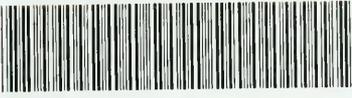


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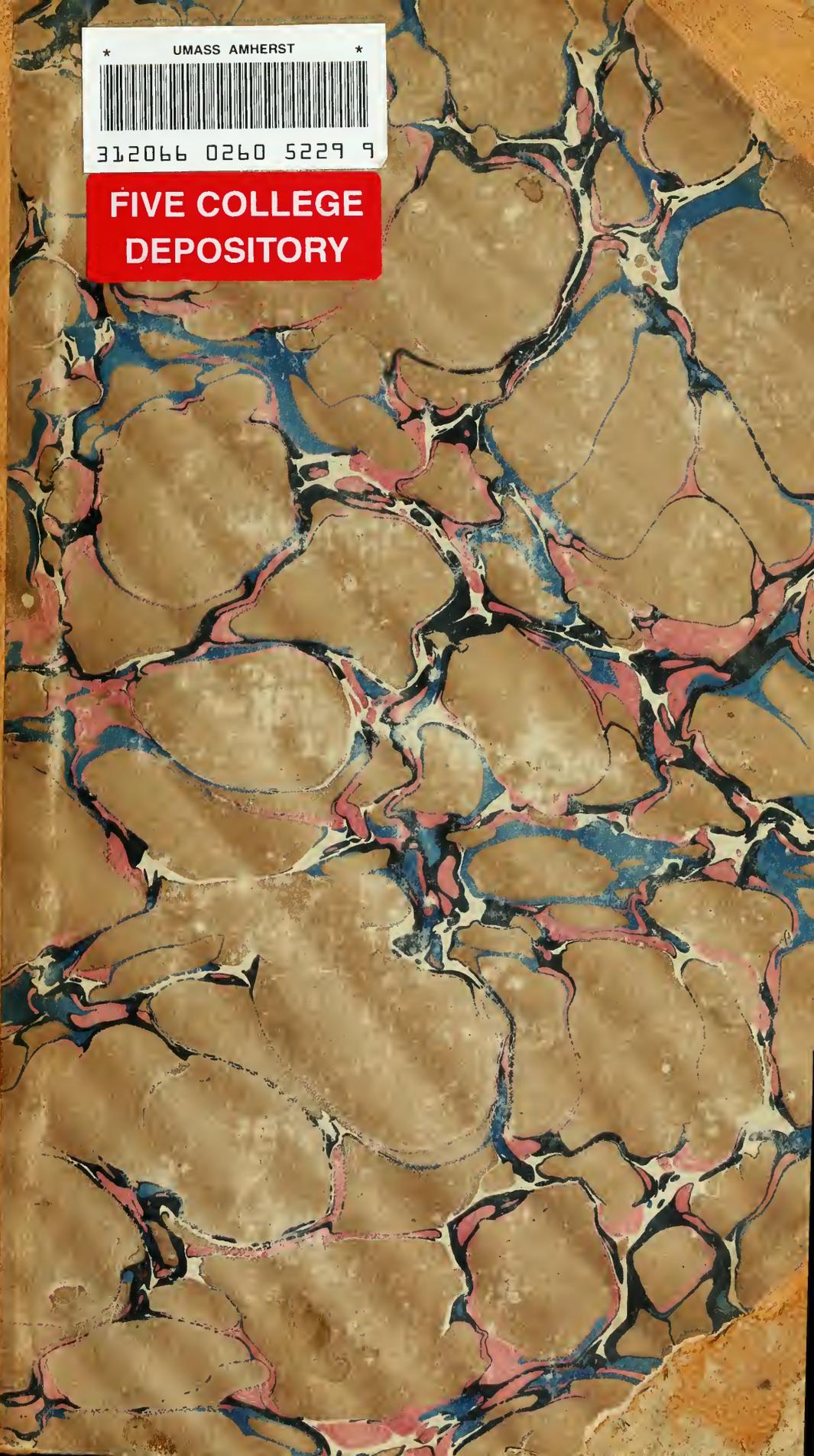
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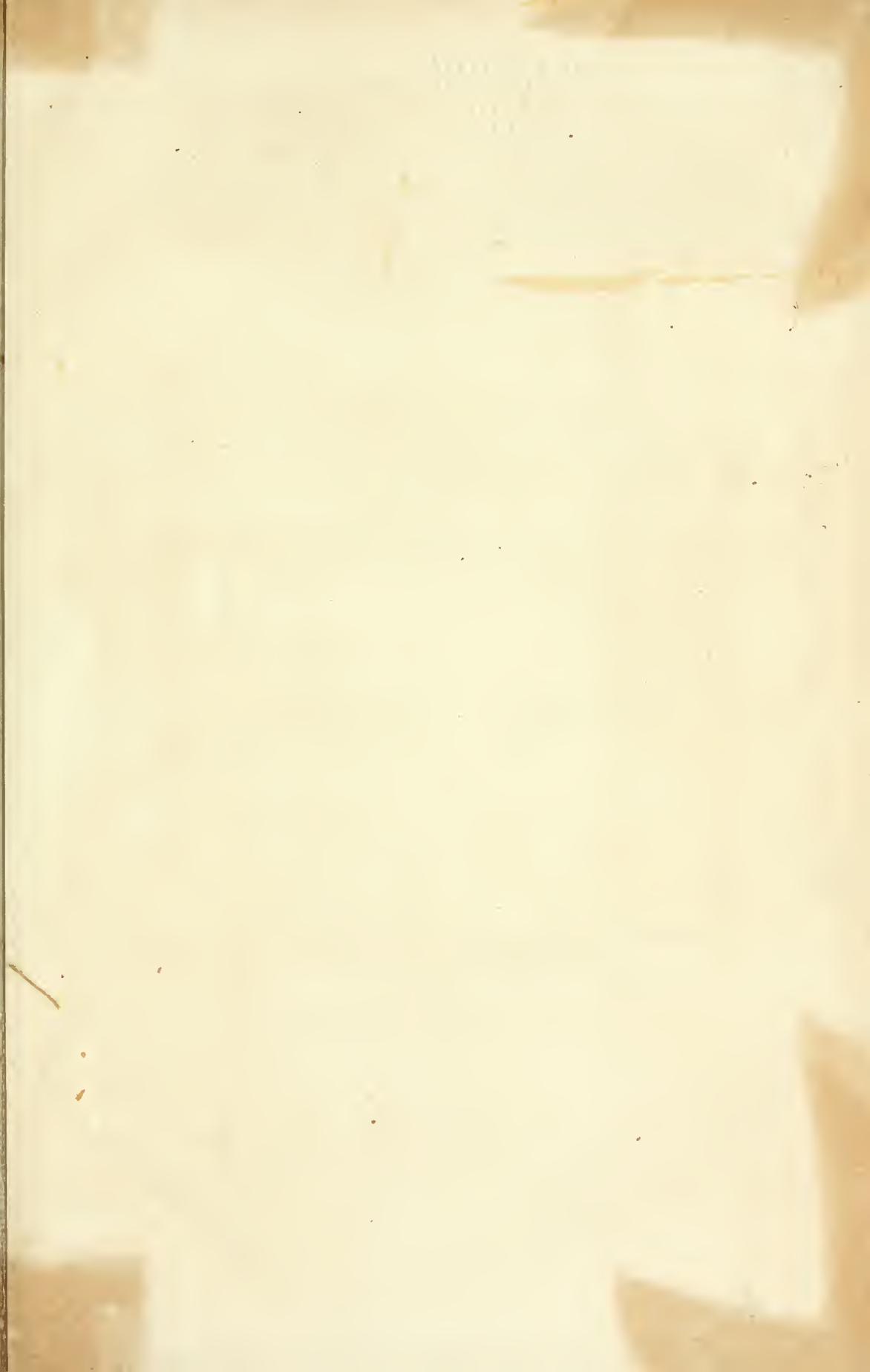
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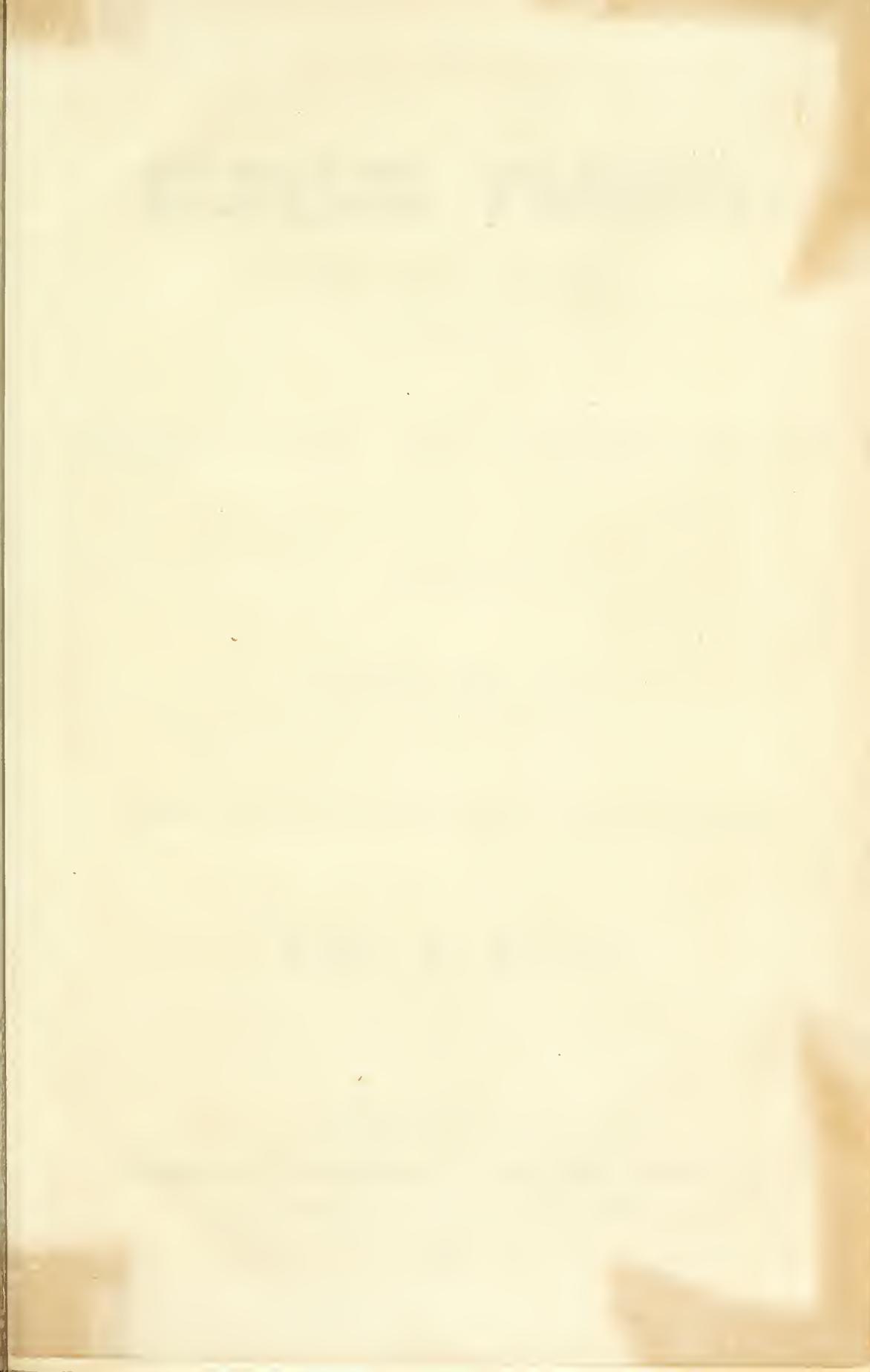
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THE

GENESEE FARMER:

DEVOTED TO

AGRICULTURE AND HORTICULTURE.

EDITED BY

DANIEL LEE, M. D.

P. BARRY, CONDUCTOR OF THE HORTICULTURAL DEPARTMENT.

VOL. 6...1845.

ROCHESTER, N. Y.

PUBLISHED BY B. F. SMITH & CO., SEED STORE, FRONT-STREET.

E. SHEPARD, PRINTER, 20½ STATE-STREET.

1845.

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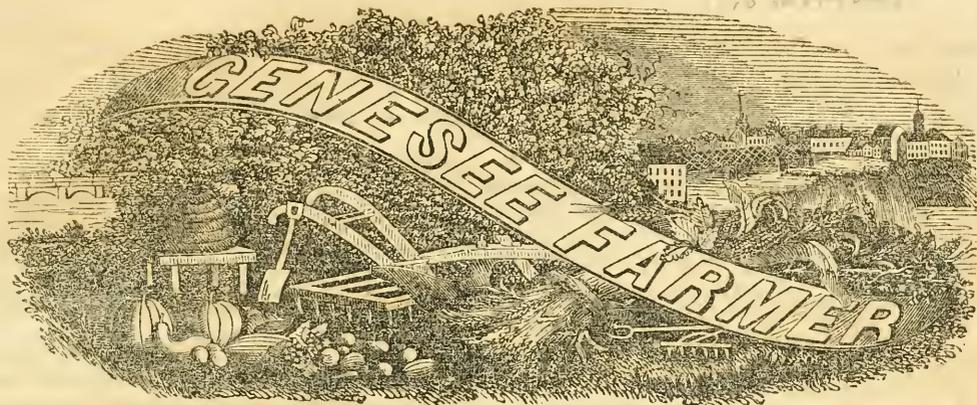
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VOL. VI.

ROCHESTER, NEW YORK. JANUARY, 1845.

NO. 1.

PUBLISHED MONTHLY.

BY B. F. SMITH & CO, PROPRIETORS,

At the Seed Store, No. 4, Front Street, near Buffalo St.

AMONG THE CORRESPONDENTS ARE

DR. DANIEL LEE,	L. B. LANGWORTHY,
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TO OUR PATRONS.

With a *new cap*, and our *frock and trousers* spic-and-span new, we make our new year's bow to our friends and patrons, wishing them all a pleasant, happy, and prosperous new year, with our most unfeigned thanks for that patronage and support which has enabled us to make our appearance with that degree of respectability that redounds equally to their credit and our satisfaction.

Notwithstanding the turmoils, and junketings, and heartburnings of the great political campaign, our little *banling* has pursued the even tenor of its way, going about like a "roaring lion," seeking to do good to all who admitted it to their tables and fire-sides.

And although some zealous and mistaken *seers* have prophecied rather *warm work* on this mundane sphere this fall, yet the winds and storms, and rain and snow, prevail as usual, and we have the hardihood to go on with our work rejoicing; persuaded that a time and season for all things will be vouchsafed by that Being whose mercy and beneficence order all things wisely.

We trust we have now all the means and appliances to render our forthcoming volume one of the most useful and interesting publications that have yet emanated from the agricultural press. In addition to our regular list of correspondents, we have the assurances of assistance from many of the former contributors to the Old Genesee Farmer, first established on this day, fourteen years ago; which, together with selections from over twenty agricultural journals, edited by the ablest men in this country and Europe, we trust to succeed to the entire content of our subscribers; in fact, we think we incur no risk in saying, that if any of our patrons, at

the year's end, shall say that there is not *one*, or even fifty articles if they please, that are not each worth the price of our paper to him, his paper shall be free.

If all those who are our firm and undeviating friends would put their shoulders to the wheel, and each procure us one new subscriber, it would greatly assist us in being able to beautify the paper by illustrations, and extra labor in its execution.

We ardently solicit communications from every observing and experienced farmer throughout the land; and let no one forbear giving his experience and knowledge to his brother farmers, from fear of any inability or ungrammatical construction of language; as it shall be the duty of our editor to correct any errors of this kind, and to lick the most deformed *cut* into shape and comeliness. It is facts we want—those stubborn things—if ever so homely.

We desire of our correspondents, that they will so *time* their subjects that they shall be in *season*, and not agitate the subject of *water melons* in January, nor of foddering cattle, nor making cider in July.

Post-masters, from whom we have ever received the most liberal assistance, will please act as agents, with the usual discount on subscriptions.

THE ALBANY CULTIVATOR, (LUTHER TUCKER, editor and proprietor,) always comes to hand in season. The December number is rich, varied, and instructive: like cream cheese, it improves with age. On the first of January, it will join in wedlock with the Central N. Y. Farmer, a neat, well-bred, and highly-educated daughter of the western district, from Rome, Oneida Co. Such a galaxy of talent admonishes us to "fly round," in these days of progress and improvement, or we shall be of "the things that were." Our little damsel, the *Genesee Farmer*, will be "at home," if any of the old beaux of the Central Farmer should call. She does not set her cap so *high* as their old flame does, now she has got to the metropolis. If you can't call, leave your cards, (50 cents)—she will be punctual in returning the favor.

THE AMERICAN AGRICULTURIST, (A. B. ALLEN, editor, N.Y.) This is a very valuable publication, and is close at the *heels* of our fastest *nags*. It comes of good stock, is of fine proportion and appearance, and comes up to the *scratch* with a bold bearing and independent front. It is in every respect worthy the patronage of all those who are seeking after information how to till the earth, and make it "bear exceedingly."

CRUSHING OR GRINDING GRAIN FOR ANIMAL FOOD.

It is a well-established fact, from actual experiment, that no stomach, either of man or beast, can digest the *hull*, or *coriaceous* covering of any of the grains, and that all the whole and unbroken kernels of all the grain and seeds of the vegetable kingdom, if uncrushed and unbroken in some degree, pass through the animal system undigested and unchanged, and are therefore wholly lost. Nothing but the stomach of fowls can perform that operation.

All the grains, and even the grass-seeds, deposited from the droppings of cattle and horses, germinate and grow, as freely as if they had not passed the ordeal of the stomach and bowels.

Every observing man will endorse this opinion, by seeing how often Indian corn passes the intestines of hogs and oxen unchanged; and it is particularly the case with swine—those gormandizing, voracious, and *hoggish* brutes, who, in their eagerness to get more than their share, do not grind more than one-half their food. It is said, and there is good authority for believing it true, that three hogs confined in a narrow slip, so that they cannot pass each other, and the first one fed with as much corn as he will eat, and giving nothing to the other two but the droppings of each other—that the second one will be in the best order, and the third one in good wintering condition.

Horses grind their grain better than any of the farm stock, except the sheep, and yet not perfectly; at any rate, it cannot fail to strike every one, that there is great importance attached to the process of grinding or crushing Indian corn, as well as economy for fattening hogs, as it is important to do it in the shortest time and at the smallest expense. Therefore, assist that curious machine, the animal stomach, by grinding the food, and also in cooking it afterwards, if you wish to arrive at the greatest result in the shortest period of time, and at the least cost.

There is no doubt but the cooking of food assists its digestion one-half in point of time; hence the necessity of using that auxiliary in fattening animals, as in consequence you relieve the digestive apparatus of one-half its labor, enabling the animal to consume and digest twice the quantity of food it could in the raw state. The animal fattens twice as fast, or somewhere in the neighborhood of that ratio, when the food is ground and cooked.

FODDERING ON THE GROUND.

MR. EDITOR.—What a miserable and wasteful policy it is to fodder cattle on the bare earth—the winds scattering it over the whole yard—the cattle, in wet weather, running over it with their dirty feet, and entirely wasting one-half the food that is fed to them!

Some provision of rack or box should always be made for that purpose. Where none is prepared, and no convenience exists for that purpose, the neatest operation we have observed is this: take 4 posts of 3 by 4 scantling, 6 feet long; board them up on four sides, 2 feet 9 inches from the bottom, and 6 feet square; nail a 6-inch strip across the top, to strengthen them, and then two strips of the same width diagonally from corner to corner, forming an X on each side, compelling the creature to eat in the center of the frame. Four cattle can feed at each, and if the master creature offers to move, they

simply change places by traveling one-quarter round. It can be easily moved from place to place, and, if well made, is very durable. H. Y.

ORIGIN OF ISABELLA GRAPES IN AMERICA.—The Isabella grape is named from Isabella Gibbs, the wife of Colonel Gibbs, distinguished as a man of great scientific attainments, and who, during a residence in France through the revolutionary war, was enabled to collect one of the most valuable cabinets of minerals of his time; the collection having been made from the public sales of the effects of guillotined noblemen. His cabinet was purchased by Yale College, at the time of, or soon after, the last war. Mrs. Gibbs, some forty years or so since, brought the grape from North Carolina to Brooklyn, and from her specimen the grapes in this part of the country have sprung. This grape has since been cultivated in Europe very extensively.

TO REMEDY CAST-IRON STOVES, THAT SMOKE FROM CRACKS OR BAD FITTING.—Take 1 part of fine salt and 2 parts of hard-wood ashes; beat them together with water till of the consistence of mortar. Fill the open places, then heat it up, and it will remain as hard as the iron, until, by long standing without heat, it attracts moisture, and becomes soft. B. M.

✍ Editors of papers, to whom we send this number, who publish our prospectus or notice our *publication and terms*, with such remarks as they shall deem our due, will receive the Farmer in exchange.

✍ In this number we make copious extracts from Mr. Colman's reports of his tour in Europe, connected with the farming thereof, hoping thereby that farmers generally may be induced to give Mr. Colman their support. We refer to another part of our paper for the terms.

✍ We shall forward this number to many persons who are not our *permanent* subscribers, both on our own motion and at the suggestion of their personal friends. To those who are pleased with the work, and forward the subscription price of 50 cents, free of postage, before the 1st of April, it will be continued; in all other cases it will be discontinued.

THE MANGE.—This troublesome disease, which shows itself by cattle rubbing themselves and by eruptions, is cured by washing them in the water in which potatoes have been boiled.

CULTIVATE WINTER APPLES.—Mr. J. R. Pell, of Ulster Co., N. Y., has an orchard containing 20,000 apple trees of one kind of fruit—the Newton Pippin. Last year he gathered from his trees 1,700 bbls. apples. Part of the crop he sold in the N. York market at \$4 per barrel, and the remainder were sent to London, and sold at \$9 per barrel.

✍ To keep a fellow out of mischief, there is nothing like giving him plenty of hard work. "An empty mind is the devil's work-shop," says an old and true proverb.

TO MAKE YELLOW BUTTER IN WINTER.—Put in yolk of eggs just before the butter comes, near the termination of the churning. This has been repeatedly tried, and it makes very fine sweet butter. It is kept by many as a great secret, but its great value requires publicity.—*Boston Cultivator*.

✍ POSTMASTERS, by law, are allowed to forward money and order publications, free of expense.

MONROE COUNTY.

The annual meeting of the Monroe County Agricultural Society was held at the Rochester Seed Store, on Wednesday, Dec. 11th.

Owing to some misunderstanding as to the hour of meeting, the number present was not so large as usual.

The following gentlemen were elected officers for 1845 :

President,

JOHN H. ROBINSON, of Henrietta.

Vice-Presidents,

Elisha Harmon, Wheatland,
Caleb K. Hobbie, Irondequoit,
Frederick P. Root, Sweden.

James P. Fogg, *Treasurer.*

Henry M. Ward, *Recording Secretary.*

Thomas H. Hyatt, *Corresponding Secretary.*

TOWN COMMITTEES.

Wheatland—Jira Blackmer, Wm. Garbutt, Geo. Sheffer. *Chili*—Wm. Pixley, Jacob Strahan, John K. Ballentine. *Riga*—James R. Flinn, Aretus Adams, Alfred Fitch. *Ogden*—Miles Landon, Marcus Adams, Jesse Harroun. *Sweden*—W. E. Skidmore, Seth P. Staples, Asa Rowe. *Clarkson*—Dr. A. Baldwin, Frederick S. Church, David Forsyth. *Parma*—Isaac Chase, Roswell Atchinson, J. M. Webster. *Grece*—Geo. C. Latta, Robert H. Brown, Hall Colby. *Gates*—Matthias Garrett, Wm. Buel, Wm. Otis. *Brighton*—Romanta Hart, C. F. Crosman, Nathaniel Hayward. *Henrietta*—W. C. Cornell, Geo. L. Beckwith, Elihu Kirby. *Rush*—Thomas Wright, Gay Markham, John B. Steel. *Mendon*—Abraham Cole, Ezra Davis, E. H. Barnard. *Pittsford*—E. Sutherland, Luther Bushnell, Marvin Hopkins. *Perinton*—Gideon Ramsdell, Zerach Burr, John Ayrault. *Penfield*—Samuel Miller, Elias Beach, Jonathan Baker. *Webster*—Byron Woodhull, Wm. Holt, Alpheus Creecker. *Irondequoit*—H. N. Langworthy, John McGonagal, Benj. Wing. *Rochester*—E. Darwin Smith, J. M. Whitney, J. H. Watts, E. B. Strong, E. Wolcott, Samuel Miller, John Longmieur, B. F. Smith, Amos Sawyer, P. Barry, Thomas Weddle, Wm. Kidd, Jas. P. Fogg.

A very interesting report was read by L. B. Langworthy, Esq., from the Committee on Farms.

A committee of three were appointed to obtain and publish the excellent address of Dr. Lee, delivered before the society, with the report of the committee on Farms, and the proceeding of the society.

After it was made known that Wm. Garbutt, Esq. of Wheatland had obtained the premium for the second best farm, it was announced, that he had directed the premium of \$8 to be added to the funds of the society.

Wherefore, it was resolved, That the thanks of the society be tendered to Mr. Garbutt for his generous donation ; with the hope that his honorable example may find a response from others—thereby increasing the funds for further usefulness.

James H. Watts, Esq., offered the following resolutions, which were passed unanimously :

The members of the Monroe Agricultural Society present, having learned that M. B. Bateham, Esq., long a devoted friend to the cause of agriculture amongst us, had removed to Columbus, Ohio,

It was resolved, That we, as members engaged in the same cause in which Mr. Bateham has so long acted with us, and as editor of the New Genesee Farmer, also an officer of this society from its com-

mencement—regret his removal from amongst us; but at the same time wish him God speed in his new undertaking at Columbus, Ohio, where he has gone for the purpose of conducting an agricultural paper.

Resolved, That the President of the society sign the above resolution, and that a copy be forwarded to Mr. Bateham, after its publication in the Genesee Farmer.

Report of the Committee on Field Crops.

At a meeting of the executive and special committees, on the 11th December, the following crops were offered for premiums:

The committee cannot but regret that the applications were so few, especially after having experienced so fruitful a year in almost every department of agricultural labor. It seems as though the wits of all men had gone a "wool-gathering" to Texas, Oregon, or some other region except their farms, if we are to judge by the meagre number who have made known their success in their farming operations, for the past year, to this committee, and they were unable to assign any reasons for the backwardness or neglect, except that the recent political campaign, with its excitements and call upon the time and attention of all classes, has obliterated all remembrance of the necessity of taking the proper measures to comply with the law, to enable them to enter their crops for premiums ; for it is perfectly within the knowledge of many members of this committee, that several large and important crops were made by members of this society, who through neglect of measuring and certifying the same, were excluded from entering for competition.

To John McGonagal, of Irondequoit, they award the second premium (there being no competitor) for the best two acres of wheat, of 45 16-60 bushels per acre, of the Red Chaff Bald variety, \$7.

Statement of Mr. McGonagal's Wheat Crop.

The kind of soil on which my crop of wheat was grown, is a sandy loam. The previous crop was wheat, which I harvested two years before and seeded with clover in the spring before harvesting. The next summer, after the clover began to head, I turned in my cattle, and soon after commenced plowing the lot which has about fifty acres in it ; that part measured off was plowed about the middle of June. About the first of August harrowed over well ; cross plowed the last of August ; plowed again the second week in September, and sowed the 11th and 12th of September. There has not been any manure drawn on for ten years, except plaster, which I sowed on the clover in the spring before plowing. I sowed about one bushel and eight qts. per acre of the Red Chaff Bald variety ; limed before sowing. Harvested some of the last days in August, which was cut with a sickle, bound and put up in three or four days, and drawn into the barn and thrashed the fore part of September, and measured. The expense I cannot come at very exactly, as it was plowed with the rest of the field each time.

Plowing three times,	\$5 25
Harrowing,	2 63
2½ bushels of Seed,	2 25
Reaping, binding and setting up,	4 00
Drawing in,	2 50
Thrashing and cleaning,	7 00

Whole expense, \$23 63

I certify that the above is a true and correct statement according to the best of my knowledge.

JOHN MCGONAGAL.

Sworn to and subscribed before me this, 11th day of December, 1844.

WILLIAM SHEPARD, J. P.

To Rufus Beckwith, of Henrietta, for the best acre of corn, of the large eight rowed variety, of 126 bushels per acre! of shelled corn, the first premium of \$7.

Statement of Mr. Beckwith's Corn Crop.

The kind of soil on which my crop of Corn was grown, is a dark gravelly loam, approximating to black sand. The previous crop was wheat, 2 years previous seeded with timothy, and pastured two years. No manure to previous crop. Manure to this crop about thirty wagon loads of coarse barn yard manure. Plowed once about eight or ten inches deep, and harrowed thoroughly the first days in May. Planted the first week in May in drills about three feet six inches apart, and from twelve to eighteen inches in the drill. The seed was the large 8 rowed variety; dropped about four grains in a hill, and used about three pecks of seed to the acre.—Cultivated between the drills for first hoeing, and plowed two furrows between the drills the last hoeing, (there were many hills missing, having been destroyed by worms.) Cut the stalks by topping the corn in September. Harvested about the first of October by husking on the hill or drills, and took from the same ground 20 cart loads of pumpkins.

The whole expense per acre of producing and harvesting the crop as near as can be stated, including the value of the manure and seed, the labor of men and teams at cost, or at current rates of wages, would not exceed *fifteen dollars*.

I certify that the above is a true and correct statement, according to the best of my knowledge.

RUFUS BECKWITH.

Sworn to and subscribed before me, this thirtieth day of November, 1844.

ELIHU KIRBY, J. P.

To John McGonegal, of Irondequoit, for the second best acre of corn, of the 10 and 12 rowed variety, of 85 13-56 bushels per acre, the second premium of \$5.

To Adin Manly, of Clarkson, for the best acre of oats, of the black and white variety mixed, of 87½ bushels per acre, the second premium (there being no competitor) of \$3.

Statement of Mr. Manly's Oat Crop.

The kind of soil on which my crop of Oats was grown, is clay loam. The previous crop was Corn, and the quantity of manure to previous crop 10 loads of barn manure from barn yard in the spring. Manure to this crop, twelve loads of the same kind and plowed in. Plowed once in April, harrowed once on the second day of May, and sowed the third day of May, broadcast, harrowing twice. The kind of seed was black and white, about half and half, four and a half bushels per acre. Harvested 20th of August, with cradle.

The whole expense *per acre*, of producing and harvesting the crop, as near as can be stated, including the value of the manure and seed, the labor of men and teams at cost, or at current rates of wages:

Plowing, harrowing, sowing and harrowing seed,	\$3 87½
Harvesting, thrashing and manure,	7 25

Whole expense, \$11 12½

I certify that the above is a true and correct statement, according to the best of my knowledge.

ADIN MANLY.

Sworn to and subscribed before me, this twenty-third day of November, 1844.

SALMON WEBSTER, J. P.

L. B. LANGWORTHY,	} Committee.
RAWSON HARMON,	
NATHANIEL HAYWARD,	

The next meeting of the society, will be held at the office of the Genesee Farmer, over the Seed Store, on the second Tuesday in February, at 11 o'clock, A.M.

The Farmer, Democrat, and Advertiser are requested to publish the proceedings of this meeting.

MR. EDITOR:—Having had, during the past year, something of a crop of wheat to dispose of, I have found an amount of difference in the weight of my wheat by scales at different mills, which I cannot account for; and I would feel obliged if you can inform me whether the scale-beams of wheat scales in your city and vicinity are sealed.—Perhaps you, or some of your correspondents, can inform the farming interests, if they can with certainty rely upon correct weights in a matter of so much importance to them.

Yours, &c., A FARMER.

Victor, Dec. 16, 1844.

Although we never had great confidence in the correctness and delicacy of the Platform Scales owing to their peculiar construction of short leverages and oscillations, yet for large weights and articles not over valuable, we have heard of no complaints, when well constructed; we also know that the City Sealer often resets and adjusts them. Currents of air striking the large hopper in which millers weigh, from above or below, can easily make a great difference in the result. We shall be glad to hear from our correspondents.

ED. FARMER.

BEANS FOR SHEEP.—If you have any beans on hand which are unfit for culinary purposes, in consequence of being mouldy or rancid, wash them carefully and give them to your sheep. A gill a day will be of more benefit to them than a pint of corn. Beans, for sheep, even in this condition, we consider equal to the best corn in any state.—*Me. Cultivator*.

Upon the above, Dr. Lee, of Buffalo, remarks:

"The Cultivator tells but half the story. *Why* is a gill of beans better for a sheep than a pint of corn? This is an important problem, and one that not one flock-master in a thousand can answer. If the object be to form fat sheep, then the remark that beans are worth more than corn, is not true—for corn contains more of the fat-forming elements than beans. But if the object be to form *muscle* and *wool*, then the remark is true. Beans contain more of the elements of wool than any other cultivated plant. Hence nature, ever true to herself, has endowed the sheep with a taste for this plant which is denied to the pig."

CHEMISTRY.—Prof. Dewey is giving a course of very interesting Lectures on Chemistry, with experiments, at the Collegiate Institute. The lectures are delivered on Tuesday and Friday evenings at 7 o'clock, P. M. A ticket for two dollars will admit a gentlemen and lady to the course. This is a rare opportunity offered to the citizens of Rochester and its vicinity for acquiring a knowledge of chemical attraction, electricity, &c. &c.

From the Cultivator.

COLMAN'S EUROPEAN AGRICULTURE.

The second part of this work has made its appearance. The great difficulty of procuring the information sought, in an exact and authentic form, amidst the embarrassments and inconveniences which surround a stranger, are mentioned as reasons why this portion of the work has so long been delayed.—Mr. Colman says he cannot promise his third and fourth numbers at any particular time, but assures us that no unreasonable delay shall be permitted. He has yet to visit Ireland, some of the counties of Scotland, the dairy portions of England, and the flax and hop districts. In the spring he intends to visit the continent, and hopes to be able to return to this country in the autumn.

The first division of the number before us, is devoted to a continuation of remarks on the *Allotment system*. Under this head, many useful facts are given, showing the large amount of sustenance which the soil, under proper management, is capable of yielding—though, as Mr. C. says, it is probable that the “utmost productive capacity of an acre of land, in any crop, has not yet been fully determined.”

An instance is mentioned where a man had supported himself, wife and son, from two acres of land, for which he paid a rent of \$45,60; and in the course of seven years, saved enough from the produce of his two acres to purchase two acres at \$144 to \$192 per acre. In another case, six acres under spade cultivation, is stated to have given an average of 52 bushels of wheat per acre. Another witness brought before the Parliamentary committee, testified that on the estate of Lord Howard, Barbot Hall, Yorkshire, twenty-eight bushels of wheat had been obtained from a quarter of an acre; being at the rate of 112 bushels per acre. Mr. Colman thinks, however, that the accuracy of this statement may be considered doubtful.”

An instance is mentioned where a man in Sussex, John Piper, who occupied four acres, and kept two cows, worked one of the cows in a cart, by which he makes an annual saving of \$24. Notwithstanding the cow is worked, “she makes eight pounds of butter per week, besides furnishing some milk for the family.”

Great pains are taken in all classes to save the manure. Nothing is wasted. The animals are stalled, and only turned into a yard a few hours a day for exercise. Brick or stone tanks, well cemented, are sunk near the cow-stables and pig-ties, for the reception of all the liquid manure. “The contents of these tanks, on becoming full, are pumped into a small cart with a sprinkling box attached to it, like that used for watering streets in cities, and distributed over the crops, always with the greatest advantage, and with effects immediately perceptible.” All which Mr. Colman saw, convinced him that there is no necessity of impoverishing the soil, but that under the right management, it will keep itself in condition, and be ever improving. The allotment system, though so evidently beneficial to the poorer classes, is strongly opposed by the farmers in general. In relation to the causes of this opposition, it is alleged that the farmers are not willing to lessen the dependence of the laborers on them for support—that the great crops obtained under such nice cultivation, contrasted with those of the farmer, tend to throw the latter into the shade, or by proving what the land is capable of producing, may induce the landlords to raise their rents. Besides, it is said the farmers are

unwilling to see the laborers appear in the markets in competition with themselves. Mr. Colman observes, that whether these reasons actually exist or not, “the motives named are but too consistent with the weakness and too often unrestrained selfishness of human nature. Every man certainly has a fair 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 every man will earn that his own true prosperity is essentially concerned in the prosperity of his neighbor, and that no gratification on earth, to a good mind, is more delicious than that which is reflected from the happiness of another, to which he has himself been instrumental.”

Some of the allotments are managed by men who act in the capacity of school teachers, and the scholars, who are boys from eight to fourteen years of age, perform the labor of cultivating the crops—working on the farm a given number of hours each day in return for their instruction. The system works well, both for the boys, and the condition and product of the grounds. Yet Mr. Colman feels constrained to add his “strong conviction that the education of the laboring classes is not viewed with favor by those who move in a higher condition of life.” “Every approach, therefore,” he continues, “in this direction, is likely to be resisted; and this feeling of superiority pervades, with an almost equal intensity, every class in society, above the lowest, from the master of the household to the most menial beneath whom there is any lower depth. Education is the great leveler of all artificial distinctions, and may therefore be well looked upon with jealousy.”

STEERING SEEDS.—Considerable has been said, during the past year, of a mode of steering seeds, introduced by Mr. Campbell, of Scotland. Mr. Colman introduces one or two letters from Mr. Campbell, in reference to this subject. The steeps he employs, are sulphate, nitrate, and muriate of ammonia, nitrates of soda and potass, and combinations of these. One experiment given, is in substance, the following. Some earth was dug up six feet below the surface, which was totally destitute of organic matter. It was sown with seeds which had been soaked in these solutions, and produced plants with seven or eight stems each, while plants from the unprepared seeds produced no more than three stems each. They had not reached maturity when this statement was given, and of course, the relative yield of grain could not be told.

SPADE HUSBANDRY.—This mode of cultivation seems to be extending itself in Great Britain, and under the cheapness of hand labor which there prevails, is found fully remunerating. The principle is the same as that of subsoil plowing. The best tool for the work, is a three pronged fork, 14 inches deep, and 7½ inches wide. This works easier than a spade, and pulverizes the ground better. Though, as Mr. Colman observes, spade husbandry cannot be generally introduced into the United States with advantage, yet he says there are some cases in which it might be found profitable, such as on farms where the poor are kept. In England, no farm is ever connected with a pauper establishment, and some caution is there used, lest those establishments be found too comfortable and attractive. Mr. Colman cites the example of a man in New England, who from only seven acres of land, sells annually \$2,500 worth of produce.

CONDITION OF LABORERS.—Mr. Colman says, “it

is with England a question of tremendous importance, what is to become of the vast accumulations of people, which are continually increasing here at the rate of from seven hundred to a thousand per day. * * * The subject, it appears to me, and perhaps wholly from my being unaccustomed to a condition of things in any degree resembling it, is daily assuming a fearful aspect; I do not mean of danger to the government, for the government seems never to have been stronger, but fearful in its bearings upon the public peace, the public morals, the security of property, and the state of crime." Mr. C. does not pretend to offer a remedy for this state of things, but seems to think the allotment system the best which has yet been devised, as it is, at all events, capable of improving, to some extent, the laborer's condition.

PROGRESS OF AGRICULTURE.—Under this head, Mr. Colman gives an interesting description of the great improvements which have been made and are still going forward in England, by means of draining, irrigation, &c. Of the live stock, he speaks in the highest terms, but does not go minutely into this subject, intending to take it up by itself hereafter. He speaks not of the cattle as seen at the cattle shows, but as they are seen every Monday in the Smithfield Market, and at the other smaller markets and fairs in various parts of the kingdom. He says "here are cattle and sheep of several different breeds, and all of remarkable excellence of their kind; I do not say perfect, for that, in almost all cases, would be assuming too much, but leaving very little to be desired beyond what has been attained. Their condition and form, their symmetry, their fatness, are admirable: and each breed is seen retaining its distinct properties; and what is most remarkable, showing how much can be done by human art and skill, in improving the animal form and condition, and bringing it to a desired model."

APPLICATION OF STEAM TO AGRICULTURE.—The application of steam to the plow, so far as Mr. Colman has heard, has not been attended with much success. Steam engines are extensively used in some sections, for thrashing grain. In the Lothians of Scotland, it is said that the use of steam power for this and other purposes, saves one quarter of the horse power required on the farm. A very important item, as the keeping of horse teams is the greatest single source of expense to the British farmer. A six horse steam power, usually thrashes from 30 to 40 bushels of grain per hour. Mr. C. suggests that in the prairie districts of our western country, wherever coal can be had, steam power might be advantageously used for many farm purposes.

A very important use of steam power in Britain, is the conveying of live stock to market by means of steamboats and railroads. Cattle are brought in immense numbers to Smithfield market by these conveyances, without loss of condition—sometimes the distance of seven hundred miles. Mr. C. thinks no parties have suffered injury from railroads. Contrary as it may be to all theories, the farmer near market is not injured, though the distant one is largely benefited.

THE INCREASE OF AGRICULTURAL PRODUCTS in Britain, is shown in a very striking light. The average importation of wheat into England from 1801 to 1810, when the population was set down at 17,442,911, would have given a fraction over one peck to each person. From 1811 to 1820, when the po-

pulation was 19,870,589, the quantity imported would have given less than a gallon and a half to each person. From 1831 to 1835, the population was 25,000,000, and the quantity imported would have given to each person one gallon. Taking the three years 1833-4-5, the importation would have allowed only one pint and one fifth to each consumer. This will give some idea of the immense production and resources of that little island. Under a fast increasing population, as before mentioned, the dependence on foreign supply, has been constantly growing less.

Among the means of improvement, Mr. Colman remarks that the Royal Agricultural Society is an efficient organ. It was instituted in 1837. It has begun the establishment of an agricultural library and museum, the object of which is to exhibit specimens of agricultural productions which are capable of preservation, seeds, plants, grasses samples of wool, mineral manures, models and drawings of implements, &c. &c. Mr. Colman remarks that he has often urged the establishment of agricultural museums in the United States, especially in the capitals of the States, where the different legislatures assemble. The suggestion is a valuable one.—Cannot our New York State Agricultural Society profit by it?

The management of the Royal Agricultural Society at its exhibitions, is spoken of as admirable in many respects. Mr. C. says—"every possible effort is made to secure an impartial decision among the competitors; for besides that they are not suffered by their presence to influence the examiners, the examiners themselves are selected from among persons as far as possible disinterested, and not likely to be influenced. They are chosen, likewise, with a special reference to their character and qualifications, to the nature of the subjects submitted, and every pains is taken in this way, to secure the greatest aptness and talents. The name of the competitor is not given if it can be avoided, but only the number of the article presented. The rules of admission and competition, are stringent and absolute, and no exceptions are on any account allowed."

The Highland Agricultural Society in Scotland, and the Royal Agricultural Society of Ireland, are both spoken of as excellent institutions, similar in their objects and management to the Royal Agricultural Society of England.

MODEL FARMS.—Mr. Colman notices some of these. He has visited that at Glasnevin, near Dublin, and furnishes some highly interesting particulars in regard to it. In connexion with this establishment there is also an agricultural school, where young men receive such an education, theoretical and practical, as fits them to pursue the occupation of farming to the best advantage. The young men work in the field about six hours per day. Mr. C. had the gratification of listening to an examination of fourteen of these young men, brought out of the field from their labor, and declares that "it was eminently successful, and in the highest degree creditable both to master and pupil." The products of this model farm, as given by the superintendent and teacher, are quite remarkable. Seven hundred and twenty bushels of potatoes per acre, are given as an average crop. The superintendent states that the largest crop he ever obtained, was in a field where the sets were three feet apart each way. Medium sized potatoes, planted whole, are preferred to cut ones. The experiment had been made, and the dif-

ference between the whole potatoes and cuttings was marked and obvious in favor of the former.—The cattle on the farm are *soiled*. Italian rye grass is mentioned as one of the best articles for feeding. It is cut four times in a season, yielding at each cutting a good crop. Lucerne is sometimes cut five times. The Scotch potatoe oat, and the Hopetown oat, are the varieties of this grain here raised.—They yield an average of 80 bushels per acre, and weigh about 44 lbs. per bushel.

The typographical execution of the second Part of Mr. Colman's work, is very perfect, and though the matter is somewhat miscellaneous, it is of a nature calculated to interest not only the agricultural, but general reader. The style is exceedingly chaste and agreeable, and a most beautiful moral tone pervades the whole. His remarks on the condition of the laboring classes in England, show how vastly superior are the advantages of that class in this country.

COTTON BEDS.

We have received from J. A. GEURNEY, Esq. a copy of the "Southron," published at Jackson, Miss., containing some remarks on the advantages of cotton for bedding. These advantages may be summed up as follows. It is claimed that "it is the cheapest, most comfortable, and most healthy material for bedding, that is known to the civilized world." In addition to these, may be named "*superior cleanliness*—vermin will not abide it—there is *no grease* in it, as in hair or wool—it does not get *stale* and acquire an *unpleasant odor*, as feathers do—moths do not infest it, as they do wool—it does not pack and become hard as moss does—nor does it become dry, brittle and dusty, as do straw or husks—and it is in many cases *medicinal*." It is said not to cause that lassitude and inertia, which is produced by sleeping on feathers. People not acquainted with it, have supposed they had been sleeping on the best feathers when in fact their beds were made of cotton. The relative cost of cotton compared with feathers, hair, &c. may be seen from the following statement :
Cost of a Hair Mattress.—They are generally sold by the lb. and cost from 50 to 75 cents per lb. 30 or 40 lbs. will cost \$15 or \$20.

Wool.—30 lbs. of wool, at 30 cents per lb. \$9 ; 12 yards ticking, at 12½ cents per yard, \$1,50 ; labor, thread, &c., 2,75. Total \$13,25.

Feathers.—40 lbs. feathers at 30 cents per lb., \$12,00 ; 15 yards ticking at 12½ cents per yard, 1,87½ ; labor, &c. 2,75. Total \$16,62½.

Cotton.—30 lbs. cotton at 8 cents per lb., \$2,40 ; 12 yards ticking at 12½ cents per yard, \$1,50 ; labor, thread, &c., \$2,75. Total \$6,65."

It is recommended to run the cotton through a "picker," where one can conveniently be obtained, before using. This gives it additional cleanliness and buoyancy.

The substitution of cotton for bedding throughout the United States, would be an immense saving, besides opening a new avenue for that article to an extent according to the estimation of the writer, equal "to more than two of the largest crops of cotton ever produced in the United States."—*Cultivator*.

Hurrah for the girls of '44, cried a politician at a caucus. No, no, hurrah for the girls of 16, responded another, and the sentiment was enthusiastically cheered.

MUSTARD SEED.

We have recently purchased from J. H. Parnlee of Ohio, a part of his crop of brown mustard seed, raised, as he informed us, on 27 acres of good rich land, prepared with as much care as is usually bestowed upon wheat land. The crop was well worked during the season, and when near ripe was cut with sickles, laid on sheets or wagon covers, hauled to the barn in sheets, and there thrashed out and fanned.

He has delivered to us a part of the produce of 27 acres of land, 114 barrels, containing 382 bushels 45 lbs. of brown mustard seed, weighing 52½ lbs. per bushel, making 20,100 lbs., for which we paid him 8 cents per lb., making \$1,608,00 ; and he has, he says, 100 bushels of tailings, which he estimates will clean up 75 bushels, say, 50 lbs. per bushel, making 3750 lbs. at 8 cents, 300,00.

Produce of 27 acres of brown mustard seed, \$1,908,00, or \$70,66 per acre.

The time is not far distant, if not already at hand, when the interests of the American farmers will be best promoted by devoting a portion of their time and land to the raising of many crops which are now imported from countries refusing (except when their own crops fail) the surplus of the American farms, and thus not only raise the price of their grain crops by diminishing their quantity, but secure to themselves a large amount of money which is annually sent out of the country to purchase these crops : mustard seed is one of them, which can be raised here to a profit, and for which, if the seed is delivered clean and in good order, the demand will be found very active and certain.

Respectfully,

J. C. FELL & BROTHER.

THREE HUNDRED SPINNING WHEELS IN OPERATION ON BOSTON COMMON.

In an address delivered before the Caledonia (Vt.) Agricultural Society, by HENRY STEVENS, in which the importance of affording suitable encouragement to domestic manufactures is very forcibly set forth, the author says :

"We find in the American Annals, an account of the anniversary of a society for encouraging industry, held 1753, on which occasion Boston Common presented a novel sight. In the afternoon, about 300 young female spinsters, decently dressed, appearing on the Common at their spinning wheels, which were placed regularly in three rows, and a female was seated at each wheel ; the weavers also appeared cleanly dressed, in garments of their own weaving. One of them working a loom on a stage, was carried on men's shoulders attended with music ; an immense number of spectators were present at this interesting spectacle. The Rev. Dr. Cooper preached a discourse, and a collection was made for the benefit of the institution. Ladies of Boston whirling three hundred spinning wheels !—These were afterwards the matrons who refused British tea, and who never saw a piano. Wonder if a thousand delicate ladies could not be seen in the city, at their pianoes, where one old fashioned rosy damsel could be found at the healthy exercise of the spinning wheel ?"

Mr. Stevens adds—"The woman who manufactures for her own household, and one piece of goods to sell, does more to retain the solid coin in our State, than all the banks, or the great financiers."

BEES.—IMPROVED COMMON HIVE.

It is a good time during these long evenings to think about our Bees, and to look over the productiveness or otherwise of the result of the past season as a part of the farm stock. The season of 1843 was a bad year for the produce of honey, and although they swarmed well, yet owing to the great drouth that pervaded this region, they barely produced food enough for their own subsistence, without producing but very little to spare to their protectors. The past year has been the most singular that I have known in twenty years' experience, with respect to swarming, and the complaint is general in the western country as far as heard from, without exception. Bees wintered well, considering the quantity of honey they made last year. The season opened fair and every thing went on prosperously, until the period of swarming, for which every preparation seemed to be ready; they "hung out" day by day for four or five weeks, when they gave up emigrating, and concluded not to "go to the west" this year. As far as I am advised, not over one quarter of the hives swarmed at all, and one half of those ran away.

The only cause of failure that came under my observation, and the only reason that I can give, is that on those days which were warm enough, and when I had made preparation for several swarms, there invariably came up either a cold wind or clouds, or rain, and this state of things continued until the young queens were killed by the old ones, and the new colonies were obliged to domesticate with the parent hive. This year cannot be counted a prolific one for honey, owing to the August and September drouth: many growers have not filled one set of boxes, in the patent hive, which in good seasons fill two.

A new modification of the common hive has lately been introduced, which completely disposes of the necessity of allowing the bees to choose their time and disposition to swarm, and yet increases the number in an equal ratio, without loss or the danger of losing them.

To explain it, take for instance a common square hive and saw it in two parts from top to bottom, then put it together with four Dowell pins and a hook and staple on each side to fasten it together again. Across each half are fixed some thin pieces of slats to keep the bees from constructing their combs continuous, and across the hive. Put a swarm of bees into them in the usual manner. The next year when they show a disposition to swarm, have another hive on the same plan, with the pins and hooks exactly alike; then slip down two pieces of tin or sheet iron of the size of the hive, and divide them; then, by the help of an assistant, add one of the new halves to each, and you have two swarms, each with room to work, and so do as often as they show signs of swarming. It does not seem important whether you have got a queen with each or not, as both parts have brood comb and they will immediately provide themselves with one; and the principle may be applied to the patent hive with drawers as to the old fashioned plain hive. I believe it to be the subject of a patent right, and is sold at a fair price to all applicants.

L.

ARTHER'S LADIES' MAGAZINE FOR JANUARY.—The first Number of the new Volume has been received. It is a splendid number, and embellished with two engravings, "Joan of Arc," and the "Bridge of Doon." The editor and printer have evidently tried to see what they could do. It is destined to take a high rank with the lovers of light literature.

BOARD OR RIBBON HOUSES.

MR. EDITOR,—During the past season we erected a house upon the plan now coming into practice in this section. The best way to make myself understood, will be to tell what we did, and how we did it.

The house is 40 by 24 feet, and about 12 feet high. The lower or main story is 8 feet in the clear. The sills are laid upon a good wall. The boards or ribbons used for the superstructure, are of hemlock, 4 inches wide and 1 inch thick. These are laid one upon the other, in the same manner as brick work, care being taken to break joints. The partitions should be carried up and worked into the wall with the main body. The door and window frames should be put in at the time, and worked to, but they should not be nailed in, or in any way fastened; otherwise, when the mass settles, it will break out the nails. I should merely put in some of the ribbon, which could be taken out when the permanent frames are to be put up. Allowances must be made for settling. If the boards are seasoned, 3 inches will probably be enough; but if green, at least 6 ought to be allowed.

The partitions should be designed so as to strengthen the middle of the wall. We have two in ours, dividing into three rooms, two of 14, one of 12 feet in width. The partitions are carried up to the roof, and a plate dispensed with, though a ridge pole is necessary. The boards were nailed with 8 penny nails, except four or five of the last courses, which were thickly nailed with 10's. The outside we have sided up, and the inside we shall plaster directly upon the wall. It makes a very warm and cheap house. The only alteration we shall make in the next will be to saw the timber 1½ inches thick instead of 1 in. In every other particular, it is right. Some plaster outside; but as we had never seen any done in that way, we did not like to risk it, especially as the season was getting late. Thus far it has answered our most sanguine expectations.

P.

DARIEN, Dec. 1844.

We attended on Thursday evening, Dec. 19th, the first of a course of six lectures to be delivered by the Rev. Mr. Holland. His subject was the character of Mahommed. It was well attended, and listened to with the utmost attention. The lecturer appeared to fellow Carlyle generally, in his views of the character of Mahommed, giving him a high place among the heroes of the world. The next lecture will be delivered on Thursday evening, Dec. 26, subject, the character of Luther. If the lecturer will speak a little louder, he will oblige one, at least, of his many hearers.

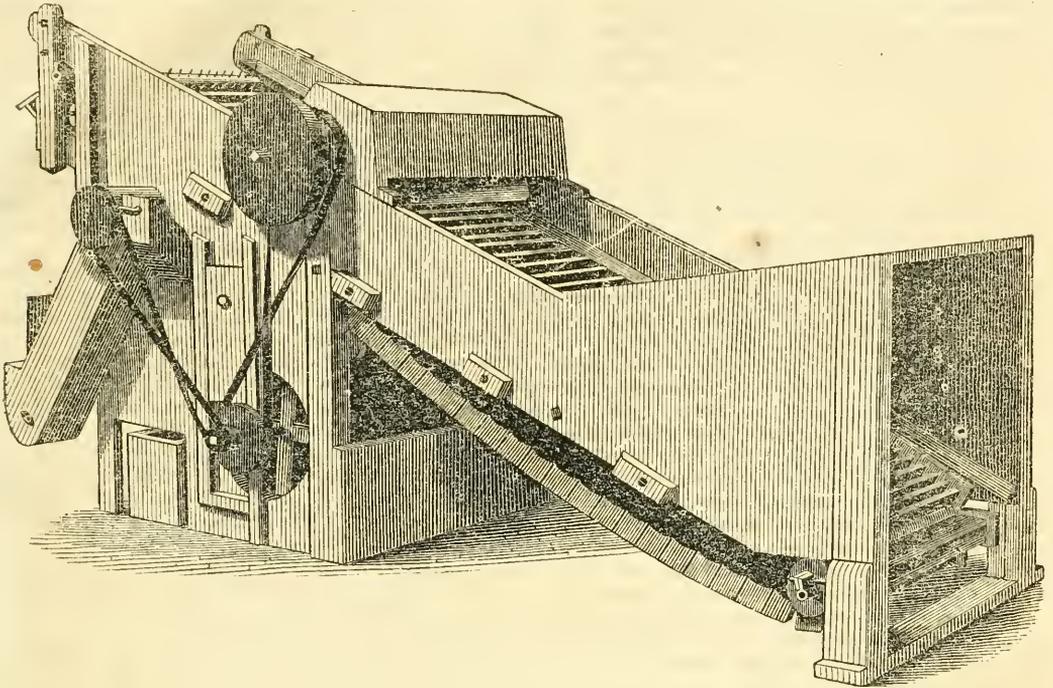
F.

A young man without money is like a steamboat without fuel. He can't go ahead. Among the ladies, he's like a moon in a cloudy night—"He can't shine." "And," adds our *devil*, "a printer without money is like a bob-tailed bull in fly-time." Mercy!—*Miner's Ec.*

A sectarian writing the life of a deceased brother, says that "he early got the world under his feet." That probably means that he was able to go alone sooner than babies in general, as the world is under the feet of every person that stands erect.

Why are globes used in schools like a man who supposes every one to be honest? They are a superficial view of the world.

Why was Benjamin Franklin the tyrant of the elements? Because he ruled the lightnings with a rod of iron.



PITTS' SEPARATOR.

This machine is so well known in Western New York, and its merits have so often been recorded in the principal agricultural papers of this and other states, that it is not deemed necessary to give a detailed description of the engraving which we here present, any further than to say, that it represents the machine constructed in a convenient manner to attach to any common thrasher, which converts it immediately into a perfect machine for thrashing and cleaning grain at one operation.

Before Mr. Pitts modified his machine, so as to attach it to the common thrasher now in use, a machine could be obtained only in connection with the cylinder; and many, who had good thrashers, could not afford to throw them away, and purchase a new machine. But this improvement seems to meet the wants of every farmer who owns the common thrashing-machine, and desires to thrash and clean at the same time.

It is worthy of remark, that this is the *first machine ever constructed, in this or any other country*, that can be conveniently attached to the common thrashing-machine. No alteration is required to be made, except the addition of a small pulley on the cylinder shaft. It receives the straws and grain as fast as they are thrashed, and elevates them to any desired point; and while passing through the machine, the grain is cleaned fit for market.

A large number of these machines have been manufactured and sold at Rochester, N. Y., the past season, which we learn have given the most perfect satisfaction.

Mr. John A. Pitts, one of the patentees, resides in Rochester, and is prepared to furnish machines, or give any desired information relating to the improvements.

Employment is necessary to man: if agreeable, it is a pleasure; if useful, a happiness.

JACK FROST.

BY MISS H. F. GOULD.

The frost look'd forth one still, clear night,
And whisper'd, "Now I shall be out of sight;
So through the valley and over the height
In silence I'll take my way.

I will not go on like that blustering train—
The wind and the snow, the hail and the rain,
Who make so much bustle and noise, in vain:
But I'll be as busy as they."

Then he flew to the mountain and powder'd its crest;
He lit on the trees, and their boughs he dress'd
In diamond beads; and over the breast

Of the quivering lake he spread
A coat of mail, that it need not fear—
The downward point of many a spear
That he hung on its margin, far and near,
Where a rock could rear its head.

He went to the windows of those that slept,
And over each pane, like a fairy, crept:
Wherever he breath'd, wherever he stepp'd,
By the light of the moon, were seen
Most beautiful things: there were flowers and trees;
There were beves of birds and swarms of bees;
There were cities with temples and towers; and these
All pictur'd in silver sheen!

But he did one thing that was hardly fair—
He peep'd in the cupboard, and finding there
That all had forgotten for him to prepare,

"Now, just to set them a-thinking,
I'll bite this basket of fruit," said he;
"This costly pitcher I'll burst in three,
And the glass of water they've left for me
Shall "click," to tell them I'm drinking!"

MR. CHARLES W. BRIGGS, of Rochester, will call on the farmers of Monroe County, during the months of January and February, soliciting subscriptions for the GENESEE FARMER. We bespeak for him a kind reception among our friends. We want one thousand subscribers in Monroe, and with the assistance of the friends of agriculture can easily obtain them.

THE CHARACTER AND IMPORTANCE OF AGRICULTURE.

—An Address delivered before the Tompkins Co. Agricultural and Horticultural Society, Oct. 5, 1844. By EBENEZER MACK. Published by order of the Society.

A copy of this address, in a neat pamphlet of 16 pages, has been sent to us by the author. It is one of the best digested and most ably written productions of the kind, that has lately appeared. The author belongs to that praiseworthy class of individuals which has done so much towards giving a fresh and powerful impulse to agricultural improvement within a few years—individuals who have retired from the turmoil of political life and the cares and anxieties of active business, to the peaceful and invigorating pursuits of agriculture.* It may be regarded as one of the happiest omens of the times—one of the surest indications of the future growth and prosperity of this country—that so many men of capital not only, but of energetic and skillful business habits, are bringing their accumulated means and their successful experience and their vigorous minds all to bear upon the great and momentous subjects of agricultural improvement and rural economy. The idea that a man who is too ignorant and stupid for any other calling, may make a good enough farmer, is proven to be a gross fallacy by the daily evidences we have before us that they are most successful in the pursuits of husbandry who are the best informed, and who possess acute, investigating and energetic minds.

The author glances at the condition of agriculture in the "palmy days of Greece and Rome," and shows that the sages and heroes of those days were not only proud of the title of "agriculturist," but were well skilled in the science, maxims and practice of agriculture, whose fundamental principles were the same then as now. He traces the progress of agricultural improvement in Great Britain, showing that "while vast improvements have been there accomplished, in every branch of husbandry—while science and practice have brought forth abundant fruit of their united skill, doubling within the last twenty-five years, the yield per acre of grain and hay, doubling within the same time the number of domestic animals, and enabling the farmers to keep twice as many upon the same amount of food as they did—while the finest cattle, horses and sheep of improved breeds, are sprinkled in numerous herds over her fertile meadows,—while the lordly and privileged owners of the soil, and the wealthy tenantry of large estates have been greatly profited—the mass of the people—the actual operators—still labor in unrequited toil. Amid this scene of present and progressive improvement, Great Britain presents in her agricultural aspect the sad anomaly of a rich and prosperous country and a poor and degraded population! It is not, however, to be denied that within the last half century, through the spirit of agricul-

* The author of this address (like the great apostle of agricultural improvement—the late Judge Buell), devoted the earlier part of his life to the arduous and perplexing duties of conducting a political newspaper, together with somewhat extended operations of a more profitable nature. And after serving the people of his county & district in the capacity of Representative and Senator, in our State Legislature, and occupying other stations of honor and trust, in a manner no less advantageous to them than creditable to himself, he retired a few years since with a handsome competence, to enjoy the pursuits of rural life upon his farm, which is situated on a commanding eminence near the village of Ithaca, overlooking that beautiful town, and commanding one of the most lovely views of rural beauty that we ever beheld. The production before us shows that the influence of rural life, with its practical pursuits, is calculated to enhance the power of genius, and to give renewed vigor and brilliancy to a mind already gifted.

tural improvement and philanthropic zeal which has been exerted in behalf of popular education, both in Great Britain and on the continent of Europe, the condition of the toiling millions has been greatly ameliorated."

After glancing at the improvements making in France, in the various departments of husbandry, through the means of experimental farms and liberal donations from government to aid in disseminating the elements of agricultural knowledge and science, the results of which have been already exhibited in the fact that France has doubled her product of wheat, and now produces more annually than Great Britain and the United States together—and showing that in Flanders, "by a systematic and skillful plan of cultivation, combining the plow with the spade husbandry, upon small farms of from forty to fifty acres each, nearly the whole face of that country has been made to present the features of garden cultivation"—the writer draws a very graphic picture of our own highly favored country.

A statistical table is given showing the amounts of the several products of the soil in the United States annually, exhibiting an aggregate value of about \$800,000,000!

The address states that Mr. E. J. AYERS, of Tompkins Co., has raised the past season *fifty-seven bushels of wheat to the acre!* Farmers of the Genesee Valley, 'do you hear that?'

On the importance of having *small farms well tilled*, in preference to large ones half cultivated, the writer has some very just and appropriate remarks. The idea that the renowned Cincinnatus, who has been kept "plowing" in the speeches of orators and statesmen from his day to this, should have had but six acres to plow, must be somewhat amusing to the advocates of "thousand acre farms."

Those who are in the habit of ridiculing what they term "book farming" and all modern improvements, are admirably hit off by an allusion to the olden times, when "horses drew by the tails, and oxen by the horns; and men went to mill with the grist in one end of the bag, and a stone in the other."

On the importance of improvement in our stock, the writer says, "the means of improving our domestic animals, as well by improved native breeds as by importations, are becoming ample." And very justly adds, "it is as easy to raise a good animal as it is to raise a poor one. It involves little if any more expense, while the satisfaction and the profits are greatly increased."

May we not hope that our author will often favor his agricultural friends with the fruits of his experienced and prolific pen? T. H. H.

TO EXTRACT THE ESSENTIAL OIL FROM ANY FLOWER.—Take any flowers you like which stratify with common sea salt in a clear earthen glazed pot. When thus filled to the top, cover it well and carry it to the cellar. Forty days afterward, put a crape over a pan and empty the whole to strain the essence from the flowers by pressure. Bottle that essence, and expose it four or five weeks to the sun, and evening dews to purify. One drop of that essence is enough to scent a whole quart of water.

AROMATIC BEER.—Take 20 drops of the oil of spruce, 20 do. wintergreen, 20 do. sassafras. Pour 2 quarts of boiling water upon the oils, then add 8 quarts of cold water, 1½ pints of yeast. Let it stand two hours, and then bottle.

BIOGRAPHY OF AN EXTRAORDINARY PORKER.

We give below, from the New England Farmer, an extract from a report of the committee on swine, at the late meeting of the Essex Agricultural Society. We presume it is from the pen of the chairman, F. Poole, Esq. If the tribe of *sus aper* don't get immortalized, it will not be for the want of comic humor in the histories and descriptions of him by the wits of old Massachusetts. It is apparent now, that the lamented Lincoln left his mantle behind him.

"Linn, too, has her share of swinish honors, derived from the extraordinary merits of a single individual of the race, of whom the committee have it in their power to present a biographical sketch. We are indebted to Mr. John Alley 3d under whose patronage this individual was reared and educated, for some particulars of his life.

"Of his origin we know but little, except that he was the son of his mother, who died suddenly when he was a few months old, and left him an early orphan. He became remarkable for his rapid growth and the excellence of his appetite, and soon arrived at that middle age of swinehood when his porkship appeared a living epitome of good nature and good living. He continued to expand in size until he became a Daniel Lambert of the race, and possessed great weight in swinish society. He was a solid character, and his specific gravity was only equaled by the gravity of his demeanor—indeed, there was nothing waggish about him—but his tail. He now became a worthy member of the I. O. of Fat Fellows, and attained to their highest degree. His corpulency prevented him from traveling, and although he had never been to *rom*, (Rome,) he was familiar with the rich stores of ancient and modern *Grease*. The state of the money market gave him no concern, and he cared little for the rise and fall of *stocks*, except *corn-stalks*, which he always appeared anxious to *get down*. He early acquired a disgust for party politics, by observing the greediness with which some partisans have thrust their snouts into the public swill-pail. He even thought that some aspiring individuals had much better have a sty in their eye than the White House at Washington. In his political views there seemed to be something like inconsistency. He was in favor of protection, and was a ravenous advocate of home consumption. He also favored large corporations, and at the same time was a strong advocate of retrenchment, and delighted in cutting down *celeris*. He never was a candidate for any public station, and it is believed that his modesty would have prevented him from accepting the offer of any office, from that of Committee on Swine down to the President of the United States.

"Notwithstanding he was ten feet long, from extremity to extremity, the event proved he was not long for this world, and in his last extremity no friend was found to save him from the hand of the assassin. He was rapidly increasing in size until the time of his departure, which was in November last, at the age of two years and six months. At the post-mortem examination of his remains, it was found that his enormous bulk had reached the weight of more than *twelve hundred pounds!* What prodigality of fatness was there! What a mass-meeting of pork, concentrated in a single individual! The county of Essex challenges the world to produce his equal. Mr. Alley informed us, with great apparent sincerity, that he subsisted mainly on raw In-

dian meal and potatoes—but the committee had supposed it more likely that he lived on green turtle soup and pound-cake, with an occasional meal of boiled salmon and canvass-back ducks."—*American Agriculturist*.

From the Cultivator.

BOOK-FARMING—A FACT.

"I want to know if you believe in this book-farming," said a neighbor, as he walked into the room where I sat reading the Cultivator.

"Be sure I do," was the reply.

"Well, I don't; I never took an agricultural paper in my life. There is B. S., of W—, who came into this country fifteen years ago, and had to buy 50 acres of land on credit. He has cleared that up, and added from time to time, till he now owns two hundred acres—has good buildings, and money at interest. He always has good crops. He has averaged *twenty-five* bushels of wheat to the acre for several years: it is the same with all his other crops. While his neighbor E. W. has not raised more than *seven* bushels of wheat to the acre, and some of his other crops he never harvests. I would give more for the experience of B. S. than for all the book-farming and farming by rule in the world.

"Very well, sir, now let me have a word. This 'experience' of B. S., of which you speak, (i. e., the method he adopts to raise twenty-five, where his neighbor raises seven bushels of wheat, and other crops in proportion,) if written out and published, would be the very *essence* of book-farming, which you so much despise, and might benefit others as well as you. And then, secondly, I know this B. S. also, and it gives me pleasure to inform you, that he is a regular subscriber to, and constant reader of, *three* standard agricultural papers—the Cultivator, the New Genesee Farmer, and the Western Farmer; while this same E. W. will not have an agricultural paper in his house, partly because he does not 'believe in book-farming,' and partly because he *cannot afford to take such a paper*."

Here the man suddenly remembered his errand, which was to borrow an improved harrow, a plan of which I had found in my paper, and which he was pleased to say, "did the work so much better than mine," [his]—so the subject was dropped. I intend to speak to him again, ere long.

Ohio, Oct., 1844.

MAPLE SUGAR.

My manner of making sugar is, to have tubs, and all connected with sugar-making, clean and sweet. My next object is, to boil as soon as possible after the sap has run from the trees. In clarifying, I use for 50 lbs. of sugar one pint of skimmed milk, put into the syrup when cold, and put over a moderate fire until it rises, which should occupy 30 or 40 minutes, then skim and boil until it will grain; after which I turn it into a tub, and after two or three weeks bore a hole in the bottom of the tub, and turn on a little cold water; and in a few days the molasses will drain out, and leave the sugar dry, light, and white. *Riga, Oct. 3, '44.* ALFRED FITCH.

We can bear testimony to the excellence of Mr. Fitch's sugar, having eaten it at his house with strawberries and cream, and seen it exhibited at the State and Monroe co. Fairs. The operation is simple and effective, and well worth the notice of sugar-makers.—ED. FARMER.

KEEP OUT OF DEBT.

Let every young man and youth read and remember the following :

"Of what a hideous progeny of ill is debt the father ! What lies, what meanness, what invasions of self-respect, what double-dealing ! How in due season it will carve the frank, open-face into wrinkles—how, like a knife, 'twill stab the honest heart. And then its transformation ! How it has been known to change a goodly face into a mask of brass : the man into a callous trickster ! A freedom from debt, and what nourishing sweetness may be found in water ; what toothsome-ness in a dry crust ; what ambrosial nourishment in a hard egg. Be sure of it, he who dines out of debt, though his meal be a biscuit and an onion, dines in 'the Appollo.' And then for raiment—what warmth in a thread-bare coat, if the tailor's receipt be in the pocket ; what Tyrian purple in the faded waistcoat, the vest not owed for ; how glossy the well worn hat if it covers not the aching head of a debtor !

Next, the home sweets, the out door recreation of a free man. The street door knockers fall not a knell on his heart ; the foot on the stair case, though he live on the third pair, sends no spasm through his anatomy ; at the rap at his door, he can crow forth "come in," and his pulse still beat healthfully, his heart sinks not into his bowels. See him abroad !—How confidently, yet how pleasantly, he takes the street ; how he returns look for look with any passenger ; how he saunters, now meeting an acquaintance, he stands and gossips ! But then this man knows no debt—debt that casts a drug in the richest wine ; that makes the food of the gods unwholesome, indigestible ; that sprinkles the banquets of Lucullus with ashes, soot in the soup of an emperor ; debt, that like the moth, makes valueless furs and velvets, enclosing the wearer in a fastening prison, (the shirt of Nessus was a shirt not paid for :) debt, that writes upon frescoed walls the hand writing of the attorney, that puts a voice of terror in the knocker ; and makes the heart quake at the haunted fireside : debt, the invisible demon that walks abroad with a man, now quickening his steps, now making him look on all sides like a hunted beast, and bringing to his face the ashy hue of death, as the unconscious passenger looks glaucy upon him ! Poverty is a bitter drought, yet may, and sometimes with advantage, be gulped down. Though the drinker make wry faces, there may, after all, be a wholesome goodness in the cup. But debt, however cortecously it be offered, is the sup of a syren, and the wine, spiced and delicious though it be, an eating poison. The man out of debt, though with a flaw in his jerkin, a crack in the shoe leather, and a hole in his hat, is still the son of liberty, free as the singing lark above him ; but the debtor, though clothed in the utmost bravery, what is he but a serf upon a holiday, a slave to be reclaimed at any instant by his owner, the creditor ?

My son, if poor, see wine in the running spring, let thy mouth water at a last week's roll, think a threadbare coat the only wear, and acknowledge a whitewashed garret the fittest housing place for a gentleman. Do this and flee debt. So shall thy heart be at peace and the sheriff be confounded."

GUANO.—The first cargo of Guano ever received in this country, arrived in New York in the month of Dec., '44.

A COFFEE PLANTATION.—A coffee estate is indeed a perfect garden, surpassing in beauty aught that the bleak climate of England can produce.

Imagine more than three hundred acres of land planted in regular squares with evenly pruned shrubs, each containing about eight acres, intersected by broad alleys of palms, oranges, mangoes and other beautiful trees ; the interstices between which are planted with lemons, pomegranates, cape jessamines, tube roses, lilies, and various other gaudy and fragrant flowers ; while a double strip of guinea grass, or luscious pines skirt the sides, presenting a pretty contrast to the smooth red soil in the centre, scrupulously kept free from all verdure. Then the beauty of the whole while in flower. That of the coffee, white and so abundant, that the fields seem covered by flakes of snow ; the fringe like blossoms of the rose apple ; the red of the pomegranate and Mexican rose, the large scarlet flowers of the pinon, which, when in bloom, covering the whole tree with a flaming coat, is the richest of Flora's realm ; the quaint lino's trumpet-shaped flowers painted yellow and red, and bursting in bunches from the blunt extremities of each leafless branch ; the young pine apples with blue flowrets projecting from the centres of their squares ; the white tube roses and double cape jessamines ; the gaudy yellow flag, and a score of other flowers, known to us only by the sickly tenants of the hot house.

And when some of the flowers have given place to the ripened fruit, and the golden orange, the yellow mangoe, the lime, the lemon, the luscious caimito and sugared zapote ; the mellow alligator pear, the custard apple and the rose apple, giving to the palate the flavor of otto of roses ; when all these hang on the trees in oppressive abundance, and the ground is also covered with the over-ripe, the owner of a coffee estate might safely challenge the world for a fairer garden. Nor must this be thought the appearance it presents for only a short period. The coffee has successive crops of blossoms, five or six times in the winter and spring, and on the orange, the ripe fruit and the young green fruit, are often seen at the same time ; while several of the shrubs and plants bloom nearly all the year.—*Notes on Cuba.*

The following resolution has been submitted to Congress, by Col. Pratt, of New York :

Resolved by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of War be allowed to loan such marquees and tents as he may think proper, whenever officially requested by any regularly organized State Agricultural Society, to promote the convenience of the farming and mechanical community, and the public generally, at the annual agricultural fairs and cattle shows in the different states of the Union—it being distinctly understood, that such state societies shall be responsible for all loss or damage, and that the articles be taken and returned safely without any expense to the government.

The Liverpool Agricultural Society has offered a premium of *fifty pounds* to the landlord who shall produce off his estate a full, well-grown, fat and contented agricultural laborer, and whose children are well fed and can read and write.

Agriculture is the art of raising crops—husbandry the art of preserving and expending them.



HORTICULTURAL DEPARTMENT.

BY P. BARRY.

HORTICULTURE.

It is our design to devote, henceforward, a limited portion of our columns, to matter pertaining *exclusively* to Horticulture, with a view of pressing, to the best of our ability, its important claims upon the attention of our readers, and to furnish regularly such practicable and seasonable information as will appear to us best adapted to promote its general advancement.

The planting, management and improvement of orchards, the culture of garden fruits, culinary vegetables, as well as ornamental gardening, will all be treated upon at the appropriate seasons, and to as great an extent as the space allotted to these purposes will admit.

We are not unaware that in Western New York there is a very considerable amount of excellent fruit cultivated, and many well managed and tasteful gardens. Indeed, we feel no hesitation in saying, and we take a pride in doing so, that there is not another portion of the United States that would compare with it in these respects, considering that the pioneers are yet living who reclaimed it from a savage state. But, notwithstanding this, Horticulture may be said to be in a state of complete infancy; for *one* instance of a well cultivated orchard of choice select fruits, there are *ten* that are nuisances instead of benefits,—they do not pay for the land they occupy.

The cultivation of vegetables is equally, and perhaps more neglected. We have, in a large majority of instances, in passing around the country, found the vegetable garden the most forbidding spot on the farmer's premises, rich in little else but weeds.—We feel confident that this will not long be the case. It only requires that sufficient attention be directed to this subject to cause it to be fully and fairly appreciated; and improvement must and will follow.

In connection with these remarks we had prepared a somewhat lengthy article, setting forth the advantages that may be derived from bestowing a proper degree of attention to these departments of rural economy; but the want of space compels us to withhold it for the present. The subject, however, is of great importance to the agriculturist, and we will bring it forward before the arrival of spring.

In urging, as we will from time to time, the improvement of Horticulture, we will take occasion to do so on other grounds besides that of *mere utility*. There are pleasures and moral influences, resulting from it that lay the strongest claim to our attention. Throughout the wide range of human pursuits, not one presents itself so directly to our ideas of rural happiness as the labors of the garden. It is inseparably associated in our minds with whatever man has done to beautify the surface of the earth, and to it we owe the innumerable luxuries that contribute so largely to the comfort, enjoyment and ornaments of civilized life. There are persons in the world so absorbed with notions of utility or profit, whom it would be difficult if not impossible to persuade to plant even a shade tree opposite

their dwelling. We would not treat the opinions or feelings of any man on this or any other subject with disrespect. Still we are sorry to meet with such, as we have often done, and we could not avoid the mortifying conclusion that they had permitted the grosser elements of their nature to extinguish the purer and better. Mr. COLMAN, in his chapter on "*Ornamental Shrubs and Flowers*," alludes to this matter in his own style. He says, "When a man asks me what is the use of shrubs and flowers, my first impulse always is to look under his hat and see the length of his ears. I am heartily sick of measuring everything by a standard of mere utility and profit; and as heartily do I pity the man who can see no good in life but in pecuniary gain, or the mere animal indulgences of eating and drinking."

Whether the subject has any connection with the length of the ears, or not, we concur heartily in sentiment with Mr. Colman.

The planting of trees and shrubs and the embellishment of our gardens by ornamental culture, create sources of unspeakable pleasure for ourselves, families and friends, and besides is a work of genuine patriotism, for our country should be beautiful as well as great and wealthy. The man who plants a row of beautiful trees by his dwelling, raises monuments to his taste, that will endure fresh and green, yielding shade and shelter, when the most costly mansion he can erect shall have crumbled to dust and been forgotten.

The love of garden labor and of flowers is natural to the young, and every parent, however humble may be their sphere of life, should make every possible endeavor to cherish that love and promote and strengthen its development, as assiduously as he would guard their bodily health. He will, thereby, increase and strengthen their attachments to home, refine and elevate their minds, retain them from vain, idle and vitiating amusements and company, and have the happiness of seeing them grow up with habits of taste and industry, useful and exemplary members of society.

The LADIES, however, are true and universal admirers of Flora, and if the men of America were but true to their character for gallantry, they would make greater exertion and greater sacrifices to gratify this elegant and innocent taste. Indeed we think in addition to the gallantry of the thing, its *utility* is susceptible of proof.

A certain female writer, we forget her name, remarks that "to the *ladies* of the creation, flowers are a boon beyond all price, and if the gentlemen knew it, to *them* through their wives. The lady who is fond of her garden, and delights in the cultivation of it, will not seek expensive pleasures abroad.—Home is everything to her, and if her husband is wise enough to encourage her taste, he is a happy man." What say you to this, gentlemen? We believe there is a valuable truth there, and would advise all who have not already done it, to *try it*—*try it*.

In the absence of any special or combined effort to promote Horticultural improvement, it is the duty of all who feel an interest in this matter to labor, by precept and example, as far as their influence extends. Every man and woman who desires to see improved gardens and orchards in their neighborhood, can if they wish do much towards attaining it, and we respectfully call upon them to be active in doing so.

THE BLIGHT IN THE PEAR TREE.

In Hovey's Magazine of Horticulture, for Dec., we find a long article of fifteen pages on this subject, by the Rev. H. W. Beecher of Indiana, in which he speaks of the various theories of the cause heretofore advanced, at much length. Some, he says, are mere imaginations; some only ingenious, and some so near what he supposes to be the truth, that it is hardly possible to imagine how the discovery was not made. This shows that Mr. Beecher believes the discovery actually made. His theory seems to be a derangement of the fluids, produced by sudden and severe frosts coming on trees in the fall, while in a vigorously growing state, as they are sometimes when we have warm weather and copious rains in autumn—such was 1843.

The sap, he says, descending slowly, in consequence of its own thickened and diseased state, the injured condition of the sap vessels, accumulates at the junction of fruit spurs and forks of branches, and remaining there, has the same effect as girdling on the branch, by obstructing the passage of the sap in the vessels. The sap elaborated above this part and descending by it, becomes contaminated and carries the disease into other parts of the tree by means of the circulation. Mr. Beecher, in support of this theory, instances several pear orchards where the late growing kinds, and those stimulated to late growth by artificial causes or otherwise, have invariably suffered most by the blight, whilst those maturing their wood early from natural properties or from being planted on high sandy gravelly soil, escape in a great measure, and in most cases entirely.

We must have recourse to much more observation and inquiry before we speak with any degree of confidence on this subject. At present we must say that we doubt very much the correctness of the theory.

In the Mt. Hope Nurseries, there are several thousand pear trees of various ages, from 1 to 8 years old, and highly susceptible of blight from this new cause, yet there has never appeared the slightest indication of it, while the disease has been committing serious depredations in the immediate vicinity on large trees, much less likely to suffer, because less excited to growth by high cultivation. We have seen many trees killed by this disease, that had not grown a foot in two or three years. The fluids of such trees could not be very abundant, nor the system in a state of great excitability, so that sudden frosts, in our opinion, could not operate so deadly.—This, to us, is one strong objection to Mr. Beecher's theory, which we have room to mention at present. This gentleman, however, deserves great credit for the industry and ability he has manifested in the investigation of this important subject, as well as for the deep interest he takes in all that concerns the interest of Horticulture. We hope his theory may prove true, for as he says, "the scourge can only be occasional, and a remedy exists to some extent."

1. By selecting for pear trees a warm, dry, early soil that will ensure early growth and ripe wood before winter sets in.

2. Select such kinds as are naturally early growers and early ripeners of wood.

3. Where trees are likely to make late growth, resort to *root pruning* to prevent it.

4. Where blight does appear, cut off the affected part as soon as you discover it, and considerably below.

Mr. Beecher concludes his article by calling the

attention of cultivators to "Yellows" in the peach trees, and remarks "that it is the opinion of the most intelligent cultivators among us that the 'Yellows' are nothing but the development of the blight according to the peculiar habits of the peach tree." This is a new idea, and one to which we will refer at some future time.

Hovey's Magazine of Horticulture.—*New Volume.*—This eminently useful periodical has just closed the *tenth year* of its existence. For some years of that period we have been a constant reader of its pages, and take great pleasure in bearing our humble testimony to the important services it has rendered to every department of Horticulture.

The Prospectus is issued for a "new decade or eeries," and if space permitted us, we should be glad to publish it entire. The following paragraph, however, will give an idea of the important objects of the work:

"Horticulture—its science and practice; the cultivation of Fruit; the growth of Plants; the management of Ornamental plantations; the cultivation of Vegetables: Hybridization; Grafting and Budding; construction of Green-houses and Pits;—Landscape Gardening; Floricultural notices; Pomological notices; Reviews; foreign and domestic notices; exhibitions of Horticultural Societies;—replies to queries; report of the Market; monthly calendar of the garden; with numerous engravings illustrating the various subjects treated upon, will make up the coming volume of the Magazine.

"The first number of the new series will appear on the 1st of Jan. 1845. It will be printed on a beautiful type, on extra fine paper, and will be embellished with several engravings. The terms three dollars a year *in advance*. The Magazine will not be forwarded by mail to any new subscriber without the remittance of the amount. No subscriptions received for less than a year, and all to commence and end with the volume."

SUPERIOR APPLE.—Mr. T. H. Hyatt, of Rochester, has left with us a sample of a kind of apple which he thinks a seedling. It is medium sized, has a thin, smooth skin, of a golden color, with a rosy tinge on one side. It is a fair, beautiful and exceedingly well flavored apple, ripening from first Nov. to Christmas. Whether it be a seedling or not, it is certainly a very valuable apple. If it should appear that it has never received a name, we would suggest that of *Hyatt's Seedling*.—*Cultivator.*

We have seen and tasted the apple alluded to above and pronounce it an excellent variety of the season. It is in fine eating condition now. Dec. 20, and may be used a few weeks longer. Flesh white, juicy, and of agreeable flavor. It is not quite as large as a medium sized swaar, flatish form. We consider it well worthy of cultivation. It is said to be a tolerable good bearer.

TOMATO CATSUP.—To a gallon skinned tomatoes add 4 tablespoonfuls of salt, 4 do. black pepper, half a spoonful allspice, 8 red peppers, and 3 spoonfuls mustard. All these ingredients must be ground fine, and simmered slowly in sharp vinegar for three or four hours. As much vinegar is to be used as to leave half a gallon of liquor when the process is over. Strain through a wire sieve, and bottle, and seal from the air. This may be used in two weeks, but improves by age, and will keep for several years.

MASSACHUSETTS APPLES.

We have just examined a collection of apples, comprising 25 varieties, received by Ellwanger & Barry, of the Mount Hope Nurseries, from S. W. Cole, Esq., of the "Boston Cultivator." These, with two or three exceptions, are entire strangers to Western New York, and many of them are superior fruits. We have not space at present to notice or describe the varieties minutely, but will do so in future numbers. E. & B. are now making up a collection of winter apples, of the favorite varieties of this region, to send in return to Mr. Cole; and we have reason to believe they will be in no way discreditable to our orchards.

We would take this occasion to recommend this system of exchanging fruits, to all who feel an interest in fruit culture, as one great means of effecting improvement. The nurserymen and orchardists of the different sections of the country should send to each other specimens of their kinds, so that a comparison might be made, errors detected, and valuable kinds made known and disseminated.

Farmers, and others who may have choice fruit in their collection, can give valuable aid in this matter, by sending a few specimens of each to the "Rochester Seed Store," or the "Mount Hope Nursery."

They may be enveloped in paper, or packed in coats or shorts, to keep them from freezing or bruising by carriage.

The name by which each variety is known may be written on the paper enveloping the fruit; or the specimens may be numbered, and the names written opposite the numbers, on a slip of paper.

AMERICAN IMPORTS.—Wimer's Liverpool News Letter states that the farmers in the cheese manufacturing districts are in a state of the greatest alarm at the recent immensely increased importation of American produce, but more particularly of that staple. The hay sent hither during the last season was not of that prime quality to command an extensive and profitable sale, though at one period there was a scarcity of the article in consequence of the long drought, which was, however, corrected by a plentiful aftermath. The pork would be well received in England, if the English mode of cutting and packing were adopted. But in cheese, with an improved method of churning and making, an immense deal may be done. It has already superseded nearly all the quantities of that article formerly imported from Holland, and the efforts of the American population engaged in its production, should now be directed to a competition with Cheshire—the seat of England's finest sample of the article. The land owners and farmers of the adjacent counties have taken the alarm, and met to discuss the subject; but they are satisfied that there is not the slightest chances of their getting any additional duty imposed on American produce by the government, and their only hope of excluding it from the British market, is on the score of its inferiority; and in the circumstance that the factors have already begun to complain of its quality. We should recommend that more time should be taken in the manufacture of cheese, in America, that a greater pressure should be applied to it, that they should be made of greater depth and less breadth than at present, that they should be packed in casks, separated by thin greased boards, and that the factors should be allowed 120 lbs. to the cwt., the Cheshire manufacturers being about to give only 112 lbs.

ADVERTISEMENT S.

CANARY BIRDS, BIRD CAGES, CANARY SEED, HEMP SEED, CUTTLE FISH BONE, for sale at the Rochester Seed Store.
Dec. 1. B. F. SMITH & CO.

WINTER SQUASHES.

CHOICE varieties of Winter Crook-neck, Cushaw, Valparaiso, and Nutmeg Squashes; seven year Pumpkins, Spanish Cheese Pumpkins, &c., for sale at the Rochester Seed Store,
B. F. SMITH & CO.

NOTICE.—No. 2 of Mr. Colman's "Tour in Europe" has been received and forwarded to out-of-town subscribers, who have complied with the terms of subscription. Subscribers will much oblige me in remitting any unpaid balances, under frank of Postmasters who are authorized by law to do so.

Subscriptions received as usual. Terms, \$5 for ten numbers, \$2 in advance, \$3 on delivery of 5th number.

JAMES H. WATTS, Agent, No. 3 Exchange-St. Rochester, N. Y.
Nov. 20.

SAP BUCKETS.

WE are now manufacturing, and have constantly on hand, a large quantity of Sap Buckets, which we will sell cheap. Farmers, and others wishing to purchase, are invited to call at our PAUL FACTORY, on Mill-street, at the lower end of Brown's Race, next door to Smith & Alcott's Mill, in the Hydraulic Buildings. Our Buckets are made of first-rate Pine stuff, and warranted to be well seasoned. Also, Pails, Cheese-tubs, Keelers, Pine and Oak Churns, &c., &c., for sale wholesale and retail.
Rochester, 19th of 10th mo., '44. ja3m. I. BUNKER & CO.

B. F. SMITH & CO.

FARMERS' WAREHOUSE & SEED STORE,
No. 4, FRONT-STREET, ROCHESTER, N. Y.

B. F. SMITH & CO., having received a full and general assortment of FIELD, GRASS, GARDEN, and FLOWER SEEDS, worthy of cultivation in this section of country, confidently recommend them as being pure, and of the best quality. Their Cabbage, Turnip, and Short-top Radish, with several kinds of Dwarf and Early Peas, were imported by them from the long-established house of R. WINCH & SONS, London. Most of the Garden Seeds were raised particularly for them, by C. F. Crossman, former proprietor of the Seed Store; and they have no hesitation in saying, that their assortment of Seeds is as good as can be found at any establishment in the country.

B. F. S. & Co. have also a large assortment of PLOWS, amongst them the celebrated "Massachusetts Plow," the "De-lano Plow," and others; Sub soil and Side-hill Plows, of different sizes. A complete assortment of Tools for Gardeners and Nurserymen.

B. F. SMITH & CO.

PRINCE'S

Linnean Botanic Garden and Nurseries,

FLUSHING L. L., NEAR NEW YORK.

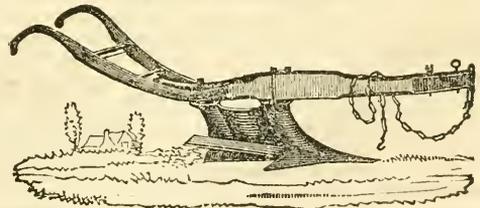
WILLIAM R. PRINCE & CO.'S New descriptive Catalogues of FRUIT and ORNAMENTAL TREES and PLANTS, (34th edition,) with prices much below those usually charged, and comprising additions of over 500 select varieties of Fruits, and 1200 varieties of Ornamental Trees, Shrubs and Roses, not in any other American Nursery, will be sent to every post paid applicant. The cost of this present edition is above \$700, and it is the most complete ever published.

Also, Prince's Treatise on Fruits, \$2.00 and on the Vine, 1.50, and on Roses, 50 cents. ORDERS will be executed in a superior manner, and forwarded as ordered. WM. R. PRINCE & CO.

Flushing, October, 1844.

N. B.—The Public are cautioned against a spurious use of our title and name by a man named Wiuter, who advertises as Winter & Co. 3m.

SUB-SOIL PLOWS.



WE have received from Messrs. Ruggles, Nourse & Mason, of Worcester, Mass., three of their superior SUB-SOIL PLOWS, in form like a genuine Sub-soil Plow, imported by them from Scotland. These plows have been thoroughly tested, with great satisfaction. The State Agricultural Society, which met here in September last, awarded the first premium to the Sub-soil Plow made by Ruggles, Nourse & Mason. Prices \$7, 50, \$11, and \$16.

B. F. SMITH & CO.,

No. 4 Front Street, Rochester.

Meteorological Observations,

MADE AT ROCHESTER SEVEN MILES FROM LAKE ONTARIO, BY L. WETHERELL.

METEOROLOGY is a subject that is beginning to interest all classes of people, and is of particular interest to the farmer. His labor is mostly performed in the field—consequently, he soon learns to observe the clouds, the direction of the winds, and also the thermometer and barometer, if he has them; for upon the favorable operation of the laws of the science of meteorology depends the crowning result of his labors.

But without enlarging on general views, I will proceed to explain the following table. The reader will perceive that three daily observations are recorded of the thermometer, and two of the barometer. The first of these is taken about sunrise; the second, at the warmest period of the day, from one to three o'clock; and the third, one hour after sunset. The thermometer is sheltered from the direct and indirect rays of the sun, and at the same time is exposed to the free circulation of the air.

The depth of rain is given in inches and hundredths.

JOURNAL OF THE WEATHER FOR DEC. 1844.

Days mo.	Thermometer.			Barometer.		Wind.	Observations.
	Sunrise.	Mid-day.	One h. after sunset.	Sunrise.	Evening.	Prevailing wind.	
1	33	33	32	29.61	29.67	NWN	Snow—fair.
2	24	34	25	.91	30.01	S W	Clear—cloudy.
3	23	37	35	.94	29.70	SSE	Clear—cloudy.
4	31	40	34	.62	.55	S E	Cloudy—rain.
5	32	38	34	.66	.62	S E	Cloudy—rain.
6	36	39	40	.71	.42	S E	Cloudy—rain.
7	50	49	38	.00	.08	SWW	Cloudy—rain & snow.
8	20	26	27	.68	.82	NW	Fair—snow.
9	22	36	31	.75	.58	W	Fair.
10	32	26	26	.69	.82	N E	Cloudy—snow.
11	24	29	21	.85	.69	S E	Cloudy—fair.
12	24	38	33	.62	.41	S W	Fair.
13	32	38	34	.30	.29	W	Cloudy—snow.
14	33	38	33	.24	.24	S E	.. ..
15	26	29	26	.28	.33	WNW	.. ..
16	23	21	20	.30	.35	..	.. ..
17	18	28	20	.40	.38	NW	.. ..
18	6	21	21	.58	.45	W	Fair—snow.
19	23	25	23	.50	.62	WNW	Cloudy—snow.
20	17	24	17	.76	.65	..	.. ..
21	15	26	34	.50	.11	S E	.. ..
22	36	42	38	.10	28.97	..	Cloudy—rain.
23	32			23.67			

AGENTS FOR THE ROCHESTER SEED STORE, AND GENESEE FARMER.

FRESH and Genuine GARDEN and FIELD SEEDS, raised for and put up by the Proprietors, may be found, at wholesale and retail, at the following places; and Subscriptions received for the Genesee Farmer:

Buffalo,	N. Y.	W. & G. Bryant,
Lockport,	..	S. H. Marks & Co.,
Albion,	..	Nickison & Paine,
Le Roy,	..	Tompkins & Morgan,
Batavia,	..	J. V. D. Verplack,
York,	..	
Attica,	..	P. Curtis,
Mount Morris,	..	R. Sleeper,
Geneseo,	..	J. F. Wyman,
Canandaigua,	..	H. O. Hayes & Co.
Geneva,	..	Hemiup & Cone,
Waterloo.	..	Thomas McClintock,
Auburn,	..	T. M. Hunt,
Syracuse,	..	Foster & Nott,
Utica,	..	J. E. Warner & Co.
Oswego,	..	D. Canfield,
Rome,	..	Comstock & Johnson,
Palmyra,	..	Hoyt & May,
Bath,	..	R. L. Underhill & Co.
Ithaca,	..	
Elmira,	..	
Skaneateles.	..	B. S. Woolcott,
Zanesville,	Ohio,	H. S. Stephens,
Columbus,	..	John Miller,
Wooster,	..	Samuel Knepper,
Mount Vernon,	..	H. A. Raymond & Co.
Newark,	..	Moor & Williams,
Sandusky City,	..	W. T. & A. K. West,
Toledo,	..	Raymond & Co.
Conneaut,	..	Samuel T. Fenton,
Detroit,	Mich.	J. W. Strong, jr.
Monroe,	..	Hosmer Graham,
Pontiac,	..	P. Davis,
Milford	..	Holmes & Brother,
Ypsilanti,	..	Edmunds & Co.
Ann Arbor,	..	F. J. B. Crane.
Marshall,	..	A. Callender.
Jonesville,	..	Smith, Potter, & Co.
Hillsdale,	..	J. W. Underwood,
Adrian,	..	D. K. Underwood,
Lafayette,	Inda.	J. W. Williams,
Eric,	Pa.	Carter & Brothers,
Hamilton,	C.W.	Samuel Kerr & Co.
Toronto,	..	Robert Love,
Belleville,	..	B. F. Davy,
Bath,	..	G. H. Davy & Co.
Napanea,	..	B. F. Davy & Co.
Brantford,	..	J. & R. Curtis,
Simcoe,	..	J. & R. Curtis,
Kingston,	Ca.	A. Thibado,
Chicago,	Ill.	N. Sherman, jr., & Co.
Milwaukee,	W. T.	Holton & Goodall.

B. F. SMITH & CO.,
Proprietors of the "Genesee Farmer" and the
Rochester Seed Store.

Jan. 1st, 1844.

ROCHESTER PRODUCE MARKET.

Wheat,	80 a 90	Hay, ton,	\$8 50	9 00	Eggs, doz.	12	14		
Corn,	37 1/2	40	Wood,	cord,	2 00	3 50	Poultry, lb.	5	6
Barley,	37 1/2	40	Salt,	bb'l,	1	13,	Tallow,	7	
Oats,	25	00	Hams,	lb.,	5	6	Hops,	10	11
Flour, (ret.)	4	25	Pork,	bb'l,	10	00	Wool,	35	40
Beans,	75	1 00	"	cwt.	3 25	3 75	Sheep Skins,	50	70
Apples,	23	38	Beef,	"	2 00	3 00	Green H'ds, lb.	3	4
Potatoes,	13	25	Lard,	lb.,	5	6	Dry Hides,	6	7
Cloverseed,	4 00	5 00	Butter,		9	12	Calf skins, gr'n.	5	6
Timothy,	1	1 50	Cheese,	cwt.	4 00	4 50			

Dec. 23.

BOSTON MARKET—Dec. 17, 1844.

Flour.—Demand moderate, and prices without change. Genesee, good common Brands, 4, 94, and Ohio 4, 81 per bbl; 200 bbls. Georgetown, at 4, 75; 100 do extra, at 4, 87 1/2 cash.

Wool.—Prime Saxony fleeces, washed, 45 a 50 c.; American full blood, do 40 a 42; do three-fourth do 37 a 38; do one-half do 35 a 36; one-fourth and common, 30 a 32; superior Northern pulled lamb, 33 a 40.

Cheese.—Shipping and four meal, 3 a 4 1/2; do new milk, 4 a 5 1/2.

Brighton Market, Dec. 16, 1844.

At market 540 Beef Cattle, 1000 Sheep, 960 Swine.

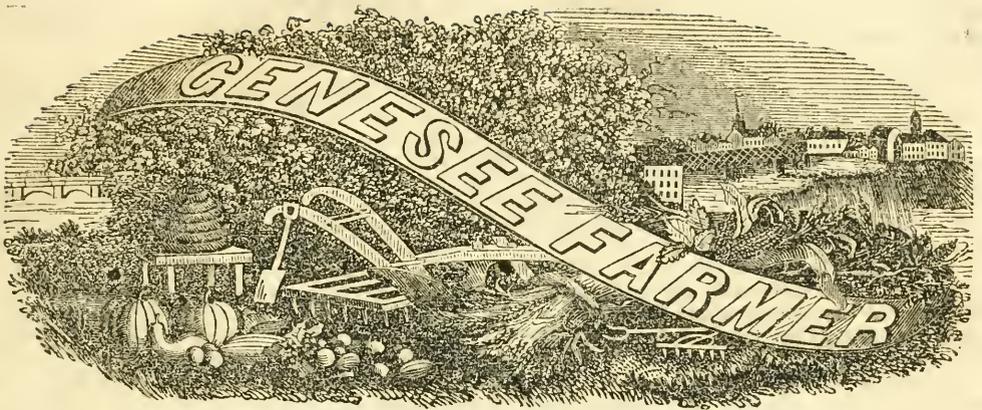
Prices.—Beef Cattle. We quote extra \$5; first quality \$4.50; second quality \$4 a 4.25; third quality 3, 50 a \$4; one yoke very fine 5, 75.

Sheep.—Sales from 1, 33 to \$2. A few stall fed Wethers 3, 25.

Swine.—Several lots to peddle, 3c for Sows, and 4c for Barrows; one lot 3 1/2 a 4 1/2. At retail, from 3 1/2 to 5c.

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VOL. VI.

ROCHESTER, NEW YORK. FEBRUARY, 1845.

NO. 2.

PUBLISHED MONTHLY.

BY B. F. SMITH & CO, PROPRIETORS,

At the Seed Store, No. 4, Front Street, near Buffalo St.

DANIEL LEE, EDITOR.

*Among the Correspondents are—*L. B. LANGWORTHY, N. GOODSELL, Prof. C. DEWEY, T. C. PETERS, L. WETHERELL, P. BARRY, and T. H. HYATT.

FIFTY CENTS A YEAR:

Five copies for Two DOLLARS; Eight copies for THREE DOLLARS. All payments to be made in advance. Money and subscriptions, by a regulation of the postmaster general, may be remitted by post masters free of expense. Address B. F. SMITH & Co.

MONROE AGRICULTURAL SOCIETY.

A regular meeting of this society will be held at the Farmer Office, No. 4, Front-street, Rochester, on Tuesday, the 11th day of February, at 11 o'clock A.M., for the purpose of making out a list of premiums, and determining the course of proceeding for the coming year.

It is desirable that the friends of the society be punctual in their attendance, as it is important that the list of premiums be revised and corrected.

JOHN H. ROBINSON, President.

No. 3 of Mr. Colman's Agricultural Reports in Europe will contain an article upon Guano and other manures, prepared with great care by Mr. C. It is expected, that in the month of February this No. will appear.

Mr. WILLIAMS' Essay on Manures, read before the Seneca Co. Ag. Society, in October, will be published in the next Farmer.

Mr. JOHN CHRISTIE, St. Catharines, Ca. Yours of January 17th is received, shall be happy to receive the communication mentioned. Please be as concise as possible.

The communication of MYRON ADAMS, Esq. of East Bloomfield, on the subject of raising corn fodder, will be published in our next.

"Penfield" is received, and will be published, or the information wanted given in the Farmer.

Mr. B. H. of North Fairfield, Ohio, will accept our thanks for the long list of names sent, as well as for the interest manifested in our behalf.

The city of Boston appropriated \$200,000 for the support of her schools in 1844.

TO THE FRIENDS OF AGRICULTURE.

KIND READER—An arrangement has just been made by which I have assumed the task of editing this paper. This responsibility has been taken, not without the hope that my services may be useful in collecting the most valuable information upon all subjects pertaining to rural pursuits, and scattering it broadcast over the land among all that will consent to pay the trifle of fifty cents a year for the cream of agricultural knowledge.

The state of New York probably contains not far from 500,000 practical farmers. Of these, not more than one-fifth read any agricultural paper whatever. This neglect arises not from the circumstance that four-fifths of our rural population have taken and duly weighed the value of these prints, and found them worthless; but from the fact that they have never read them at all, and know nothing of their true value. How are these people to be reached? To a part of them, I trust, this humble sheet will find access.

In that portion of the Empire State which I regard as Western New York, there are 700,000 souls. To 50,000 families of these I desire the privilege of talking on matters that involve, in an eminent degree, their prosperity and happiness. Why should they be unwilling to hear once a month what a friend and neighbor may have to say on the science of agriculture, and the practice of good husbandry? I have resided among you for twenty years. We all have a common interest; which is, to produce by our *better-directed* labor a plenty of all the comforts of life. When we have dug from the bountiful earth the little property which we really need, that each of us may "provide well for his own household," we should be glad to know quite as well how to keep and enjoy the good things that rightfully belong to us, as all the sharpers and non-producers shall know how to obtain the rich fruits of our toil without giving us a full and fair equivalent. The important science of keeping and making a good use of what their labor gives them, is too much neglected by the producing classes in all countries. As a general rule, that information which enables one to render his muscular strength and mental powers productive in the highest degree, will be sufficient to secure him from parting with the fruits of his industry on terms much to his disadvantage. But the majority of working men labor under the double misfortune of not knowing how to work to the best advantage, so far as the results of their physical toil are concerned, and of not understanding

how to keep for their own benefit more than a moiety of what they do produce.

For these people I feel a profound sympathy. Most of them are alike distinguished for their honesty and patient industry. They produce much, because they are always at work; they consume little, live poor, and die poor, to enrich others. Among the cultivators of the soil, these men read no agricultural papers. They think that they cannot afford to pay fifty cents or a dollar a year for a plain record of the practice and experience of the most successful farmers in the United States and in Europe. But, in sober truth, they are too poor to be able to do without the aid of such information.

It pains me when I reflect on the fact, that the number of public paupers in this great and wealthy state increases much faster than population. A laboring man must be pretty industrious to earn \$300 a year, and quite economical in his family expenses to retain a clear surplus of \$50. At this rate, it will absorb all the surplus earnings of 100 families to make an annual gain of \$5,000. If a man shall acquire \$100,000 in 20 years, as some have done in this state, he will draw into his coffers a sum equal to the entire surplus products of 100 laboring men. If from the misfortune of sickness or of accident any five or ten of these 100 families, that live from hand to mouth are thrown out of employment for a short period, they must go to the poor-house, and become a tax on the whole community. In this county (Eric) our annual poor-rates are but a fraction less than \$20,000. In the whole state, the sum is nearly a million of dollars!

Intelligent reader, allow one who has thought much on this deeply-interesting subject to ask, How much better would it be for each one of these 100 families to have \$1,000 well secured as the legitimate product of their honest toil, rather than that ten of them should be in the poor-house, and the other 90 paying \$7,000 a year to *one rich man* for the use of the \$100,000 which *their* productive industry—not *his*—had called into existence?

If the humane and patriotic will aid in giving this paper a wide and general circulation among the poorer class of farmers, the rich will take care of themselves, I should rejoice in the belief that I might give some hints that would be worth a hundred times more than the cost of the "Farmer."

There will be a number of important experiments in practical farming tried in Western New York the coming season, the first account of which will be published in this paper.

The writer of this will spend the winter in Albany. Should the friends of agricultural improvement, or others, wish to command his services in the Legislature, their business will be attended to.

Having freely given a great deal of time, first and last, to render rural labor far more productive both to the husbandman and to the community at large than it now is, I claim the right to ask every friend to the advancement of agriculture, and the elevation of honest industry, to co-operate with me in sustaining the "Genesee Farmer," and to carry it home to the fire-side of thousands. Let us show the people "down east" that some things can be done in Western New York quite as well, if not a little better, than in any other part of the Union. D. LEE.

☞ It is but justice to the publishers and to myself to say, that the January No. was made up without any of my assistance; except that this hastily-written article found a place in a small part of the edition.

INCREASE OF POPULATION.

Few are aware how rapidly the human family are augmenting their numbers, even in the largest cities on the globe. It is stated, in a recent report to the British government, "that in a little more than 12 years, 1,200 new streets have been added to London." On these new streets, 48,000 houses have been erected, most of them on a large scale.

London is now about 40 miles in circumference, and contains more than two millions of inhabitants. This wonderful increase of population within the last twelve years is attributable mainly to the numerous railways which center in that great metropolis, giving to it and carrying away again daily, it is said, *five times* as many people as visited it fifteen years ago.

There never was a time when human beings were multiplying so rapidly in Great Britain and Ireland as is now taking place in that kingdom. The aggregate increase is the natural effect of improvements in agriculture. These exceed the relative wants of the additional millions of the people living on those small islands, who import less and less grain per head every year.

Of course there is a limit to the production of human food, on the limited number of acres of arable land; but where the bounds are set, no one can tell. At this time it is thought, that fifty millions living on the two islands will consume all that can well be grown at home.

By improving our present system of agriculture and horticulture, we can easily add 2,500,000 to the population of New York within the next 25 years. This will more than double the value of all the farming lands in the state. On the contrary, if we fail to increase the productive value of our lands, emigration will remove nearly all the increase of our species to the more fertile regions of the boundless West.

RAILS AND FENCES.—Now is the time to procure rails, and prepare for making good fences next season. Between Rochester and Albany, nothing more discreditable to farmers is seen than the miserably poor fences that meet the eye most of the way. Wherever it is worth while to have any fence at all, certainly it is much cheaper, in a long run, to maintain a *good* than a *poor* one. Every sensible reader knows, that very great improvement can be made by fencing judiciously both large and small inclosures. Rails are not always used to the best advantage, after they have been made or purchased at no small expense. In determining the size of fields intended to be used alternately for growing grain, meadow and pasture, much judgment should be called to the aid of the agriculturist.

FARMERS' CLUBS.—We commend to the attention of the reader the article under the above heading, which will be found in this number. Immense good may be gained by the meeting together of a dozen or more practical farmers, young and old, to discuss agricultural topics, and devise ways and means to increase the productiveness of rural industry. The same land and labor that ten years ago gave ten bushels of wheat, should now give fifteen bushels; and ten years from this, should give twenty-five bushels. This is practicable.

A vessel loaded with guano has lately arrived at New York—the first cargo brought into that port.

GUANO.

We have received from the Hon. J. S. Sherman, of Washington, a treatise on the use of this highly fertilizing manure, with a great variety of well-authenticated experiments, both in England and America, by which it appears that 300 lbs. of Peruvian guano are equal in effect, to 30 loads of barnyard manure, when applied to the spring and summer crops, and equally valuable for the wheat crop, and all the grasses. If its virtues are not overrated, (and from the high standing of the gentlemen) who attest to it, as men of science and practical knowledge, it would be almost infidelity to doubt, it almost realizes the prediction of one of the early German philosophers, that the time would come when "a farmer would carry the material to manure an acre in his breeches pocket." This material contains all the properties of the most valuable manure hitherto known, in a highly concentrated state, particularly ammonia and the phosphate of lime. It is the dung of sea-birds who subsist on fish, deposited during a succession of ages coeval with their creation, in a climate where it never rains; which by heat and decomposition has become concentrated into the richest of all conceivable manures.

It is found in beds of 30 feet in depth, near the sea shore, in Peru, and also in Africa. It is sold at the rate of \$3 per 100 lbs. at our sea ports, and by the ton at about the rate of \$2 75 per cwt.

At the latest advices from Ichaboe, in Africa, where guano has lately been discovered, there were 130 vessels lying at anchor, waiting their turns to procure loads, and an English frigate stationed to keep good order—so great is the demand and anxiety to get this favorite manure.

The Bird Islands, on the Labrador coast, on the north of the gulf of the St. Lawrence, are a remarkable instance of the gathering of the feathered tribe for the purpose of incubation. On those islands, in the early part of summer, the congregation of sea fowl, of all kinds under heaven that are found on this continent, is so immense as to darken the sky when they rise, and the noise of their wings is like the rushing of the whirlwind. Whole islands are so thickly covered with their eggs, that it is impossible to walk about without crushing them under foot. The fishermen clear off favorable spots, and place down blankets and sails, and retire a few hours, and they are covered with eggs; they then are broken on boards slightly inclined, like the roof of a shanty, and dried in the sun into a substance like glue, for winter subsistence. Persons going on to the islands with guns totally forget their use, as ship-loads of birds, which are setting or laying, can be killed with clubs—which is often done, merely for their feathers and down.

Why have not some of our adventurous and enterprising Yankees, whose sails whiten every ocean, pushed their inquisitive genius for discoveries to these islands in pursuit of guano? The only objection to its existence in that region that strikes us is, the fact of the heavy shows and rains that climate is liable to, which may decompose and wash away the virtues of the excremental deposit. At any rate, if we were "bobbing for whale" along the Grand Banks and that quarter, we should go "a bird nesting" along those *diggin's*, wide awake for speculation. ?

TEA CAKE.—Take four cups of flour, three cups of sugar, three eggs, one cap of butter, one of milk, and one spoonfull of dissolved pearlsh.

MISTAKE CORRECTED.

Philadelphia, January 6, 1845.

SIR—The subscription to the Genesee Farmer was paid years ago. You have no claim against me. Please correct your fraudulent mode of keeping books. I shall take the proper means to punish your meretricious mode of making former patrons of the Farmer pay postage unjustly. Your repeated duns for money already paid are a nuisance.

SAM. C. ATKINSON.

REMARKS BY THE PUBLISHERS. This letter is one of the many we have received during the month of January, directed to the "Publishers of the Genesee Farmer." Now we beg leave to say to Mr. Atkinson and all others that have received "repeated duns" of this kind, that they are not sent by the proprietors of the Farmer, or any one connected with its publication. We understand these "duns" are sent by Samuel Hamilton, of this city, who, it would appear, is employing his leisure time, in thus "fraudulently" during the subscribers to the "*Old Genesee Farmer*," published by Mr. Luther Tucker, which was removed to Albany and united with the "*Cultivator*," five years ago!

We make this explanation, to prevent the impression, (otherwise unavoidable) that these duns were sent by the present proprietors of the "*New Genesee Farmer*," and we would also remark that they are not less unpleasant and annoying to us, than to those to whom they are so unjustly sent.

OHIO CULTIVATOR.—Published at Columbus, Ohio, by M. B. Bateham, late editor of this paper, has just made its appearance, and is a neat and well-executed affair. We marvel that he did not substitute the octavo for the quarto form. He is behind the *light-house* there.

He *feels* well, and comes into the *ring* like one confident of success; and if puffs and promises (which we know him able to perform) augurs anything, we think the *suckers* may be proud of their acquisition. ?

THE "PRAIRIE FARMER"—Messrs. Wright & Wight, editors, Chicago. This publication is a large quarto, 24 pages monthly, price \$1, and is unique as an agricultural work. The editors are knowing *wights*, and generally on all subjects about *right*; while the cogitations of some of their correspondents are a perfect specific for the horrors. Any of our readers who wish for the science of log cabins, where the latch-string is always out—of thousand acre farms without fences—plowing with four yoke of oxen—fields without stumps—bacon hominy and common doings—or white bread and chicken fixings—let them read the *Prairie Farmer*.

NEW VARIETY OF WHEAT.—The Cincinnati Atlas states, that several farmers in that vicinity have, for a year or two past, cultivated a new variety of wheat with great satisfaction. It was introduced into Ohio from Alabama, in 1839. It takes the preference over all other wheat which comes to that market, weighing from 64 to 68 lbs. to the bushel. The yield has averaged 30 bushels to the acre the present season. It matures early, having been harvested in that state on the 6th of June. By-the-bye this latter trait is a most desirable one, as it will very materially tend to protect it from *rust*, one of the most dire enemies of the wheat crop.—*Agri.*

ANNUAL MEETING OF THE N. Y. STATE AGRICULTURAL SOCIETY.

Albany, Jan. 16, 1845.

MR. EDITOR—In compliance with your request, made before I left Rochester, I will give you a brief account of the proceedings of the State Agricultural Society, at its annual meeting, which took place in the hall of the Old State-House, in this city, yesterday. Hon. JOHN P. BEEKMAN, president of the society, presided. There was a fair attendance of the friends of agricultural improvement from different portions of the state. The following delegates were in attendance from county societies, viz.:

Abraham Boeckee, of Dutchess; S. A. Brown, of Chautauque; Henry S. Randall, of Cortland; John P. Beekman, of Columbia; John Greig, of Ontario; Daniel Lee, of Erie; Abraham Van Bergen, of Greene; E. Kirby, of Jefferson; John A. Lott, of Kings; Carlos P. Scovil, of Lewis; Benjamin Enos, of Madison; T. H. Hyatt, of Monroe; Mr. Fonda, of Montgomery; Mr. Southworth, of New York; Elon Comstock, of Oneida; T. M. Brown, of Onondaga; Robert Denniston, of Orange; George Vail, of Rensselaer; Ebenezer Mack, of Tompkins; J. McDonald, of Washington; T. R. Lee, of Westchester; A. Birdsall, of Broome; David Rogers, of Saratoga.

From the report of the Treasurer, it appears that the amount of the receipts for the year has been \$4,865 80, and the expenditures, thus far, \$3,833 90, and a portion of the premiums are yet to be paid, and some other expenses. The receipts are about \$600 more than they were the last year, and the expenditures nearly \$1,000 more.

The Corresponding Secretary made a report, stating that he had opened a somewhat extensive correspondence with the friends of agriculture throughout this country not only, but with distinguished individuals in England, Scotland, France, Germany, &c.; and that several valuable communications had been received, in return, from Professor Johnson, Prince Albert, and others, and that more were expected in time to be published in the regular volume of Transactions.

The Recording Secretary made a report, stating the number of societies formed in the several counties to be about fifty, as near as he was able to estimate them; that volumes of the State Society's Transactions had been sent to most of them; that considerable correspondence had been kept up by him; and he read over a schedule of the property belonging to the Society.

A committee of three from each Senatorial district was appointed by the President, to nominate officers of the society for the ensuing year, and to fix upon the place for holding the next annual fair. The committee were as follows:

First District—Mr. Lott, of Kings; Mr. J. E. Southworth and Mr. Folsom, of New York.

Second District—Mr. Denniston, of Orange; Mr. Boeckee and Mr. E. Crosby, of Dutchess.

Third District—Mr. Van Bergen, of Greene; Mr. Geo. Vail, of Rensselaer; Mr. L. Tucker, of Albany.

Fourth District—Judge Savage, of Washington, Mr. Fonda, of Montgomery; Mr. Mann, of Herkimer.

Fifth District—Mr. E. Kirby, of Jefferson; Mr. E. Comstock, of Oneida; Mr. Enos, Madison.

Sixth District—Mr. E. Mack, of Tompkins, Mr.

Birdsall, of Chenango; Mr. Faulkner, of Livingston. Seventh District—Mr. J. M. Sherwood, of Cayuga; Mr. H. S. Randall, of Cortland; Mr. T. M. Browne, of Onondaga.

Eighth District—Mr. S. A. Browne, of Chautauque; Mr. T. H. Hyatt, of Monroe; Mr. D. Lee, of Erie.

The committee, through their chairman, Judge Savage, reported in favor of holding the next Fair and Cattle Show at Utica, several responsible citizens of that place having pledged themselves to pay all the expenses of making the necessary erections, &c., for the Fair. A similar proposition was also submitted from the citizens of Auburn, on condition that the Fair should be held at that village. The committee reported the following list of officers for the current year, and the report was adopted by the meeting:

FOR PRESIDENT,

BENJ. P. JOHNSON, of Oneida.

FOR VICE-PRESIDENTS,

1st district—James Lennox, of New York.

2d district—Thos. L. Davies, of Dutchess.

3d district—E. P. Prentice, Albany.

4th district—H. W. Doolittle, Herkimer.

5th district—Benjamin Enos, Madison.

6th district—O. C. Crocker, Broome.

7th district—H. S. Randall, Cortland.

8th district—Geo. W. Patterson, Chautauque.

Daniel Lee, Erie, Corresponding Secretary.

L. Tucker, Albany, Recording Secretary.

Thomas Hillhouse, Albany, Treasurer.

ADDITIONAL MEMBERS.

Thos. S. Faxon, of Oneida; E. Kirby, Jefferson; Alex. Walsh, Rensselaer; George Vail, Rensselaer; J. M'D. McIntyre, Albany.

The several committees chosen to award premiums on field crops made their reports, which I have not room for, in detail, in this communication. They will soon appear in the official proceedings. I would state, however, that the first premium on wheat was awarded to Matthew Watson, of Canandaigua, who raised 215 bushels of wheat on four acres and twelve poles of land, being nearly fifty-two and a half bushels per acre.

To our friend Col. Randall, of Cortland County, was awarded a gold medal, worth \$12, for the "best-managed flock of sheep." His flock consisted of 55, about one-half pure Merinos, the remainder were half-blood Merinos and South Downs. He states, that he has yet 39 of his flock on hand. The following is an abstract of his profits on the flock: Expenses of keeping 55 sheep one year, . . . \$82 50 Received for wool, . . . \$119 99 Received for those sold, . . . 726 00

845 99

A pretty fair profit, truly!

In the evening, at the Capitol, Dr. Beekman delivered the annual address, which was highly creditable to him, and interesting to his hearers. Mr. Johnson, the new President, was introduced to the meeting, and made some very appropriate remarks.

I have not time for further particulars now; and if this imperfect sketch will be of any interest to you or your readers, I shall be repaid for my trouble.

T. H. H.

The New York Commercial Advertiser thinks the people of that city spend more money for tobacco than they do for bread.

WHEAT CULTURE.

MR. EDITOR—I am glad that W. Robinson, in the Dec. No. of the Farmer, corrected my errors, which were published in the September number; for it is well known that we all can see others faults much easier than our own: and some of us are so anxious to correct others, that we imagine errors where they do not exist. He is of my opinion when he says, that "we are too anxious to raise wheat, and sow too much." Now, it is rather my notion, that to sow wheat on the same ground every other year would be sowing rather more than to sow it once in three or four years.

Again, he says, "But look for yourselves, and you will find plenty of evidence that our friend Garbutt has committed an error in the September number of the Farmer, where he says that green vegetables, and manure made from them, are of but little value when compared with that made from dried ones, such as hay, straw, and stalks." Now, Mr. Robinson, I never thought so, nor ever said any thing like it. I said that dried vegetables, such as hay, straw, and stalks, make more and much richer manure by being fed to animals; but that green ones, and particularly clover, did not require the same amount of fermentation to prepare them for the food of plants: yet there was nothing, as manure, lost by feeding them.

I am very glad to learn from him, that the past ten years, and not the future, are to regulate the value of our agricultural products; for I think that it will be much to the interest of the farmer, and will benefit the wool-grower, as well as the raisers of wheat.

He then "appeals to any set of candid men to say which would enrich land most, feeding it one year with sheep, which gnaw a little below the surface; or plowing under the first year, in its green state, 7 or 8 tons per acre, including roots and all."

I cannot say how low Mr. Robinson's sheep gnaw below the surface; but mine generally leave some of the clover roots in the ground; and however uncandid he may think me, I am willing to acknowledge that pasturing ground enriches it, and that it is equally beneficial towards improving the soil to plowing it under—for such is the economy of creation.

I will take the freedom to inform Mr. R. that alcohol can be made from wheat, corn, and even potatoes, as well as barley; and if it is his intention to be so very consistent, he must not raise any of them.

I am glad to learn that he and so many of his neighbors have had such bountiful crops of wheat the past season, and would like to know what their crops were in 1841 and 1842.

The more animals that can be kept, and well fed, both in summer and winter, on grain-growing ground, the more we shall enrich it; providing we manage the manure aright. And Mr. R. is satisfied that we ought to be particular and make all the manure we can. But I should like to know how he will pasture his stock, when his ground is all in wheat or clover, and the latter all plowed under; and whether he can winter them well on straw alone.

But there is a consolation for us both: for whatever anxiety we may feel lest our neighbors should fall into an error, we may rest assured that there is very little danger to be apprehended from it by us; for each one will have his own way, independent of any thing that we may say.

WILLIAM GARBUTT.

Wheatland, Dec. 30, 1844.

BOOK FARMING—A PLEA FOR ITS OPPONENTS.

MR. EDITOR—Strange as it may seem, there are perhaps not fifty agricultural papers taken in this beautifully picturesque, rural county of rich alluvions. It was only last week that a wealthy farmer, a descendant from that Germany which has produced a Berzilius and a Liebig, complained to me that he had been cheated out of the premium on a horse, which had been awarded to him at our last Seneca County Fair. From the impulsive manner in which he spoke of the cheat, I suspected that he had been paid in a counterfeit coin, or a bill of an exploded bank. It was far worse than this, in his view of the case—he had been compelled to receive, in lieu of a dollar in coin, a bound quarto of the Albany Cultivator—a thing about as useless to him, as were the shirt and trowsers given by Captain Cook to the South Sea Islander.

If I mistake not the cause why book farming is in so little repute among practical farmers, the fault is not altogether on the side of the unlettered man of the plow. St. James truly says, "faith without works is dead;" yet nine book farmers out of ten exhibit, in the appearance of their ill-managed, slovenly-worked farms, the very reverse of the apostolic axiom. I once rode by a farm, adorned by a capacious barn, with a stone-basement stable, and painted ventilating window-blinds; its strong stake-and-rider fences, clean meadows, and finely-pulverized fallows, filled me with respect for the proprietor, in vesting him, in my imagination, with all the attributes of a truly scientific farmer, and a man of taste. Passing on a little farther, I came to a farm where a large dog was driving the cattle out of a corn-field, through a gap in the old rotten fence. The whole farm was overrun with Canada thistles—the fences would hardly have had an altitude, were it not for the support they received from the alders and briars—the big lumps in the fallow indicated what the sailors would call "good holding-ground"—the barn doors off the hinges, one of them laid cross-wise of the door-way, to keep out the hogs—the house (what a rambling piece of patchwork!) in ruins, leaky eve-troughs, broken windows, with sundry sashless holes in the attic gable. Said I to myself, here is the abode of a poor unintellectual toper, perhaps a petty office-holder—an idler, who spends his time and his substance at taverns, electioneering for himself and the party that feeds him the small crumbs in its gift. I soon found, that in both cases I was sadly mistaken; the neat, well-worked farm was owned and improved by a Pennsylvania German, so deficient in the first rudiments of school learning, that he sometimes took his *Dutch* calendar to the school-marm, to interpret its meaning. But he had that in his physical manhood which is of more account to successful farming than mere book-learning without it—he had the early-acquired habits of industry and self-denial—his physical education was perfect. 'Tis true he made great blunders and waste in the application of his animal manures; his use of mineral or inorganic matter was often neglected, or grossly misapplied; he was also the victim to that disturbing force always at war with intellectual improvement, in the mind of an unlettered man—I mean superstitious and traditionary error; but his powerful, well-trained nerves—his indomitable, plodding industry—his all-and-singular devotion to his own calling, from which no petty ambition for social distinction, in the shape of a petty

town office, had power to withdraw him—overcame every impediment to his success. *Labor omnia vincit.*

I confess, that from that day's journeying to the present time, I have never looked into the face of a German farmer, however vacant and unintellectual it may have been, but I have felt a respect for the man. Even after I have listened to his coarse, uncivilized elocution—his crude, disjointed notions of political economy—his quaint, superstitious theology—I have still felt a respect for the man. Like the Pacha of Tripoli, who judged of the moral power of the naval captain only by his large physical proportions; so I respected the man who, by the force of an early well-trained muscle, and indomitable, persevering industry, could thus bind Nature to him—the willing handmaid, the smiling caterer of all his wants.

The dilapidated and slovenly farm was owned and managed by one who was called a "book farmer;" he was one of those unfortunate men whose hereditary fortune had strangled his physical education in the cradle. That lack of self-denial, management, and economy in the outset of life, so inseparable from the youth of the silver spoon, soon dissipated the better part of his fortune. Determined to secure the remainder, he invested it in a farm. He now bought Merino and Saxony sheep, imported a Durham bull and Leicester cow, at an enormous cost; subscribed for two or three agricultural papers, and commenced farming. During the first year he was heard to complain bitterly of the faithlessness of hired help: the fact is, he always said, "Go, boys, and do it," instead of "Let us go, boys, and do it." His farming went on from bad to worse—some of his sheep died, others ate out one side of the haystack, when, losing its balance, it fell over and killed them—his bull broke down the fences, became unruly, and was sold at a tythe of his cost—his cows, owing to exposure and irregular feeding, looked in spring, like the cows of eastern Virginia, as though "they were on the lift."

Here was the melancholy spectacle of a man of a good natural mind and temper, with a well-read theory, so sadly wanting in physical energy and practice, that all his best resolutions were nought—to sum up his present character, in one short word, he was a *discouraged* man. Speak to the thrifty German farmer about his neighbor's bad husbandry, and he will exclaim, with a mingled expression of pity and contempt, he is a *book farmer!*

Thus is agricultural science brought into contempt by those unfortunate men who have had no early physical training—who have the will to do, without the nerve even to stand by and see others execute. What would be the situation of that ship, in a gale of wind, if, after giving the men orders to reef and take in sail, the officers should go below to smoke their pipes? It could not be worse, even should half the ship's sails blow away from the yards, than that of the farm whose master is never present with his men in the field—not even at seed-time and in harvest.

S. W.

CHILBLAINS, OR JOHNNY-CAKE GOUT.

MR. EDITOR—There are none of the little ills of life more annoying than chilblains, or that burning, swelling, and itching sensation of the feet of many persons, so common in cold weather. There are as many nostrums and cures for it as there are for the ague, very few of which possess any virtue. The

cause of this complaint is, frosted feet and tight boots or shoes. The fine ramifications of the veins of the arterial and venous circulation of the blood become disorganized, and the arterial system forces the blood into the feet, which the nervous system is unable to dispose of; consequently swelling and inflammation result.

The certain cure for this complaint is cold water. Take a tub or pail, with a quantity of cold water, (if half snow the better,) set it in a situation that the feet may be immersed till you cannot tell whether you have a foot on your leg or not. Take them out, and sit till you feel a pleasant glow of heat: and so continue 4 or 6 times during an evening, and they will be and remain cured, as long as you keep them from excessive cold or heat. No ill effect ever results from this application. This remedy should be applied before the skin becomes cracked or icherous. Its medical effect is the same as the cold bath—the sudden alternation of heat and cold equalizes and restores circulation.

Yours, &c.

L. B. BIPED.

"OHIO CULTIVATOR."

MR. EDITOR—I have just enjoyed a perusal of the first number of this paper, published at Columbus, Ohio, by our friend Mr. Bateham, late the presiding genius of the Genesee Farmer. I am glad to find that he has reached his destined point in safety, and seems to be in such mighty good humor with himself and every thing and every body around him. His first number is rich and racy—a real treat, not to the agriculturist alone, but to the philosopher, the student of human nature, the lover of literary oddities, such as D'Israeli—and above all, and beyond all to the ladies.

A large portion of this number is occupied by friendly, congratulatory, and excellent letters from distinguished agriculturists throughout the Union. These are all in about the same spirit—complimentary to Mr. Bateham, laudatory of his new enterprise, and hopeful of his success.

The prospectus is quite comprehensive, and rather compact and ably written. But the "Introductory," "Our letters of Introduction," "The Editor's own Corner," and other editorial scraps, savor too strongly of bombast, in my opinion, to be well relished by the plain intellectual palates of Mr. Bateham's rural readers in general. Some of the editors in the city of New York, or such places, may indulge to their advantage in these editorial swaggerings, and perhaps the more lavish and inflated the better; but it does seem to be out of place—not what we would naturally expect to see addressed to a plain farming community by a staid and sober old bachelor like our friend.

Old bachelor, did I say? but he insists upon it, that he is *young* yet. Well, he knows best. Hear what he says himself, to the Buck-eye ladies, on this subject of bachelorism:

"Of course, the ladies will not expect the *editor* to write articles upon household management, or the duties and pleasures of domestic life, for the truth is—and it may as well come out—he is—a—a bachelor! Not very old as yet, however, for he promises, as soon as the profits of the *Cultivator* are sufficient for that purpose, he will endeavor to find an *assistant* who is qualified, and will consent, to take the editorial charge of the "Ladies' Department." He hopes, therefore, that all who feel any

sympathy for him, in view of his condition, will manifest by their deeds!"

These, and similar remarks interspersed liberally throughout his columns, may be considered amusing sallies of good humor, or perhaps some may excuse them as "eccentricities of genius;" but candidly, (and I speak now as a sincere friend of Mr. Bateham's,) they will confer but little honor or dignity on either him or his paper; on the contrary, will they not indicate a sort of personal vanity, that is not wholly inoffensive, in these unromantic, matter-of-fact times of ours? In the good old days of chivalry it would have been less censurable. On the whole, however, the 1st No. of friend Bateham's paper does him credit in many respects; and we bespeak for him, as we most sincerely wish him, "all manner of success." He deserves it well. He has entered on a great field of labor. As Mr. Randall, in his letter to Mr. B. eloquently and expressively remarks:

"Ohio is the mightiest of the young sisterhood of the western States. Her soil is fertile as that of the fabled garden of Hesperides."

That the efforts of Mr. Bateham, in this mighty and fertile State will, and that the efforts of all others who labor in any way to promote the public good, may be crowned with ample and merited success, is the sincere wish of

A FRIEND TO AGRICULTURE.

VARIATION IN WHEAT-SCALES.

MR. EDITOR—I noticed in your paper for January an inquiry, by a farmer, whether the beams of wheat scales are sealed. This is a question which I have often heard asked, but never heard answered to my satisfaction. I had, this last fall, some wheat to dispose of, and for my own satisfaction I weighed, with a pair of small steelyards, which I have good reason to believe correct, several half-bushels of the grain, and found it uniformly to hold out $30\frac{1}{2}$ lbs. to the half-bushel. The wheat was all thrashed in the field, in one of Hall's machines, with Pitt's separator—drawn at once to the barn, and emptied upon the floor.

As soon as I had leisure, I cleaned it up for market, and put it in bins in the granary. When it was drawn away, it was put up in bags of just two bushels each, all carefully measured by myself in one half-bushel; and there could have been but a very slight error, if any at all. Now for the result.

At one mill, twenty-six bushels held out but *twenty-four bushels and fifty pounds*. At another place, thirty-six bushels by measure held out only *thirty-four bushels and ten pounds*—this was at a mill that paid extra for hauling past its neighbors, and was the first and last load I drew past a mill for extra pay. While at another mill (and I drew the rest of my crop there) my half-bushel held out full measure and a trifle over!

Now, what could make this difference? Surely five and a half per cent. is too much to put down for "currents of air from above or below," unless there were a special contrivance to have it blow *up* pretty hard. I am at a loss to account for it, except by inaccuracy, for I know my account by the measure was correct. I have heard of long arms to scale-beams; and the way in which the hopper is strung at the end of the beam offers every facility for putting it on a short arm. Could it be easily shifted, wheat-sellers could right themselves by changing ends, and at one load rectifying the error of the other. This might be done if, instead of chains, the hopper and

weight platform were slung with rods, so as to stand erect while shifting ends with the beam. At any rate, farmers must look to their interests in this matter; and I for one am not disposed to give all all scale-beams the credit of being honest, because they will stand level when unloaded, any more than I would give my neighbor credit for honesty because he stood fair with the world, while I caught him robbing my pork-barrel.

Scales can be made to turn with 1-60,000th part of their load; but a far less delicate instrument will answer for all our purposes, in ordinary affairs. All we ought to ask is, 'a just balance and a just ephah.' But I cannot but mistrust results so widely different in respect to grain from the same bin, measured in the same half-bushel, and with such precautions as almost to preclude the possibility of mistake.

I should, perhaps, have said, that the beam of the scale which I believe to be correct was made by Lewis Selye, of Rochester.

Yours, &c., AGRICOLA.

Victor, Jan. 1845.

FARMERS' CLUBS.

MR. EDITOR—Having noticed in the last number of the Farmer a suggestion to farmers' sons, whether it would not be well for them to form farmers' clubs in their neighborhoods, during winter evenings, I could not repress the inclination of saying a few words upon the subject, expressive of my own opinion—which is, that such clubs should be formed in every town at least, and we wish they might be in every school district in the Union.

The *why* we would wish such a state of things to exist is, that *we know* that where they do exist, and have done so for any length of time, under prudent management, results have arisen from them of a valuable and enduring character. Let us take a single case for illustration: In a certain neighborhood, somewhere in Christendom, (no difference where—not, however, a hundred miles from Boston,) there was a certain individual who had ventured so far into the strange innovations of the age as to take an agricultural paper, and his was the only one left at the office where it took its solitary pilgrimage. With all the sympathy which a certain class of people always possess, poor neighbor A. was given up as a *gone case*. He had become a "book farmer," and they *guessed* he'd find out that book farming "wan't what it was crack'd up to be"—at any rate, it wouldn't support *a-body*. And besides, them papers wouldn't do for our soil, "that where they was written was so very different," &c. &c., to the end of the lingo.

Farmer A., however, saw fit to differ from his neighbors in these points, and, though thrown into a very humble minority for venturing to exercise his own good sense, he resolved that general good should be the result of it. He carefully read his papers, and brought the knowledge thus acquired into practical action—not, however, without bringing his *judgment* into action also—to make such variations in *modus operandi* as his soil, climate, and other causes required. The result was soon manifest in the fertility of his fields, and the improvement and prosperity of his flocks and herds. His neighbors *saw* the change that was going on with him, yet they would attribute it to any cause (we might mention a host of them actually supposed, but it is not necessary) rather than to any benefit he had obtained through the press. He reasoned with them,

and tried to induce them to take agricultural journals; but the general reply was, that they knew "how to farm it pretty well," and they did "not think them city fellows could teach them much about it." He at length, after much toil, (harder than swinging the axe or guiding the plow, we warrant you,) obtained *one new subscriber!* It was a victory, and if not so bloody an one as those which have given to sanguinary warriors a proud and enduring name, it was fraught with far better consequences than most of those which have had their birth on fields of human bloodshed. Farmer B.'s papers henceforth, then, came on with farmer A.'s, and their contents, as may be expected, furnished them topics of discourse whenever they met. A. soon found that he had a help-meet in B. in sifting the wheat, and B. found more than the benefit promised by A. in agricultural reading; and even Mr. C., whose wisdom had formerly seemed invulnerable, began to listen to them, and finally, in a very confidential way, he told A. (he being pioneer in the business, and a very clever man withal) that if he was *willing*, he should like to *borrow* two or three of them papers, and look at them a little, and if *he liked them*, he took a story paper (his boys liked story papers best) from *Philadelphia*, that he would like to exchange with him. The request was granted, of course, so far as lending.

Now the reader, no doubt, has thought a dozen times that we have wandered from our text; but our narrative, like every thing else, must have a beginning; and so long as the pictures are true, what matter if we inclose two in the same casement? or perhaps, more properly, what harm if, in giving the picture, we represent more clearly the back-ground? But we are fully aware that newspaper articles must be short as is consistent with fact and general illustration; we therefore pass over many little incidents which, if drawn out, may be found in almost every neighborhood, and come directly to *that farmers' club* we spoke of in the early part of our epistle.

When these institutions were first introduced in this country, farmers A. and B. were wide awake in the cause of agricultural improvement. No wonder, then, that the idea took with them; but how to establish, sustain, and make one popular in their neighborhood, was a matter which raised many queries in their minds. At length they resolved, in their own wisdom and strength, that one *could* and *should* be sustained. They gave the requisite notice, with an invitation for all to attend at the district school-house. The evening of appointment came, and by most of the inhabitants passed unnoticed; a *few*, however, from a curiosity to see how this other new-fangled monster moved, went in merely as spectators—they took no part save to listen, with what motives we shall not surmise, to the confab between A. and B. The evening passed, and A. and B. voted an adjournment for one week. The gossip consequent on new things followed this meeting. Some thought they talked well, but need not have gone to the school-house, to burn out the district's wood, to say what they did. Others declared it all a humbug; while a third party declared it a thing started by A. and B., to set themselves up for notice.

The second meeting came: some were tired and could not attend, and others guessed (they were all Yankees) it would run out that night, and they would not go near 'em; but, on the whole, curiosity

had increased her conquests, and there were three more there than on the former evening. This increased number, though convened out of no helpful motive, inspired new hopes and new courage in the bosoms of those who had fearfully but resolutely commenced the work. A judicious subject of discussion was introduced between A. and B.—C. continued to lend a helping hand, though rather faintly—D. could not quite see through it all; the ideas communicated were opposed to those transmitted to him through his ancestors, and, in a sort of vengeful self-defence, he raised many queries, which were as quickly confuted by his antagonists. In short, there began to be an *excitement*; and at the close of the meeting D. proposed a subject, on which he engaged to come out in defence; and they broke up, all promising to come again, mostly, however, "to see the sport go on."

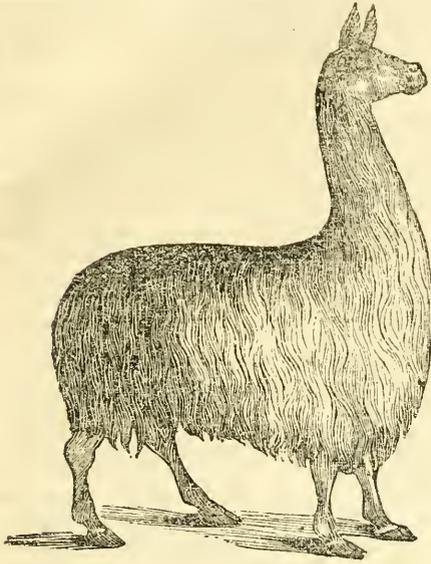
At the third meeting the house was filled to overflowing. Even Mr. C.'s great boys agreed to suspend story reading for one night, for living sport; and the ladies [as they go, so goes the multitude] all turned out to hear Mr. D. speak—a new thing, quite—they didn't believe he could say any thing.

The result of this meeting was more flattering than that of any preceding one. Before the adjournment, measures were discussed, to secure the permanent existence of a "farmers' club" and a committee, of which the late doubting Mr. D. was chairman, was appointed to report a form of constitution for their adoption at the next meeting—a duty which they performed in a very satisfactory manner, recommending, as an important article, that "no person should be a member of this club who did not take at least one agricultural paper."

To follow the club from the beginning, which we have shown, through all its operations up to the present time, would be tedious and needless. It is enough for us to say, that it has survived the storms of one winter, and the more tempestuous blast of a host of opposers, and is now successfully passing through the second. It is still held in the school house of an out district, where A. and B. held, almost in solitude, the first meeting. Every man in the district is now a member, (of course, each takes an agricultural paper,) and many from other parts of the town have associated with them. In addition to the discussions, or *talks* as they are called, they have frequent lectures on agricultural subjects, choosing the lecturers from among themselves. While, as an additional source of improvement, communications on raising flowers and fruit, rural and landscape gardening, many of which are written by the ladies, are read at such meetings. A subscription is now on foot to procure an agricultural library for the benefit of the club. Farmer C.'s boys have given up their story paper, and now invest their funds in more substantial reading. In short, a general change has come over the face of things in that region, such as would hardly have been supposed possible at the commencement of the cause—a change which manifests itself not only in the general tone of reading and of thought, but in the appearance of agricultural thrift in all that neighborhood. D.

Richmond, Mass., Jan. 1845.

LOAF CAKE.—Take two pounds of flour, one half-pound of sugar and a quarter of a pound of butter, three eggs, one gill of milk, one half tea-cupfull of sweet yeast; clove and nutmeg for spice.



THE ALPACA.

Among the beautiful and useful animals least known to the civilized world, is the Alpaca, a native of the interior of Western South America. It has the characteristics of the sheep, being larger, however, and its wool much longer. The beautiful, substantial fabrics for ladies' wear are mostly made of Alpaca wool.

This animal is remarkably hardy, and upon high and airy hills would be enabled to endure the moderate heat of our summers in elevated situations; and its fleece, which would be light in the warm season, would become large in winter, and form a good protection against our cold winters. Snows and storms do not affect these animals, as their skins are thick and hard, covered with an impervious coat, so that it is not injured by moisture.

There are a number of Alpacas in England, and in other parts of Europe, and they do well under proper treatment; though they sometimes suffer by confinement; and too much kindness—having been managed as pets and curiosities, rather than as hardy animals.

PARSNIP WINE.—Wine made of parsnips approaches closely to the malmsey of Madeira, and is made with very little expense or trouble, and is wholesome and palatable.

To every 4 lbs. of parsnips, clean and quartered, put one gallon of water; boil till quite tender; drain them over a sieve, but do not bruise them, as no process will clear the liquor afterwards. Pour the liquor into an open vessel, and to each gallon add 3 lbs. of sugar, and half an ounce of cream of tartar. When cooled to about blood heat, put a little new yeast, or emptyings: let it stand 4 or 5 days in a warm room, then put it into a cask, and when the fermentation has subsided, bung tight, and let it stand 8 to 12 months before using.

The months of April and May are the best for getting a good fermentation; and in these temperance times it is an experiment worth trying.

NON AQUA-ARDIANTE.

WORK FOR WINTER.—From the very nature of the season, but little can be done during winter in the way of agricultural operations; but still there are various preliminary steps which may be taken to facilitate those of the ensuing year. Where fencing may be wanted, the present occasion should be seized to fell the timber, and get it out into posts and rails, in order that when the season arrives for putting up new fences, or repairing old ones, no delay may occur to trench upon the other business of the farm, or that so essential a branch of the farmer's duty, as that of providing good fences may not, for want of time, be neglected. It is good, too, for one to look back upon the things that have passed, to see if some improvement may not be made in the future. If time were taken, in intervals of leisure during the winter season, to digest and adopt plans for early spring work, one would be able to enter upon and carry them out, under far more favorable auspices than if the necessary arrangements were delayed until the time of action arrives; for arrangements formed amidst the hurry and press of business but seldom reflect the best energies of the judgment, and more often prove defective for the want of time to mature and develop them. And whilst we may be looking back upon the past and forward to the future, with respect to the affairs of the farm, let us not omit to return thanks where alone they are due, for blessings already conferred; and in seeking a continuation of them, to do it in that spirit of gratefulness and humility which becomes a Christian farmer.

FIRE-WOOD.—If you have not already cut a sufficient quantity of wood to serve you through the coming year, forthwith go to work, fell the trees, cut it up into cord-wood, and when that is done, haul it into your yard, and have it neatly piled convenient to your dwelling, kitchen, and quarters. To obtain fire-wood by piece-meal, as the saying is, as it may be wanted, is to indulge in one of the worst habits into which a farmer can possibly fall, and never fails to be pregnant of evil. Therefore we may say to you, that you should not consider that you have discharged your duty to your family, and to yourself, until you have secured, within a few yards of your house and tenements, a supply of wood sufficient to meet every demand for at least twelve months to come.

GATES.—If the entries to your fields are through bars, substitute gates for them.—*Ame. Farmer.*

A **SHORT-HORN CONTROVERSY** has commenced in the London New Farmers' Journal, which promises to reveal some things which we fancy certain personages, who figured so largely formerly in purchasing and sending out cattle for the American market will not care to hear. The veteran breeder, Mr. Bates of Yorkshire, is one of the principals in this affair, and the way he shows up certain pretty *long green* horns is a caution to all beholders. There is scarce another man in England who possesses a title of the knowledge which he does on this subject, and we would give more for his single judgment in cattle breeding than for all that the flippant talkers, writers, and jobbers who have hitherto monopolized the public ear ever knew, or can know, or concoct together.—*Am. Ag.*

CUP CAKE.—Take one cup of butter, two cups of sugar, three cups of flour, whites of four eggs, well beat together, and bake in pans or cups. Bake 20 minutes.

DR. LEE'S ADDRESS BEFORE THE MONROE COUNTY AG. SOCIETY,

At their Annual Meeting, October, 1844.

MR. PRESIDENT, AND FARMERS OF MONROE,—The fact cannot have escaped your notice, that competition in growing breadstuffs, provisions, wool, and other agricultural products, is fast becoming a matter of deep interest to those that must live, and hope to prosper, by cultivating the earth. This growing competition is quite unavoidable. The introduction of labor-saving machinery into every branch of the mechanic arts, throughout the whole civilized world, is driving millions from factories and workshops into rural pursuits, who, but for the invention of *iron men*, that eat no bread, nor meat, nor wear any clothing, had remained the good customers of the farmer, instead of becoming his active rivals, if not ruinous competitors. Agriculture is *the* great business of civilized man; but, like every other branch of human industry, it has its ups and downs, its sunshine and its storms. Its sunshine is most enjoyed by those that avail themselves of all substantial improvements in the art and the science of good husbandry. These advantages give to the fortunate few, who are wise enough to study and understand them, a double capacity to supply the markets of the world, by increasing to that extent the productive power of their hands and their fields.

Think not that I have a hobby to ride in this matter. I fear bitter experience will soon, too soon, demonstrate the truth of the remark, that it is *unsafe* for the farmers of Western New York to despise the improvements of the age, and the competition of the whole world beside.

At the Agricultural School near Dublin, the pupils have raised, this season, a large field of potatoes averaging 750 bushels per acre. With a population of ten millions living on a territory but little larger than this State, and exporting more bushels of grain than all the United States, the fact has already been established, that in spite of your protective duty of ten cents a bushel, Irishmen can, and do, export potatoes to Boston and New York, and sell them at a little over a half cent a pound!

Farmers of Monroe! I declare to you, without the fear of contradiction, that out of the Free States of this republic, and excepting the British provinces adjoining us, agricultural labor is every where *very cheap*, and likely to fall in price, with the increase of our race, to the lowest point that will serve to keep soul and body together. Europe, at this hour, has two hundred and fifty millions of human beings, not one out of five of whom has permission to eat, or otherwise consume, the entire fruits of his own productive industry. The market value of the labor of two hundred millions of people is continually forced down, by circumstances over which they appear to have no control. Nevertheless, their numbers are rapidly increasing; and the most desirable outlet is to emigrate to this country, and settle on the fertile lands of our vast public domain. Answer me this plain question:

If other men will work, feed, and clothe the human family cheaper than you can afford to, what is to become of those who have only their labor to sell, and nobody will purchase it at a price compatible with a full supply of the necessaries of life?

Profoundly impressed with the importance of this truth, I desire that it may sink deeply into your minds: It is the fact, that the discoveries and improvements of every year depreciate more and more

the market value of the mere mechanical force of human bone and muscle. The same causes serve to augment, in an equal ratio, the value of cultivated intellect.

It is in view of the competition of iron men and iron women, moved with wonderful precision by steam and water power—in view of the competition of starving millions, working each for a peck of potatoes a day—and above all, the fearful competition of those that will soon produce two bushels of wheat, and two pounds of wool, as cheaply as you now do one pound of either—that I urge upon your attention the science of agriculture. "Science" is but another name for knowledge; and knowledge is indispensable to the practical husbandman, as a matter of self-defence.

I have not the vanity to assume to be a teacher. But since the worthy President of your Society has honored me with an invitation to address you, and having assumed the task, I will endeavor to show something of the importance of science to the practical agriculturist.

Nothing is more probable than the supposition that some one of you has harvested and brought to this market 100 bushels of wheat from five acres of land. Let me assume that the wheat weighed 60 pounds to the bushel, or 6,000 pounds; and that the straw weighed twice as much as the grain—in all 18,000 pounds.

As a simple, practical question, tell me how much of these 18,000 pounds of matter came from the soil? Tell me how much came from the air?

Conceding that what your cultivated plants draw from the ever-moving atmosphere, need not be restored to the fields whence they were taken, can you say as much of the alkalies and other minerals removed with your crops, from the soil where they grew? Long experience answers this question in the negative.

I regard it as one of the greatest discoveries of the age, that about 97 per cent. of the ingredients which make up the whole substance of wheat, rye, corn, barley, oats, peas, and beans, exist in the air in inexhaustible quantities. To transmute these aeriform bodies into the plants above-named, and into grass and roots, at the smallest expense, is the object of nearly all your hard work.

If I were to burn in your presence 100 pounds of wheat, including both straw and seed, you would know of a certainty that this bread-bearing plant might all be converted into air and vapor, except something less than three pounds of ash, which would remain. Now, who among you that loves good bread, and would be glad to produce it as cheaply as any one, will refuse to learn how Nature changes all the vegetable matter thrown into the air by combustion, fermentation, rotting, and the respiration of all animals, back again into grain, grass, and roots? Believe me, Nature is quite as willing to give you 40 bushels of wheat to the acre, and from one bushel of seed, as she is 20, if you will only *study* and *obey* her uniform laws.

A wheat plant is a living being; and the number which may be grown and brought to full maturity on an acre depends on the *quality* and *quantity* of food which you feed to them. It may not be profitable to feed so high as to raise at the rate of 320 bushels per acre, as one gentleman in England professes to have done. But that you may grow 40 bushels on an acre, at a less price per bushel than with any less number, I have no doubt.

The raw materials to form 36,000 pounds of ripe wheat plants are not expensive in this section of country. Nor is the knowledge expensive to combine and use these materials, so as to save a considerable portion of the ordinary cost of producing 40 bushels of this grain. But to render this information entirely satisfactory and generally available, an Experimental Farm is needed, to demonstrate practically how much of the ingredients contained in a field (i. e., what per-centage) comes from the air, and what from the soil.

Although I have spent much time in investigating this interesting subject, not only as regards wheat, but corn, oats, and peas, yet I am not prepared to speak very confidently at present in the matter. My impression, however, is that not more than ten per cent. of corn and twenty per cent. of wheat, under the most favorable circumstances, come from the earth. I will state a few facts which form, in part, the basis of this opinion.

A few years since, the mayor of Albany (FRIEND HUMPHREY, Esq.,) planted three acres in corn, on the poor sand plain, near that city. The quantity of vegetable mould, or organic matter, in the soil was small. As an experiment, he dropped in each hill on two acres, with the seed, a few grains (or perhaps drachms, of *horn shavings*). The other acre received nothing as a fertilizer. On the former he harvested 60 bushels per acre of shelled corn; on the latter about 15.

I learn from the Southern Planter, that farmers in that neighborhood, as an experiment, have paid so high as \$3 per 100 pounds for guano—the price of good pork, in many places—to feed to corn and other plants; and find the food not too expensive for profit. Thousands of tons of this fertilizer are annually consumed in Great Britain, at the cost of 20 or more dollars per ton.

The mere soaking of seeds in strong solutions of common sal-ammoniac and saltpetre of the shops, enables plants to increase largely their weight. Now, the question is—Do they derive this additional nourishment, which, as in the case of the horn shavings, adds 45 bushels of grain to the acre, and stalks in proportion, from the soil or the atmosphere?

From the known sterility of the soil, I think at least 90 per cent. of the grain comes from the air. In a mellow, deep soil, where the roots can easily expand, and be accessible to atmospheric influence, no matter how destitute it may be of organic substances, plants gain the most by the aid of concentrated fertilizers.

M. Boussingault heated a fair clayey soil to a high temperature for some time, till he had burned out all the organic matter. In this earth he planted a few peas, and watered them with pure distilled water. Some of them blossomed and bore perfect seeds, drawing *all* their carbon and nitrogen, as well as oxygen and hydrogen, from air and water. Had these peas had the benefit of common rain-water, there can be no doubt that the carbonic acid and ammonia which it contains would have been of essential service in promoting their growth.

An acre of land wholly destitute of vegetable matter, and containing all the minerals required for the plant, might produce a small crop of peas. The same is probably true of corn, clover, and artichokes. Mons. B. tried a similar experiment on wheat, but it would not grow to maturity without the aid of some organic matter. To prepare a field

to produce a good crop of this grain, other plants which draw nearly all their nourishment from the air, should be first cultivated and "plowed in" to enrich the earth. There is good reason to believe, however, that nearly all lands in Western New York lack, not so much vegetable mould, or organic matter, as some of the mineral or purely earthy ingredients necessary to produce large crops of wheat. This opinion is not lightly formed. It will take up too much of your time, however, to go into details to explain the facts and reasons on which it is founded. *Thorough draining, deep plowing, and a perfect pulverization of the soil*, I regard as of great importance, and calculated to improve our present system of farming. On the subject of draining we have much to learn, and more to practice.

Deep plowing has the double advantage of letting off, to some extent, any surplus water, and of bringing to the surface those saline substances without which no plant can flourish. When any of these are wholly wanting, there is no remedy but to apply them. Fortunately, only a very small per-centage of most plants is mineral matter.

One hundred pounds of wheat straw give only 3½ pounds of ash; and 81 per cent. of that is called *silica*—the basis of common sand. Before this *sand* can enter into the circulation of plants to form the *bone* of their stems, to keep them upright, (and many a field of wheat has fallen down, and been lost from a lack of this vegetable bone,) it must combine with potash or soda, to render it soluble in water. Loose, sandy soils are usually barren, because all the alkalies are dissolved and leached out. Without these, pure sand cannot enter the roots of plants, and they die from the lack of their natural aliment. The application of wood ashes to such soils increases largely their fertility, although they contain very little organic matter.

In clayey soils, the potash, soda, and magnesia are not washed out. After they have been partially exhausted by injudicious cropping, the application of lime sets the balance free to unite with silica, and form silicate of potash or soda, or double salts, which are soluble in water, and thus enter the roots of plants. These salts are decomposed in the chemical laboratory of vegetables. Silica is deposited in their tissues, and becomes again insoluble. But a small part of wood ashes, when put up in a leach, will dissolve, although every particle of them was dissolved before it entered into the organic structure of trees or smaller plants. On the decomposition of the compounds of silica, potash and soda return to the earth, combine with, and render soluble, more sand. This is carried, with its circulating fluids, into every part of the vegetable, and deposited where needed. It is doubtless in this way that a small quantity of alkali will serve to convey into the stems of corn, grass, and grain the large per centage of silica, flint, or sand, which they are known to contain.

Thus, if a soil had a moderate supply of organic matter, and only lacked one or two simple minerals, you can readily see how a farmer might pay, as do some in Virginia, at the rate of \$60 a ton for ingredients to be transformed into plants, and sold, perhaps, at \$10 a ton. It is, however, bad economy to waste the raw materials of cultivated plants—the very constituents of our daily bread and meat—and then trust luck to purchase, at a dear rate, something nearly as good brought from Africa, or the Pacific Ocean.

A large portion of the elements found in guano, and the salts or minerals necessary to the growth of plants, escape from the bodies of animals, whether man or brute, by their kidneys. You need not be told that the liquid excretions of all animals are *salt*, and that this saline matter must come from their food. Small as this mineral substance really is, when compared with the gross amount of matter taken into the animal system, it is quite indispensable in the composition of the vegetables that furnish it.

There are two and a half millions of people in this State, and they may consume an average of five bushels of wheat each per annum. This would use up 12,500,000 bushels a year, or 100,000,000 bushels in eight years. Now, bear in mind the important fact, that it will take just as much and precisely similar ingredients to form the second 100,000,000 bushels that were consumed to make the first. Owing to the great abundance—say 80 per cent.—of these ingredients, according to my estimate, being provided by Infinite Benevolence every where at our hands, their loss to the wheat-grower is not important. But there are elements in this grain which are not abundant, in a form ready to enter into the organization of wheat plants. When we have the seed, the land plowed, harrowed, and fenced, at no small expense, and *ninety four or five per cent.* of every thing required to give 30 bushels to the acre, the other 6 per cent. of ingredients lacking are worth treble their weight in clean wheat, if they will add 15 bushels per acre to the crop.

What was the value per pound of the few horn shavings used by the Mayor of Albany, which added 90 bushels of corn to two acres of land, more than were harvested on an acre in all other respects treated like the two named? Some of you may have noticed, that one kernel of wheat will often send up ten stems; and that, under favorable circumstances, each stem will bear an ear containing 100 or more plump seeds. I have frequently counted over 130 seeds in a head or ear. This is less than half the yield of stems which has been obtained, yet it shows a perfect willingness, and the capacity, in Nature to give a return of *one thousand fold* on the seed planted. A single peck of seed planted on an acre, in drills, and judiciously supplied with all the ingredients necessary to form perfect plants, and yielding at this rate, would give a crop of 250 bushels.

Experience has demonstrated the practicability of increasing largely the yield of grain without augmenting the growth of straw in an equal ratio. You will bear witness to the truth of the remark, that it is not always the heaviest yield of straw in wheat, oats, corn, clover, or peas, that gives the most grain or seed. I assure you, that if you will feed to your hungry plants a good deal more of those ingredients taken from them, and most insanely thrown away in urine, you will soon know, why guano is worth sixty dollars a ton.

By cultivating the soil with the plow and hoe, it loses not only the minerals carried off in the crops, but not a little of the same substances while dissolved in water, which, instead of being taken up into the circulation of cultivated plants, pass with the water into creeks, rivers, and the ocean. How much of the valuable salts of lime, potash, soda, and magnesia are lost from cultivated land, it is impossible to say. But there is scarcely a spring or well, especially in a good grain country, whose water is not "hard." By evaporating a few gallons of such

water in a clean vessel, a thin coat of white powder will cover its bottom and sides—being the minerals held in solution in the water, which it took from the earth.

All the streams that flow into the ocean have more or less of these saline ingredients dissolved in them. The sea is a vast salt-pan, with no other outlet than by solar evaporation. The known difference in the water that falls from the clouds on to the land and that which runs into the ocean—the water running in being *salt*, and that which escapes by solar evaporation being *fresh*—makes the water in the ocean very salt, and crystalized more or less, like that in a vat used to make salt, at Salina. No small portion of the rocks found in the bed of the sea are composed of ingredients which, like the crust of lime in a teakettle, were once dissolved in water. Few are aware that the materials carried, either mechanically, like mud, gravel, and sand, or in solution, to the ocean, from ancient islands and continents, have formed rocks on this continent estimated at, and I may say measured, by Prof. Rogers, to the depth of *forty thousand feet*.

Mr. Philips, in his "Elements of Geology," sets down the perpendicular thickness of the rocks in Great Britain, which abound in the remains of plants and animals that once lived on the earth, at six and a half miles. Viewed with a chemical and geological eye, the soil in Western New York has many interesting features. It possesses many minerals of great value to be used in the preparation of compost heaps. I regret that I have not time to go into details in the matter of combining and preparing the precise elements required by Nature to form the plants most cultivated in this section. To absorb many of the valuable gasses given off from fermenting manure, I have reason to believe that there is nothing better than pulverized charcoal, mixed with plaster. It is a subject worthy of much study, to learn how to save and use to the best advantage all the solid and liquid excretions of every animal that feeds on the fruits of the earth.

Nature has done much for the farmers of Monroe County, in providing ready to your hands a soil remarkable for its fertility, and an atmosphere, for your lungs, not less remarkable for its salubrity. I rejoice to know that these great natural advantages are duly appreciated and well deserved, by a rural population alike distinguished for their intelligence and their industry. Think not, that while I contend we all have something to learn, I would underestimate the wonderful improvements which have been made by the hardy tillers of the earth in Western New York. No man respects honest, productive industry more than I do. All I desire is, to see it better directed, that it may be better rewarded. I have often felt, and often expressed, my deep anxiety to see the time when every practical farmer in the State shall be able to produce all that he and his family shall need, or a fair equivalent, and then know quite as well how to keep and enjoy the rich fruits of his honest toil, as all the non-producers in the land shall know how to exchange their shadows for the working man's substance.

Believe me—those that create, by hard work, nearly all the good things consumed by civilized man, ought to learn how to *keep*, as well as how to *earn* property. Pauperism is on the increase, and it would be well if every man, woman, and child knew the reason why.

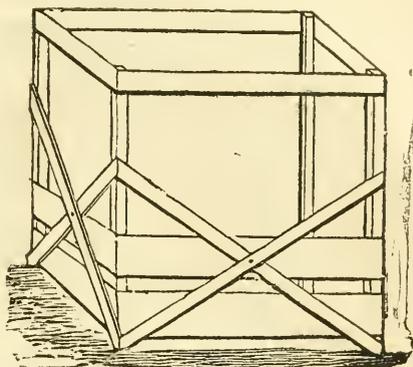
A MARRIAGE PORTION.

Allow me to introduce a simple story; though perhaps not new, nevertheless interesting in its results. On the margin of a sunny lake lived a farmer; his shaded cottage was an object of pleasure to the mariner of our inland sea, and the traveler could not refrain his commendation as he passed the well-tilled fields, rendered more attractive by the pervading spirit of neatness and order. A wife, with two daughters, shared the labors and pleasures of the farmer. One hundred acres were the extent of the farm, and the farmer's capital was little more than honesty, industry, and health. I need not paint the family circle in its devotion to sacred duties, nor its daily toil—the results will carry to every heart a view of the path pursued. His eldest daughter married, and he gave to her one-third of his farm, as her marriage portion. Notwithstanding this diminution of acres, he had the same quantity of products as formerly. In due time his youngest daughter married also, and he gave to her one-half of what remained—and still the produce of his farm was not diminished. The secret was easily discovered—he applied as much labor and attention to the remaining one-third part as he had been accustomed to give to the whole farm. Do you ask, how this applies to any of us? Let me explain. We divide our labor over too many acres to afford sufficient culture to each; and we neglect the aid of science, which teaches us to concentrate the various means always within our control, and their economical and appropriate application.

AGRICULTURAL PAPERS.

It may be, and often is asked, how are we to ascertain the experience of other farmers, that we may benefit by their experiments and experience? Nothing is more easy—the agricultural periodicals of this country bring to the fire-side and leisure hour of every farmer, the tried results of experiments throughout the world—they give to him the practice of every section of our country—they open to him the science of his profession, making clear and intelligible all that heretofore has been deemed chance. No farmer can fail to be wiser and richer if he carefully peruses the well-stored pages of the Cultivator—a paper too well known in this country and in Europe to need an eulogium here; and it will surely be a matter of surprise to all when I state, that in this county there are not probably 30 farmers who consult its pages. Another paper of well-known and deserved merit is the New Genesee Farmer, from the pages of which every farmer can derive lessons of experience and wisdom in his vocation. The American Agriculturist is another periodical worthy your attentive perusal. These and other sources offer the ready means of knowledge, at a cost, too, so moderate, that it surely requires but a knowledge of the fact to see one or more in the hands of every man in this country, who desires to thrive, and, like our friend of the Lake shore, be able to give to every daughter a farm as a marriage portion.—*Delafield's Ag. Address.—Seneca County, N. Y.*

CRANBERRIES.—Mr. William Hall, of Norway, Maine, has succeeded in raising cranberries on a patch of boggy land. He sowed the berries in the spring, on the snow and ice. The seed took well, and entirely rooted out the weeds. Last year he gathered six bushels from a patch of land about three rods square, which a few years since was useless



MOVEABLE HAY RACKS.

MR. EDITOR—I accidentally took up one of your papers sent to our post office, and read an article on foddering cattle, and the description of a cheap and simple contrivance, to do away with a great many troubles of that part of a farmers work. It struck me as just the thing I wanted. I had 7 head of cattle in my yard, and I constructed two cribs, which had accommodations for 8 head, and it works to my entire satisfaction. I have had it in use a fortnight and it has saved me more than the price of your paper, and I herewith enclose you one dollar for a copy for myself and one of my neighbors.

In contriving my racks, I have departed a little from your description, and I think for the better. I also send a rough drawing in which two sides are only finished. The variations I found advantageous, were to put the boards only 2ft 6in high, instead 2ft 9in, and to drop the cross pieces so that they shall come no higher than the side boards. The whole should be strongly nailed with 10d or 12d nails, and where the cross pieces cross, there should be a good wrought spike that will clench, so that the cattle shall not break them down or push them out of shape.

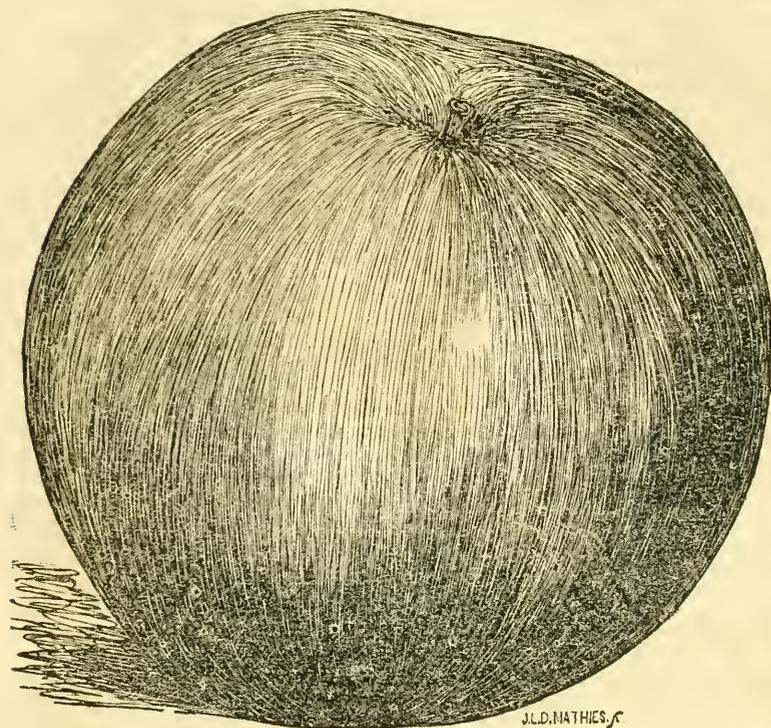
L. L. BARKER.

FACTORY OWNED BY GIRLS.—The factory girls of Lowell talk of establishing a large factory, to be worked by themselves, and of which they should be the joint-stock proprietors. Should such a scheme be successfully put in operation, we presume it would not be long before the proprietors would have plenty of applications for partners. A young man might thus apostrophize a fair stockholder:

“Ever from that hour I loved her,
Till for her stock I paid her with myself.”

THE FLOWERS.

When God to man a being gave,
’Twas by a garden fair;
His first-drawn breath was from a wave
Of odour-wafting air.
As vision, at his spirit's birth,
The tender eyelids burst,
He saw, from out his kindred earth
The flowers had risen first.
Mid clustering vines and trees that wood'
His new-created sight,
Wore fruits for rich, salubrious food,
And flowers for his delight:
And these were fed from living springs,
Baptiz'd with holy dew,
And softly fann'd by angels' wings,
In beauty while they grew.
They shone, a glorious vulture spread
For his all-peaceful hours:
The first sweet book man ever read
Was of the leaves of flowers,
Pure thoughts of his Almighty Friend,
With radiance from above,
Were on its countless pages penn'd—
Its author's name was LOVE. — [HANNAH F. GOULEE.]



NORTHERN SPY.

The above figure represents this superior native apple. It originated in the town of East Bloomfield, in the orchard of the late Oliver Chapin.

It was but little known until two or three years ago, when a number of young trees, suckers from the original tree, came into bearing, and the fruit was carried to the Rochester market, where it attracted general attention. It is now esteemed the best winter or keeping variety known—better than the Swaar or Spitzenburg. It commands the highest price in the market; we have seen them sold in the spring for \$1 50 per bushel; and last fall, those that we knew to be sold brought \$2 25 per barrel; while \$1 was the usual price of ordinary fruit. We have seen specimens produced on old, stunted trees, that were small and quite deficient in color and flavor. Young trees, or those that have been carefully pruned, produce abundant crops, and the fruit is of large size and extremely beautiful. The tree is a rapid, upright, and handsome grower; wood dark brown, covered with gray-colored specks or dots, very easily distinguished from any other. *Fruit* somewhat conical, sometimes slightly ribbed; the specimen figured measures 12 inches in circumference. *Stalk* about 3-4ths of an inch, set in a broad, deep cavity. *Eye* deeply set in a broad deep basin. *Color* pale green in the shade, dark red on the sunny side; those fully exposed to the sun, are entirely covered with a fine deep red. *Flesh* yellowish white, tender, juicy, and high-flavored, with a peculiar musky perfume. In use from November till May. This, like all other popular fruits, is *counterfeited* by the men and boys who sell apples around the streets, and on the corners; every apple they can find, that in any way resembles the "Northern Spy," is so called by them. We have, during the present winter, seen several distinct varieties sold by them under this name.

HOW TO EAT AN APPLE MECHANICALLY, SCIENTIFICALLY, AND GENTELY.—Pare it neatly and carefully, making an entire ribbon of the skin; then placing the middle finger of the left hand upon the stem, and the thumb upon the blossom end, with your fruit-knife commence cutting a slice from the top to near the centre, and so on, in succession, leaving the core standing as a column or shaft, upon which it revolves until it is demolished.

It is a cleanly, delicate, and systematic operation, which commends it to all persons who are fond of that wholesome and valuable fruit.

POMUS.

THE APPLE CULTURE.

The culture of the apple is of much greater importance to the farmer than is generally considered. We know that an orchard has grown to be a matter considered as of almost absolute necessity; but it is the carelessness with which it is generally planted and cultivated, that warrants the remark we commenced with. In growing wheat, corn, potatoes, or any other field product, the farmer very rationally procures such varieties and bestows such culture as will, considering their adaptability to his soil and other circumstances, yield him the most liberal return for his expenditures. These considerations are equally important in relation to the orchard. Your land is occupied with it—your trees, and planting them, cost something—your labor is required to pick, preserve, and carry your fruit to market, if you sell them; and these, altogether, constitute a considerable item. Hence appears the necessity of exercising as much care in selecting suitable varieties of fruit as of grain, and of bestowing on them a proportionate degree of attention, both in planting and after-culture, in order to insure their health and fruitfulness, and make the investment one of profit instead of loss. We know many excellent farmers, whose fields show that they are cultivated by a careful and skillful hand, but whose orchard is in a state of absolute neglect. This arises from an incorrect estimate of orchard products. It can be easily shown, that an orchard of choice, well-selected apples, ripening in regular succession, properly cultivated and attended to, will yield as great profits as any other product. Our soil and climate are admirably adapted to the perfect growth and development of this fruit—proved by experience. An acre of land may contain 150 trees. These, in five or six years, will produce at least five bushels per tree, if

properly cultivated; and these, at the low price of 2s. per bushel, would amount to \$187 50. At this low estimate, the orchard, after paying all expenses, would be found highly profitable. Prices in our market vary from \$1 to \$2 50 per barrel, in proportion to the quality. Choice and rare kinds are sometimes sold in the spring for 10s. to 12s., and even as high as 16s. per bushel. But for domestic uses, for eating in a raw state, for cooking, and for feeding to hogs, to cows, and even horses—apples are of great value. The great facilities which steam conveyances and canals now afford for the transportation of fruit, give increased importance to this branch of industry, by opening up new markets, and thereby increasing the price of fruit materially in the interior portions of the country. The Atlantic steamers will, we believe, at no very distant day, be loaded with American fruits (apples particularly) for the European markets. The markets of the south, too, will create an increasing demand.

This subject begins to be appreciated, as will be seen from the following extract from an eastern paper:

FRUIT.—The demand in England for American fruit is likely to become a matter of considerable importance. A large quantity of apples were sent there last season, and paid well. Many orchards of five, ten, and twenty thousand trees, have lately been planted in the Hudson river counties, with a view of growing apples for export to foreign countries. We see no reason why peaches from New Jersey, and other Atlantic regions where they grow, cannot be sent to England, by steamers, and arrive in good condition.

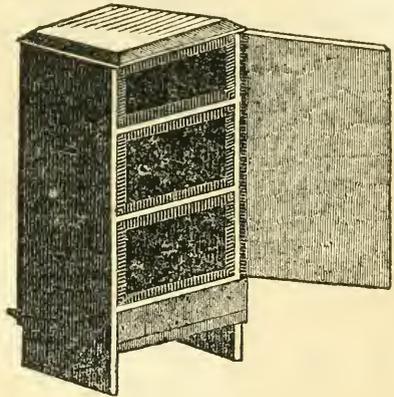
But even if confined to our own markets, or the markets of our own continent, the demand for *good fruit* will increase as fast and faster than the supply for ages to come. It has been so in every country—the progress of civilization and refinement, the increase of population, the accumulation of wealth, invariably increase the demand for the choice productions of the garden and the orchard, faster than they do the means for producing them.

In order to assist those who are anxious to procure the best varieties, we will from time to time notice and describe such as we can recommend.

A FINE SWEET APPLE.—We have just examined a specimen of a very superior variety of sweet apple, quite new to us, left at the Seed Store by a gentleman who found it at Gould's grocery store, in Buffalo-street, where it had been purchased from some farmer. It is a tender, juicy, fine-flavored apple, equal, if not superior to any sweet apple we know, and is eminently worthy of extensive cultivation. If the person who brought it to Gould's should see this, he will please leave or send his address to the Seed Store. The fruit is large, measuring 12 inches in circumference, surface uneven, with large unequal ridges or ribs; stem slender, about half an inch long, and inserted in a narrow and moderately deep cavity; *colyr* small, and in a small and rather shallow basin; skin yellow in the shade, clear red in the sun, and wholly covered with brown dots, so numerous as to make the surface rough; *flesh* yellowish white, melting, and fine-flavored; looks as though it would keep well till spring. This we consider would be a valuable addition to our present very deficient list of what are called sweet apples.

STRAW CUTTING MACHINES.—We have for sale four different patterns of Straw-cutters, which we will sell low.
Dec. 1. B. F. SMITH & CO.

ADVERTISEMENTS.



O. REYNOLDS'

NON-SWARMING & DIVIDING BEE-HIVE.

THE Subscriber having kept Bees for upwards of thirty years, and having tried many of the various modes, and some of the patents, that have been recommended for the preservation of Bees and removing of honey—having been disappointed in his anticipations, became sensible that the improvements heretofore presented to the public were not such as would give general satisfaction. Knowing that much has been done to advance the interests of the Bee-grower, and the preservation of the Bees, and believing that art has not yet arrived to perfection, would, with due deference, present to an enlightened community his Non-swarming and Dividing Bee-hive, believing that they will compare former improvements with his, and decide agreeably to merit, feeling confident that he will receive a share of their approbation. Said Hive is divided into different apartments, and so arranged that the Apianian may cause the Bees to leave one apartment and pass into the others, thereby freeing the honey from its incumbents at the will of the operators. Dividing can be performed with ease and safety. All depredations from the bee-moth and robber may be prevented; the method of feeding and ventilating being superior. In a word, the improvement is just such as the Bee-grower is desirous of obtaining.

O. REYNOLDS.

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

To Dr. Oliver Reynolds, of Webster, for a newly-invented, Non-swarming 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. Monroe Ag. Society.

N. B. Any person wishing to purchase Territory, or act as Agent, by directing a line to the Postmaster, Webster, Monroe Co., N. Y., will be promptly attended to.

☐ For sale at the Rochester Seed Store, No. 4, Front-street.

STRAYED HORSES.

FROM the Farm of the Subscriber strayed away, about three weeks since, an aged BROWN MARE, gray over the eyes, low in the back, with saddle-marks thereon; has one white hind foot, long tail, which, with the mane, is black. Also, a RED ROAN HORSE COLT, coming two years old. Said horses were last heard of in the town of Greece.

Any person who can give information as to where said horses are, or have been, shall be remunerated for their trouble, by giving me notice thereof, through the mail, addressed—

WILLIAM LOWRY, of Clark's n,

Parma Center Post-office, Monroe Co., New York.

Clarkson, Dec. 22, 1844.

HORSE CHESTNUTS for sale at the Rochester Seed Store, Dec. 1st, 1844. B. F. SMITH & CO.

CASH for FLAX SEED; and OIL MEAL for sale—at the Old Oil Mill, Water-street; or No. 3, Front-street, Rochester, Dec. 1844.—Jadm. THOS. WEDDLE & SONS.

APPLE SEEDS for sale at the Rochester Seed Store, No. 4, Front-street. B. F. SMITH & CO.

CASH FOR TIMOTHY SEED.

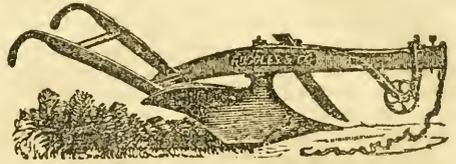
500 TO 1000 BUSHELS TIMOTHY SEED wanted at the Rochester Seed Store. The highest price paid in cash for good Seed.
B. F. SMITH & CO.

Meteorological Observations,

MADE AT ROCHESTER, SEVEN MILES FROM LAKE ONTARIO,
BY L. WETHERELL.

JOURNAL OF THE WEATHER FOR JAN. 1844.

Days mo.	Thermometer.			Barometer.		Wind.	Observations.
	Sunrise.	Mid-day.	One h. after sunset.	Sunrise.	Evening.	Prevailing wind.	
24	27	38	32	29.25	29.42	n w w	Cloudy—fair—r.g. .80.
25	28	42	40	.58	.32	s w	Fair.
26	47	52	35	.26	.39	s w w	Cloudy—rain.
27	26	26	23	.57	.50	n w	.. ..
28	12	24	18	.49	.50	n n w	Fair.
29	28	33	31	.60	.54	w	Snow—cloudy.
30	39	35	36	.11	.37	s w w	Rain—snow.
31	29	32	32	.63	.24	w	Cloudy—fair.
1	38	30	35	.33	.56	w n w	Cloudy—snow.
2	25	29	25	.75	.75	n	Fair.
3	33	43	43	.50	.27	s s w	Cloudy—rain.
4	33	39	36	.50	.40	w	Fair.
5	32	30	32	.30	.41	w n w	Cloudy—snow.
6	20	20	20	.67	.47	n e e	.. ..
7	23	32	29	.15	.39	e w	Cloudy—rain & snow
8	25	32	28	.50	.50	w	Cloudy snow.
9	32	40	36	.41	.29	w s w	Fair—snow and rain.
10	25	34	27	.58	.52	s w	Cloudy.
11	25	32	28	.50	.36	w	Cloudy—snow.
12	22	28	22	.35	.40	w n w	.. ..
13	20	24	20	.12	.38	n e n	.. ..
14	18	20	16	.50	.68	n	.. ..
15	25	40	32	.60	.72	w s w	Cloudy—r. g. .88 in.
16	30	30	26	.72	.62	n e	Cloudy, snow, rain, hail
17	28	29	28	.31	.26	n e	.. ..
18	18	20	14	.61	.98	n w w	Fair, snow, r. g. 1.00
19	0	18	14	30.06	.77	s e	Fair.
20	24	38	30	29.63	.53	s s e	Cloudy.
21	27	34	30	.39	.49	s e n w	Cloudy—Snow.
22	30	36	30	.66	.83	n w	.. ..
23	20	38	38	.93	.70	s s e	Fair.



AGRICULTURAL TOOLS, &c.

FOR SALE AT THE

SEED STORE & FARMERS' WAREHOUSE,

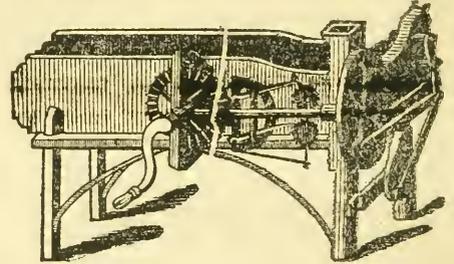
No. 4, Front-street, (near Buffalo-st.) Rochester, New York.

125 WORCESTER PLOWS, which stand unrivalled for superiority of workmanship and durability. Also, twenty-five PREMIUM PLOWS, made by H. DELANO. CULTIVATORS, Seed Sowers, Grindstones, Root Cutters, Road Scrapers, Ames' best Cast-steel Spades and Shovels, Ditching Spades, Boys' Spades, Shovels, and Manure Forks; Tree Scrapers, 30 doz. Hoes, assorted kinds; Garden Hoes, of every variety; Garden Rakes; CYLINDER CHURNS, a superior article; SUGAR MILLS, BUDDING KNIVES, Pruning Knives, Grafting Chisels and Saws, Transplanting Trowels, Ladies' Weeding Trowels, Anti-friction Rollers, Bush Hooks, Ring and Hook Hammers, Trace Chains, Cattle Chains, Brass Ox Balls, Bull Rings, Ox Yokes and Bows, Garden Syringes, Hatch's Patent Sowing Machines.

CANARY BIRDS, BIRD CAGES, CANARY SEED, HEMP SEED, CUTTLE FISH BONE, for sale at the Rochester Seed Store.

B. F. SMITH & CO.

IMPORTANT TO FARMERS.



E. TAYLOR'S new and valuable Patent STRAW-CUTTER and CORN-SHELLER.—This is allowed, by all who are acquainted with Machines for cutting straw, to be the best yet invented. As it combines durability with simplicity in its construction, it is not liable to get out of repair. The Knife (which is very heavy, and made of the best steel) is moved by eccentrics, which give it a drawing stroke, of great power; and it can be sharpened and adjusted to the Machine with less skill than is required to sharpen and fix a Sythe.

Double the amount of straw can be cut in any given time, with half the amount of labor, by this than by any other Straw-cutter now in use. There is a Self-feeding Apparatus attached, which can with ease be so regulated, as to cut the straw to any desired length.

The Machine is adapted to cut all kinds of straw, hay, and corn-stalks, with equal facility; and the rapidity with which it shells corn, removing every kernel, and leaving the cob perfectly whole, is unparalleled.

The Subscribers are now manufacturing three different sizes of the above Machine—one with the Corn Sheller, and two without—all are, however, constructed on the same principle, but varying in price. The one of the largest size can be driven by horse-power, if wished.

Every Farmer who has examined this Machine has expressed his decided opinion, that it is the best adapted for its various purposes of any that have hitherto been presented to public notice; and there is no assumption in asserting, that a continued use of it will warrant even greater encomiums than have yet been passed upon it.

The ready sale it has had since the Subscribers commenced the manufacture, induces them to believe, that no person intending to purchase a Straw-cutter will not do so before examining those which they have recently constructed, which may be seen at Baiton & Belden's Tool Store, west end of the Bridge, in Buffalo-street; at B. F. Smith & Co's, Rochester Seed Store, Front-street; and at their shop, in the stone building a little west of the United States Hotel, corner of Hill and Elizabeth streets; at any of which places persons desirous of obtaining the above-described Machine will have prompt attention given to all orders they may give for the same. BEARDSLEE & BADGER.

Rochester, Jan. 18, 1845.

N.B. Persons wishing to secure the right of manufacturing the above-described Machines can address—

E. TAYLOR, (Patentee,) Rochester.

Maximum (Dec. 26) ther. 52 deg.; barom. (Jan. 19) 30.06.

Minimum (Jan. 19) ther. 25 deg.; barom. (Dec. 30) 29.11.

Summary—1844.

Thermometer—highest degree during the year, 89.
.. .. lowest 2. (below zero.)
Barometer, —highest 30.10.
.. .. lowest 28.65.

Greatest monthly range of ther. in April, 72 deg.
Warmest day in the year, June 25.
Coldest Jan. 27.
Wind north in the year 28 days; ditto north east, 47½; ditto east, 47½; ditto south-east, 26½; ditto south, 27½; ditto south-west, 52; ditto, 73½; north-west, 98½.

Prevailing wind for the year, north-west. We have had much more than our usual proportion of north-east wind, it having been the prevailing wind in March and April.

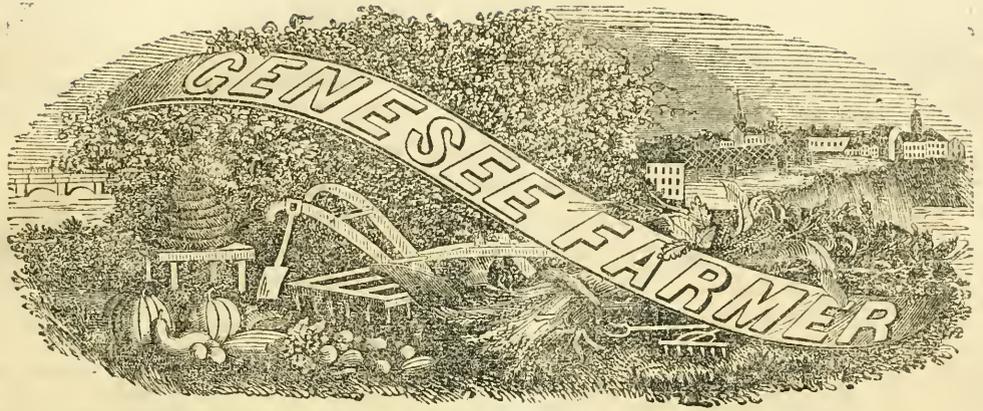
Number of fair days, 170; ditto cloudy, 196.
.. .. days on which rain fell, 124.
.. .. snow fell, 70.
.. .. snow and rain fell, 9.

ROCHESTER PRODUCE MARKET.

Wheat,	87 a	94 Hay, ton,	\$7 50	8 00 Eggs, doz.	12	14
Corn,	37½ a	40 Wood, cord,	2 00	2 50 Poultry, lb.	5	6
Barley,	31	35 Salt, bh,	1	13 Tallow,	10	7
Oats,	25	00 Hams, lb,	5	6 Hops,	10	11
Flour, (ret.)	4	25 Pork, bh,	10	00 Wool,	35	40
Beans,	75	1 00 " cwt,	3 25	3 75 Sheep Skins, 50	75	75
Apples,	25	35 Beef, "	2 00	3 00 Green H'ds, lb.	3	4
Potatoes,	18	25 Lard, lb,	5	6 Dry Hides,	6	7
Cloverseed,	4 00	5 00 Butter,	9	12 Calfskins, gr'n.s	6	6
Timothy,	1	1 50 Cheese, cwt,	4 00	4 50	Jan. 26.	

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VOL. VI.

ROCHESTER, NEW YORK. MARCH, 1845.

NO. 3.

PUBLISHED MONTHLY.

BY B. F. SMITH & CO, PROPRIETORS,

At the Seed Store, No. 4, Front Street, near Buffalo St.

DANIEL LEE, EDITOR.

*Among the Correspondents are—*L. B. LANGWORTHY, N. GOODELL, Prof. C. DEWEY, T. C. PETERS, L. WETHERELL, P. BARRY, and T. H. HYATT.

FIFTY CENTS A YEAR:

Five copies for Two DOLLARS; Eight copies for THREE DOLLARS. All payments to be made in advance. Money and subscriptions, by a regulation of the postmaster general, may be remitted by post masters free of expense. *Address B. F. SMITH & Co.*

TO CORRESPONDENTS.—We have received a large number of Communications during the last month, which will be published as soon as we can find room. Correspondents will please be as concise as possible. The Farmer is only half as large as we wish it was, for their accommodation. Several articles are on file for the April number. Among them one from N. GOODELL, Esq. on the "Disease of Potatoes," one from one of the best farmers in Sweden, on "Liquid Manures," and "H" on the "Best Breeds of Cattle." E. C. of Salina, A. W. of East Bloomfield, and W. S. T. of Cayuga County, are under consideration. S. WILLIAMS' Essay on Manures is in type, but necessarily crowded out this month.

Our correspondent at Perry Centre, is referred to the advertisements of J. W. Bissell & Co. and Ellwanger & Barry, for "Northern Spy" grafts. They can be depended upon as genuine.

Our correspondent at Reserve, Inda. is informed that Lucerne can be had at the Rochester Seed Store, and that Madder seed can be had of Dr. Julian X. Chabert, No. 336 Front street, New York.

CHOICE SEEDS.—We have received from the Hon. H. L. ELLSWORTH, of the Patent Office, a great variety of choice seeds; they will be distributed to those who desire to test their qualities.

OUR THANKS are due to Post Masters, (from whom we have received many favors,) and to many kind friends, who have exerted themselves so successfully to extend the circulation of the Farmer. We commenced the year with an edition of six thousand. This number is already nearly exhausted. We shall continue to supply the back numbers to new subscribers as long as they last. From present indications we shall be obliged to re-print the first two numbers of this year. Send in your names immediately.

THE INDIANA FARMER AND GARDNER.—We have received two numbers of this paper, published at Indianapolis, by S. V. B. Noel & Co. twice a month for \$1 a year. HENRY W. BEECHER, Editor. The editor comes into the field like one well acquainted with the business. Instead of being discouraged by the number of new Agricultural papers, starting up all over the west, he says—

"There is already a line of agricultural papers extending from Maine to Missouri, and from Missouri to Florida. Every year adds to the number. Every year gives them better support. Papers create readers—the supply creates a demand. New papers are, like new settlers in a pioneer village, not rivals, but welcome helpers—the more the better, within certain limits. The time is coming when every good farmer would as soon be without a plow, as without an able agricultural paper. There are nearly a million of people in Indiana, and only one agricultural paper."

We have been in the habit of sending quite a large number of packages of our Farmer, to Indiana. We welcome the "Farmer and Gardener" into the field: there is room enough and to spare. We shall expect a great increase to our subscription list from Indiana?

AGRICULTURE IN COMMON SCHOOLS.

We are surprised to find the following remarks in the Quarterly Journal of Agriculture, which may be found on page 47:

"Looking at our common schools as they now are, and are likely to remain for years to come, notwithstanding all the efforts to elevate them, we cannot but deem the plan above mentioned [the introduction of the study of agriculture into common schools] as *worse than foolish*; for the result can be nothing else than the imparting of that "little knowledge" which is *always a dangerous thing*" (!)

The whole educational acquirements of 99 in every 100 children that now attend common schools in this state, can only be regarded as "imparting" to them a "little knowledge." If this "little knowledge" be "always a dangerous thing," then the whole common school system should be abolished. If the acquisition of a "little knowledge" of the science of agriculture will be injurious to the sons and daughters of the farmers of New York, should the Quarterly Journal of Agriculture be allowed to circulate among them? Who knows but that some of the more inquisitive of the rising generation, now attending our common schools, may extract from its ample pages that "little" information, which the learned professors pronounce "a dangerous thing?"

Mr. Pope was a man of genius, and an admirable poet; but he had no more idea of the condition of society in this state in the middle of the 19th century, and of the wants of our children, and their duties in after life, than did "the blind bard of Scio."

To read attentively good books on practical and scientific agriculture, pupils in common schools need not learn any the less of other elementary studies. No one proposes that they shall neglect orthography, writing, arithmetic, reading, grammar, or any other branch of useful knowledge. Without abating one jot or tittle of their ordinary acquirements in literary pursuits, they may add thereto much valuable information in regard to the uniform and unerring laws of nature, which fertilize the earth, and enable it to feed all that live.

AMERICAN HOTEL, No. 160 State Street, Albany. Having been for two months the guest of Mr. C. N. BEMENT, the well known keeper of the above named establishment, we deem it no more than an act of simple justice to the farming community, to say that, a better public house for them to stop at cannot be found in this, or any city. The American Hotel is Agricultural Head Quarters; and well it may be. Go where you will about this establishment, and you recognise at once that good order, good taste, and good sense, so agreeable to every intelligent farmer. Mr. B. is master of every thing pertaining to the word *comfort*. D. L.

THE STUDY OF AGRICULTURE.

Extracts from an unpublished Work.

MINERALS AND ROCKS.

Every part of the globe which is not animal nor vegetable, including air and water, is regarded as mineral.

The term "rock," in popular language, embraces only the solid part of the earth: but in geological language it includes all loose materials, such as soil, clay, gravel, and loam.

Taken as a whole, the earth is about five times heavier than water, and two and a half times heavier than common rocks. The density of the globe increases from the surface to the centre. At the depth of 34 miles, air would become as heavy as water, and at the depth of 362 miles water would become as heavy as quicksilver. At the centre of the earth, steel would be compressed to one-fourth, and a stone into one-eighth of its bulk at the surface.

The rocks which compose the globe are divided into two great classes—STRATIFIED and UNSTRATIFIED rocks.

The latter are supposed to have been a melted mass, which, on cooling, formed a very hard, crystalline rock, like granite. Such rocks are of great and unknown thickness, and without stratification.

All rocks formed in water are *stratified*, or deposited in regular masses, usually on nearly parallel planes, varying in thickness from that of paper to many yards. Although, as a general rule, the lines of stratification are parallel, or nearly so, they often converge in one direction, and of course diverge in the opposite direction, giving the *strata*, or layers of rock, a wedge-like form.

It is believed by geologists, that the globe was once in a liquid, if not gaseous state. Its shape is precisely what a fluid would assume—an "oblate spheroid"—if it revolved on its axis with the known velocity of the earth. It is 36 miles farther through at the equator than at the poles. The *crystalline* form of all the rocks that lie below those that have been deposited and stratified in water, furnishes strong presumptive evidence that these ancient rocks, called "primitive" and "granite," were crystallized by the cooling of a liquid mass, just as water is crystallized when frozen into solid ice by reducing its temperature below 32 degrees.

If we admit that the now solid crust of the earth was once a melted mass, it is obvious that water must have existed in a state of vapor, or in the form of simple *gases*—that is, in *oxygen* and *hydrogen* gases. These are very light, and invisible, like common air. Many other substances beside water—particularly *carbon*, the substance that burns in wood, coal, oil and tallow, *sulphur*, *phosphorus*, and other combustibles—would have existed only in the vastly expanded and intensely heated atmosphere.

After the globe had cooled sufficiently to permit vapor to condense into water, and form an ocean around the earth, it would seem that all the *carbon* that now lies in coal-beds over much of the surface of the planet, and in the *carbonic acid* which is combined with immense and unknown quantities of lime rock, often some thousands of feet in thickness, and of vast extent—must all have been in a gaseous state.

It is obvious, that an atmosphere thus loaded with carbon, sulphur, and other poisonous gases, could not support any of the higher order of animals, or more perfect plants. The way in which this bad at-

mosphere was purified, and a barren granite rock rendered the fit habitation for the highest class of animals, with man at their head, is worthy of consideration. * * * *

There can be little doubt that *internal heat*, deep in the bowels of the earth, elevates more or less frequently, and to a greater or less extent, large sections or tracts of the earth's surface. By this means islands, mountains, and whole continents may, in the course of ages, be raised by slow upheavings from the bottom of the deep sea. Mountains several miles above the level of the ocean are very common; and some of them are composed, in part, of rocks many thousand feet in thickness, having the remains of marine animals imbedded in them, showing that these rocks were deposited in water, and entombed living animals in their once-soft mass. Marine shells are often found miles above the present level of the sea. Either the ocean must have fallen some eight or ten thousand feet over its whole surface, or these fossiliferous rocks must have been elevated from the bed of an ocean where they were formed. The latter supposition is doubtless the true one.

De la Beche estimates the average height of dry land above the ocean at two miles. The average depth of the ocean is thought to be not far from two and a half miles. As nearly three-fourths of the earth's surface is covered with water, it follows, from the above facts, that all the land above the level of the ocean might be washed by rains and rivers into the sea, and not half, or more than half, fill it up.

The repeated *upheaval*, and *sinking down* of different portions of the earth's crust, have subjected every part of our planet to elevation into dry land—*islands* and *continents*—and depression into the bed of an ocean.

ORGANIC STRUCTURE AND FUNCTIONS OF CULTIVATED PLANTS.

To the practical farmer and gardener, plants may be regarded as machines, which transform the raw materials of grain, roots, hay, flax, hemp, tobacco, and cotton, into those valuable products. Hitherto we have studied the geological and chemical character of plants and animals as they exist in *rocks*, in *soil*, in *water*, and in the *atmosphere*.

We have now to study them when subject to the control of new laws, which break up previous chemical combinations, and form peculiar compounds, unlike any inorganic product, and without which all animal life would speedily become extinct. Regarding a cultivated plant as a living machine, which, if properly tended, will change stone and dirt into bread and honey, aside from the interest of the subject as a matter of science, we should investigate the *structure* of this curious machine, and the *function* or office performed by every part, that it may operate at all times to the very best advantage.

In treating of the organic structure of plants, with reference not to their botanical character, but to increase their quantity, and improve their quality by judicious culture, they may be divided into *Roots*, *Stems*, and *Leaves*.

ROOTS—THEIR STRUCTURE AND FUNCTIONS.

When a seed is made to sprout, the part of the new living being which is first developed, and bursts the membrane that incloses the seed, is called the *radicle*, or root. This shoots downward, as if in search of nourishment from its parent earth. Connected with the radicle, a portion of the infant plant shoots upward, as if in search of the light and heat

of the sun. This is called the *plume*, or *plumula*, from which *leaves* are developed, and the *trunk*, or stem, is formed.

The roots of plants are only the prolongation of the woody fibres and bark of the stem into the earth. The inner bark is called the *cortice*, and the outer the *epidermis*. Both of these membranous coverings of plants extend over all their roots, and are perforated by innumerable pores, called *spongioles*, or little sponges. The woody portion of roots is also very porous and spongy, so as to permit the easy ingress and egress of water, or *sap*.

All new roots put forth have their origin in the *alburnum*, or white sap-wood, that surrounds the *heart-wood*, as it is called in forest trees. It is through the numerous tubes or vessels in the sap-wood, which extend from the roots to the leaves of plants, that all liquids pass up to the latter organs. These liquids descend in vessels that lie in the cortice, or inner bark.

The obvious function of roots is to imbibe liquid nourishment from the soil, that it may pass up and supply, in part at least, the wants of the living being. It is a question of considerable importance, whether roots have the power to *discriminate* as to what substances they will admit as suitable food, and what reject as improper or poisonous. This is still an open question. Liebig, Dumas, and Bous-singault, find reason to believe that roots act mechanically, like a sponge, and take in whatever substances may be held in solution in the water that enters their pores. Other physiologists, of equal distinction, believe that roots are endowed with a kind of elective affinity under ordinary circumstances, which *selects* what is needed to accomplish the purpose of nature, and *excludes* matter which would counteract that purpose.

If the stem or root of a vegetable be placed in a vessel of water, and the quantity not large, it will all be taken up, and either decomposed to furnish aliment to the plant, or it will be dissipated into the air from its leaves. When the supply is exhausted, the leaves and flowers wither, or dry like herbs and hay. In the summer season, and under the influence of a hot sun, the leaves of corn and clover curl up, because the evaporation from their surface exceeds the supply of moisture from their roots.

It is probable that the circulation of a plant is most active when the temperature of the atmosphere is such as to cause a free evaporation from its leaves, without drying them. The chill of evening, and even clouds, by checking evaporation, will enable the ascending sap to restore freshness to drooping plants without the aid of any moisture from the air. But to render their resuscitation doubly sure, nature usually condenses vapor in the form of dew, which supplies these organs, not only with water, but with carbonic acid, and other gases imbibed by the leaves, and used as food to nourish plants.

If a few leaves on a growing plant be bent over, so that they may be placed under a tumbler inverted, and full of water, and the leaves thus fixed, be exposed to the direct rays of the sun, bubbles of gas will be seen to form on the leaves, and gradually rise and collect in the bottom of the tumbler. If this gas be examined, it will be found to be pure oxygen.

If the water contain carbonic acid, it will gradually disappear, and an *equal bulk* of pure oxygen will be left in its place.

This demonstrates the important fact, that leaves, when subjected to the direct rays of the sun, have

the power to decompose a compound of carbon and oxygen, which is always formed by the *burning*, *fermenting*, and *rotting* of vegetables, and by the *respiration* of all animals.

As carbonic acid exists in immense quantities in stratified rocks, particularly limestone and magnesia, it may be regarded as a mineral substance. Its important constituent—carbon—forms about 60 per cent., and sometimes 90, of mineral coal. While there are many situations, or operations in nature, in which carbon and oxygen unite to form carbonic acid, it is worthy of note that this compound is no where decomposed except in the organic laboratory of plants, and that by the action of the light of the sun. Both its carbon and oxygen are indispensable ingredients in building up the bodies of all animals; but not one of them can decompose either carbonic acid or water, and thus obtain the carbon, oxygen, and hydrogen necessary to form animal fat and muscle. Plants alone have this power.

It sometimes happens that the quantity of oxygen given off from leaves is less than the quantity imbibed in the carbonic acid. This fact is accounted for by the analysis of the plant, which shows that a portion of the oxygen has entered into the composition of the organic substances of the vegetable. On the other hand, Sprengel has demonstrated, that when plants are watered with liquids containing carbonic, sulphuric, or nitric acid, the quantity of oxygen given off by the leaves is greater than that imbibed from the air. Thus demonstrating, that those acids, when taken in by the roots, are decomposed; and as the excess of sulphur does not escape by the leaves, nor remain in the plant, it is inferred that it must make its exit from the plant by its roots.

“AMERICAN QUARTERLY JOURNAL OF AGRICULTURE AND SCIENCE.”

Under the above name Prof. EMMONS, of Albany, and Dr. PRIME, of Newburgh, have commenced the publication of a handsome Quarterly of 200 pages, for the purpose of bringing to the aid of practical agriculture more science than has hitherto been done in this country. We hope that their efforts in this laudable enterprise will be crowned with success. There is enough of scientific attainment already devoted to the profession of agriculture to sustain a work of this character, if it can be placed under the inspection of all who will feel an interest in reading its pages. To medical gentlemen, who are more or less engaged in rural pursuits, and to all that have studied the sciences of geology, chemistry, vegetable and animal physiology, this Quarterly will be of great value, while common, plain farmers will also find in it much to interest and instruct them.

Its leading article, “On the Food of Plants,” is a well-written essay from the pen of Dr. HUN. He follows the theory of Liebig, Dumas, and Bous-singault. Dr. H. has somehow fallen into the common error of regarding the “salts of soda, potash, alumina, silic, and other earthy and saline matters,” as “not forming any part of the organized tissues of plants.” He says, “they are simply deposited in these tissues, and are called the inorganic constituents of plants.” On the contrary, carbon, oxygen, hydrogen, and nitrogen are regarded as *organic* elements, whether organized in plants and animals, or in the form of carbonic acid, vapor, and ammonia, in the air. This arrangement is not only *not* true to nature, but it destroys all distinction between *unorganized* carbon, oxygen, hydrogen, and nitrogen,

and these simple elementary bodies after they have been organized, to make up the principal bulk and substance of all plants and animals.

When soda, potash, iron, or lime form a part of lean meat, skin, or of any animal or vegetable tissue, they are as much *organized* or organic bodies as the carbon, water, or nitrogen which enter into the composition of the same tissues. Unorganized oxygen and hydrogen united in the form of water, are quite as much *mineral* matter as the chlorine and sodium which may be dissolved in such water.

All the elementary substances required by nature to form a perfect plant, exist in a crude, unorganized state, and are then alike inorganic bodies. So, too, when nature combines these inorganic bodies into an organized being, whether vegetable or animal, they are all alike *organized* substances. Fermentation, respiration, rotting, and combustion, *disorganize* the compounds of carbon, oxygen, hydrogen, and nitrogen, quite as much as those of soda, potash, alumina, and silex.

Plants *alone*, while acted on by a due degree of *heat, light, and moisture*, have the power to *reorganize* crude mineral matter, whether drawn from the earth or atmosphere. Decompose any organic substance, whether animal or vegetable, into its simple chemical compounds, like water, carbonic acid, and ammonia, and no animal can live on, or reorganize its living tissues from these inorganic bodies.

The foundation of all rational agriculture rests on a knowledge of the constituents of cultivated plants, and on a knowledge of the circumstances necessary to enable seeds, buds, and roots to multiply themselves to the largest extent at the least cost in labor and in land. To obtain this information, every farmer should study the *science*, as well as practice the *art* of his noble calling.

As a means of disseminating this invaluable scientific knowledge, we commend the Quarterly Journal of Agriculture to the favor of the agricultural community. Price \$3 per annum.

FOOD OF PLANTS.

From the Maine Cultivator—"We have been very much interested in reading an address, delivered by Dr. Lee, of Buffalo, before the Monroe County Agricultural Society. He there asserts that plants—a field of wheat for instance—obtain 97 per cent. of their food, and consequently 97 per cent. of the amount of the produce is derived from the atmosphere and but 3 per cent. only obtained from the soil. How this fact is ascertained, or how it may be demonstrated, does not appear."

The editor of the Cultivator has mistaken the meaning of our remarks upon the above subject. The paragraph to which he alludes is in these words :

"I regard it as one of the greatest discoveries of the age, that *about 97 per cent.* of the ingredients which make up the whole substance of wheat, rye, corn, barley, oats, peas, and beans *exist* in the air in inexhaustible quantities. To *transmute* these aeriform bodies into the plants above named, and into grass and roots, at the *smallest expense*, is the object of nearly all your hard work."

If 100 lbs. of wheat straw be burnt in the open air, it will leave only $3\frac{1}{2}$ lbs. of ash, or earthy matter; the balance, $96\frac{1}{2}$ per cent., will be dissipated through the atmosphere in the form of vapor, carbonic acid, and free nitrogen. If 100 lbs. of wheat be burnt in the same way, there will remain only

1 8-10 lbs. of ash. Now, as 200 lbs of straw, in a good crop, will contain 100 lbs. of wheat, it follows that 300 lbs. of ripe wheat plants, *dry*, will yield 8 8-10 lbs. of earthy matter, lacking only 2-10ths of 1 per cent. in 300 lbs. of being precisely 3 per cent. of earthy matter.

In what way does the 97 per cent. of our cultivated plants get back from the air into our growing crops?

When plants rot on the surface of the earth, either with or without passing through the digestive organs of animals, the nitrogen which they contain passes into the air in the form of ammonia, or of a carbonate of that volatile alkali. The carbonate of ammonia, ammonia and carbonic acid, are all very soluble in water. The dews, rains, and snows bring this aeriform food of vegetables down to the earth, and convey it, still held in solution, into the roots and circulation of plants. Vegetable mould, or carbonaceous matter in the soil, having an affinity for ammonia and carbonic acid, retains these volatile elements around the roots of plants, and prevents, in a good degree, their speedy evaporation by the heat of the sun. No solid earthy matter can possibly nourish any plant unless it be *dissolved in water*, so that it can enter their *roots*; or be in the *form of gas or vapor*, so that it can enter their *leaves*.

In answer to the question, "How much of a field of wheat or corn comes from the air? and how much from the soil?" the author says—

"I am not prepared to speak very confidently at present in the matter. My impression, however, is that not more than *ten* per cent. of corn, and *twenty* per cent of wheat, under the most favorable circumstances, come from the earth."

By this is meant, that when the farmer takes 100 lbs. of ripe, dry corn from his field, the soil from which it was taken has lost only 10 lbs. of its solid earthy matter; and in the case of wheat, the soil loses only 20 lbs. of the constituents of that bread-bearing plant. This opinion is founded on *many facts*, which will be written out in full, and published hereafter. Suffice it to remark at this time, that a good wheat soil need not contain over 5 per cent. of those aeriform bodies—carbon, nitrogen, oxygen, and hydrogen—necessary to form 97 per cent. of a perfect wheat plant. To concede that 17 per cent. of those materials of which the soil contains only 5 per cent. come from the decomposition of earthy matter, is an allowance beyond the demand of *reason*, and probably beyond the *truth*.

In addition to what nature every where furnishes ready for the use of the practical agriculturist, we are confident that the raw materials necessary to form a bushel of good wheat, in Maine or New York, need not cost to exceed 10 cents. In this state, if we should cast into the middle of the Atlantic every year the raw material ready to coin one million of half-eagles, and save all the elements of wheat, corn, and potatoes now annually wasted, we should be largely the gainers by throwing away gold, rather than human food and raiment.

No human being, nor any domestic animal, can live without bones; nor can any of our most valuable plants grow to maturity without the presence of phosphorus and lime, the two important elements of bone. Of lime there is no lack in the country; but of *phosphorus* the supply is very small, and there are millions of acres of cultivated lands where the crops are greatly injured from the absence of this highly

combustible substance. It is mainly lost in the loss of the liquid excretions of man and beast.

It is proper to remark, in regard to the per centage of earthy matter in cultivated plants, that some contain as high as 15 per cent. Timothy hay has 9 per cent. The proportion of their substance which plants derive from the atmosphere directly through their leaves, is a matter involved in too much doubt for me to give an opinion respecting it at this time.

D. L.

Albany, Feb. 18, 1845.

HONEY-DEW.

This is a term made use of by many to denote a viscid saccharine substance often seen upon the leaves of plants during midsummer; and the more general impression is, that it descends from the atmosphere, as other dew, and has an injurious effect upon plants on which it falls, producing all manner of diseases, as rust, blights, &c., &c. I would invite the attention of such as would investigate this subject, to visit a green-house during the winter, where the glass, being kept closed, prevents a free admission of the atmosphere perpendicularly, which might be essential for depositing this substance: neither, in case it could so descend, is it supposed capable of forming it at this season.

In green-houses which are not often fumigated, plants often become infested with different kinds of aphids, or plant-lice, which are a great nuisance, and if allowed to remain long, materially injure the plants. Where elevated plants become infested with these insects, the leaves of those standing beneath them will have the same appearance that those in fields have during summer, which are said to have been the recipients of the honey-dew. Ants are known to be particularly fond of this excrementitious matter, and during summer may be seen ascending and descending such plants as are infested with different kinds of aphids—mixing with them without molesting, gathering the substance from the surface of the leaves whereon it has fallen, and often receiving it directly from the extremity of the insect, as it is ejected.

The honey-dew may, therefore, be considered nothing more nor less than matter ejected from these insects, and will be found most abundant under plants or trees on which these insect feed, or in the vicinity of woods, or swamps, from which some of the winged varieties make their flight.

While upon the subject of dew, will any of your correspondents inform me why it is, that during the summer, in the mornings, we often see each blade of grass ornamented with a small pearl, or dew drop, upon its extreme point, while the blade below remains dry, unless where the blade is upright, and the drop has increased beyond what the point can support, when it descends upon the blade, or drops from the point when it reclines. Has electricity any agency in the formation of these drops? If so, how is vegetation influenced by it?

N. GOODSSELL.

MAPLE SUGAR.

We have in hand a communication on the subject of making maple sugar, from W. S. T., which, although a reasonable article, yet from its length we are obliged to abridge it, for the want of space. He very earnestly recommends cleanliness in the kettles and sap-troughs, or buckets, which, if old, must be well scalded; and he prefers green wood to dry, on

account of the blaze, which is apt to burn and discolor the sugar.

He recommends preparation to be made early, so that the first running, which is the richest and most valuable, may be secured; and prefers the use of the augur for tapping, boring from 1½ to 2 inches in depth, and no more. The spouts so made, that in driving in they shall only pinch at the bark and outer edge of the orifice, so as not to impede the flow of the sap. Care should be taken that the boiling works be placed near the centre of the sap bush; and in the boiling process, towards the latter end, that it does not burn. If the weather be not too warm, enough sap may be boiled at once to make from 100 to 200 lbs. before sugaring—which, when commenced, should be driven on as fast as possible, till about the consistency of good molasses, when the fire should be allowed to expire.

For clarifying sugar, he says, "many ingredients are used. Some use milk and sugar, beaten together; some use nothing but cold sap. I have used them both, but prefer clear eggs alone, as being better than eggs and milk together. Cold sap is better than milk alone, from the fact, that if milk is put in before the syrup is perfectly cold, it is apt to coagulate, and gives the sugar a bad appearance." He advises, that every time the boiling-kettle is emptied of syrup, it should be well cleaned before using it again.

We are obliged to W. S. T. for his friendly offers, and hope to hear from him again on other subjects. †

QUICK VINEGAR PROCESS.—Prepare a barrel, without heads, with netting or cross pieces of wood across the bottom; fill it with hard-wood shavings, loosely packed, so that a current of air can pass through, and set it over a tub. Take any quantity of rectified whiskey, and mix it with from 4 to 6 times its quantity of water, and cause it to trickle slowly on the top of the shavings until it has all passed; and so continue to pass it through until it is thoroughly converted into vinegar. It will be necessary, on first putting up the concern, to mix a small quantity of molasses with the liquor, to cause the shavings to become oxidated, after which spirits, cider, beer slops, &c., may readily be changed into vinegar in less than 24 hours.

The rationale of the process is—the immense surface of exposure to the air, whereby oxygen, on the acidifying principle is absorbed; in comparison with the old process, wherein only one surface comes in contact with the atmosphere. A.

CORN-STALK SUGAR.—The manufacture of sugar from corn-stalks promises to become an extensive and profitable branch of business at the West. Mr. John Beal, of New Harmony, Indiana, has made 395 lbs. of good sugar this season, from the corn-stalks that grew on three-quarters of an acre. This is at the rate of 500 lbs. to the acre. His plan is thus briefly noticed in the Cleveland Herald; "When the ears begin to form, they are pulled off. When the leaves are dead about half way up, the stalk is stripped of leaves, cut up at the root, the top cut off, and then ground in a sugar-mill. Twenty stalks will yield about one pound of sugar. Mr. B. made 80 lbs. in a day, with a simple apparatus of his own construction. 500 lbs. at 4 cents per lb. is \$20 per acre. It would have produced—say fifty bushels of corn, at 25 cents. \$12.—*Am. Farmer.*

CORN FODDER.

MR. EDITOR,—One evidence of improvement in agriculture is the almost universal use of corn-stalks for fodder; it being as rare now to see a field of stalks left to be run over and trampled under foot by cattle, as it was, before the establishment of agricultural societies and agricultural newspapers, to see a field of corn cut up by the roots, and housed in good order for winter feeding. Many farmers are now beginning to find, that corn can be cultivated exclusively for fodder, cheaper than they can raise other feed. But there is an error very prevalent in regard to the best method of cultivation—I allude to sowing it broadcast. Farmers are so much in the habit of sowing all crops broadcast, that the subject of drilling-in crops has received but little attention. We reason, that because labor is high and land cheap, therefore we cannot afford the time and expense of drilling, but must use more land and get lighter crops. As I have had some experience in cultivating corn fodder, I think I can make it appear that the drill system of culture is the cheapest.

Lands to produce corn for any purpose should be highly manured—and of course they will be very subject to weeds. Corn cultivated in hills is usually very much injured by weeds; but very much more so when sown broadcast. Other spring grains are put in the ground so early, that they get the start of weeds; but by the time corn is planted, vegetation is rapid, and if it has to run an even race with weeds, they are sure to come off victorious. In getting the seed into the ground, sowing broadcast is the most expeditious; but this advantage is greatly overbalanced in harvesting and curing the crops. Corn fodder is the most difficult to cure of any crop within my knowledge. When we recollect, that from 800 to 1000 lbs. of syrup, boiled sufficiently to grain into sugar, has been obtained from one acre of stalks, we shall realize that stalks contain an abundance of sap.

The following method of cultivation I have practiced with good success: Prepare the land as usual for corn; mark off the drills, 3 feet apart, north and south, so as to admit the noon-day sun between the rows. Let the corn be dropped in the drills so as to have at least one kernel in every two inches. Two bushels of seed should be used to the acre, and there is not much danger of getting the corn too thickly in the drills. They should be covered by drawing the earth from each side of the drill with a hoe. As soon as the rows can be distinguished, they should be plastered, cultivated, and hoed. A skillful hand with a cultivator will perform the after-culture, as the corn will grow so rapidly as to soon cover the ground, and prevent the growth of weeds. It should be cut as soon as it gets its growth, and before frosts. The best method is to use a common corn-cutter, laying the stalks upon the ground in small bunches, and when wilted, binding them in small bundles, and stacking them in the usual manner of stacking corn. From seven to nine bundles placed in a stack, and bound around the top, will cure well. The stacks will need to stand a long time in good weather to be thoroughly cured: and after all, they will almost assuredly heat in the mow, and become mouldy, unless well salted.

Of their value as food for stock I need not speak, as horses, cattle, or sheep will discuss that matter to your entire satisfaction, provided you place them within reach.

The great difficulty with corn sown broadcast is

in the harvesting and curing. I knew a crop on rich land, which grew about seven feet high, and the stalks were so limber as to scarcely bear their own weight. It had to be cut with a sickle, which was a slow, tedious process. If they can be mowed or cradled, there is still much danger of their becoming spoiled before they can be cured; and there is no safe manner of curing them except by stacking. Farmers will at once perceive that they are much more readily bound and stacked when in drills, and cut with a sickle or corn cutter, than when scattered over the whole surface.

There is another use for corn sown for fodder, which is practiced by some farmers near Boston—viz., for soiling—and it is represented as a crop equal to any of the articles used in England for that purpose. If, instead of trying to introduce foreign articles, of which we are entirely unacquainted, we should try experiments in using corn, we should probably find our account in it. We know it is congenial to our climate, and will afford wholesome food for man and beast.

Yours,

MYRON ADAMS.

East Bloomfield, Jan., 1845.

CORN-COB MEAL—INQUIRY.

MR. EDITOR,—Allow me to express the grateful feeling of a tiller of the soil, that we have so easy and direct a channel through which useful knowledge may flow to our understandings, as is presented in the "Farmer." This I take to be the legitimate channel to which we of Western New York are to look for the opinions and experience of those who, in their agricultural practice and researches, have gone before us, or stand above us; and when we fail to find in this channel that which is calculated to aid us in coming to right conclusions, and settling upon right grounds, any interesting and important question which may be agitating our own minds, and which is material in its effects upon the profits of cultivation or the economy of feeding, I consider it perfectly apropos to invite those who may be in possession of the knowledge which we desire, to throw it into the channel, and let it come down to us. And it is with a view to elicit facts, both scientific and experimental, on a subject which I consider of great importance to the farmer, especially of Western New York, that I beg to be allowed to propound a single question; hoping that they who have understanding in the matter will not withhold it: viz., What is the influence, or relative value, of corn cobs as food for domestic animals; and to what kind of stock can it be most profitably applied, if to any? I add "if to any," because the term "most profitable" implies that the cob may be fed to some kinds of stock with profit—a proposition which I suppose some will not acknowledge as true.

I am aware that this question has its advocates *pro* and *con*; and while one says that the cob, ground up with the corn, is worth as much as the same bulk in oats—another says, it is worth no more than so much saw-dust, and all the good it does the animal is in simply distending the stomach; and again, a third puts in his plea that neither are correct, and says, that if you take the cob in its juicy state, (that is, before the corn gets thoroughly seasoned,) you will find that it contains much nutrition, but after the corn in the ear becomes fully dry and hard, the cob becomes hard of digestion, and is no longer fit to enter the stomach of any animal.

Not being competent to analyze the cob, I cannot

reconcile these conflicting opinions, nor decide which should be entertained. If the first be correct, how much valuable food is annually lost, and how important that we, as farmers, be immediately set right; but if, on the other hand, the substance is useless, or positively injurious, how important still that we have wisdom on the subject, and not abuse the creatures committed to our care.

In the early part of last summer, I had as a traveling companion, for a day or two, a gentleman from Ohio, of apparently much intelligence and experience as a feeder, particularly of horses; and, in talking upon this subject, he said that he had fed cob meal until he had become satisfied that, to a horse in health it was decidedly injurious—to use his own expression, it made their hair stand the other way. He thought the cob possessed of a medicinal quality, which in certain cases might be useful. A neighbor of mine, last fall, carried to one of the city mills, and got ground, a quantity of ears of corn, in all ten bushels, which he fed to a cow designed for his family beef. He was well satisfied with the result, and thought it a matter of much economy. He paid 4 cents per bushel for grinding—40 cents, the price of a bushel of corn. So we see it costs just as much to grind a bushel of cobs as it does to grind a bushel of corn. Now, if it is economy to carry cobs to a mill, and pay 4 cents per bushel to have them ground, (and it certainly is, if the first of the above theories is correct,)—if they are valuable in one state, and not in another—or if they are good for cattle, while they are injurious to horses—in short, whatever truth is in the case, I for one shall be glad to have it plainly shown; and I shall keep my eye upon the *channel*, and seize with avidity upon any thing that reflects upon the point at issue.

Yours, &c.

PENFIELD.

Jan. 20, 1845.

Some remarks on the above will be given in our April number.

A PLEA FOR BOOK FARMING.

MR. EDITOR,—Strange as it may seem, when the unbeliever seeks for arguments to disprove the truths of our blessed religion, he neither goes to the Pagan mythology, to the monstrous Hindoo superstitions, nor to the gross and self-indulgent code of morals inculcated by the Arabian prophet; but he is invariably driven to the lame alternative of judging Christianity by those very institutions and morals which Christianity itself has set up—thus unconsciously setting his own seal to the very truths which he, in his proud self-blindness, attempts to refute. So with the scoffer at *Book Farming*. How often does the poor blind, bookless farmer, insist that there can be no improvement on his mode of manuring and culture. Ask him how he manures his fields, and he will unconsciously betray the fact, that he pursues those very improvements which that prince of agricultural science, the great Tull, labored half his life to bring to the conception of the dull prejudiced mind of the English farmer. Until Tull's day, 1740, it was the practice of the farmer to take ancient customs as an infallible rule of practice—nothing was investigated, nothing was improved! The age of human progress had indeed commenced, but as yet it had shed little light on agricultural science. Such is the isolated life of the farmer, that he is generally the last in the social circle to be benefited by the progress of light and knowledge. I have often thought, when conversing with a farmer, that

his prejudices were the more obdurate and unyielding from the lack of that daily collision with his fellows, without which the mind of man is continually prone to a narrow-minded, hopeless egotism.

In less than ten years after Tull had forced upon the mind of the English farmer the idea of theoretical agriculture, Mr. Bakewell commenced those experiments upon *breeding*, based upon natural principles, and a patient observation of the nature and physical organization of the animals he wished to improve; thus, the sheep which he introduced, and others have since improved, are capable of being fatted at about half the age required by the old, stunted breed. The same improvements have been made in swine, and other farm stock, until even in our own land we have hardly a farmer, however besotted his prejudices against agricultural progress, who has not inadvertently mixed the blood of his long-nosed, *land-pike* breed of hogs with that of the more comely improved animal: like the old schoolmaster in Guy Mannering, whose obdurate habits would not permit him to exchange his old, greasy, threadbare suit for a better, until it was abstracted from his bed-side at night, when he unconsciously *donned* the new suit left in its place!

How it strikes at my life when I hear a farmer complain of his hard condition—the deterioration of his crops—the high price of labor—the low price of his produce, &c., &c. The effect upon the minds of his growing children is most disastrous; so far from teaching them to like and to learn that which cannot fail to improve and exalt his noble calling, it only leads them into the most fatal errors in relation to that which constituted both the pecuniary success and the true independence and respectability of life? When I see a boy, fresh from the farm, fatally installed into a law office, I cannot but reflect upon what Junius has said about the soul-destroying influence incidental to the legal profession. When I see him behind the counter of a village store, I can only apply to him the soliloquy of Cardinal Wolsey:

This is the end of all thy greatness!

Here falsehood and meanness have a precocious beginning, even before the end of adolescence; as his manhood develops, so does his knowledge of the tricks of trade. Like the ill-fated, demoralized, and demoralizing gambler, who has converted his wealth to mischief; so does this farmer's son go down to the grave, a bankrupt in mind, reputation, and estate; without the proud satisfaction of having made one blade of grass grow, or of leaving behind him a single, solitary example of true, exalted morality, for the benefit of his race!

Let me, then, admonish the farmer to beware how he belittles his own calling to the ears of his sons and daughters. Let him give them the best education in his power, both physical, moral, and religious. In no instance may he utter in their presence the vulgar, exploded notion, that *book learning* is only necessary to the professional man. If his own tastes are unhappily perverted, by his early defective education—if he “cannot teach and will not learn,” let him, then, reflect the more on the responsibility he incurred when he became a father, and the duty he now owes to his own offspring. If he does not himself know, and cannot or will not comprehend, how one acre of arable land may be made to produce, with a little more expense, twice or even thrice the usual crop—if, by growing a green crop instead of exposing his fallow land to the rays of an American sun, his soil inspires, instead of expiring, carbon and

ammonia—let him not prevent his children from learning that which *he* will not learn, and from seeing that which he has neither eyes to see nor head to comprehend.

S. W.

SUBSOIL PLOWING.

Col. Sherwood, of Auburn, made use of the subsoil plow the past season on fifteen acres. A part of the subsoiled land was planted to corn, and a part sown with wheat in the fall. The soil was loamy, and the subsoil hard clay and gravel. He used the subsoil plow of Ruggles, Nourse & Mason. It required four oxen to draw it; and to work to the best advantage, at the depth it was run in this case, which was one foot, Col. Sherwood thinks there ought to be six oxen. The team worked over from an acre to an acre and a quarter a day. The ground had not been plowed for thirty years. It was naturally wet, so much so, that in a wet time the water would stand on it to the injury of the grass. The effect of the subsoiling was, to render the soil and subsoil so friable, that the water immediately found its way through; and though a portion of the past season was very wet, the water at no time remained on or so near the surface as to do the least damage to the crop. That part which was put to corn was first planted on the 20th of May, but the seed failed, and it was planted again on the last day of May and first day of June, and grew so vigorously, that it got ripe as soon as other corn in the neighborhood. Several strips, of 20 to 30 feet wide, were left through the field not subsoiled. The difference in favor of the subsoiled portion was very obvious, in the ranker growth and larger size of the corn on that part—it was so plain, that it might be seen to a row. The different portions were not measured separately at harvest-time. The effect of subsoiling on the wheat crop cannot be told at present.—*Cultivator*.

SCIENCE AND AGRICULTURE.

A spirited writer in the London Agricultural Gazette, in speaking of the comparatively slow progress of improvement in agriculture since the days when "Adam delved and Eve spun," up to the present time, says, the scientific world is responsible for the backward state of agriculture compared with other arts, and that farmers are not altogether culpable for their ignorance respecting the scientific principles of their pursuit, since those who alone had the power, and whose province it was to give them light, did not diffuse it for their benefit, (if indeed they had discovered it,) till the example was set by the immortal Davy. Now, however, the writer thinks the farmers are promised the needed light of science, and being made familiar with its doctrines and its terms. Thus he says:

"What if Farmer Dobson *did* think, last year, that *Ammonia* was the name of a gentleman's daughter? He knows better this year; and next year we shall hear of his putting sulphuric acid or gypsum on his dunghill, to seize this fair lady as she flies. Why should he be expected to be a ready-made chemist? When he was a boy, chemistry was scarcely born. He had no education in chemistry. How should he know it had any thing to do with farming? He is not to be blamed for his ignorance in this matter. The blame, if anywhere, lies with those who advance it—namely, with the scientific world, who have allowed the physical world to grow nearly six thousand years old, and have only just made the notable

discovery that the science of nature (chemistry) is eminently and necessarily applicable to the art of human existence—farming. I say, it is the backwardness and infancy of science, not the ignorance of farmers, that deserves reflection."—*New England Farmer*.

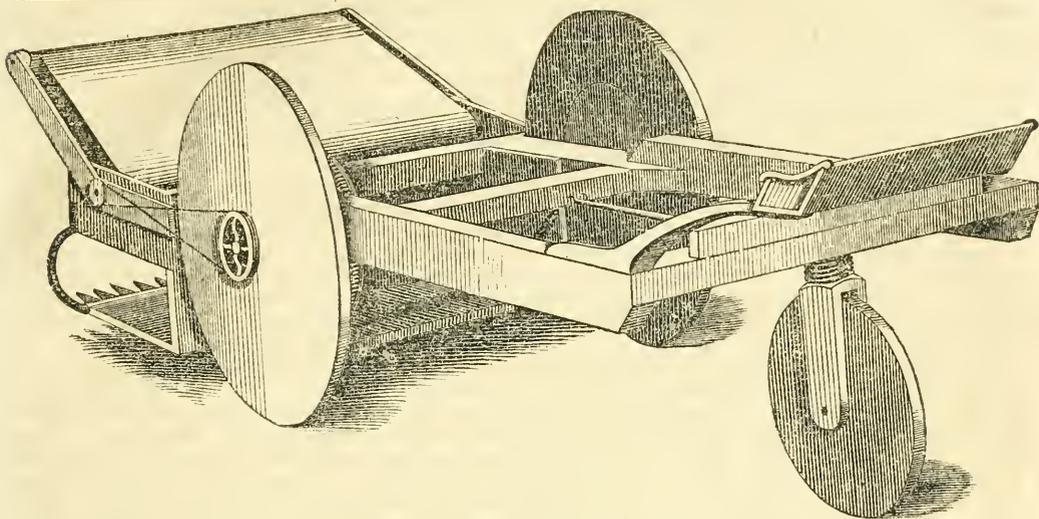
HOW TO MAKE A CONTRARY HORSE GO AT YOUR BIDDING.—A neighbor of mine once told me, that he bought one of those ill-tempered horses so often to be found, and, a day or two after the purchase, he took him to the woods to draw a load of fuel. Having placed a reasonable load on the sled, he bade him go; but no, he would not start an inch. After every fair method had been tried to induce him to travel, all to no purpose—(he only exhibited feats of ill temper—snorting, leaning, dancing, backing, rearing up, &c.)—he very securely tied him to a sapling, and left him to his will. At noon he was tried again, but to no better purpose. He was then left till night: still he had no mind to go. He was now left over night: by this time he felt quite willing to move, which very kindly he did, with his load. His master then put him in the stable, rubbed him down, and gave him a good breakfast. I was told, he never after refused to move at his master's bidding. This was rather a severe chastisement, but perhaps it was the only way he could be cured of his contrary will. Probably if this horse had been properly treated when young, he might never have needed such severity.—*Mass. Ploughman*.

STATISTICS OF POULTRY.—According to the returns made by the census of 1840, the aggregate amount of capital invested in the United States in this branch of domestic industry is very great. The amount in the various states and territories is as follows:

Maine	\$124,171	Kentucky	\$536,439
New Hampshire	97,562	Tennessee	681,531
Vermont	176,437	Louisiana	273,314
Massachusetts	540,295	Mississippi	309,481
Rhode Island	61,492	Alabama	829,220
Connecticut	176,659	Missouri	230,283
New York	2,373,029	Indiana	393,228
New Jersey	412,487	Illinois	330,968
Pennsylvania	1,033,172	Michigan	82,730
Delaware	47,465	Arkansas	93,549
Maryland	219,156	Florida	61,067
Virginia	752,467	Wisconsin	16,167
North Carolina	544,121	Iowa	17,101
South Carolina	590,594	District of Columbia	3,092
Georgia	473,158		
Ohio	734,931	Total	\$12,176,179

If you would have your fowls lay in winter, you must feed them well, procure a warm house for them, place a box containing gravel, lime, and ashes, and fresh meat two or three times a week.

There is a beautiful circumstance connected with agricultural emulation. In many of the pursuits of life, one man gets rich by making another man poor, climbs the ladder by putting his feet on another man's shoulder—or, he builds his own building out of the fragments of his neighbor's, which he has undetermined. This is often a crying injustice, and inflicts many bitter mortifications, or arouses vindictive and tiger passions. Emulation in agricultural improvement enkindles no such baleful fires. A man can make no improvements in husbandry without at once extending the knowledge and advantage of them to others. The enlargement of the capacities of the soil, and every increase of its productions, confer an immediate benefit upon the whole community.



REAPING MACHINE.

The advantages of this machine over all others are as follow : its construction is of such a nature as to allow the machine to turn right or left, on any circle that may be required—the cutter having the same motion as if moving straight forward. The easy manner in which the grain is drawn down against the cutter, by the use of an endless apron, without the danger of beating out the grain, (as is the case where reels are used for that purpose ;) also, the simple way in which the grain is discharged from the machine, by a man who stands upon the same platform on which the grain falls, by the use of a sort of rake or fork, in a proper shape for binding ; the frame extending back far enough to admit the horses directly in rear of the machine—which is another great advantage over all machines drawn from the sill or corner. The motion of the cutter is obtained by means of internal gear, inclosed in the driving-wheels, which are made principally of cast iron—an advantage, when compared with external gearing, of 50 per cent. in the cost of the required amount of motion. It must be clearly seen, that it does away with the complications of frame-work, journals, and boxing, &c., which is required to support external gearing. There are, also, farther advantages in the internal gearing—it forms the driving-wheels, and being so inclosed, cannot possibly get out of order—and, at the same time, is entirely out of the way.

The cost of the machine will be about \$75.

WM. H. KETCHUM,
E. P. NEEDHAM.

Buffalo, Feb. 1845.

As far as mechanical construction and ingenuity of contrivance in its action can be judged of, without seeing its operation, we think the above machine promises well, and will be a cheap and labor-saving machine for well-cleared fields, and particularly for the western prairies. One span of horses and two men are expected to cut from 20 to 30 acres per day.—Ed. FARMER. †

No man ever trusted in God but he found him faithful ; nor in his own heart but he found it false. Whoever has true Christianity, cannot be poor ; whoever is without it, cannot be rich.

SHADE TREES.

A very sensible correspondent of the "Boston Cultivator," in speaking some time ago of the party zeal evinced in the late campaign, and the unprofitable and foolish direction that was given to it in many respects, remarks, in regard to pole-raising—

"Had the worthy guardians of the nation's rights who reared them, planted trees with good roots in their places, a much nobler object would have been gained than any that are now existing. Then they might have stood for ages, and furnished a beautiful object for future generations to look upon, and pleasant shades for the children of future years to gather under. Then the hoary-headed sire might have told his children's children, as he sat down in the evening of his days, that "that tree was planted as a political emblem, in 1844." It would have been a beautiful theme for the men of either party to have dwelt upon, and our country would have been vastly richer in rural embellishments than it will be when these seared poles have fallen."

He also recommends, "that the members of Congress for each party, immediately on the convening of that body, call meetings of their party, and determine forthwith what trees shall be their emblems for the next campaign, and give notice thereof, with the assurance, that none will be accepted but those that shall appear the next summer full of leaf and thrifty growth."

We like the suggestion very much, though we fear it is made in vain. If carried out, it would be a new and interesting feature in politics, and one from which the country would derive some benefit, to make up for the great waste of time and labor of which we have been guilty. In passing through the country last autumn, we saw farmers and their families engaged, with the utmost enthusiasm, in erecting poles ; while their dwellings, barns, fences, gardens, &c., indicated shameful neglect. We like to see a proper degree of interest taken in the affairs of the nation ; but when men neglect their own daily and legitimate pursuits, to babble about politics and enact absurd and unmeaning follies, they should remember, that they are doing themselves and their country a positive injury.

P. B.

REPORT OF THE COMMITTEE ON FARMS.

From the Second Annual Report of the Transactions of the Monroe County Agricultural Society.

The Committee on whom devolved the duty of examining such farms as applications were made from the owners, in accordance with the regulations of the society, may be expected to make a more particular and extended report than was given at the annual Cattle Show and Fair in October last, at which time some general and commendatory remarks were made by the Committee on several farms which they visited, which were not competitors; as well as upon those that were, which did not quite come up to that point of excellence in general, systematic management which the committee had laid down as their guide.

This Committee may be expected to lay down some general rules, as a criterion of what they conceive to be a true system of farming for a majority of the land in this county, and that manner of fencing, draining, manuring, and rotation of crops, and general management, upon which they predicated their premiums; and although some of those points are still unsettled, and some important questions still remain debateable by our best and most experienced farmers, yet, to exhibit the grounds upon which they arrived at their conclusions, they "will also give their opinions."

This Committee are decidedly of opinion, that the wheat crop, (combined with wool growing,) is the only crop, in this county, that farmers can depend upon for producing at all times ready money, at a fair remuneration for their labor—especially if they are located at any great distance from market. Corn, hay, oats, potatoes, pork, &c., cannot be depended upon as ready cash articles, to any great amount; with the exception therefore of those farmers whose lands are not adapted to the grain crops, and are more natural to grass, grazing and fattening cattle may succeed well, and in some hands we know it does; but yet, they can hardly compete with the more hilly, cheap, and broken lands of the southern and eastern parts of this state, the outlay for which is not over one quarter of the amount that our lands were purchased at. Therefore, it recurs with great force to the minds of this committee, that the wheat crop is the only one adapted to a profitable and successful course for the farmers of this western country to pursue, as a main dependence to make money, pay for their farms, and get out of debt.

The committee will therefore proceed briefly to state what they consider a good, judicious, and successful system for conducting a farm, and what state of preparation and rotation of crops it is necessary to pursue, to come up to that point of excellence which should be the perfection of the art; and those whose exertions come nearest to that course will, consequently, be the successful competitors for their favors.

Let a farm consisting of any number of acres, not too large—say, for example, one hundred acres of arable land, independent of wood lands, orchard, and garden—be in the first place well fenced, if with rails, well staked and ridged; or what is better, with corner stakes and yokes, the yokes placed at two or three rails from the top, in which case the stakes need not be set in the earth; or what is better still, where there is a sufficiency of stones, let the fences be made with them, and it can hardly be conceived, by those unacquainted with the process, how small and inferior an article will make a good and lasting

fence, merely by the plentiful use of cedar, pine, or chestnut sticks laid in crossways with the stone, always reserving a sufficient quantity of stone to cope the wall, and form a cap, to cover and retain the whole line. Divide the whole into such sized fields as shall comport with the size of the farm, and in such a manner as will allow it always to be nearly equally divided into a three-course rotation. The fences to be clear from weeds, brambles, and shrubs, and of a sufficient height to protect against all depredation: for there is no better opiate to induce good nature, and calm and uninterrupted sleep at night, than good strong and high fences. If there are any low or springy lands, let them be thoroughly open, or under-drained—under-draining is by far the most convenient, safe, and economical.

The barns should be large, with an under-ground basement, if possible; sheds and stables, large and roomy enough to house every hoof on the farm; barn yards not too large, with water handy; a piggery, with boiling apparatus; and proper protection and fixtures for the sheep; with a well-built, snug, and convenient house; an industrious wife, not too handsome; a kitchen and flower garden; a well-chosen fruitery, and orchard—and that is what this Committee would consider a *pretty smart chance* of a beginning. Now, we would propose that there should be a flock of sheep, of a *hardy, fine-wooled* variety if for the fleece, or of a large-framed long-wooled variety if for the carcase—as an indispensable requisite to commence with, not only as to profit from themselves, but as an important element in wheat husbandry. A greater profit will be realized from the sale of the wool and carcase than is lost to the farm by the food they consume, as their manure is the perfection of food for the wheat plant, and, from its intimate division and distribution, it is in a better state to feed they own plant than any other, except, perhaps, the artificial compounds.

The true wheat farmer should have no more cows, oxen, or horses, than are necessary to carry on the farm, and subsist the family—and those of the very best breeds. It must be very bad economy to be obliged always to keep half the farm in pasture and meadow, merely for the sake of keeping a great herd of cows; coupled with the privilege of foddering 20 or more tons of hay, and making a few pounds of butter, to sell at 8 cents per pound, the marketing of which costs more than its produce.

We would premise, that a farm, when it is right, should not have one square foot but what is arable, and capable of producing any crop put upon it; and as nearly as convenient, always to have one-third in wheat, one-third or more in clover and grass, and one-third or less in summer crops. Now let us explain the *modus operandi*: It is now spring—one-third in wheat, properly seeded; one-third or more in meadow and pasture; and such portion of the other third as shall be convenient fall-plowed, for summer crops, which is to be devoted to oats, corn, potatoes, bagas, wortzel, carrots, &c.—on which is to be expended the fresh barn-yard manure made the winter previous, or so much as is needed, and the balance composted, for dressing the summer fallow. All of the oat, corn, and potato ground, or so much as the season will admit, should be sown with wheat, after the crops come off; if any lays over, it may be sown the next spring with peas or barley, and followed with wheat.

The manure which was applied to the summer crops, is now in the best possible state for produ-

cing wheat, having lost its fermentative quality, and, by rotting, plowing, and working, has become thoroughly divided and mixed with the soil, and is in a better state to promote the production of the wheat berry than in any other shape that it can be applied. So much of the summer crop and enough of the grass in pasture to make about one-third of the arable land, comes into wheat each year. This course of cropping gives but a small portion of mowing land, after providing pasturage for the sheep and neat stock; yet, with the judicious use of the root crops, and the straw from the wheat and oats, a very small quantity of hay need be used before the first of April, and yet the whole farm stock be kept in as good order as those to which is fed a ton and half per head; by which course a great amount of land is relieved, for the grand desideratum of the wheat crop.

The meadows and part of the pasture of this year, become the summer fallow of the next; and this year's stubble, properly seeded, becomes the meadow and pasture of the succeeding season.

This course your committee consider the best, safest, and most profitable, taking into consideration the importance of keeping the soil in good heart and productiveness, and in a state of improvement, rather than impoverishing it. Yet there are some good and judicious farmers who, occasionally, where a field throws heavy to straw, follow with two or more crops of wheat alternately; when clover succeeds well, and the ground is free from weeds and foul grasses, we have known this course to succeed well, even with once plowing, but it is a course, generally speaking, more to be deprecated than praised.

Another course is pursued, by some of our best farmers, who prefer to let all the manured summer-crop land lie over to the next season, and take off a crop of barley or peas, and follow with wheat. The Committee incline to the opinion, that this course must nearly or quite exhaust and neutralize all the virtue of the previous year's manuring, and have a tendency to keep the land in a situation not improved for the wheat crop, if not losing in its qualifications to produce, for any length of time, a certain and profitable return.

Another course, pursued by equally judicious farmers, is to take a four-year course rotation, by allowing all the seeded ground to lie two full years in clover. The first year it is mowed and pastured, and the second year it is mowed or pastured till about the first of June, then plastered, and at the proper time cut for clover seed; the year after, mowed or pastured till the first week in June, when it is turned under for the summer fallow, for wheat. This course, on large farms, with a heavy stock of cattle and sheep, (as it allows more hay and pasture than the three-year course,) is a very successful method; and even for those of a medium size, may suit well for some particular soils; and perhaps in those cases where the management for saving and increasing the manure is not skilfully and judiciously performed, this is a safe course, if one-quarter of the arable land gives a sufficient quantity of acres in wheat:

The three-year course in three divisions—Field A.
 1841 in wheat, seeded.
 1842 in meadow, pasture and summer crops.
 1843-4 in wheat.
The four-year course, in four divisions—Field A.
 1840 in wheat, seeded.
 1841 in meadow and pasture.

1842 .. in meadow, clover-seed, and summer crops.
 1843-4 again in wheat.

But whatever course an enterprising and thinking farmer may pursue, if he has a system and plan of proceeding, and pursues it constantly, he will soon come to a result as to what process is best adapted to his soil. Without regularity, system, and a code of rules and reasons, no course will succeed, nor any valuable result be reached. It is said, that bad habits, regularly followed, are not so pernicious to the human system as an irregular and mixed course of life; and the remark is peculiarly applicable to the arts of husbandry. We say—*system! system! system!* and follow it, good or bad, and conviction must follow, by comparison with others pursuing a different course.

The Committee can conceive of no better system of farming than that of 100 acres of arable land, (or double or treble that amount, if you please,) of which one-third, say 33 acres, is put into wheat producing from 800 to 1,000 bushels; with 100 to 150 fine-wooled sheep, producing from 300 to 500 pounds of wool, worth from 40 to 50 cents per pound; and the balance of the land in grass and summer crops, every item of which should be consumed on the farm, to subsist the family, hired help, and farm, stocks, and, perhaps, to help to pay mechanics; all the offal, hay, straw, and roots, going to increase the manure heap, which, with a plentiful use of plaster and clover, will more than compensate for the wheat and wool subtracted from the soil, and sold.

The Committee, in awarding their premiums, have selected those who, in the words of their instructions, came the nearest to their standard of excellence—"reference being had to the general system of management, and the profit obtained: rather than to natural advantages or expensive improvements."

ELISHA HARMON, of Wheatland, to whom was awarded the first premium, cultivated a farm of 400 acres, 306 of which are improved; has been settled 40 years; the soil a sandy loam, inclining to gravel, abundantly filled with a limestone shale; on a part of which are beds of plaster, which are opened, and manufactured for use and sale, averaging 1,000 tons per year. This tract was originally an oak opening, with gentle undulations, and is, altogether, a splendid wheat farm. The dwelling-house, barns, and out-houses, are of a superior construction and finish. He has this year over 92 acres of wheat, yielding over 2000 bushels—has raised an average of 50 bushels of clover-seed for the last 15 years—usually alternates his crops, by wheat one year and clover two years, but has one field that has produced wheat every other year for 15 years past, without any deterioration of the land. Plowing commences, for the summer following, on the first week in June and second week in September, using his sheep and the wheat cultivator intermediately between the plowings—sows from the 12th to the 20th of September, 5 pecks to the acre, of pure White Flint. His stock consists of 400 sheep and 106 lambs, Saxon and Merino. His clip of wool this year was 1,600 lbs., which sold in market for 40 cents; 7 cows, 12 horses and colts, and 30 hogs, a part of them fine Leicesters; and what particularly commended itself to this Committee was, over four miles of stone fence. His summer crops were 8 or 10 acres of corn and oats each, root crops, potatoes, &c. \$10 and Vol. Transactions.

WILLIAM GARBUTT, of Wheatland, to whom the Committee award the credit of being the only farmer accountant, that they visit d, who kept his accounts of profit and loss on every crop on his farm, and the produce and cost per acre, and the general result for some 20 years past. For a description of his farm, and his system of farming, they propose to let him tell his own story :

To the Viewing Committee of the Monroe Agricultural Society.

But to my own business: My farm consists of 200 acres of cleared ground; but the mill-pond overflows 10 acres, which is of little value except for pasture in autumn and dry seasons, and 6 acres are occupied with roads and yards; which leaves 184 for cultivation. I generally calculate, when circumstances will admit, to have 45 acres in wheat, 15 in barley and oats, 15 in hoed crops, 40 in pasture, 40 for hay and clover-seed, and 30 in fallow. The ground intended for the hoed crop is always in clover, if practicable, highly manured with rotted manure, and plowed under in the fall. The barley stubble is twice plowed, receives a light dressing of manure, and is sowed with wheat; so that about two-fifths of my wheat crop are raised after summer crops, the remainder after fallow (viz., clover pasture;) the whole of the wheat always seeded with clover and timothy. I annually sow from 10 to 12 tons of plaster, and the two seasons past have put 4 tons, each year, or my manure in the yards. My general average stock has been 300 sheep, 30 hogs, 15 head of cattle, and 8 horses; keep three good teams, and a span of mares for breeding, and odds-and-ends.

I stable or yard all my stock in winter, and make all my forage into manure. I keep the stock in the yards in the spring as long as I conveniently can, seldom turning sheep out before the 1st of May, cattle the 10th, and team not until spring work is done. My first pasture is my fallow; second, clover, which is intended for hay and seed.

The cattle are wintered on corn-stalks, straw, and roots; sheep on chaff, straw, and shorts, of which I feed annually from 1,000 to 2,000 bushels. I always endeavor to feed as well as I can, with the fodder I have—not to pamper nor waste.

The amount sold from the products of the farm, from 1830 to 1840, was great, averaging from \$2,200 to \$3,200 per annum, independent of our farm living—it being only the amount sold. The expenses during the same period, including every expense belonging to the farm excepting those of my own and Mrs. G.'s labor, of which we make no account, was from \$1,200 to \$1,600 per annum. The crop of 1840 amounted to \$1,818 76; expenses, \$1,296 15; 1841, \$1,302 44, expenses \$1,214 28; 1842, \$1,578 02, expenses \$1,204; 1843, \$1,639 63, expenses \$1,219 10. I can give all particulars relative to these amounts, but this communication is already too long. The plaster and mill-feed increases the amount both in the expenses and income.

Owing to the failure of my clover, I have the present season more acres in wheat, more in fallow, less in hoed crops, less in grass, and fewer sheep than usual—viz., 57 acres in wheat, 43 in fallow, 10 in barley, 10 in hoed crops, of which 2 are in potatoes, 3 roots, and 5 corn; and 8 in oats.

Stock, 10 horses, 26 cattle, 24 hogs, 150 old sheep, and 60 lambs. Present season, 4 men by the year from the middle of July; one more for the season; 3 one month in hay and harvest, and one by the day through wheat-cutting.

And I would further state, that the great difference in my wheat crop per acre, in the various years, was more owing to the seasons than to the cultivation, or the condition of the land to produce a crop. The crops of 1833-4-5 were very heavy, yet the ground was not in any better condition than it was in 1836 and 1837, when the crops were light; and the same may be said of 1841 and 1842. The crop of 1842 was the lightest I ever had, being only 19 bushels per acre, owing to the rust; for if it had not rusted, it would have been 30 bushels per acre.

Yours most respectfully, WILLIAM GARBUTT

JOHN AYRAULT, Perinton. This farm is of a natural soil for a grazing establishment, and is better adapted to grass than for grain crops. It contains 300 acres, 250 of which are improved. The soil is a clayey loam, with some parts rather wet, but reclaimed by extensive under-draining. Usually has under the plow from 20 to 30 acres; the balance in pasture and meadow, which produces on an average 2 tons of hay to the acre; composts his manure, and applies it as a top-dressing to his meadows; as also his straw, as it comes from the barn, and with great advantage—cuts from 60 to 65 acres of hay, and keeps his meadows lying in grass as long as they produce well, without any rotation—mows off the tops of the leaves of the oats in June, to make them start out, and to assist the young clover—has some superior stone wall, and all his fences are first-rate, mostly of white cedar, high, strong, and secure. Dwelling-house, barn, and out-houses excellent; garden neat, and laid out with taste; fruitery well-stocked with the best varieties; stock, 105 neat cattle, a part spayed heifers, and 10 calves; buys most of his stock at two years old; 6 yokes of working oxen, 50 sheep; sells his fat cattle for the Eastern market, when three and four years old, at prices ranging from \$25 to \$30. Taken altogether, it is a fine specimen of a well-conducted grazing farm.—Third premium of \$6 and Volume of Transactions.

ROMANTA HEART, of Brighton. This farm contains 226 acres, 200 of which are under improvement, with a great variety of soils, from heavy clay to light openings—not naturally rich, but greatly improved by skillful culture and good management—about 70 acres in wheat, of three varieties, Flint, Hutchinson, and Sowles—with 8 acres of very superior-looking Italian spring wheat—has a lime-kiln on his farm, and is making extensive experiments with it, on various crops and soils—is not prepared, as yet, to state the result—one field limed with 60 bushels per acre—wheat, heavy and lodged, yielded over 30 bushels per acre—one field not as clean as desirable, some chaff and other foul growth—12 acres of corn and potatoes, very fine—40 acres of grass, a great part of which is clean, heavy timothy, a part intended for market—has 70 sheep, [not enough,] and but few neat cattle, and horses for farm use—an excellent and well-arranged dwelling-house and garden; barns, outhouses, and fixtures good. The owner does things about right, and cannot fail of realizing all reasonable expectations.—Fourth premium of \$4 and Vol. of Transactions.

JOHN MCGONEGAL, Irondequoit. Fifth premium of \$2 and Volume of Transactions.

The Committee will close this Report with an expression of their gratitude for the kindness, good feeling, freedom, and hospitality with which they were in all cases received by the farmers, and their tidy, economical, and pleasant helpmates, as well as by their hardy sons and blooming daughters; and they feel to regret that they either have not the honor of holding an appointment on this Committee for life: or were not all bachelors, that they might have a chance for a life estate, *real and personal*, among the fair dwellers in these rural habitations.

L. B. LANGWORTHY,
R. HARMON, Jr.,
WM. C. CORNELL,
M. B. FATEHAM,
N. HAYWARD, } Committee.



HORTICULTURAL DEPARTMENT.

BY P. BARRY.

GARDEN AND ORCHARD—OPERATIONS FOR MARCH.

Hot-Beds.—So little is done in this respect by our readers, that it would be nearly a waste of paper to say much in relation to it. Those who do intend to avail themselves of hot-bed culture for early vegetables, have undoubtedly commenced, as the weather, during the latter part of the past month, has been highly favorable.

Tomatoes, Egg-Plants, Peppers, &c., should now be sown in pots, if not done before, to be ready for planting in the open ground. Tomato plants may be raised in pots, or boxes, in an ordinary sitting-room: we saw as good plants raised in this way last spring as any produced in hot-beds.

Lettuce, Radishes, Cress, &c., can be sown in cucumber frames, to save labor, as they will be used before they will come in the way of the vines.

Broccoli, Cauliflower, and Cabbage seeds may now be sown, to be ready for planting out in their season.

Scions for grafting should be cut this month, if not already done—no time is now to be lost. Be careful about cutting the best kinds *only*, and keeping correct memorandums of their names. Put them away carefully in a cool cellar, with the lower ends in earth or sand, till ready for use.

Pruning orchards should now be attended to, as soon as the weather is mild enough to be out. Where the heads of fruit trees have become dense with branches, so that the sun cannot penetrate freely, they should be thinned. The fruit will be much larger and finer flavored. Use a saw, and smooth over the incisions carefully with a sharp knife.

Grape Vines, not pruned last fall, should now be pruned immediately, before the sap begins to flow. Without a proper pruning, a crop of grapes need not be expected.

Transplanting of currants, gooseberries, and such plants as put forth their leaves early, should be attended to this month, towards the latter part, if the ground should thaw, and the weather be mild.

Strawberry Beds, Bulbous Roots, &c., that have been protected, should be uncovered as soon as the weather is sufficiently warm.

If you intend to graft, you should prepare your grafting-wax, and put your implements in proper working order *now*, while you have leisure. By and by you will regret it, if you don't. See, also, that your fences are all up and in good order round your garden: if you don't, the cattle will be breaking in and destroy your beds of early vegetables, after all your trouble. Gates, too, are frequently out of order, causing great inconvenience, and often loss. Nothing, it strikes us, can be a stronger indication of slovenliness and bad husbandry than bad fences and gates, any where on the premises, but particularly around the garden or the dwelling, where neatness and good order ought to be manifested, if any where.

Provide your Garden Seeds, the first opportunity, from a responsible source. It is a ruinous economy

to take any thing that comes easiest and cheapest. A few shillings are a *mere nothing*, in such cases. Don't sow a seed, unless you are as confident as it is possible to be that it is the *very best*. You should have all in readiness, in order that you may improve the first favorable moment to get in your first sowing of seeds, so that the summer will not be three-fourths spent before you have your family supplied abundantly with good healthy vegetables. These we consider an important item in domestic economy. Next month we shall say more on this subject.

"FIRE BLIGHT"—A REMEDY.

We have received a communication from Mr. John Christie, Welland Hill, St. Catharine's, C.W., in relation to the "Fire Blight," as it is termed, in the pear tree. He says, it may be easily discovered during the month of May or early part of June, by the top leaves and some of the outer branches turning a copper color, and drooping.

Trees exhibiting such symptoms of the disease, if examined, will be found to have portions of the bark shrunk and dead. These should be at once thoroughly stripped off, even should it be necessary to encircle the tree—guarding carefully against injuring the cuticle, or soft substance between the bark and the tree. After this operation has been carefully performed, in a week or so new bark begins to form, and the sap resuming its natural course, the tree puts on a beautiful and healthy appearance. Should any of the branches be black or dead, they should immediately be removed below the diseased part, and the cure will be effected."

NOTE.—Without expressing our belief whether the above cure, suggested by Mr. Christie, would be effectual, we would advise those who have valuable pear trees to examine them frequently and carefully, and on the first indication of the disease, hasten to remove the affected part.

This, owing to the imperfect knowledge of the *cause* of the disease, is the only cure that can with confidence be recommended, without entering into vague speculation.

We recollect having seen an article in the "Albany Cultivator" of Oct. 1844, which assumed that the "common cause of blight in pear trees is a worm, the egg of which is deposited in the branches by a small insect." He adds, that "if iron cinders or iron ore, or any other articles of iron, are placed around the roots of the tree, the insect will bid it adieu." Thus, theories and remedies multiply.

Rivers' Method of adapting the Pear to Garden Culture, and inducing Early Fruitfulness.

During the last fifteen or twenty years, the culture of the pear has received more attention from pomologists in the principal horticultural districts of both Europe and America, than any other fruit, and perhaps more, indeed, than *all* the others united. The long years of patient, zealous investigation devoted to this subject by the late Dr. Van Mons, of Belgium; Knight, of England, and others, as well as the late R. Manning, and others, in our own country—have improved and multiplied the number of varieties to an astonishing degree—that is, if any thing could be astonishing in this age of startling progression. We have ourselves seen 60 varieties exhibited on one table; but this is trifling, considering the fact that some American nurseries enumerate 300 sorts in their catalogue; and, including Europe and America, there are not less, and probably more, than 1,000 varieties now cultivated.

About the commencement of the present century, the most extensive catalogues published in France, which then was foremost in the culture of the pear, did not exceed 180 or 190 sorts, and most of these are now superseded by recent productions. The world may now be said to be rich in this delicious fruit, and the great subject of inquiry and research at present seems to be, what system of culture is the best adapted to spread the benefits of these vast improvements amongst the tillers of the soil,—to place them within the reach of every man who owns a square rod of earth, and that in the *shortest period of time*? The importance of this question has, for several years past, been fully appreciated in Europe; and multitudes of experiments have been made by practical fruit-growers, with a view to discover a method of inducing early fruitfulness, and adapting them to garden culture.

We have felt a deep interest in this subject. We were aware that the great mass of the people of this country were discouraged from attempting to cultivate the pear on account of the length of time it requires, usually, to bring it into a bearing state; it being a very common saying, that if you do plant a pear tree, you need not expect to live to see it bear; or, as it has been said poetically—

He that plants pears,
Plants for his heirs.

This obstacle in the way of the general culture of the pear has, as we have remarked, awakened a spirit of investigation on the subject, that, so far, has been attended with the most cheering success.

Root Pruning and Growing on Quince Stocks, after being thoroughly tested by the most skillful and practiced fruit-growers for eight or ten years, have been found eminently successful in obviating the objections we have mentioned. A treatise on the subject, the result of eight years' careful experience, by T. Rivers, of the Sawbridgeworth Nurseries, near London, was read before the London Horticultural Society in 1840, and shortly after published in Hovey's Magazine of Horticulture, in this country.

Mr. Rivers states, in his treatise, that he was led to the discovery of the benefits of this system in the endeavor to test his specimen trees. His object was to confine them to a small space, and promote early fruitfulness. After resorting to several methods, such as planting in brick pits, plunging in large pots, &c., all of which were expensive and unsatisfactory, the idea of frequent transplanting occurred to him, from observing that some apple trees in his nursery, that had been removed one or two consecutive years, had "acquired a stunted and prolific habit, making abundance of bloom-buds, and bearing profusely." These trees, he found, had no large feeding roots, but only a mass of fibres. "It then occurred to me," he says, "if I could keep the roots of my pear trees in a fibrous state, by frequent removals, I should make them acquire the stunted and prolific habit I had so long observed in the apples. In attempting to remove my pear trees, a second thought occurred, that it would be less trouble to dig a trench round them, and cut all their roots at a certain distance from the stem; and this completely fulfilled my anticipations. I have pruned thus radically for five seasons, and with the most satisfactory results." This is the basis of this new and improved method of fruiting the pear. At the time this treatise was published, it excited great interest,

and since then it has been thoroughly put to the test, and the results, as far as we have been able to learn, have been highly satisfactory. We are familiar with numerous instances where the pear is successfully cultivated, as dwarfs, on quince stocks, standing 6 feet apart, and bearing abundantly. We cannot say that we have seen root pruning fairly tested.

Mr. Rivers published last summer, (1844,) in a supplement to his catalogue, some additional information on this subject, the result of still farther experience. His system is illustrated by engravings of the trees, roots, and tops, trained in the several methods. We copy the annexed figure from "Hovey's Magazine," which represents a pear tree trained in the pyramidal form, accompanied by the explanatory Remarks of Mr. Rivers:



Pear Tree
trained in the Pyramidal form.

The adjoining cut is a portrait of a tree, of Louise Bonne, of Jersey, taken here in autumn, 1843; the tree four years old, six feet in height, grafted on a quince stock, and root-pruned. This approaches to the pyramidal shape, so well adapted to small gardens; for trees of this form may be planted six feet apart, either in a square appropriated to them, or in rows by the sides of garden walks. The adjoining was one of a group, all of which were laden with fine fruit—so much so, that they required to be fastened to stakes. It will be seen that its roots are a mass of fibres, showing the effects of root-pruning. The tree was taken up, that the artist might give it, with its roots, exactly after nature, or rather art. The pyramidal form is, perhaps, of all shapes the most eligible for pears in the open quarters, as scarcely any pruning of their branches is required. By merely going over the trees in June and July, and pinching off the ends of the side shoots to within two or three buds of their base, they soon become well furnished with bearing shoots, and assume a close pyramidal form. The height of the trees may be regulated by fancy: from six to eight feet seems the most eligible. Nothing can be more interesting than these pyramidal trees when in full bearing; indeed, they are perfectly beautiful, and their fruit, from being fully exposed to the sun, are always fine and high flavored.

We are anxious to turn public attention to this subject, so that every family may enjoy, if possible, an abundance of choice pears. We shall publish, in a future number, the detailed method of root pruning of Mr. Rivers. We would add, that trees propagated on quince stocks, intended for this mode of culture, are to be found at the Mount Hope Nurseries, as will be seen by reference to the advertising columns. They are of large size, full of bearing-buds, and will produce fruit the year after being transplanted.

MONROE CO. AGRICULTURAL SOCIETY.

LIST OF PREMIUMS FOR 1845.

HORSES.

Best stud horse, 4 v. Trans. & §3	Third best, do, v. Am. Inst. & 1
Second best, Colman's Report & 2	Best colt, from 2 to 3 years old, 3
Third best, vol. Am. Inst. & 1	Second best, do, 2
Best pair matched, Col. R. & 2	Third best, do, v. Am. Inst. 2
Second best, 3	Best yearling colt, 3
Third best, vol. Am. Inst. & 1	Second best, 2
Best mare (w colt.) Col. Rep. & 2	Third best, v. Am. Inst. 2
Second best, do, 3	

CATTLE, CLASS I.

Thorough-bred Durhams, Herefords, Devons, and Ayrshires.

Best bull, over 2 yrs. old, §8	Second best, Col Rep
Second best, do, Col Rep	Third best, vol Tr
Third best, do, two vols Tr	Best heifer, two yrs old, 3
Fourth best, do, one vol Tr	Second best, vol Tr
Best yearling bull, 5	Third best, vol Am Inst
Second best, 2	Best yearling heifer, Col Rep
Third best, vol Tr	Second best, 2
Best bull calf, 3	Third best, vol Tr
Second best, vol Tr	Best heifer calf, 2
Best cow, three yrs or over, 5	Second best, vol Tr

CATTLE, CLASS II.—Native or Grad.

Best bull, over two yrs old, §7	Second best do, vol Tr
Third best, do, 5	Best fattest animal, for beef, 3
Fourth best, do, vol Tr	Second best, vol Tr
Best bull, from one to two yrs old, 5	Best pair working oxen, 5
Second best, do, 3	Third best, 3
Third best, do, vol Tr	Best milch cow, Col Rep
Best bull calf, 3	Second best, 3
Second best, vol Tr	Third best, vol Tr
Third best, vol Am Inst	Fourth best, vol Am Inst
Best pair steers, 3 yrs old, v. ind, 5	Best heifer, under two yrs old, 2
Second best, do, do, 3	Second best, do, vol Tr
Third best, do, do, vol Tr	Third best, do, vol Am Inst
Best pair fattest oxen, Col Rep	

SHEEP.—Long or Coarse Woolled.

Best buck, Col Rep	Best three ewes, Col Rep
Second best, 2	Second best, vol Tr
Third best, vol Tr	Third best, vol Tr

SHEEP.—Fine-Woolled.

Best buck, Col Rep	Best three lambs, Col Rep
Second best, 2	Second best, vol Tr
Third best, vol Tr	Third best, vol Tr
Best three ewes, Col Rep	Best three fattest sheep, Col Rep
Second best, 2	Second best, vol Tr
Third best, vol Tr	Third best, vol Tr

SWINE.

Best boar, Col Rep	Second best, do, 2
Second best, 2	Third best, do, vol Tr
Third best, vol Tr	Four best pigs, under 8 months, 3
Best sow, with her pigs, Col Rep	Second best, do, vol Tr

FIELD CROPS.

Best acre of wheat, four vols Tr and §5
Second best, Col Rep and 3
Third best, do, and 2
Fourth best, vol Tr and 1
Best field of ten acres or more, four vols Tr and Col Rep
Best field from five to ten acres, Col Rep
Best acre of Indian corn, Col Rep and 3
Second best do, vol Tr and 3
Third best do, vol Tr and 2
Fourth best do, vol Am Inst and 1
Best acre of oats, col Tr and 2
Second best do, vol Tr and 1
Third best do, vol Tr
Best acre of peas, 5
Second best do, 3
Third best do, vol Tr
Best acre of potatoes, 5
Second best do, 3
Third best do, vol Tr
Best half-bushel of potatoes grown from seed, 5
Second best do, do, 3
Third best do, do, vol Tr
Best half-acre of Ruta Baga, 3
Second best do, 5
Third best do, 3
Best half-acre of Mangel Wurtzel, 5
Second best do, 3
Third best do, vol Tr
Best half-acre of sugar beet, 5
Second best do, 3
Third best do, vol Tr

Best quarter acre of carrots, 5
Second best do, 3
Third best do, vol Tr
Best quarter-acre of parsneps, 5
Second best do, 3
Third best do, vol Tr

(One-third of the premiums to be paid in books.)

DOMESTIC ARTS,

Best 10 lbs butter, in rolls, §3	Second do, 2 vols Gen Far
Second best do, vol Tr	Best 10yds domestic fulled cloth, 3
Best 20 lbs packed butter made in May or June, 3	Second do, 2 vols Gen Far
Second best do, vol Tr	Best 1-lb sewing silk, 3
Best 10 lbs of honey, 3	Second best, vol Tr
Second best do, 2 vols Gen Far	Third best, 2 vols Gen Far
Best 10 lbs of maple sugar, 3	Best specimen of domestic man-ufactured silk, 3
Second do, 2 vols Gen Far	Second best, vol Tr
Best 10 yds home-made flannel, 3	Third best, 2 vols Gen Far

Discretionary premiums to be awarded to females for articles of domestic manufacture, not enumerated, according to the funds of the Society.

HORTICULTURAL.

(Funds raised by Gardeners and Amateurs.)

For the best twelve varieties of apples, 3 of each, §2
“ second best, do, vol Tr
“ third best, do, 2 vols Gen Far
“ best dozen pears, plums, peaches, and quinces, 1
“ best new seedling apple, pear, and peach, each vol Tr
“ best sample of grapes ripened in the open air, 2
“ second best do, vol Tr
“ third best do, 2 vols Gen Far
“ best two each of musk melons, water melons, pumpkins, squashes, and egg plants, 1
Best two heads each of cauliflower and broccoli, 1
Best six each of beets, carrots, parsneps, turneps, salsify, celery, cabbages, onions, and tomatoes, each kind, 1
Best assortment of double dahlias, vol Tr and 1
Second best, vol Am Inst and 1
Best assortment of cut flowers, vol Tr
Second best do, 1

PLOWING MATCH.

To the owner of the team which plows one-fourth of an acre best within 60 minutes, Col Rep and 2
Second best, vol Tr and 2
Third best, vol Am Inst and 2
Fourth best, 2

The depth of the furrow must not be less than 6 inches, and the width not less than 10 inches.

ON FARMS.

For the best-managed farm, not less than 40 acres, reference being had to the general system of management and the profits obtained, rather than to natural advantages or expensive improvements, four vols Trms and §5

Second best, Col Rep and 4
Third best, two vols tr and 3
Fourth best, two vols tr and 2
Fifth best, two vols tr and 1
Sixth best, two vols tr

[Committee on Farms—Daniel Lee, (Ed. Farmer,) Rochester,—L. B. Langworthy, Greece,—John H. Robinson, Henrietta,—Elisha Harmon, Wheatland,—Romana Hart, Brighton,—T. H. Hyatt, Rochester.]

Persons desirous to compete for premiums on farms are required to give notice to either of the Committee, or to Mr. Fogg, treasurer of the society, at the Rochester Seed Store, as early as the 1st of June. The Committee will visit them all once or more during the summer.

The next meeting of the Society is appointed to be held the second Tuesday of August, for appointing awarding committees, and making other arrangements for the Annual Exhibition.

JOHN H. ROBINSON, President.

NURSERYMEN or MARKET-GARDENERS.

TO LEASE, for a term of years, Five Acres of superior LAND, and a good Dwelling-house. The Land is in a first-rate state of cultivation and full of manure, having been used for a market garden for several years. The above Land is within fifteen minutes' walk of Rochester Market-place. The owner, and present occupant, wishing to retire from the business, would lease it to a good tenant very reasonably. There are 12 Lights and Boxes, for early framing; also, Garden-tools and Implements for cultivating the ground. For further particulars inquire on the premises, of Mr. JOHN MORRIS, North Clinton-st., near Mr. Galusha's.)

N.B. Also, for sale by the subscriber, a quantity of superior early POTATOES, for seed—the true Early June, Early Manley, and Midsummer Kidneys: the Early June is the earliest potato that grows, and was sold in the Rochester market by the subscriber on the 9th day of June last—the first and finest that were in market.

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ROCHESTER PRODUCE MARKET.

Wheat,	87 a	94 Hay, ton,	\$7 50	8 00	Eggs, doz.	12	14	
Corn,	37 1/2	40 Wood, cord,	2 00	2 50	Poultry, lb.	5	6	
Barley,	31	35 Salt, bbl.,	1	13	Tallow,			
Oats,	25	00 Hams, lb.,	5	6	Hops,	10	11	
Flour, (ret.)	4	25 Pork, bbl.,	10	00	Wool,	35	40	
Beans,	75	1 00 " cwt.	3	25	3 75	Sheep Skins,	50	75
Apples,	25	38 Beef, " 2	00	3 00	Green H'ds, lb.	3	4	
Potatoes,	18	25 Lard, lb.,	5	6	Dry Hides,	6	7	
Cloverseed,	4	00 5 00 Butter,	9	12	Calfskins, gr'n.	5	7	
Timothy,	1	1 50 Cheese, cwt.	4	00	4 50			

Feb. 26.

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

The Proprietors respectfully announce, that their present stock of Fruit and Ornamental Trees, Shrubs, and Plants is unusually fine.

The Collection of Fruits comprises the most esteemed American and Foreign varieties; the trees are handsome, thrifty, and of the most suitable age and size for successful transplanting; and being propagated with the most scrupulous care by the proprietors themselves, either from bearing trees in their own grounds, or from others of undoubted correctness, can with confidence be recommended as genuine.

A choice collection of Pears, comprising the most esteemed European varieties, selected by one of the proprietors personally in the best nurseries of France, is also offered; they are on Quince Stocks, intended for growing in the pyramidal form, and will bear the year after transplanting; they may be planted six feet apart, and are consequently admirably adapted for garden culture.

Over 2,000 trees of the valuable native apple the "Northern Spy" are yet on hand: this is generally acknowledged to be one of the best varieties cultivated.

The collection of Roses is very fine, including a very choice assortment of Standard or Tree Roses, 4 to 6 feet high: these are beautiful objects for lawns or borders—most of them are perpetual, or ever-blooming.

A large and splendid stock of Green-house Plants, including the finest new varieties of Roses and Geraniums, &c., are on hand, and are offered at low prices.

Trees, Shrubs, Plants, &c., securely packed for transportation to any part of the country.

Priced Catalogues sent gratis to all post-paid applications. The Public are respectfully invited to visit the establishment—location, nearly opposite the Mount Hope Cemetery.

All orders and communications must be addressed, post-paid, to ELLWANGER & BARRY.

N.B. Scions of the "Northern Spy" apple, and other choice varieties, will be furnished in small quantities.

B. F. SMITH & CO., FARMERS' WAREHOUSE & SEED STORE, No. 4, FRONT-STREET, ROCHESTER, N. Y.

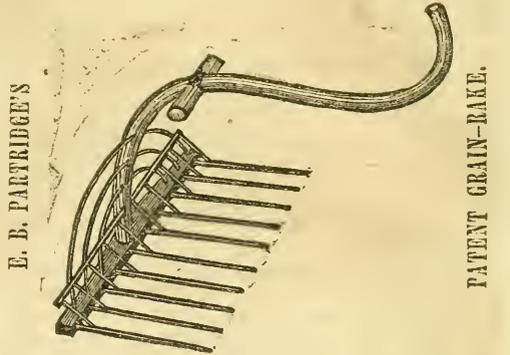
B. F. SMITH & CO., having received a full and general assortment of FIELD, GRASS, GARDEN, and FLOWER SEEDS, worthy of cultivation in this section of country, confidently recommend them as being pure, and of the best quality. Their Cabbage, Turnip, and Short-top Radish, with several kinds of Dwarf and Early Peas, were imported by them from the long-established house of R. WINCH & SONS, London. Most of the Garden Seeds were raised particularly for them, by C. F. CROSMAN, former proprietor of the Seed Store; and they have no hesitation in saying, that their assortment of Seeds is as good as can be found at any establishment in the country.

B. F. S. & Co. have also a large assortment of PLOWS, amongst them the celebrated "Massachusetts Plow," the "Delano Plow," and others; Sub soil and Side-hill Plows, of different sizes. A complete assortment of tools for Gardeners and Nurserymen.

WINTER SQUASHES.

CHOICE varieties of Winter Crook-neck, Cushaw, Valparaiso, and Nutmeg Squashes; seven year Pumpkins, Spanish Cheese Pumpkins, &c., for sale at the Rochester Seed Store.

POP CORN.—Twenty Bushels for sale at the Rochester Seed Store. Dec. 1st, 1844. B. F. SMITH & CO.



E. B. PARTRIDGE'S

PATENT GRAIN-RAKE.

The manner of using this Rake is as follows: By one regular draft, or stroke, a sheaf of grain can be collected with perfect cleanliness on the bed of the swath; preserving evenness of straw, and without the necessity of shelling the grain, as with the common Rake.

Wherever this Rake has been introduced, it has obtained a decided preference over all others; and it will be found, by any one giving it a fair trial, to possess such unequalled excellencies in performing all the various operations of raking, and with so great a saving of grain and labor, as to make it the interest of the farmer to possess them. L. STEDMAN.

Rochester, (Frankfort.)

"We do certify, that we have had B. Partridge's Patent Grain Rake in use throughout the past harvest, and found it to work extremely well. It gathers the grain much cleaner, and does the work much faster and easier for the operator; and we cheerfully recommend it to the public as being a great labor-saving implement,

- JOHN DWIGHT, Salina,
- HIRAM BRINTNALL, Syracuse,
- GEO. H. BURGESS, Elbridge,
- JOHN PHILLIPS, Onondaga,
- *CORNELIUS WOODRUFF, Lyndora,
- J. B. GILBERT, Preble,
- GEO. HOUSE, Onondaga,
- ISAAC BRINTNALL, Onondaga."

BOARDMAN'S ROCHESTER NURSERY AND GARDEN,

One mile east of the Bridge, on Main-street.

THE Proprietor of this Establishment has on hand, this spring, a very extensive assortment of all the choicest varieties of Apple, Peach, Pear, Plum, Cherry, Apricot, Almond, and a variety of Shade and Ornamental Trees, Shrubs, &c. &c. The trees are very large and of fine growth. A few hundred of each kind, of extra size and beauty, will be selected for retailing, and will bear fruit in a short time. For more particular information, the public are referred to the annual catalogue, which may be found at the Rochester Seed Store, or at No. 22, Buffalo-street. Orders left at the above places, or addressed to A. C. SMITH, Rochester, N.Y., post-paid, will receive prompt attention.

NORTHERN SPY GRAFTS.

THE Subscribers offer for sale a quantity of Grafts of the above choice fruit, which they will warrant to be genuine. Also, Grafts of all kinds of choice Apples.

BISELL & HOOKER, (Successor to E. Boardman,) Rochester Nursery, Main-st. 17,000 Apple trees for sale.

COLMAN'S TOUR IN EUROPE.

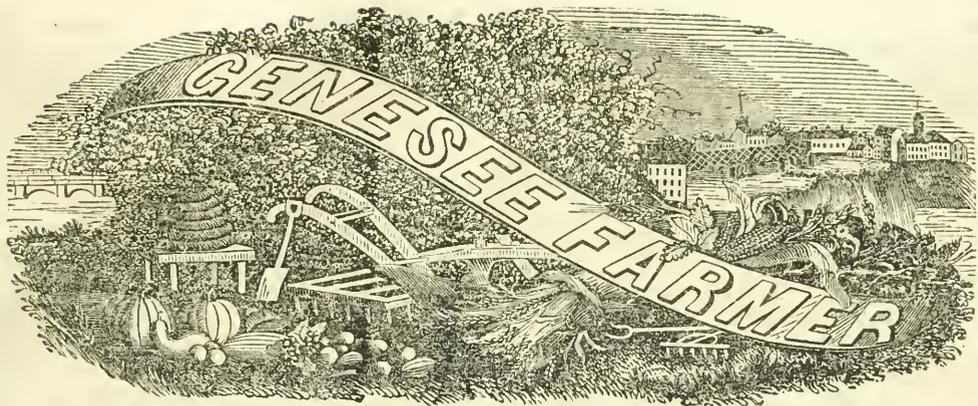
NOS. 1 and 2 on hand. Subscriptions received by me, at the corner of Buffalo and Exchange streets. Terms—\$5 work entire, in 10 numbers: \$2 on subscribing; \$3 on delivery of the 5th number. JAMES H. WATTS, Agent for Henry Colman.

BAGS! BAGS! BAGS!—I have a large stock of GRAIN BAGS on hand, such as Farmers and Millers will want; and will be glad to exhibit them for sale at less prices than they have ever been sold in Western New York.

To be found at the well-known Hardware Store of E. WATTS, 3, corner of Exchange and Buffalo streets. March 1, 1845. JAMES H. WATTS.

SAP BUCKETS.

WE are now manufacturing, and have constantly on hand, a large quantity of Sap Buckets, which we will sell cheap. Farmers, and others wishing to purchase, are invited to call at our PAUL FACTORY, on Mill-street, at the lower end of Brown's Race, next door to Smith & Alcott's Mill, in the Hydraulic Buildings. Our Buckets are made of first-rate Pine stuff, and warranted to be well seasoned. Also, Pails, Cheese-tubs, Keelers, Pine and Oak Churns, &c., &c.; for sale wholesale and retail. Rochester, 19th of 10th mo., '44. ja3m. 1. BUNKER & CO.



VOL. VI.

ROCHESTER, NEW YORK. APRIL, 1845.

NO. 4.

PUBLISHED MONTHLY.

BY B. F. SMITH & CO, PROPRIETORS,

At the Seed Store, No. 4, Front Street, near Buffalo St.

DANIEL LEE, EDITOR.

*Among the Correspondents are—*L. B. LANGWORTHY, N. GOODSSELL, Prof. C. DEWEY, T. C. PETERS, L. WETHERELL, P. BARRY, and T. H. HYATT.

FIFTY CENTS A YEAR:

Five copies for Two Dollars; Eight copies for Three Dollars. All payments to be made in advance. Money and subscriptions, by a regulation of the postmaster general, may be remitted by post masters free of expense. Address B. F. SMITH & Co.

NOTICES TO CORRESPONDENTS.

We shall not be able to publish, in this number, the circular of the Chemung Agricultural Society, containing Mr. A. J. Wyncoop's "Plan for Agricultural Schools;" and before our next publication, the Legislature will have closed its session. We can only say, that if the plan could be carried out, as proposed by Mr. W., the agricultural regions of this world would become terrestrial Paradises, and a state of society, of knowledge, and of improvements would exist, as near perfection as we, who are of the "earth earthly," could enjoy. We only fear Mr. W., like many other projectors and benefactors of mankind, is in his views some few *lustres* in advance of the age.

We have received from Henry O'Reilly, Esq., at Washington, a circular addressed to the proprietors of the old and worn-out lands of Virginia, Maryland, &c., offering his assistance and views in renovating the over-tasked soils of that region; together with his services in making sales, and introducing some of our northern enterprising Yankees, as the true *leaven* to raise the character of those countries. *Intelligent white free labor* is the true *panacea* for that Sahara of barrenness and sterility that is spreading over these, the fairest regions of this continent.

J. S. SKINNER, late editor of the Baltimore American, one of the oldest and most able writers on agriculture in these United States, is engaged with our late fellow-citizen, Mr. O'R., in these laudable objects. We wish them all that success which we shall not fail to lend them, whenever it is in our power.

AURORA AGRICULTURAL INSTITUTE.—This institution, as will be seen in the advertising notice, is about going into operation. If there is sufficient intelligence, patriotism, and correct views of the dignity of labor, extant among our farming community, to entrust some of their sons to this institution, they cannot fail of reaping a rich reward. It commends itself particularly to our sympathies and cordial good-will, by observing that it has the countenance and support of that veteran agriculturist, David Thomas, of Cayuga Co., than whom a more honest, benevolent, and disinterested individual does not exist, nor one imbued with more true practical knowledge and science, of all that appertains to the vegetable kingdom; its structure, and its economical and perfect development. We wish them the fruition of all their anticipations.

ELLSWORTH'S REPORT.—We have received this very able and laborious report upon the agricultural, mechanical, and scientific interests of our Union. It is a perfect encyclopedia of the new inventions and discoveries in the arts and sciences in the United States; containing, also, reports on various new productions and new processes for producing the greatest yield of crops—experiments with manures, and various views of the soils, productions, and climates of almost every part of the country, and much curious information on the recent inventions and patent rights of this "universal Yankee nation." It is document No. 78 of the 28th Congress, and contains 520 pages; and a more interesting volume has not issued from the press, within our remembrance.

We have also received an address delivered by H. Sutton, Esq. to a farmers' club at Romulus. Although it is a well-concocted and truthful exposure of many of the fallacies of the day, abounding in every-day, common-sense views of society, and the duties of the farmer; yet, from our limited pages, and the necessity of dividing, it would meanrably spoil its value. We will dispose of it as desired, on the first opportunity, or in cheap postage time, at farthest.

"T. H. P." The disease called Bloody Murrain, among cattle, if stubborn and dangerous; but if proper remedies are applied in its incipient stages, yields to proper treatment. The work spoken of cannot be had short of Albany or New York, and would be too expensive to order by mail. Merchants going to New York would readily accommodate our correspondent.

"W. S. T.," "Alvin Wilcox," and "A Young Farmer," have been received.

AGRICULTURAL STATISTICS.

We had intended to prepare for our paper, in a condensed form, much valuable, statistical information, and to commence with the present number.—But the somewhat onerous duties that devolve on the editor, will prevent his doing much till the adjournment of the legislature.

In the London Farmers' Magazine of the present month, (March) it is stated that the exports of flour, wheat, pork, and beef, from Montreal and Quebec, for the years 1843 and '44, were as follow:

	bls. Flour.	bus. Wheat.	li J.Pork.	bls. Beef.	
1844.	415,487	282,183	11,164	5,568	
1843.	172,813	87,712	8,208	4,545	
Increase	242,654	194,471	2,956	1,023	
	Kegs Butter.	bls. Oat Meal.	bus. Peas.	bus. Early.	bus Oats
1844.	7,680	6,725	130,355	63,755	24,574
1843.	2,829	2,777	66,984	620	2,315
Incr'se	4,851	4,448	63,371	63,135	22,259

These figures show a remarkable increase in the exports of 1844, as compared with those of the year before. The depth of rain which fell at Harrayby, near Carlisle, in England, during the year 1844, was twenty-eight and one quarter inches. This is less, by three and one fifth inches, than the average for the nine preceding years.

The January number of the Journal of the Highland Society of the Royal Agricultural Society, contain the reports of many interesting experiments:

Forty-four bushels of wheat, have been grown on an acre so poor in vegetable mould, that it contained only 1½ per cent.

In the annual report of the Agricultural Chemistry Association, at the head of which is Professor Johnston, of Edinburgh, it is stated that 384 analyses of soils, guanos, ashes of plants, oil cakes, waters, &c., have been made. Many facts stated in

this report are interesting, and will be condensed for the Farmer.

The expense of maintaining the poor in England and Wales last year, was £4,982,096.

The farmers of Holland sent to London, in the month of February, 478 oxen and cows, and 581 sheep. Cattle sold at £14 to £20; sheep at 32s to 43s per head. Advices from Dutch ports say that 7,000 head of cattle are fattening for the same market.

The news by the late arrival, is important to the agricultural and commercial interests of this country.

The duty on lard and lard oil is soon to be removed. This will operate greatly to the advantage of the corn-growing regions at the west; and indirectly, by withdrawing competition, to the benefit of N. Y. farmers.

In the House of Commons, Sir Robert Peel's financial resolution passed by 208 majority. No doubt is entertained that the Premier will be able to carry out his scheme for a reduction of excises and duties.

The following table exhibits the probable effect of these reductions and abolitions of duty on the produce of the revenue:

Estimated loss on sugar.....	£1,300,000
Duty on cotton repealed.....	680,000
Duty on 430 articles in tariff.....	320,000
Export duty on coal.....	118,000
Auction duty.....	250,000
Glass.....	642,000

Total, £3,310,000

The whole duty is to be taken off cotton, but none from tobacco.

On the 4th of March, Canadian flour was quoted at 26s a 27s; and U. S. 27s a 28s free. In bond, i. e. duty unpaid, 16s a 17s.

The session of parliament was opened on the 4th of February. The prominent points of the Queen's speech were a suggestion for an increase of the naval estimates, for the purpose of creating a steam fleet; another for enlarged educational provisions in Ireland; and a recommendation to continue the income tax, with a view to reductions on other taxes.

Sir Robert Peel announced in the House of Commons, on the first night of the session, that the commissioners to arrange a new plan for the suppression of the slave trade, were, the Duke de Broglie, on the part of France, and Dr. Lushington on the part of England. Sir Robert said that no method could be effectual unless supported by public opinion; and as public opinion in France was against the right of search, it must of necessity be abandoned.

So John Bull backs out at last on the "right of search," which was more than half the matter in dispute in his war of 1812, with the United States.

The wheat growers in western New York and the new states, are soon to encounter powerful competitors in the persons of Russian serfs, and the facilities of the Russian railways, wielded, as they are soon to be, by science and unlimited power.

DELAY OF NO. 3 OF COLMAN'S WORK.—Owing to indisposition, Mr. Colman had not prepared the manuscript of No. 3 of his work, to be published during the month of March, as was expected; but if his health allowed, he was to send it by the packet of the 4th of March. So that in all of the month of April, Nos. 3 and 4 will no doubt appear. His agent at Rochester has been thus advised.

GRINDING AND CRUSHING GRAINS.

In answer to our correspondent, on the subject of the advantages of grinding grain for feeding animals, and especially with relation to grinding Indian corn with the cob, we will give our opinion, deduced from some experience, and such reasoning on the subject as strikes us as applicable.

With respect to the advantages of grinding all grains before feeding, there can hardly be a doubt. If for the purpose of fattening, the sooner it can be performed, the sooner the return of the outlay, and saving in time and labor; and it is almost self-evident, that all assistance we can render the digestive process of the stomach, either by rendering the food fine and properly divided, and even cooking it, (for to that point it must come in the stomach before it can digest,) is aiding the animal economy in the process of assimilating it into fat and muscle; and when we take into consideration that no human or animal stomach can digest any one species of the grains until it is crushed and broken, and the imperfect manner in which neat cattle and hogs perform that office, there cannot be indulged a rational doubt but that the grinding of grain for feeding must prove advantageous.

With respect to the virtue of grinding the cob with the grain, its advantages are at present rather a matter of speculation than of well-tested experiment. That the *cob* possesses some nutritious matter there can be no doubt; but whether in a greater degree than the same number of pounds of hay, is yet problematical. There is no vegetable matter within our knowledge that will produce the same quantity of potash in burning, from the same quantity of material; and it consequently must be something more than "mere pine saw-dust," and contain some of the vegetable products, sugar, gum, &c., which are the constituents of nutriment in the great mass of the vegetable kingdom. Grain and potatoes contain starch and gluten, and bagas, beets, and other esculents and grasses, sugar and gum, or mucilage, as the principal ingredients of the nutritious principle.

To feed cattle and horses, when ground with the cob, it has its advantages in lightening the food and distending the stomach, on the principle of using chopped hay or straw with meal, to avoid founder, colic, and hoven, or bloat; and in that view is undoubtedly beneficial, independent of its nutritious qualities.

In fattening hogs, a process that cannot be over expedited, as they are not a dyspeptic creature, and laugh to scorn the idea of founder or the belly-ache, and having a digestive apparatus that cannot be overcharged with richness of food—it is reasonable to conclude, that the entire grain, well ground, cooked, and fermented, is the most proper aliment for going the "whole hog" system of fattening that "sweet and interesting animal."

The principle is analogous to the story of the old farmer, who, when asked how he made his hogs so fat, replied, that he "used meal and saw-dust;" but added, "the less saw-dust the better."

Cutting hay and straw we consider a very economical process, at least to those who have but small quantities, or who live in reach of a market. Hay cut and wetted, with or without meal or mill stuffs, and occasionally salted, combines the advantages of a great saving in quantity when fed in boxes or troughs, assists the ruminating or chewing process, and avoids the necessity of the animals drinking, particularly in

winter, the great quantity of cold water necessary to macerate the food when eaten dry and uncut, whereby the whole system is chilled and paralyzed, until the animal heat is again renewed, at a great expense of nutriment and muscular exertion; for remember, that warmth and protection from cold are as important adjuncts to sustenance, as food; for it is a well-settled fact, that animals exposed to severe cold expend their food to keep up animal heat, when, if protected, it would produce fat and flesh.

An animal stabled and littered, with its food cut and moistened, will consume one-third less, and remain in better order, than when exposed in open yards, and drenching themselves with ice-cold water, and exposed to the blasts and storms of winter.

L.

“RURAL ECONOMY, in its Relation with Chemistry, Physics, and Meteorology; or, Chemistry applied to Agriculture. By J. B. Boussingault, Member of the Institute of France, etc.”

Messrs. Appleton & Co., 200, Broadway, N. Y., have conferred a great benefit on the agricultural interest of the United States, by re-publishing a London English edition of this work, which is from the pen of one of the best chemists of the age.

The translation is made by a practical agriculturist, who has added to the text many valuable notes.

Unlike most other authors who have written on agricultural chemistry and physiology, Mons. B. is a practical farmer of large experience, and all his deductions in the laboratory have been submitted to the rigid test of practical results in the field, on a large scale. It contains more practical experience in farming operations, and more accurate scientific analyses, than can be found in any other work on the subject of rural economy.

To BOUSSINGAULT and DUMAS are we indebted for more valuable discoveries in analytical chemistry, as applied to vegetable and animal substances, than to any other, if not to all other living chemists. Leibig was a pupil of theirs before he opened his renowned school at Geisen; and M. Dumas, in his “Balance of Organic Nature,” complains that M. L. only anticipated his instructors in publishing to the world, as his own, discoveries the honors of which were due to himself and his illustrious associate, the author of the work before us.

Of the claim of M. M. Dumas and Boussingault to the honor of priority in discovery, as compared with Leibig, we know nothing.

Over 100,000 copies of Leibig’s works have been sold in the United States. May the work of the Frenchman have a sale equal to that of the German.—Price \$1.50.

AGRICULTURAL LECTURER.—We are pleased to inform the public, that the Executive Committee of the New York State Agricultural Society have made an arrangement with the Corresponding Secretary, Dr. D. LEE, [editor of the Genesee Farmer,] to make a tour through various portions of the state, for the purpose of collecting useful information, and giving occasional lectures on agricultural subjects. We have no doubt his visits will be received by the farmers with warm approbation, and that due notice only will be required to insure the attendance of large audiences to hear his lectures. Dr. Lee is at present a member of the Assembly; and, during the session, may be addressed here on any matters pertaining to his proposed tour.—*Cultivator*.

For the Genesee Farmer.

OBJECTIONS TO BOOK-FARMING,

As detailed in a Letter from an intelligent, hard-working, practical Farmer in Oneida Co., with a Corresponding Reply to each Objection.

“Old Stafflet, with his 1500 bushels of wheat a year, at an expense of \$100, outshines Dana or Leibig.”

REPLY.—The same farm on which Stafflet raised 1500 bushels of wheat, or 40 bushels to the acre, does not now produce, on the average, 12 bushels to the acre, notwithstanding a perfect system of alternating with a clover crop as manure, has been constantly pursued.

“It will not do to spend more money manuring than the crop will come to; when the Seneca county lands are worn out, go west and buy more.—What farmer wastes a load of manure! I have given the straw of 16 acres, this winter, for 25 loads of manure. You say, keep stock to work up the straw into manure: 3 year old’s bring but \$15; this don’t pay \$2 a ton for the hay they eat. It costs \$1½ the ton to make hay with hired help.”

REPLY.—It is the province of book-farming to teach the true economy of manuring—to save all as less or mal-application, by initiating the farmer into a knowledge of the composition and action of manures, both organic and inorganic; as also the composition and action of plants. I have read of a farmer who applied to a loose granitic soil, 100 loads of swamp muck to the acre; who can doubt but that, at least, half his labor might have been spared, had a little lime ashes, &c., been applied to the swamp muck, with some fresh dung superadded, and only fifty loads applied to the acre. All the time a farmer spends in manuring a loose soil with stable manure, that has lost its nitrogen, and nearly all its carbon, by exposure to sun and rain, he is chopping wood with a very dull axe; ten to one his soil has already in it, quite enough dead vegetable matter, called by chemists ‘insoluble humus.’ Had this farmer covered up his manure and converted it into compost, with swamp muck, ashes, charcoal, plaster, &c., thus saving all the salts in the manure, and also the salts generated from the atmosphere in the progress of fermentation, who doubts but that one load of such compost, would be worth four loads of the exhausted stable manure.

As to stock, I say keep no more of it than is necessary to make your straw into manure. I thought that a horse made at least twice as much manure as a cow, until I stabled a cow; I now find that the latter makes as much manure as the former. In New England, a hog often pays for his keeping by the manure he makes. It is not fair, then, to say that stock leave nothing to the farmer, but the money he receives from the drover.

“I plowed under eight acres of straw on half an acre of land; it was not worth two loads of manure on my gravelly loam.”

REPLY.—So much the more need have you of a little stock to work up your straw into manure.—Your land is still rich in vegetable matter; part of which might be made soluble food for plants, by the application of a compost rich in lime and alkaline salts. Stable manure is rich in these salts; but they are exposed to much waste when applied directly to a loose, gravelly loam; and when the spirit has gone to the atmosphere, the mere vegetable remains are of no more account, than the same weight in that straw of which you speak so disparagingly.

The advice to the Seneca Co. farmer to go west and work new lands, after he has exhausted the present soil, out-Herods any thing ever practiced north of Mason & Dixon's line. If the New England farmer can thrive on his all silicious soil, by the force of his own moral and indomitable physical power, with how much less expense of time and muscle, can the Seneca Co. farmer live and thrive on his calcareous alluvions. Here Nature has deposited her inorganic treasures with no stinted hand—the subsoil of Seneca county is identical with that of the all alluvial west. A single acre of mountain detritus, covered with that evergreen laurel, whose bleached sepulchral blossoms announce the death of every other genus, would here command a high price, as a raree show, to the lovers of primitive sterility.

S. W.

For the Genessee Farmer.

WINTERING STOCK—A DIALOGUE.

James. Bro. Henry, I am glad to see you: for two of my cows are sick, and I do not know what is the matter with them. Let us go to the barn and see them.

Henry. The cause of your cows' sickness is nothing but poverty. You have your cows, steers and oxen, all together in the yard, (I ought to have said *mudhole*) without any shelter, or any means of feeding, but on the ground; and, by appearance, not much to eat; and it is a wonder that the half of them are not dead.

J. Now, Henry, you are wrong when you think that my cattle have not had enough to eat; for the barn was filled as full of hay as we could cram it, and you see that it is now almost empty.

H. Who takes care of your cattle?

J. Who fodders them, do you mean?

H. Yes, and how do they do it?

J. Sometimes one and sometimes another—

H. And, perhaps, sometimes no one.

J. That may happen sometimes, when we're busy. We take a fork, throw the hay out of the barn, then pitch it around the yard, at morning and night.

H. And did you do it only twice a day through the severe snow storm in February?

J. Certainly; how would you have us do?

H. And do you take care to make as many piles of hay as there are cattle; so that each one can have a chance?

J. Why, I never thought of such a thing! Can not two eat from one heap?

H. As I said before, it is really a wonder that half of your cattle are not dead; and yet you have wasted more fodder than would have made them all fat, if you had had but comfortable houses for them, and conveniences for feeding, without the fodder being trodden under foot. Then, too, your yard would have been neither a snowdrift nor a mudhole, the winter past, and your hay would not have been thrown around and trodden into the mud, and the cattle left to starve. But let us go and see the calves and sheep. Have they done any better?

J. Oh, yes, we had 8 calves, and only two of them are dead; and we think there is no fear but that all of the rest will come through.

H. What do you mean by coming through?

J. Why, we mean that they will live through winter.

H. So you think that it is doing very well, not to lose more than two out of eight?

J. Yes; that is better than the most of our farmers do.

H. And how is it with your sheep?

J. Pretty well; I think there are not more than twenty of them dead; are there, Joe?

Joseph. Yes, father, there are over thirty. In that heavy snow storm I could not keep them alive all that I could do.

H. You had the calves and sheep all together, in the field by the stack, without any shelter, and only fed twice a day through that heavy snow storm, with a little hay thrown into the snow, which is trodden under foot in five minutes.

J. Like enough; but could not they have dug it out?

H. No; when fodder is trodden under foot, it is lost. Your sheep and calves have wasted more hay than would have wintered twice the number well, if they had but been provided with comfortable shelter, and good racks to feed in. Come and see my stock and you will see the difference between poor and good feeding?

J. Well, brother, I will; and will come to-morrow; so that you will not have time to slick up.

* * * * *

H. Brother, I am glad you have come; let us go to the barn. We will first go to the cow stable:—Here are eleven head standing, all comfortable and secure from the storm and cold, each one getting its part of the feed, and none is trodden under foot or wasted. Nor are they hooking and jamming each other about; they are warm and comfortable, and do not require near so much fodder to keep them in good condition, as when they are exposed to the cold and storms of our severe winter.

J. They are as slick as moles, and hog-fat; but then you rich farmers can do as you please; but we poor ones have to do as we can.

H. The careless and unfeeling manner in which you have wintered your stock, is the cause of your poverty. You have lost more this winter, in waste of fodder, loss of animals, and in the wretched poverty of those that do live, than the whole of your summer's work; and more than would have built comfortable shelter for them all; which, besides, would have prevented the cruelty of causing those poor animals to suffer so much from perishing with cold and hunger. "The merciful man is merciful to his beast;" this ought always to be remembered by the farmer.

J. Brother, how you talk. Do you think that I am cruel?

H. Not intentionally so; but by your carelessness to your animals, you have caused them very much suffering, besides your loss of property. Calves must be kept by themselves, and fed with the best of hay, and some roots—sheep in small flocks, with comfortable hovels—the lambs, the ewes, the wethers, and the young sheep each in a flock by themselves. They should all be fed three times a day, in good weather; and when cold and stormy, four or five times.

J. What! spend so much time on our stock?—They would not pay half the expense.

H. Yes, they would pay double the profit that yours have done. The better you feed your animals, and the more comfortable you can keep them, the better they will pay. And it is not so much labor as you may think: let each of your boys know what part of the stock they have to take care of, and yourself see that each one does his part aright.

J. Well, Henry, I will try your plan next winter. But I must have some of those big beets;—how do you raise them?

H. I will let you know that next time.

March 15, 1845. WHEATLAND.

☞ We are always pleased to hear from our Wheatland correspondent.

LEGISLATIVE AGRICULTURAL MEETINGS—BEST BREEDS OF CATTLE, &c.

It is doubtless known to many of our readers, that the friends of agricultural improvement in the legislature of this state have established regular weekly meetings, which are held every Thursday evening, at the Capitol, for the purpose of discussing the various subjects connected with the science and practice of agriculture. These meetings are not confined merely to members of the legislature, but all other friends to the cause are invited to participate in their deliberations. We should judge, from the reports we have seen of their proceedings thus far, these meetings must be very interesting, and cannot be otherwise than productive of much good. Similar meetings have been, and are yet kept up at Boston and New York, and with the best results. These agricultural clubs are also much in vogue in England, where not only practical farmers join in giving the results of their experience and observation, but many of the nobility—Prince Albert, Sir Robert Peel, Earl Spencer, the Duke of Richmond, and other distinguished statesmen and land-owners—take an active part in the discussions, and in aiding onward the cause of agricultural improvement. These are certainly omens of good, to the friends of agriculture.

The last of these legislative agricultural meetings of which we have seen any report, up to this present writing, (Feb. 18,) was held on the 30th ult.; and the subject under discussion was, "What breed or breeds of cattle, are best adapted to the purposes of farmers in the state of New York?" The Albany Argus, of the 13th Feb., gives a sketch of the debate on this question; and as it is a subject of great interest to our readers, we know of no way in which the same space can be occupied in our columns to more advantage and profit than in giving an abstract of that debate:

"Mr. Sotham said, he was an advocate for the Herefords. He believed they would make more flesh with the same expense than any breed in the country—that they would carry themselves to market with less loss, and that their beef would, from its superior quality, command the highest price. In selecting these cattle, he had done so from a conviction they would prove more generally useful here than any other breed in England. He had had frequent opportunities of examining all the breeds there, and thought he was acquainted with the peculiarities of each. He had been perfectly satisfied with the Herefords here; and he only asked a fair trial for them, to satisfy others. He, however, considered mere opinions as of but little consequence in regard to cattle; he therefore proposed to have the Herefords tried on their own merits; and for this purpose was willing to put three steers and three cows to a trial with the same number, owned at this time by one man, of any other breed, under such regulations as impartial individuals should deem proper. He made this public offer for no other purpose than to have a fair comparison made with various breeds.

"Mr. Danforth, member of Assembly from Jefferson County, said, he began breeding with native stock; and about 16 years ago, purchased a short-horn bull of the late Matthew Bullock, of Albany, with which he very much improved his natives. 'They were more profitable by at least 20 per cent. than the old stock.' Mr. D. also crossed a Devon bull with his grade Durhams, to very good advantage.

"Mr. Betts, of the Assembly, thought the natives best: [he spoke more of the experience of his 'neighbors' than of his own.]

"Judge Leland, of Steuben county, said they had tried several breeds in his section—the Short-Horns, Herefords, and Devons had all been there. Several years ago, Mordecai Hale, Esq., who was in some way connected with the U. S. navy, sent some Herefords into that county; and perhaps he ought, in justice to the advocates of Herefords, to say, that they proved the most generally useful of any stock they had tried. They were very hardy, were powerful in the yoke, and a decided improvement on the native stock for the dairy. Comparing those Herefords with the herd owned at this time by Messrs. Corning and Sotham, he thought the latter showed that the breed had been improved in regard to a disposition to accumulate fat on the most valuable parts—the 'quality pieces,' as Mr. Sotham had called them; but while this had been gained, it was a question in his mind whether they had not lost something on the score of muscular strength and constitution. In relation to this, however, he only spoke of the appearance of Messrs. C. and S.'s stock.

"Judge L. remarked, that his experience and observation had convinced him, that the native stock of this section would be improved either by the Durhams, Herefords, or Devons—that is, a cross from either of these made more profitable stock for general purposes.

"Mr. Howard, associate editor of the Cultivator, spoke against the erroneous notion prevailing with many, that the *largest* animals must necessarily be the *best*.

"Mr. H. said, he knew it was common, for people who had not given much attention to the matter, to attribute excellence in animals to large size; and he knew of no error more fatal to improvement. It had been well observed by a distinguished breeder, that large size, merely, no more indicates excellence in *quadrupeds* than in *men*! The best cattle, for *any* purpose, whether Short-Horns, Herefords, or Devons, are comparatively small-boned.

"Mr. Bement had tried the Durhams, Herefords, Devons, and Ayrshires. He liked all of them; but the latter he thought rather best adapted to his farm, which is a light sandy soil.

"Mr. Stevens, of Buffalo, spoke briefly of the properties of different races; though as the evening was far advanced, he could only give a general notice of them. In general, he thought the Devons were not good milkers. Some breeders, however, had cultivated the milking property, and had obtained Devons good for the dairy. He cited the stock of Mr. Patterson, of Maryland, (which had been obtained from the Earl of Leicester, and his tenant, Mr. Bloomfield,) as being of this character. The milking properties of the Short-Horns that have been brought here, as he had before said, have been various. Mr. Heaton, of Throg's Neck, Westchester county, imported some in 1793. They were good milkers, and a useful stock. The late Samuel

Miles Hopkins, Esq., imported some to Cayuga county, which were also good; and taking them for all purposes, he did not know that he had ever seen better. The stock of the late Matthew Bullock were good milkers, but many of them, especially of those bred in early times, had bad constitutions—they had narrow backs and big bones. The Herefords were not formerly considered good milkers, but he thought they had been latterly improved in this respect—a Hereford having received the highest prize of the Royal Agricultural Society in 1839, as the best cow for dairy purposes, in competition with the Durhams and others. He had seen the Herefords of Messrs. Corning and Sotham; and though he, (Mr. Stevens,) was a "Durham man," he must say he liked them. Several of the cows in that herd showed good developments for the dairy. He could not say how the stock in general might prove in this respect. If, as their advocates contend, they are as good as others for dairy purposes, they were certainly a valuable stock; for he thought their properties for the yoke, and for fattening, were unquestionable."

H.

[A bull and heifer of the Hereford breed, and we believe the only specimens in Western New York, were purchased of Messrs. Corning and Sotham, of Albany, and brought on here last fall, by our townsman, Mr. T. H. Hyatt, for his farm on Genesee-street. They are beautiful animals, and were noticed in the December number of the Farmer.—ED. F.A.R.]

For the Genesee Farmer.

PUBLIC CEMETERIES.

"Methen, I love thy grave!

The violet, with its blossoms blue and mild,
Waves o'er thy head. When shall it wave
Above thy child?"

The attention now devoted to public cemeteries thro'out this country, is a cheering manifestation of increasing good taste and public spirit in the American people, and one of the most pleasing features in the spirit of our times. The citizens of Boston—the emporium of American literature and refinement, may be said to have taken the lead in this sacred enterprise, by setting apart and embellishing the extensive and beautiful grounds of Mount Auburn.—Their example has exerted a wide and salutary influence. By directing public attention to the subject, it has diffused, throughout our whole country, a desire to appropriate, apart from the noise and bustle of cities and the crowded thoroughfares of trade and traffic, a suitable resting-place for the *dead*; where their graves may be protected and beautified by Nature's ornaments,—*trees, shrubs and flowers*, planted and cherished by the mourner's hand, as well as by the more costly, but less appropriate ones of art.

How consoling the reflection, that the remains of those whom we loved in life, rest in such a lovely place as Mt. Auburn, or our own Mt. Hope, (of which, as a citizen of Rochester, we feel justly proud,) instead of in the narrow, bleak, deserted and appalling-like spot in the city's midst, without a single ornament but the grave-stone! conveying but a single impression—that of DEATH! We have experienced many a bitter feeling, as we passed a family burial-ground in the country, with the fences down, and weeds grown rank over the graves, and all within sight of the family dwelling. We cannot believe that such people regard with much veneration the memory of their friends and relatives, or that they cherish any of the finer feelings and impulses of humanity.

P. B.

MANURES,

Their Nature and Action upon the Soil and Growing Plants.

BY SAMUEL WILLIAMS, WATERLOO, N.Y.

The great and increasing attention which of late has been directed towards a scientific knowledge of the principles governing the operations of Nature, now bids fair to dissolve the great mystery by which Nature herself produces without creating, and dissolves without annihilating, and again reproduces from the dissolved elements, the kindly fruits and flowers of the earth.

In the early ages of man's creation, the Egyptians carried the agricultural art to such perfection, that by irrigation, and other mechanical labor, they made the fertile alluvions of the Nile so productive, that when a seven years' famine overspread both Egypt and Asia, the granaries of Egypt alone arrested the horrors of a general starvation.

This same mechanical agriculture, without any knowledge of, or disposition to learn, the secret by which Nature produces, decomposes, and reproduces, does still succeed in the present day, on the fertile virgin soils and bottom lands of our great *West*. But from the lack of agricultural science, and the preventive wisdom with which its lessons inspire us, the ignorant, improvident farmer in the fertile alluvions of the West will soon have to lament a deterioration in soil, and a diminution, if not a frequent failure, of his crop.

While every other profession, requiring the aid of science, is considered unattainable without the most patient study; the profession of the farmer, the noblest and most god-like of all, is treated, strange as it may seem, even by the farmer himself, as a calling of hopeless, unintellectual drudgery. When the farmer beholds his growing crops and thriving stock, the bounty of Nature is a mystery to him, with which he can hold no communion of thought or intellectual feeling; his love of gain only, the most sordid of the passions, is excited—he sees only the pecuniary reward of a labor which had been to him toilsome, unintellectual, sterile, mechanical! When this same farmer held the plow, he knew little more of the composition of the furrow it turned up to the action of the atmosphere, than did the team that drew the plow itself.

* * * * *

The two great principles to be impressed on the mind of the farmer who wishes to avail himself of the aid of science in his calling, are, first—that urine, stable manure, and all animal manures, ferment; in the process of which they will convert three times their own weight of other substances into manure equivalent to stable manure itself. Secondly, that the more intimately the manure is mixed with the soil the better, as in the first place it acts mechanically, to open the soil and let in the atmospheric gases: in the second place it dissolves quicker, and until dissolved, all vegetable physiologists agree, that manure can have no chemical or organic effect upon growing plants. The same with plaster—until plaster is dissolved, it can produce no effect; hence the importance of sowing plaster early, even before the snow of winter is gone.

From the first principle, the farmer will see how much he loses by permitting the manure of his barn yard to waste itself by fermentation in the open air. Some agricultural chemists have advised that ground plaster should be strewed over the stables and the

barn yard, in order that its lime and sulphuric acid might seize and retain the ammonia which escapes during the fermentation of the manure; but the best authority decides, that swamp muck, bog peat, or even common loam, is better than plaster—that the manure should be pressed down and covered up with straw, in the barn yard, to prevent fermentation there—that it should be hauled out on to the land intended to be manured, as early in the spring as possible. If it cannot be plowed under before it ferments, it should be fermented in heaps covered up with swamp muck, or even the surrounding earth, if time cannot be had to procure other matter. Just air enough should be admitted to the manure to promote fermentation; but none of its gases should be allowed to escape through the earthy covering. David Thomas has advised, that a thin coat of lime or plaster should be thrown on the top of the earth which covers the fermenting dung; but that in no case should caustic lime be mixed with barn yard manure: when the lime has become carbonated by being some time mixed with loam or muck, it may then be safely mixed with the compost. Lime in the hydrate state spoils animal manures, urine, and stable dung, although it is useful in that state to reduce and render soluble the fibre of such undecomposed matter, as peat-bog, leaves, straw, chip dung, &c. &c. Lime is also useful to decompose the inert vegetable matter in the soil. When soils fail to produce wheat, our farmers suppose that their vegetable matter is exhausted; this is a great mistake—it is only the alkalies, earths, and metallic bases that are wanting. These alkalies dissolve the vegetable matter in the soil, and fit it for the food of plants; they attract the ammonia and carbonic gas from Nature's great storehouse, the atmosphere, and prevent their escape, giving them off slowly as food to the growing crop.

It has been rightly said, that the atmosphere, and not the earth, is the great storehouse of vegetable and animal food. The decomposition of all vegetable and animal bodies fills this air with the gaseous elements of organic life. Burn a candle, and you add nearly its weight of carbon to the atmosphere; that same candle is returned again to the earth, and from the earth again to the ox, and from the ox again to a candle; a perfect reorganization takes place—nothing was lost by the burning of the candle, nothing is created in the fattening of the ox—a re-combination only takes place. How often do we hear a farmer boast of having dug his fortune from the earth; when it is a well-settled fact that 97 parts in 100 of all the solid structure of all his corn, pork, beef, &c., (bones excepted) is derived from the atmosphere. Hence, how encouraging is it to the Seneca co. Farmer to know, that the farmer on the alluvial prairies in Illinois has no advantage over him, save in the presence of the yet unexhausted salts in the soil, all of which must soon be lost, by an improvident wasteful system of husbandry.

It is now our purpose to learn, how these universal atmospheric treasures are to be seized upon—"by what drugs, what charms, what conjurations, and what mighty magic" we are to convert them into corn, wine, and oil—the fattened calf and the stalled ox.

In the first place, then, we will say, that plants are principally composed of four simple substances,—to wit, carbon, oxygen, hydrogen, and nitrogen, together with about three per cent. of inorganic matter, forming the ashes. Of vegetable substances

cultivated for the food of man and other animals, nearly 50 per cent. is carbon. Oxygen in plants exists in the form of water, or sap, as eight pounds of every nine of water is oxygen. Hydrogen is the lightest substance found in the structure of plants, and is received by them in combination with nitrogen, as ammonia. Nitrogen, although forming 79 per cent. of the bulk of atmospheric air, is supposed by Liebig not to enter into the composition of plants directly, but only when combined with hydrogen, it forms a volatile soluble gas called ammonia; this gas is the great stimulus of all growing plants; when it escapes to the atmosphere, it is condensed and brought to the earth by the dew and rain, ready food for the roots and leaves of plants. As the earth is the receptacle for the above-named constituents of plants from the atmosphere; and as it is on the earth that these gases are continually generated from decayed vegetable and animal matter, it is of vital importance to the farmer that he keeps the surface of the soil, on which plants are grown, open and loose by tillage. When plants are in their incipiency, this is all-important, as they then feed mainly from their roots; but as they progress in leaf, tillage becomes less and less imperative, as many plants now feed more from their leaves than from their roots.* Those who have grown a large yield of Indian corn, while their neighbors have suffered a partial failure of the same crop, will bear me out in the assertion that the early hoeing, even before the plants are fairly out of the ground, is the grand *arcanum* in the art of Indian corn growing. This hoeing lets in the ammonia from the dew and rain, and also that warmth of the sun, which alone can secure that early tenacity of root, without which Indian corn is a very uncertain crop.

This loosening and pulverizing the soil not only lets in the ammonia and carbonic acid from the atmosphere; it also makes the loosened earth a laboratory, where every particle of decomposing matter in the soil is made soluble food for the growing plant. Liebig says, that all decaying vegetable matter on the earth's surface is a source of carbonic acid; as also, that all putrifying animal matter is constantly giving off ammonia.

It is also necessary to ameliorate the mechanical structure of heavy, tenacious soils, by plowing in long manure, or green crops—thus rendering the soil porous, and capable of absorption. I often hear a farmer say of a particular lot, that it has been cropped until it is heavy and dead. In this state the ammonia deposited by the dew and rain on the surface, is immediately taken back again into the atmosphere, by the first sunshine or dry wind. Thus many soils are accused of sterility, when nothing is wanting to them but a mechanical change from heavy and dead to light and porous: as it is in this state alone that the soil can receive and distribute the atmospheric gases.

Go into your garden in the morning, and examine a bed that was raked the previous evening; it will be wet with dew, induced by capillary attraction. Then look at a bed which has not been raked since the last shower: it will be found crusted over and dry, or much drier than the new bed. A little manure, with thorough mixing and good tillage, is better than much manure badly distributed; the working of the

* When a plant is quite matured, the carbonic acid in the soil is no longer required.

During the heat of summer, plants derive carbon exclusively from the air.—Liebig.

soil, and its mechanical structure, being no less important than its chemical fertility—in fact, a heavy application of manure, badly mixed, often injures the crop. When I hear a farmer say, that from the best manured field he ever planted he got but 50 or 60 bushels of corn to the acre, I have replied, “Had you planted closer, cut out the barren stalks and suckers, and worked and hoed it more and earlier the product might have been doubled. The secret why river bottoms produce better than uplands is resolved into the simple fact, that Nature there has mixed the soil into a rare consistency, which enables it to absorb and retain the atmospheric gases, almost without tillage. * * * *

Of mineral manures, I have only room now to speak of lime, the most common as well as the most economical manure of this class. All vegetable physiologists agree, that no plant can be fully matured without those alkalies, earths, and phosphates which constitute the ashes of plants. It has of late been fully ascertained, by Professor Wohler, of Gottingen, and others, that all limestone which has formed, by disintegration, the soil on which wheat grows best, contains potash. This readily accounts for the activity of our lime as an alkali, when applied to a soil where the alkaline salts have been exhausted by cropping. The action of lime on the soil is two-fold, mechanical and chemical. Take a field of clay loam, so worn and heavy that four German horses can hardly plow it with a steel-laid plow-share; put on 60 bushels of lime to the acre, well broken, in the hydrate or unslacked state; after this lime is mixed with the soil by plowing and dragging, put six four-horse wagon loads of unfermented manure to the acre; sow the land with wheat, and plow it in after many harrowings; in the spring sow it with clover. The wheat may be light for the present year, but the clover will be thrifty. The texture and complexion of the soil will be changed from hard dead pale clay to a dark friable loam. The mechanical change produced by this lime is apparent the first year; but the chemical effect of the lime in dissolving the vegetable matter in the soil, and as the inorganic food of plants, will be of much longer duration.

Dr. Lee, of Buffalo, a practical farmer and chemist, asserts, that when lime parts with its carbonic acid, it becomes dissolved by water, and sinks too deep in the soil to be of farther use to vegetation. Hence the importance of a yearly application of a little lime, so that it may be always present near the surface, to absorb the carbonic acid from the air, and to retain it for the use of the growing plants.

A large quantity of lime applied to the soil at one time can only be useful in altering the mechanical structure of the soil; as but very little can be assimilated by the growing crop, and its alkaline properties are only needed to make the humus in the soil soluble food, ready for the assimilation of plants.

Many farmers erroneously suppose, that when limestone is present in the soil, the hydrate of lime need not be applied to it; but chemistry teaches that limestone, and even limestone pebbles, are held together so firmly in their natural state by carbonic acid, that but little disintegration can take place until the carbon is expelled by the fire of the limekiln.

SHAKER GARDEN SEEDS.

THE Subscriber having been appointed Agent for the “United Society,” at New Lebanon, is now opening a large assortment of these deservedly popular and excellent Seeds, which are confidently recommended for purity and accordance with the label.

April 1.

L. B. SWAN, 18 Buffalo-st.

TO BREEDERS OF SHORT HORN CATTLE IN THE UNITED STATES.

In the month of May last, I proposed, through the columns of the Cultivator and American Agriculturist, in N. Y., to publish an American Herd Book, provided a sufficient demand for a work of that kind should be made in the manner there indicated. At the time I wrote the proposition, I had little confidence that it would be met with any general zeal, or approbation even, by the breeders of short horns throughout the country; and in this I have not been disappointed. It is apparent that a lethargy pervades too many of our once spirited cattle breeders, on the vitally important subject of preserving, in an enduring form, the genealogies of their individual herds; a course, which, if persisted in, will ultimately lead, not only to their destruction, but to a large pecuniary loss to themselves, and awaken, when too late, deep and lasting regrets.

But the zeal of our American breeders is not altogether lost. A considerable number of enterprising and spirited gentlemen have manifested strongly their desire that the work shall proceed; and, with characteristic liberality, proposed such a patronage as shall procure its publication.

I propose, therefore, to commence the compilation of the Herd Book as soon as sufficient material shall be transmitted to me for a commencement; and I now request all those gentlemen, who wish their animals registered, to make out plain and distinct pedigrees of their stock, with all necessary references and particulars that may be important touching their lineage; and if foreign animals, the date of their importation, and by whom made, together with such other facts as will best illustrate their history, &c. It is to be observed that the object of this work is not to establish pedigrees, but to perpetuate them;—and it may at once be remarked, that any animal whose purity of blood is not properly sustained, cannot be admitted within its pages. The English Herd Book was first published in 1822. Previous to that time, and for a few years immediately following, many valuable animals, from among the best families of well descended short horns in England, were imported into America, whose names and pedigrees are not to be found in its columns. Many breeders in England, not then appreciating the value of such a work, neglected to register their cattle; and these remained thus unnoticed, in many instances, altogether, and in others, until the supplementary volumes were published. The descendants of those importations, preserved in their purity, and their history properly authenticated, will be admitted. But in all cases where references cannot be made directly to the English Herd Book, such facts and references as will place the lineage of the animals named beyond dispute, will be necessary to accompany the registry.

In one particular this will differ from the English registry. That work has neither note nor comment. To all but the initiated in short horn lore, the pages of the Herd Book are as a sealed volume in all that relates to their origin, history, and present condition. Names of animals are often inserted without any reference whatever, apparently for no other purpose than to establish them as “Herd Book Cattle.” It will be otherwise in this. Interesting facts and illustrations will accompany pedigrees as they may occur, throwing light and information, such as to place every thing relating to this noble breed of cattle, in the most attractive form, and develop in the best

manner their advantages to the American farmer.

In all cases where the parties are unknown to the subscriber, either personally or by correspondence, they will please to give the name of some distinguished breeder, or citizen of their own or a neighboring state, as a reference. This is not required through any suspicion of the entire integrity of any gentleman who may offer his cattle for registry, but as a rule for the mutual protection of each one who desires a true and unimpeachable record of short horns, (as far as it goes,) in America.

As the magnitude of the work (in pages) will not be known till the materials are all collected, the price cannot be exactly stated: but at all events it will not exceed three dollars per copy, as noted in the prospectus last May, deliverable as there stated.

All pedigrees, &c., are requested to be transmitted, (if by mail, post paid,) to me, at Black Rock, N.Y.; or if more convenient to the parties, to A. B. Allen, at the office of the American Agriculturist, 205 Broadway, N. Y. city; or to Caleb N. Bement, American Hotel, Albany, N. Y., who will duly forward them to me. The terms for registry will be one dollar for a single animal; and fifty cents each for any larger number; to persons having 10 or more animals, with simple pedigrees, a liberal deduction will be made from this last price, according to number; the money to be enclosed with the pedigrees. Accompanying the pedigrees, the number of volumes subscribed for is also requested.

All papers to be forwarded as soon as possible; at all events before the first of April next; as the work will be put to press to be delivered to subscribers by the first day of June ensuing.

The insertion of this notice is respectfully requested in the Agricultural papers generally, one of which to be sent to me, for which a copy of the book will be presented; and any gentlemen who feel an interest in this subject, will do a favor by giving information of this proposed publication to any neighboring breeders of short horns, who may not otherwise obtain it.

LEWIS F. ALLEN.

TO COL. RANDALL—INQUIRY.

Wheatland, March 11, 1845.

MR. EDITOR,—I wish to inquire of Col. Randall, of Cortland county, through your paper, in relation to his flock of sheep, for which he was awarded a gold medal worth \$12, by the N. Y. State Agricultural Society. If the Colonel can inform the farming community how to realize equal profits from their flocks of sheep, he will receive the thanks of many poor farmers, and of the writer of this communication in particular.

His flock is stated at 55, one-half pure Merinos, the remainder half-blood Merinos and South Downs. After deducting the expense of keeping, the net profit would be \$763 49, or \$13 88 per head. He received \$119 99 for wool, or \$2 18 per head. He sold sixteen for \$726; which is upwards of \$45 per head. How much wool did the different kinds average per head? and what did he get a pound for the different grades of wool? How many of the different grades were sold, whether bucks or ewes? and what were their relative prices? Whether many farmers did not receive about an equal amount of money per head for their wool? In what consists the peculiar excellence of his flock and management? If all farmers had flocks of equal excellence, would they be likely to realize as large a profit?

INQUIRER.

NEW-YORK STATE AG. SOCIETY.

The regular monthly meeting of the Executive Committee of the N. Y. State Ag. Society for February, was held at the Society's Room in the old State Hall, on the 13th. The President, B. P. JOHNSON, Esq., of Oneida, in the chair. Present—MESSRS. PRENTICE, HILLHOUSE, M'INTYRE and TUCKER of Albany—Mr. BEEKMAN of Columbia—MESSRS. WALSH and VAIL of Rensselaer—Mr. ENOS of Madison, and Mr. LEE of Erie.

REPORTS OF COMMITTEES.

Mr. JOHNSON, from the committee to whom was referred the applications for the prize for the best managed Cheese Dairy, reported that they had awarded the Gold Medal to ALONZO L. FISH of Cedarville, Herkimer Co., and three vols. Transactions to ABRAHAM HALL of Holland Patent, Oneida Co.

Mr. JOHNSON also reported that the committee had awarded the prize of \$25, for the best Experiment in the Culture of Indian Corn, to GEORGE GENDES of Camillus, Onondaga county.

Mr. JOHNSON also reported that the committee on that subject, had awarded the prize of \$20, for the best Essay on Farm Management, to JOHN J. THOMAS of Macedon, Wayne county.

Mr. BEEKMAN, from the committee to whom was referred the Essays on the importance of scientific knowledge in prosecuting successfully the ordinary pursuits of agriculture, reported that the committee had examined the three Essays submitted to them, neither of which, in their opinion, were written with sufficient care to entitle it to the premium; and they recommend that the same prize be offered another year.

Mr. LEE, from the committee to whom the applications for the prize for the best Text Book on Agriculture for the use of Schools was referred, reported that two books were submitted to them, neither of which were sufficiently adapted for the purpose, to entitle it to the prize, and concluded by recommending that the same premium be again offered.

Mr. M'INTYRE, from the committee on Essays on Rotation of Crops, reported that they had awarded the prize, \$20, to the writer of the Essay marked A, the author's name being unknown to them. [It was written by JOHN J. THOMAS, Macedon.]

Mr. R. L. PELL, from the committee on Essays on the Culture of the Apple, sent in a written report, awarding the prize, \$20, to the Essay sent in with the report. [This Essay was written by JOHN J. THOMAS.]

Mr. PRENTICE, from the committee on Essays on the prevalent disease in potatoes, reported that they had come to the conclusion that neither of the Essays were such as would warrant them in awarding the premium.

Mr. LEE, from the committee on Essays on Manures, reported against awarding the premium to the Essay submitted to them. He also reported that the committee had awarded a Silver Medal to R. L. PELL of Pelham, Ulster County, for his report of Experiments to show the comparative value of different kinds of food for cattle.

Mr. WALSH, from the committee on Essays on the Culture of Silk, stated that but one Essay had been submitted to them, and that evidently not intended for the premium, as it did not contain the matters required in the prize Essay. The Essay was referred to the committee of publication.

The committee on Wheat, at the annual meeting,

recommended that a premium of \$15 be awarded to Mr. E. J. AYRES of Tompkins, provided he furnished certain farther particulars, which, Mr. Ayres having furnished, a premium of \$15 dollars was voted him on his wheat crop, amounting to 114 bushels and 58 lbs. on two acres.

Mr. BEEKMAN presented the Annual Report of the American Institute, which was referred to the committee of publication.

Messrs. WALSH, LENOX and PRENTICE, were appointed a committee on the Library.

The discussion and arrangement of the List of Premiums occupied most of the afternoon, and not being completed, the Board adjourned to meet again on the 15th.

Feb. 15th.—The President in the chair. Present—Messrs. Vail, Hillhouse, M'Intyre, Lee, Enos, and Tucker.

The premium List was taken up, and after a few trifling additions, was ordered to be published.

The Board then proceeded to the appointment of County Corresponding Committees in each County. (We are obliged to defer the publication of this list of committees till our next.)

A resolution was adopted, directing the Corresponding Secretary to open a correspondence with the County Committees, Superintendents of Common Schools, and others, for the purpose of furthering the objects of the Society, and especially the introduction of the study of the principles of Agriculture into our Schools and Academies.

Messrs. TUCKER, BEEKMAN and LEE, were appointed a committee of publication.

After the transaction of a variety of other business, the Executive Committee adjourned to meet again on the SECOND Thursday of March.

A room has been fitted up in the old State Hall, exclusively for the use of the State Society, where the meetings will hereafter be held. Entrance on Lodge, corner of State-street.

PAYMENT OF PREMIUMS.

All money premiums awarded by the Society, may be obtained on application to THOMAS HILLHOUSE, Treasurer, or to LUTHER TUCKER, Rec. Secretary, Albany.

☞ All premiums not demanded within *four months* after the award, will be considered as donations to the Society.

☞ The List of Premiums offered by the State Society, will be published in our next.

CLUBS AND ASSOCIATIONS.

MR. EDITOR,—The benefits derived from congregation, organization, and combination, to all sects, trades, and professions, are no where more palpably evident than in the association of farmers into town or district clubs, and county and state societies for mutual instruction and information, and the exhibition of excellent specimens of the animal and vegetable kingdoms.

No one of our species is so learned, so all-wise, and experienced, that he cannot learn something from the commonest and most weak capacity. By association, we compare opinions—give and take information on the subjects most important to our avocations, and observe the productions of nature and art spread out before us like the grouping of a picture; where an opportunity is presented to observe, compare, and treasure up facts, that no amount of expense and personal exertions, consistent with our ability, could procure for us.

There could be no greater benefit conferred upon a farming community, for the improvement of their minds and professions, than the institution of town or district societies or clubs. If they even did not have a town fair or public show, yet to have regular evening conversations properly organized, and subjects for discussion and elucidation propounded previous to each meeting, so that all could prepare themselves to participate in the subjects brought before the society, would be the means whereby mutual benefits would be derived, by condensing and collecting all the knowledge possessed by the members.

The same advantages are derived from county societies, though not in as familiar and direct a manner, as all cannot participate in that free and friendly manner that smaller associations render available; yet the agricultural press, with its thousand wings, sends forth all the facts and circumstances attending the exhibition and the description of articles and crops brought together for the view of the society, and every process attending the operation of producing them. The Danish proverb says, "No one body knows *every thing*, but *every body* does know *every thing*." Then if *every body* is willing to communicate their knowledge through the medium of the press, *any body* may, with the most trifling expense, and application, become almost as wise as *every body*.

The prejudice existing against acquiring agricultural information in the same manner that we acquire the knowledge of history, geography, or even the proofs and evidence of that faith that is within us—is most preposterous. It is too late in the day to undervalue the great lights that shine through the medium of the agricultural press, in which are engaged many of the greatest geniuses of the age, elucidating that great and noble art, and dispersing their knowledge and discoveries so freely and plainly, that he that runs can read, and he that reads can understand.

None but the selfish and overwise can undervalue the information that may be obtained by the study of well-written essays from the pens of well-informed and practical men: especially as every one has the liberty of retaining or rejecting any views not coinciding with his own reason and experience. L. A.

LIQUID MANURES.

MR. EDITOR,—Having for years past—so far as your paper, the "Genesee Farmer," is concerned, at least—acted upon the principle of *receiving*, concluded to change the *modus operandi*; that is to say, give a little, as well as receive a good deal: for that charity which begins at home, and ends there, does not deserve the name. But lest your anticipations should be raised too high by this overwhelming burst of benevolence on my part, to enlighten my brother farmers, I would say—be moderate in your expectations; for I promise you not to let the whole of my experience, as a practical plow-jogger, run through the *hole* of one small sheet. But lest your patience be tried by a long introduction, will therefore come to the point which first prompted me to make this effort; for I am no speech-maker, nor writer of essays.

I have long been aware of the importance of manure, as a fertilizer; and the farmer who hopes to succeed without it, has made a sad mistake at the threshold of his operations. And farther, the farmer who does not make it a rule to increase this indis-

pensable article, has not yet reached the acme of farming economy.

With a full conviction of the truth of this position, I have beheld with regret, and sometimes consternation, the large quantities of liquid manure running from my barn-yard, from year to year; and at length came to the determination it should do so no more. Wherefore, with a little practical common sense, I plowed and scraped the surface of the yard, so that all the liquid in it would run to one corner, in which I the last summer sunk a cistern, laid in stone and mortar, which holds about 60 hogsheads; across the top of which, and even with the surface of stone-work, were placed two durable pieces of timber, to support the covering of 2-inch plank, that it might be safe, and to give it the finishing-stroke. I placed in it a pump, the spout of which is about 7 feet from the ground; by which a hogshead can be filled in ten minutes. So much for the cistern and pump, the whole cost of which does not exceed \$25. It had not been long finished before it was full of a strong liquid, and running over. Now, (said I to myself,) here is work enough! Without delay, I procured a strong molasses cask, and placed it on my wagon, supported by two strong rails within the stakes. An inch hole was bored in each side, just below the rails that supported the cask, in such a manner as to throw the liquor as far as possible: and also in the back end, just above the lower chime. Thus rigged, I drove to the pump and filled my cask—then to a field of wheat sown upon corn stubble, the ground being frozen quite hard. Now, “thinks I to myself,” comes the butt end of the project! However, nothing daunted in the least, the three plugs were pulled in an instant—the horses moved on at a steady pace for about 25 rods, after which I gradually slackened their pace until the whole was discharged. At the end of 36 rods, the width of the field, the two side streams reached the ground at an angle of 45 degrees, and the stream from behind striking the hinder bolster of the wagon. The ground being frozen, the whole was very evenly discharged, over a surface of about 10 feet in diameter. I need scarcely say, that I returned to re-load, as proud of the operation as if I had been made a stockholder in the “Georgia Lumber Company,” or a speculator in a *Red Side Bank*.

Now, Mr. Editor, I agreed, at the outset that I would not let all my *experience* run out upon one sheet; therefore conclude by saying, that should any experiments of this sort be of use to the public, I shall be happy to communicate them.

Yours with respect, JACOB SUTPHIN.
Sweden, Feb. 7, 1845.

We hope Mr. S. will give our readers the result of his experiment; as, from his well-established reputation as a *practical working farmer*, it would be highly instructive.—Ed.

AGRICULTURAL PRODUCTS.—The annual report of the Commissioner of Patents, (the Hon. Henry L. Ellsworth,) was a few days since laid on the desks of the House of Representatives. Mr. Ellsworth estimates the agricultural products of the country as follows:

Wheat,bu.	106,310,856	Hay,tons,	16,419,807
Corn,	494,618,396	Tobacco,lbs.	185,731,554
Oats,	145,929,969	Cotton,	757,668,090
Rye,	24,280,271	Rice,	89,869,145
Barley,	3,220,721	Silk,	315,965
Buckwheat,	7,959,410	Sugar,	66,400,310
Potatoes,	105,756,133	Wine,gals.	139,240

DISEASE OF POTATOES.

Messrs. Smith & Co.

GENTLEMEN,—As you have desired me to give you my opinion on the disease which has proved so injurious to this important crop, I comply with some reluctance, for various reasons. First, because I was so engaged the past season that I could not give that attention to the subject which the importance of the case demanded; and secondly, have been so situated that I have not perused the leading agricultural journals of the day, and of course am not able to jump into their popular current, and swim easy, but must confine myself entirely to my own observations, which I think most of your readers will readily conclude have not been very extensive.

During the early part of last summer, or until the latter part of July, the crop of potatoes in this vicinity looked uncommonly well; after which, the tops in places began to change, which was generally considered as indicating early maturity, but which proved to be the incipient stage of the disease. In the month of September, some began to be alarmed, and it was not until this time that my inquiry was directed to the subject.

The first that I examined had the appearance of having been perforated in many places by the wire-worm, which I had known to injure them when growing upon alluvial lands, or in the neighborhood of stagnant waters, in which these “varmint” breed; and as those looked at were from lands favoring the opinion that *that* was the cause, I so gave it. I soon found that the disease was not confined to any peculiarity of soil; which led me to be more careful in my examination. I found the holes in the tubers were of different dimensions—some larger, some smaller, some round, but others irregular, and more resembling cracks than holes made by the worm; and all surrounded by dark, scurfy-looking spots, of greater or less extent. I found, also, many smaller spots upon the skin, of the same appearance, but which were not accompanied with any rottenness. By cutting off those spots very thin, with a sharp knife, a slight discoloring was perceivable, corresponding with the size, and perhaps age, of the scurfy appearance upon the skin. This discoloring I supposed must have arisen from a disturbed circulation, connected with the spot upon the skin. By rubbing these spots, I thought I could detect the same smell which is emitted when the dark spots upon apples are rubbed; and when the thin scurf was taken off; and put in the mouth, a similar taste was also evident.

Knowing that dark spots upon apples were caused by the growth of a parasitic plant of the *Cryptogamian* family, (in which is included the rust upon wheat, and others of similar nature,) I came to the conclusion that this disease was caused by a species of those plants, which perhaps first vegetated upon the stalks, and the seeds of which being infinitely small, descended through the pores of the earth, and took root upon the tubers as well as the stalks: and as heat and moisture are favorable to their growth, and light not being essential, their location beneath the soil was no hindrance to their increase.

By examining these spots with a magnifying glass, the small projection from the surface, and a radiation from the centre of the roots, (or, as they are sometimes called, “the spawns”) may be detected. The seeds of this class of plants are so small, that they are capable of being carried by the atmosphere to a great distance without being perceivable; but when

in abundance, its presence is detected by the smell, as when the rust of wheat prevails.

Such is my present opinion of this disease; but as I do not consider myself infallible, I hope others, with greater opportunities, will continue their observations until the cause is well established, and an antidote discovered.

As a preventive, I would recommend many experiments to be made with fresh slacked lime, knowing that this substance is very destructive to most of the species of these plants. In the first place, immersing potatoes intended for planting in lime-water; scattering it about the hills, and upon the tops, wherever it appears; sifting it among the potatoes after they are dug, when placed in heaps to be covered in the field, or to be placed in bins in the cellar. Perhaps an immersion in salt and water for a short time might destroy the seed, without injuring the vegetating properties of the potatoe. But my impression is, that we must trust to some application of lime.

Yours respectfully.

N. GOODESELL.

Monroe Nursery, Greece, Feb. 25, 1845.

ANCIENT AND MODERN IMPROVERS OF LIVE STOCK.

"There cannot be," says Blacklock, in his celebrated treatise on sheep, "a more certain sign of the rapid advances of a people in civilization and prosperity than increasing attention to the improvement of live stock. Yet," adds that author, "as much appears to have been known about sheep two thousand years ago as at present—so true is it, that nothing new is to be met with." Yet that does not rob our modern improvers of their merits; for though they deserve but little as inventors, they are to be admired for that strength of mind, and determined perseverance, which enabled them to rouse their fellows from lethargy, and compel them to become true benefactors to their country and themselves. He adds, "The greatest recorded improvers of sheep in ancient times were Lucius Columella and his uncle, Marcus Columella, Spaniards of distinction, who removed to Rome in the reign of Tiberius, and made agriculture the study and business of their lives. The former commenced his celebrated treatise on husbandry during the reigns of Tiberius and Caligula, and appears to have finished it A.D. 55. It is only within a very recent period that the mode of improving live stock by skillful breeding has been properly attended to. The first, in modern times, who arrived at any thing like eminence in this department, was Joseph Allom, of Clifton, who raised himself by dint of industry from a plow-boy, and for a long time contrived to keep his methods secret. Though possessing talent, he does not appear to have had education enough to avail himself of it; and accordingly never gained the extensive popularity which fell to his successors. As the introducers of new and important plans of management in agriculture are always rewarded by large profits, and the gratitude of their countrymen, so none were more generously dealt with, in either respect, than Mr. Robert Bakewell, of Dishby, and Mr. Ellman, of Glynde. The former, who may be said to have created a *variety*, considered that a tendency to acquire fat was the first quality to be looked to, in an animal destined for the food of man, and on this, with him a fundamental principle, were based the whole of his proceedings. Different opinions will of course be held on the merits of the theory on which he acted; but all must acknowledge

that we are indebted to his skill and experience for the exertions which have been subsequently made to improve the qualities of stock of this kingdom, (Great Britain.) It was by his example, in fact, that the farmers all over the country were stimulated; and be the system bad or good, it ought to have our veneration, seeing that it was the commencement of a new and most important agricultural era. John Ellman derives his well-earned fame from the zealous manner in which he improved the South Down sheep, and spread them through the empire. Till he directed his attention to the subject, every thing connected with the management of the flock was left to chance, or at least to the management of farm-servants, with whom, of course, it could not be a matter of interest to select, or *sort*, suitable animals for the continuance of the race. He speedily, however, corrected this management, and, aided by the introduction of turnep feeding, in no long time, and without any admixture of foreign blood, materially improved the breed. About the year 1770, improvements commenced in Scotland. Till then, in many parishes, no farmer could keep sheep through the winter, and no place was reckoned so fatal to these animals as the undrained and unsheltered parish of Elksdale-Muir, in Dumfriesshire, until one William Bryden, by the *original* plan of draining and building stone inclosures, "made it," to use the words of his able biographer, Mr. Scott, of Selkirkshire, "like the land of Goshen—good for cattle; which is unto this day."

Thus it seems, from the earliest period, has the improvement of stock been considered among the most praiseworthy of the efforts to which the human mind has been directed; being, in its advance or decline, indicative of the progressive or backward tendency of a nation: and those individuals, humble though they may be—even the plow-boy, who has contributed to his country's real good—shall have their biography handed down, and receive the meed of praise from a grateful posterity. There is something so laudable in this peaceful yet important manner of contributing to a nation's good—so moral, through the industrial habits and tendencies which it inspires—so powerful, as to be felt by all—so profitable, that all may enjoy, (for who does not benefit by improvement?)—distributing its blessings to all, its evils to none—that, in itself, it should be sufficient to encourage those in our own country in like manner to be forward in promoting its own good; extending benefits which may be lasting, yet not impoverishing themselves. That there are some such individuals among us, we are happy to believe; and among the number that might be mentioned, the name of Solomon W. Jewett, of Weybridge, Vt., may not be considered among those least worthy of notice. With Mr. Jewett we have not the pleasure of a personal acquaintance; but in all of the correspondence had with that gentleman, we accredit him the merit of inspiring the reader with a renewed desire to press forward, and showing himself to be not merely an amateur, but a connoisseur in the business. And that he is a successful breeder and improver, no one that has received his stock will doubt. Mr. Jewett's efforts have been mainly directed to the *improving the constitution*, assuming the position, that in this cold and variable climate, the first effort should be to breed a healthy, hardy, vigorous sheep, and has spared no pains nor money in obtaining the best of the race for breeders; and, while increasing the weight of fleece, has retained the fineness of fibre. This, in connection with improving their shape,

(which is, however, incident to improving the constitution,) we hold to be the true system. In order, however, the more fully to appreciate Mr. Jewett's efforts, we make further quotations from our favorite author, as referring to the shape of the Merino sheep when first introduced into Spain, and the average quantity of wool, as compared with the same race now; as also, to their origin and peculiarities:

"The Merinos received their name from a peculiar buff or reddish hue of the countenance, and are supposed to have come originally from Africa; at least, Marcus Columella, having seen a strange variety from that country exhibited at Rome during some public games and shows, took them to his farm, and having crossed them with the breeds of Tarentum, sent their offspring to Spain. There they thrived remarkably, attracting the attention of other nations, to whom they were from time to time exported, and at present may be found in almost every part of the world. The horns of the Merino sheep are of large size, twisted spirally and extended laterally, approaching closely in these characters to the sheep of Mount Parnassus. The face has a characteristic velvet appearance, but the cheeks and forehead are disfigured by coarse hair. The legs are long, and small in the bone; the breast and back are narrow, the sides flat, and too much of the weight expended on the coarse parts. There is a peculiar looseness in the skin beneath the throat, which is admired in Spain as denoting a tendency to weight and fineness of wool. The average weight of the fleece in Spain is 8 pounds for the ram, and 5 pounds for the ewe."

Thus much for the description of the Merino sheep as they existed originally in Spain. The variety owned by Mr. Jewett is the Paular, a minute and interesting account of which may be seen in the "Farmers' Museum" of Jan. 1844, penned by Henry S. Randall, Esq., of Cortlandville, N. Y.; and their pedigree in another article by the same gentleman, in the December number of the Cultivator, 1844—leaving no doubt with even the most sceptical as to their purity of blood. Mr. J.'s Paulars vary so much in shape from those described above, that it might be difficult to trace their identity; all that we have seen having great depth of shoulder, and breadth through the breast and back; the fore parts in proportion to the lateral, being much heavier than in any sheep we have ever examined. It is in these respects that Mr. Jewett excels as an improver: the width and depth through the breast denoting constitution, while increasing proportionately the amount of fine wool. The average weight of fleece from his buck Don Pedro, up to and including his fifth year, being 10 13-16 lbs.; and of Fortune, up to and including his third year, 10 11-16 lbs. Of the average weight of wool from the ewes we are not informed, the yearling purchased by Mr. Randall cutting 5 12-16 lbs., and his yearling buck 8 lbs.

If Blacklock's description of the Merino sheep as originally existing in Spain be correct, then we can the more fully appreciate the efforts of Mr. Jewett as an improver. For the reasons, that in the general configuration his sheep are more perfect; their constitutions equally good, or better; the quantity of wool increased, the fineness of fibre retained, and a predominance of the fine to the coarser parts. We design at some future time to speak more fully of Mr. Jewett's stock; believing the Paular variety to be that required by our northern farmers, and that Mr. Jewett's sheep will not suffer by comparison with those from any other flocks.

E. C.

Salina, February, 1845.



HORTICULTURAL DEPARTMENT.

BY P. BARRY.

THE GARDEN AND ORCHARD.

PRUNING.—Those who are in the habit of doing things in their proper season, have their fruit-trees all carefully pruned, where pruning was necessary, before this time. There are always some, however, behind-hand, either from negligence or adverse circumstances. We would remind such, that it is not yet too late, particularly for apples, pears, &c. The stone fruits should not be pruned after the warm weather has set in sufficiently to put the sap in motion, as in that case they will be liable to bleed. They can be pruned in midsummer with less risk. Where fine fruit are wanted, a careful pruning, where the heads of trees have become dense and woody, is absolutely necessary in order to give free access to light, air, &c.; and where the trees exhibit a stunted, unthrifty appearance, the ground to some distance, as far as the roots extend, should be spaded so as not to injure the roots, and a few inches of old well-rotted manure applied. This may seem to some rather too much labor to expend; but we can tell them that it will be well expended. If your trees are not worth this care, cut them down, at once.

Pruning, we are sorry to say, like most of the other operations pertaining to horticulture, is, generally speaking, but little understood, farther than the mere sawing or cutting off a limb. Quite recently, we met with several instances where the *are* had been used on fine young orchards, to cut off what was deemed superfluous wood! This is pruning with a vengeance indeed! In pruning out superfluous wood, regard should be had to the shape of the tree; and where limbs interfere with each other, as is frequently the case, one should be cut off, or both if necessary. Branches should be cut off as close to the main stem as possible, without injuring it, in order to prevent a cluster of young shoots being immediately produced in lieu of the removed limb.

A fine pruning-saw should be used, where a saw is necessary; and the incision should be smoothed over with a pruning-knife. We should like to add further explanatory remarks on pruning, but space will not permit.

GRAFTING.—The season for performing this operation is at hand. Those who have worthless, or even middling varieties of apple, pear, plum, &c., should at once have them grafted with the most valuable sorts. Nurserymen and others have disseminated fine sorts throughout the whole country; and communication is now so rapid from place to place, that there is no difficulty in obtaining them. Be careful whom you trust to provide you with grafts, and to graft your trees—gross frauds have been practiced upon farmers throughout the country, by unscrupulous persons who make grafting their business during the season. Nothing is easier than to deceive in this respect—the deceiver has ample time to escape before it is possible to detect him. Let such persons do the labor, if they choose to warrant it; but provide the scions yourself, and be sure they are of good quality, and genuine.

TRANSPLANTING.—Transplanting should be attended to at the earliest moment practicable. We know well, by experience, that it is quite common to postpone it until the last moment. We have frequently seen trees taken from the nursery in full leaf, particularly when the spring is unusually early and rapid, like that of 1844: success cannot be reasonably anticipated in such cases. Cherries, particularly, will not bear transplanting in a forward state, and they put forth very early; so that the moment the ground is thawed, you should procure your trees. Besides, this can be done before the hurry of other matters comes upon you.

Spring is the best season for transplanting such as are somewhat tender, in northern latitudes—viz., the *peach*, *apricot*, and *nectarine*; and even the *cherry* will do better by early spring planting. In procuring your trees, remember the following suggestions:

Be careful in selecting your varieties. If you are not acquainted with fruits by their names, get some one in whom you have confidence to assist you. If you leave it to a nurseryman, be satisfied that he is correct in his method of culture—that he has himself a good knowledge of fruits, and is responsible for the correctness of what he sells. Have your trees carefully labeled and packed before leaving the nursery. We have seen persons carry a bundle of trees worth \$15 or \$20 a whole day's journey unpacked, rather than pay a few shillings for packing. This is a sort of economy that no intelligent man would practice, if he would but reflect properly on the natural consequences. Ignorance of the principles of vegetable physiology allows thousands to be imposed upon, as well as to impose upon themselves.

With regard to the age and size of trees for transplanting, we believe we could hardly persuade a large number of persons, if we were ever so persuasive or if we could demonstrate it as clearly as a mathematical problem, but that *the larger the better*. Our experience, and that of almost every other observing cultivator, have convinced us that this is highly injudicious. Apple trees two or at most three years old, from the inoculation or graft, if thrifty and well grown, are the most suitable for transplanting. Pears and plums the same; cherries one to two years old from the inoculation; peaches, one; apricots and nectarines, one, or at most two years old. The remark is often made, by persons wishing large trees, that "we want them to be up out of the reach of cattle;" their system being to plant their trees, seed down the orchard, and turn the cattle in. This is just the way to ruin the trees. After being planted in a thorough manner, every tree should be carefully staked, to prevent them from being blown about by the winds, and the orchard, or at least the land about the trees cultivated, and occasionally manured, for at least three or four years. They should be examined every spring, and the pruning-knife applied, to keep the head in proper shape, and to cut off any diseased or dead wood: this system will insure an orchard of healthy, handsome trees, and bring them forward rapidly into a productive state.

To these general and very simple remarks we should, if space permitted us, add a select list of the various fruits adapted to our region: but for the present we must content ourselves with referring those who are about planting to the catalogues of nurserymen.—(See the advertisements.)

VEGETABLES.

We spoke in our last number of the importance of the cultivation of vegetables; and now, at the

opening of the season of *action*, we would urge the subject again. If your vegetable garden was not manured and spaded up last fall, do it at the earliest moment practicable. Lay it out in square plots, of convenient size, with suitable walks. Select a warm dry border for your early sowing, and arrange it so that you can protect it on frosty nights with matting, &c. Plant some of the best kinds of *early potatoes*, *peas*, *beans*, *lettuce*, *cabbage*, *cauliflower*, *radish*, &c. A little attention devoted to these things in due season will be rewarded with an early and ample supply of healthful and delicious table vegetables. If you defer it until the season is so far advanced that you can sow the seeds and have no more trouble with them, you deprive yourself and family of some of the richest bounties the earth offers you.

ASPARAGUS.—Every man who has a garden should have a bed of asparagus. Two or three hundred roots are sufficient for almost any family. They will occupy but a small space, and require very little care: it is one of the most delicious and generally esteemed esculents we possess.

This is the proper season for planting. The bed should be prepared by a deep trenching and abundance of manure. The plants should be two or three years old; they may be raised from seed, or procured at the nurseries. They should be planted in rows 15 or 18 inches apart, and a foot apart in the rows. The bed should be covered with manure in the fall, and that should be forked in early in the spring, as soon as the ground thaws.

RUBARB.—This is a valuable and generally esteemed culinary plant, and should be in every garden. It is wholesome and very agreeable to the taste either for tarts or pies, or when stewed with sugar. It makes excellent jam or jelly, boiled with brown sugar; and the juice has even been converted into a wine resembling champagne—but being a "staunch teetotaler," we would not recommend the wine-making. One very valuable property is, its earliness—it is fit for using before any thing else of the kind. The finer sorts cannot be raised from seeds. The roots must be planted in a deep rich soil; 2 feet apart each way will answer for the smaller early kinds, and twice that distance for the Giant, or Myatt's, Victoria, &c.

THE FLOWER GARDEN & SHRUBBERY.

We must not forget this department. If we wish to have pleasant, cheerful homes, we must bring around them some of nature's ornaments. A dwelling destitute of these, even though it be costly in its material, looks bold and repulsive. The humble cot with its smiling flower-plots, is gladdening and inviting—an indication of taste, refinement, and happiness.

To those who have not yet thought of these external ornaments, we would suggest that they immediately set about it. Plant a few ornamental trees, such as horse-chestnuts, mountain ash, Ailanthus or tree of heaven, weeping willow, &c.; some of our native forest trees, such as the white wood, basswood, maples, elms, &c.—some or all of these, as means, &c. will admit. Also, some flowering shrubs, such as snowballs, fringe trees, Althea or rose of Sharon, spiræa, silver bell, and many others; besides climbing roses, honeysuckles, and such things, for training up the house sides, piazzas, or over arbors. Prepare also a little border for annuals—they cost little but labor, and furnish a beautiful display of flowers round the season. The seeds will be furnished in pack-

ages, cheap, at the Seed Store, with directions for sowing, &c.

These remarks are addressed to those who have yet to begin ornamental gardening. We would remind those who have already made some advancement of the fine new herbaceous plants, magnificent new Bengal, Bourbon, and Tea Roses, that will bloom the whole season in the borders, and can be taken up and kept in the room, or even the cellar, during winter. Also, Verbenas, of almost every hue, beautiful ever-blooming border-plants; besides many others that we cannot now allude to. Ladies! be stirring when the fine mornings arrive: remember what we said to you in our January number.

ADVERTISEMENTS.

AURORA AGRICULTURAL INSTITUTE, AT AURORA, CAYUGA CO., N. Y.

THE late Judge Puel, in one of his last public addresses, in speaking of agricultural schools, says, "I pretend not to the spirit of prophecy, yet I venture to predict, that many who now hear me will live to see professional schools of agriculture established in our land—to see their utility extolled, and to be induced to consider them the best nurseries for republican virtues, and the surest guaranty for the perpetuity of our liberties. They should be established—will be established—and the sooner they are established, the better for our country."

The undersigned, being satisfied of the great public utility of such institutions, and feeling an earnest desire for their early introduction into our state, have, in order to meet what now seems to be a decided public sentiment in their favor, and call for their establishment, resolved to open such a school, and have already made arrangements therefor.

The Farm upon which the Institute is located is situated in and directly adjoining the beautiful village of Aurora, on the east bank of Cayuga Lake, in Cayuga County, sixteen miles from Auburn, and twelve miles from Cayuga Bridge and the Auburn and Rochester Railroad. The communication is direct with Auburn by stage, and with the Railroad by steamboat, in summer. The farm contains 212 acres, in a good state of cultivation. The soil is various; fruit abundant; buildings are good—part nearly new—and very pleasantly situated. The location is considered one of the most desirable of the many beautiful situations on the borders of the Lake, commanding an extensive and varied prospect of its waters and the surrounding country—and altogether admirably adapted to the end in view.

It is the intention of the undersigned that this Institution shall afford every facility for young men to make themselves thoroughly acquainted with the principles of agricultural science, and their judicious application to practical husbandry; and particularly to afford young men from our large towns the most favorable opportunity for preparing themselves for agricultural pursuits. It is also their purpose to some extent to test, by actual experiment, the correctness of principles in agriculture now received, but not yet well established, and report the same to the public.

The young men will be received into the family of the Principal, and be kept under his immediate and constant supervision. Particular regard will be had for their moral culture, and a strict observance of all rules and regulations required.

Terms, \$150 a year, payable quarterly, in advance.

No pupils under fourteen years of age will be received. Applications for admission may be made to the principal, from whom any further information may, on request, be obtained.

CHARLES C. YOUNG, A.M.,

Proprietor and Principal.

ALEXANDER THOMPSON, M.D.,

Lecturer on Botany, Geology, Agricultural Chemistry, &c.

DAVID THOMAS, Visitor & Adviser.

Dated Aurora, March 10, 1845.

REFERENCES.

B. P. Johnson, Esq., Rome, Onondaga Co., President of the State Agricultural Society; Daniel Lee, Esq., Buffalo, Corresponding Secretary of the State Agricultural Society; James S. Wadsworth, Esq., Genesee; John Thompson, Jr., Esq., Rochester; W. E. Sill, Esq., Geneva; J. S. Seymour, Esq., Auburn; Hon. B. R. Wood, Albany; Joel B. Nott, Esq., Albany; Luther Tucker, Esq., Albany, Rec. Secretary of the State Agricultural Society; Joel Rathbone, Esq., Albany, Rev. Washington Roosevelt, New York; Wm. Curtis Noyes, Esq., New York; B. R. Melville, Esq., New York; W. W. Bhoester, Esq., New York; B. W. Bonney, Esq., New York; A. B. Allen, Esq., New York. April, 1845.

STRAYED, from the inclosure of the subscriber, on or about the 1st of June last, a Sorrel MARE, now four years old, with a white stripe in her face. Said mare is smoothly built, and has a firm appearance.

Whoever will give me, the Subscriber, information where said Mare may be found, by letter or otherwise, shall be liberally compensated for all their trouble and expense.

Clarkson, March 13th, 1845.

JOHN M. BOWMAN.

GUANO.—For sale at the Rochester Seed Store.

B. F. SMITH & CO.

TO LAWYERS, MERCHANTS, MECHANICS, FARMERS, PUBLIC OFFICERS, &c.

AMERICAN GOVERNMENTAL AGENCY, WASHINGTON.

PERSONS in any part of the United States, who have business to transact with either department of the General Government at Washington, or with any of the State Governments, or who require researches to be made in the Public Records any where in the Union, can have their requests promptly attended to by addressing the undersigned.

Extensive acquaintance throughout the Union, consequent on connection with the newspaper press, with the Post-Office, and other public organizations, will greatly facilitate the prosecution of inquiries, and transaction of business.

Lawyers, Public Officers, Contractors, and others having business arising under contracts, or under the Pension or Patent Laws—Merchants desiring remission of duties, &c.—Mechanics or Inventors, requiring patents—and Farmers having business with the General Land Office—may find this agency conducive to their interest in the way of promptness and economy. Claims under treaties with the Indian Nations, or Foreign Governments, also attended to.

Special attention will be paid to those who wish to buy or sell Lands in Virginia and other Southern States; and inquirers from the North or South are respectfully referred to the Circular concerning "Agricultural Improvement in the Southern States," lately published in the Globe and other Journals, under the signature of John S. Skinner, (Assistant Postmaster-General,) and the undersigned.

Satisfactory references given in any part of the United States, as there are few districts in which the subscriber is not personally acquainted. Charges reasonable.

Letters must be post-free, to insure attention; and may be addressed to the subscriber, either at Albany, New York, or Washington.

HENRY O'REILLY.

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

THE Proprietors respectfully announce, that their present stock of Fruit and Ornamental Trees, Shrubs, and Plants is unusually fine.

The Collection of Fruits comprises the most esteemed American and Foreign varieties: the trees are handsome, thrifty, and of the most suitable age and size for successful transplanting; and being propagated with the most scrupulous care by the proprietors themselves, either from bearing trees in their own grounds, or from others of undoubted correctness, can with confidence be recommended as genuine.

A choice collection of Pears, comprising the most esteemed European varieties, selected by one of the proprietors personally in the best nurseries of France, is also offered: they are on Quince Stocks, intended for growing in the pyramidal form, and will bear the year after transplanting; they may be planted six feet apart, and are consequently admirably adapted for garden culture.

Over 2,000 trees of the valuable native apple the "Northern Spy" are yet on hand: this is generally acknowledged to be one of the best varieties cultivated.

The collection of Roses is very fine, including a very choice assortment of Standard or Tree Roses, 4 to 6 feet high: these are beautiful objects for lawns or borders—most of them are perpetual, or ever-blooming.

A large and splendid stock of Green-house Plants, including the finest new varieties of Roses and Geraniums, &c., are on hand, and are offered at low prices.

Trees, Shrubs, Plants, &c., securely packed for transportation to any part of the country.

Priced Catalogues sent gratis to all post-paid applications.

The Public are respectfully invited to visit the establishment—location, nearly opposite the Mount Hope Cemetery.

All orders and communications must be addressed, post-paid, to

ELLAWANGER & BARRY.

N.B. Scions of the "Northern Spy" apple, and other choice varieties, will be furnished in small quantities.

SALE OF FULL-BLOODED NORMAN HORSES

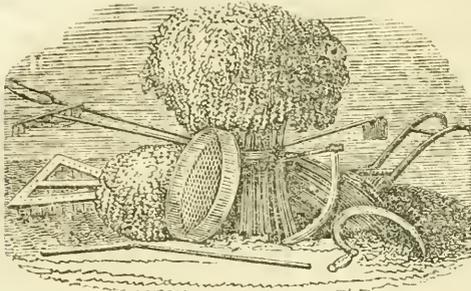
THE Subscriber having relinquished farming, will offer at public vendue, at his farm in Moorestown, Burlington County, New Jersey, nine miles from Philadelphia, on Tuesday the 20th of May next, his entire stock of Norman Horses; consisting of two Imported Stallions, "Diligence" and "Buonaparte;" two Imported Mares; two full blooded Filies, three and four years old; two Filies by Diligence, from a half-blood Canadian Mare, three and four years old; and one Filly four years old, by Diligence, from a well-bred English mare, broke and kind to harness.

The undersigned deems it unnecessary to speak at large of the quality of these horses, so much having been said of this particular importation, (which is believed to be the only one ever made to the United States) in all the principal agricultural papers. In a few words, they are the Canada Horse on a larger scale, combining the form, activity, and hardihood of that well known race, with greater size and strength. "Diligence" has been a remarkably successful stallion; he has been exhibited at the Fairs of the Pennsylvania and New York Agricultural Societies, where he was not entitled to compete for the premiums, but received the highest encomiums from the committees. At the Fair of the American Institute, in New York city, in October last, he received the Silver Medal of the Institute.

It is expected that a large number of the Colts of "Diligence" will be on the ground on the day of sale, some of which, no doubt, may be purchased.

EDWARD HARRIS.

Moorestown, Burlington Co., N. J., March 15, 1845.



**ROCHESTER SEED STORE, FRONT-ST.,
BY B. F. SMITH & CO.**

AWARE of the important relation which the seedsman 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 C. F. Crossman, and under the inspection of the proprietors; others were raised by experienced seedsman; while those varieties of foreign growth which experience has shown are the best, have been procured from the most responsible sources abroad.

The collection has been greatly enlarged this season, in order to accommodate all who wish to try whatever is new, rare and curious.

FIELD SEEDS.

Red Clover, large and medium.
Timothy, White Dutch Clover, Oats, Barley, Seed Corn, Spring Rye, Italian and Siberian Spring Wheat, Early June Potatoes, Marrowfat and Field Peas.

VEGETABLE GARDEN SEEDS.

A choice and select variety of Peas, Beans, Cabbage, Cauliflower, Celery, Beets, Cucumbers, Melons Radish, Squash, &c., &c., Summer Savory, Thyme, and Sweet Marjoram.

FLOWER SEEDS.

The collection of Annual and Perennial Flower Seeds contains many new and choice varieties, raised for us by A. Stone, Esq., of this city; making our assortment altogether superior to any ever before offered in this city.

AGRICULTURAL & HORTICULTURAL TOOLS.

At our Warehouse, adjoining the Seed Room, may be found an extensive and complete assortment of Agricultural and Horticultural Implements, embracing every tool used in the cultivation of the Farm and Garden.

MASSACHUSETTS PLOWS.

We also have on hand 150 of the celebrated Massachusetts Plows, made in a superior manner from second-growth eastern timber, which we shall sell at a reduced price.
B. F. SMITH,
April 1. JAMES P. FOGG.

NORTHERN SPY GRAFTS.

THE Subscribers offer for sale a quantity of Grafts of the above choice fruit, which they will warrant to be genuine. Also, Grafts of all kinds of choice Apples.

BISSELL & HOOKER,

(Successor to E. Boardman.) Rochester Nursery, Main-st. 17,000 Apple trees for sale.

ROCHESTER PRODUCE MARKET.

Wheat,	90 a 96	Hay, ton,	\$7 50	8 00	Eggs, doz.	8 10
Corn,	37½ a 40	Wood, cord,	2 00	2 50	Poultry, lb.	5 6
Barley,	31 35	Salt, bbl.,	1 13	Tallow,		
Oats,	25 30	Hams, lb.,	5 6	Hops,	10 11	
Flour, (ret.)	4 25	Pork, bbl.,	10 00	Wool,	35 40	
Beans,	75 1 00	" cwt.,	3 25	3 75	Sheep Skins,	50 75
Apples,	25 38	Beef, "	2 00	3 00	Green H'ds, lb.	3 7
Potatoes,	18 25	Lard, lb.,	5 0	6 7	Dry Hides,	6 7
Cloverseed,	4 00	5 00	Butter,	9 12	Calfskins, gr'n.	5 4
Timothy,	1 1 50	Cheese, cwt.	4 00	4 50.		Mar. 23.

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Meteorological Observations.

MADE AT ROCHESTER, SEVEN MILES FROM LAKE ONTARIO,
BY L. WETHERELL.
JOURNAL OF THE WEATHER FOR MAR, 1844.

Days mo.	Thermometer.			Barometer.		Wind.	Observations.
	Sunrise.	Mid-day.	One h. after sunset.	Sunrise.	Evening.	Prevailing wind.	
	24	37	42	40	29.44	29.40		w	Cloudy—fair—r.g. 35.
25	40	55	52	.40	.27	..	Fair.
26	35	39	33	.40	.42	..	Fair.
27	28	42	31	.42	.45	w N	Fair—cloudy—snow.
28	27	31	29	.52	.40	n w	Cloudy, fair snow.rg.62
1	36	42	32	.34	.42	..	Cloudy—fair—snow.
2	34	54	46	.37	.41	s w	Cloudy—rain.
3	35	32	30	.39	.50	n w	Cloudy—fair—r.g.42in
4	37	46	42	.78	.51	s s e	Fair—cloudy—rain.
5	35	46	40	28.99	.47	e n w	Cloudy—rain & snow
6	28	43	35	.81	.70	n w n	Fair.
7	33	66	50	.63	.41	s s e	Fair—cloudy.
8	55	56	46	.36	.50	s w w	Cloudy—rain—r.g. .02
9	32	39	34	.56	.61	n w n	Cloudy snow.
10	29	38	33	.60	.41	s w n e	Fair.
11	27	33	25	.54	.76	n e	Cloudy—fair—snow.
12	22	46	36	.75	.68	s w	Cloudy.
13	30	48	38	.70	.66	s w n	Fair—cloudy.
14	39	38	33	.48	.34	s e w	Cloudy, rain and snow.
15	20	24	20	.40	.38	s w w	Cloudy—snow.
16	12	31	26	.28	.10	n w w	..
17	22	40	30	.91	.07	w	..
18	24	32	22	29.12	.25	n w	..
19	18	25	22	.33	.40	..	..
20	22	33	29	.49	.60	..	..
21	16	27	27	.77	.71	..	Fair—cloudy—r.g. 20.
22	28	40	33	.73	.67	n w w	Fair.
23	35	50	37	.48	.31	s s w	Cloudy—snow.
24	34	40	36	.41	.58	n w w	..
25	28	42	35	.83	.82	..	Fair.
26	32	54	50	.85	..	s w	Cloudy—rain.

Maximum (Mar. 7th)—ther. 66 deg.; do. (Mar. 26th)—bar. 29.85 in.
Minimum (Mar. 16th)—ther. 12 deg.; do. (Mar. 17th)—bar. 28.91 in.

REMARKS.

The first half of March was very warm for the season, but the last half has been very cool and stormy.

Spring birds appeared the first of the month.
Navigation between Rochester and Canada opened much earlier than usual—first boat here on the 14th.

The weather, at the close of the month, is more like spring than it has been for several days past. Prospect, now, of an early spring.

AGRICULTURAL AND HORTICULTURAL BOOKS.

Just received and for sale at the Rochester Seed Store, Front-street.

THE American Poultryer's Companion; by C. N. Bement,
The New American Orchardist, with an Appendix; by Wm. Kenrick.

The New American Gardener; by Thomas G. Fessenden.

Blacklock's Treatise on Sheep.

Cobbett's American Gardener.

Dana's Muck Manual. The Complete Florist.

Every Lady her own Flower Gardener.

Dr. Smith's Essay on the Cultivation of Bees.

BOARDMAN'S ROCHESTER NURSERY AND GARDEN,

One mile east of the Bridge, on Main-street.

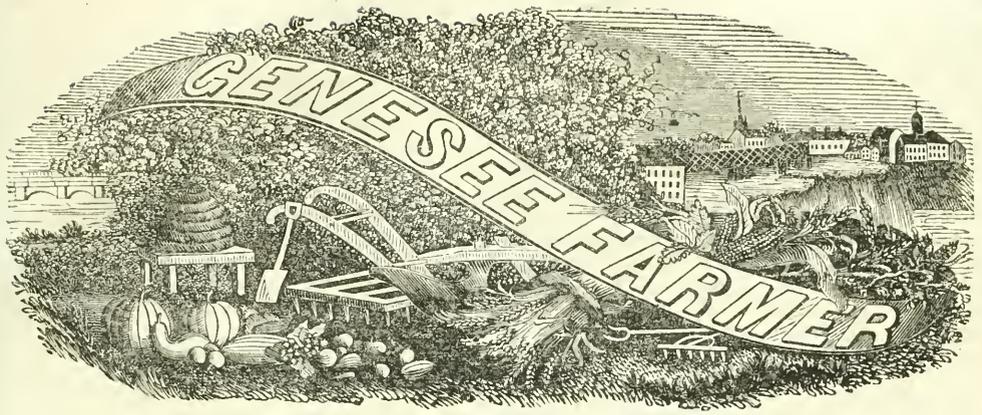
THE Proprietor of this Establishment has on hand, this spring, a very extensive assortment of all the choicest varieties of Apple, Peach, Pear, Plum, Cherry, Apricot, Almond, and a variety of Shade and Ornamental Trees, Shrubs, &c., &c. The trees are very large and of fine growth. A few hundred of each kind, of extra size and beauty, will be selected for retailing, and will bear fruit in a short time. For more particular information, the public are referred to the annual Catalogue, which may be found at the Rochester Seed Store, or at No. 22, Buffalo-street. Orders left at the above places, or addressed to A. G. SMITH, Rochester, N. Y., post-paid, will receive prompt attention.

THE ROCHESTER NURSERY,

By J. MOULSON.—Office, No. 36, Front-street.

THIS Nursery is in fine condition, having been established over fifteen years. The collection is particularly choice in fine varieties of fruit, and is every way worthy of the attention of the public. Orders received by mail, or otherwise, promptly attended to. Trees packed for any distance. Required selections of varieties made when desired. Six or twelve months' credit, on interest, given upon proper reference, when desired. Catalogues gratis upon application.

E. SHEPARD, PRINTER, STATE-STREET, ROCHESTER.



VOL. VI.

ROCHESTER, NEW YORK. MAY, 1845.

NO. 5.

PUBLISHED MONTHLY.

BY B. F. SMITH & CO, PROPRIETORS,
At the Seed Store, No. 4, Front Street, near Buffalo St.

DANIEL LEE, EDITOR.

Among the Correspondents are—L. B. LANGWORTHY, N. GOODSSELL, Prof. C. DEWEY, T. C. PETERS, L. WETHERELL, P. BARRY, and T. H. HYATT.

FIFTY CENTS A YEAR:

Five copies for Two DOLLARS; Eight copies for THREE DOLLARS. All payments to be made in advance. Money and subscriptions, by a regulation of the postmaster general, may be remitted by post masters free of expense. Address B. F. SMITH & Co.

TO CORRESPONDENTS.

MR. JOHNSON, of Holland, makes inquiry whether an old man may, with any prospect of being able to see the fruit of his labors, attempt the cultivation of the pear. This fruit has the reputation of requiring great age before it will show fruit; but our experience is to the contrary. Stocks of 5 or 6 years growth will bear nearly as soon as the apple, if grafted from the wood of a bearing tree. The pear is very apt to throw up suckers from the root: these, grafted as they stand, and taken up the next year, make good trees. The surest way, however, is to procure good-sized trees, from the nursery, of which plenty may be procured in this city, and in three or four years they will show fruit, and in ten years become large productive trees.—On the subject of the sweet and sour apple, we acknowledge to scepticism, when it is claimed as an artificial production; and when our correspondent will exhibit one, half red and half green, both sweet and sour, we will cry *pe-cavi!*

HAMILTON Co. OHIO.—We have received the report of the Agricultural Society of Hamilton Co. Ohio. Their proceedings are spirited, with enlarged views of the benefit of association and combination for mutual and general improvement.

The report of Messrs. Whittlesey and Randal, appointed to make an agricultural survey of that county, contains much curious and valuable information. It refers to 127 farms and locations of different soils, aspects, and original timber, principally with reference to their ability to produce wheat, noting the period the land has been under cultivation, the variety of wheat used, the greatest and the average crop produced; with the prevailing diseases and accidental causes of failures, and the insects which infect that region. We regret our inability

to publish the report, from its length, but shall avail ourselves of many of its facts, for the benefit of our readers.

We commend the course taken by the Hamilton County surveyors to the Committee on Farms for Monroe County. Many important facts might be elicited, and valuable statistics and information be obtained.

HAY-RACK.—We have received a drawing and description of a "down-east" hay rack. But as we use no carts in this country, and the article is so like the machine known here as a barrel-rack, used to transport flour-barrels to the mills, that we fear it would not come in competition with the neat and capacious articles used "up west."

We shall be happy to exhibit the drawing to all inquirers, and to hear from our correspondent from Waldo, Maine, on other subjects.

VIRGINIA STATE AGRICULTURAL SOCIETY.—We have received the proceedings of a meeting at Richmond, in January last, at which was organized a State Society, nearly on the plan of our own State Society, but we think with some valuable improvements, particularly in dividing the state into four great districts, in which the annual fair is to be held alternately; and in creating, by individual donations and state bounty, a permanent fund, the interest of which shall produce means for ever, and beyond the reach of contingencies. We rejoice that the Old Dominion has waked up. Some of her people are of the right genius to make such an undertaking go off gloriously, and insure lasting benefits to her citizens.

T. N. D., of Wheatland, Loudon County, Virginia.—We were much interested and pleased with his communication. His correct notions of farming, and the means needed to bring up the worn-out land, of the Old Dominion, would be a valuable medicine for that part of the world, if it could be administered to its inhabitants; but as our *ride* does not extend into those regions, having but few subscribers there, and considering the length of his article, conclude not to publish it, at present.

DR. LEE'S REPORT.—Several slashing criticisms have appeared in the New York papers, on the report of Dr. Lee. Strange it is, that the moment an individual has the philanthropic boldness to advocate the rights of the producing classes, the whole kernel of those who hope to live by their wits, are out upon him, "tray, blanch, and sweetheart."—PUB.

W. S. T. Two communications received.

LIEBIG, AND AGRICULTURAL SCIENCE.

We have just received a long and highly interesting letter from Mr. Horseford, formerly connected with the geological survey of this state, who is now pursuing the study of organic chemistry with the renowned prof. of Giesen University. The letter was not written for publication, but agreeably to a promise made to the editor, to inform him as to the course of study, and all the details pursued in the lecture and recitation rooms of Liebig. Some of the statements are too important to be withheld from the public. The assemblage of chemists is large, as nearly every country in Europe has its representatives.

"The last lecture," says the writer, "was on cheese, containing the results of Russian chemists who are at work in this extensive laboratory. They have discovered two unknown acids in cheese; and that caseine (curd) is soluble in milk only because it contains an organic acid, combined with soda, in which caseine is soluble."

The reader will remember, that about nine-tenths of milk is water, in which curd or cheese is insoluble.

The variation of the quality of butter and cheese, by varying the plants, and the composition of the soil on which cows feed, is discussed at length. This is a subject of more practical importance than most dairymen are aware of. We cannot now go into details, but shall resume the subject. Milking cows three times instead of twice in 24 hours, is practiced successfully in the vicinity of Giesen. Much more butter is thus obtained, owing to the rapid absorption of the oily portion of the milk, if the gland that secretes it be allowed to remain distended.

ANIMAL HEAT.—On this subject Mr. H. remarks, "The most startling thing of the winter session, thus far, has been his (Liebig's) reconciliation of the experiments upon the subject of animal heat with the theory that derives all heat from the combustion of organic matter."

The experiments on this subject are illustrated by a drawing descriptive of the apparatus. Dulong and Despretz are the Chemists who differ with Liebig. We can hardly make this abstruse scientific discussion interesting to the general reader.

At the University of Giesen are pursued the studies of law, medicine, physiology, chemistry, &c.

Mr. H. speaks of having met with a gentleman who cultivates 94 species and varieties of wheat, corn and barley. The person named has recently published a work on the "ceralia," which is regarded as the best extant. The editor of this paper is promised some of the choicest varieties of these seeds, for distribution through the New York State Agricultural Society.

Mr. H. is devoting particular attention to the wheat culture of Germany; well remarking, "that it is impossible but that the experience in wheat growing by these patient, thinking Germans, for 2,000 years, should be either uninteresting or unimportant." We expect a communication on this subject.

MANURES.—Don't forget the use of leached ashes, gypsum, charcoal, and urine. You can hardly apply them amiss, either in the hill, on it, or by scattering broadcast.

SALE OF STOCK.—Mr. Prentice's entire stock of Short Horns will be sold at auction on the 25th of June.

STEEPING SEED-CORN.

It is believed that a peck of seed corn soaked 24 hours in a steep made by dissolving one-fourth of a pound of common sal-ammoniac, (muriate of ammonia,) in six quarts of water, will serve to protect the corn from grubs, and increase the crop.

The experiments made in Scotland the past season, and in England also, have not uniformly proved so favorable as was anticipated. Nevertheless, the testimony in favor of steeps is, on the whole, calculated to inspire confidence in their practical utility. The temperature of the solution should be between 60 and 70 degrees.

Instances are given where it was thought that seed grain had been destroyed—i. e., its germinating power, by the use of too strong solutions of salt-petre and muriate of ammonia. Any one disposed to try the experiment can soak a few kernels in a solution of any given strength for 24 hours, and then place them in warm moist earth to sprout, till he can tell whether the germ be injured or not. The stronger the solution can be made, without injury, the better it will operate on the coming crop.

Apply all your spare unleached ashes to your spring corn and potato crops, in the hill, or on the hill. In default of unleached ashes use those that have undergone the process of leaching. The compost recommended in my report will be found to be very valuable. The mass should lie some two weeks, and be well mixed once or twice, before it is fit for use. The soda thus obtained by the decomposition of common salt will be a most useful alkali. The addition of ground charcoal will be useful. The quantity to be used I will leave to the sound judgment of the farmer in each case; premising that the expense will be likely to prevent the application of a quantity so large as to be hurtful. This compost can be used as a top-dressing to grain crops, or it can be applied to hoed crops.

ELECTRICITY—EFFECTS ON VEGETATION.

At a late meeting of the New York Farmers' Club, Mr. R. L. Pell, of Ulster County, presented to the club two pots containing growing plants: in one of which a regular galvanic battery had been prepared in the usual way, by coils of zinc and copper plates, moistened by a weak solution of sulphuric acid. The wire connecting with this apparatus was brought into contact with the roots of the growing plants. The result was, that the plants thus treated, other things equal, grew 22 inches in the same length of time that the plants in other parts grew but 5 inches.

Similar experiments have been tried in Europe for many years, and with marked results.

PREPARING WOOL FOR MARKET.

This is an important matter. To wash sheep well, a narrow vat, with a small stream of soft water running into it, is the best contrivance that we have ever seen. The operator stands outside of the vat, into which the sheep is placed. Water may be poured into the reservoir, in the absence of a running stream.

A smoothly planed box, of the right width, is the best apparatus for doing up fleeces neatly. Place the twine at the bottom of the box, roll tight, and tie snugly. It is easy to get 2 or 3 cents per pound more for the same wool, when put up with care and skill, than it would bring if put up in a slovenly manner.

THE WESTERN RESERVE MAGAZINE OF AGRICULTURE AND HORTICULTURE, *monthly, in pamphlet form.* Cleveland, O., F. R. ELLIOTT, Editor.

This publication is a neat and chaste production, abounding in illustrations, and has some well-written articles on Fruits, Locations, and Planting Trees, a subject to which the attention of the settlers in new countries cannot have their attention too frequently called.

Ten years ago there were but three or four publications, including our own, in the United States; and now every town of any consequence, and some the reverse of that claim, produce one or more; they are as plentiful as blackberries! Verily, we are a great people!

PUMP-LOGS—INQUIRY.

MR. EDITOR,—I would like some information respecting the best method of laying pump-logs; and also what kind of timber will be the most durable. Please answer the inquiry, and I shall feel much obliged.
A YOUNG FARMER.

Our opinion is, that white pine is the most durable, and easiest worked, of any of our forest woods, and that good straight-grained timber, 4 by 4 for a two-inch bore, and 10 feet long, will do more service than any other form it can be made in, because the wood is so thin in all its parts, that it is constantly wet, and consequently does not rot or decay. Hoop iron, $\frac{3}{4}$ -inch wide, is riveted into a band $3\frac{1}{2}$ inches in diameter, and driven into the end of the timber, when one log is inserted into the other. But a much better course is, to have a cast-iron connecting tube, about 3 inches long, and driven into the ends of the logs. Two men will lay 50 rods per day.

For the Genesee Farmer.

AURORA (CAYUGA Co.) AGRICULTURAL SCHOOL.

A glorious place, this, for a School Farm! When N. P. Willis, in his "Cherokee's Threat," essayed to paint the beauties of the vegetable creation, on the borders of Cayuga Lake, he did worse than attempt to adorn the lily—he caricatured the indigenuous floral creation. The names of David Thomas and Dr. Alexander Thomson, as connected with the Aurora institution, gives an earnest that no money-making scheme is attempted at the expense of the community. If a thorough knowledge of practical agriculture, in connection with science—if an enthusiasm for, and an intimate acquaintance with all that relates to the fruits and flowers of the earth, are admitted to be requisite qualifications in those who are to "teach the young idea how to shoot"—then the Aurora school must be a desirable place, not only for farmers' sons, but for any other son who has the taste and good sense to prefer the good and beautiful in the world to the world's illusions. S. W.

DRAINING.—This is a branch of rural labor quite too much neglected in this country. The cost need not be any thing like the profit attending the operation. At this time we intend barely to call public attention to the subject. See that your ditches are all open; for notwithstanding the very dry and unfavorable weather which we have had for the last three weeks, we may soon experience a touch of the opposite extreme. Too much water, or any standing water just below the surface, is fatal to healthy vegetation.

SPROUTING SEEDS.

Extract from a letter to Messrs. B. F. Smith & Co., Proprietors of the Rochester Seed Store, from a seed-grower in Massachusetts:

"I find from many years experience that much labor and vexation is saved by sprouting all small seeds before sowing, and especially onion and carrot. A little plaster of Paris mixed with the seed at the time of sowing will absorb the water and separate the seed. Several years since, I planted a large field of carrots, with the seed dry, without sprouting. The seed I knew to be good; but it was almost a total failure; and in searching for the cause, I found that a small insect, (a sand-fly, I call it,) which, sometimes, in a dry time in the spring, is very numerous. This insect, I found, would destroy the seed as soon as it opened to vegetate. Since then, I have always sprouted my seed, and have never found any difficulty. Another advantage I have found in the practice is, that the seed will come up before the weeds, (say from two to four days,) and keep ahead of the weeds through the season. I have always recommended the practice to my customers, which is generally adopted.

"If you are seed-growers, I need not mention that in sprouting seeds, they must not, for any great length of time, lie submerged in water. My practice is, to put the quantity of seed I wish to sprout into a bucket, and pour to it water sufficient to cover the seed. The water may be quite warm. Let it stand over night, or until the seed is sufficiently saturated; then drain off all the water, and let stand in a moderately warm temperature till the seed sprouts; taking care to stir it, and not let the seed get dry.

"I have planted carrot seed with the sprouts an inch in length, and had the plants appear in rows on the surface in two days."

PROSPECTS OF THE WHEAT CROP.—Wheat, on the oak and dry soils, stands well, but is generally backward, which in most cases is undoubtedly owing to late sowing, in consequence of the excessive drought that prevailed throughout this country last autumn. Those that sowed early, notwithstanding the dry season, have the best prospects, for although much failed to germinate, yet it has made amends by stooling out, and now looks very well. On sandy soils, the high winds and dry weather have had a bad effect; and on low and mucky soils the month of April has been severe, and a great deal is killed out, and otherwise looks poor. A great breadth of land is sown this year; and if the late-sown escapes the rust, we think there will be a full average crop.

KITCHEN GARDEN.

We trust that no head of a family who reads this paper will fail to secure a good kitchen garden. It has three important advantages: First, it is decidedly profitable. Secondly, its products are exceedingly comfortable; and, thirdly, a garden furnishes more innocent recreation to a family than any other thing combining the useful with the agreeable.

Children should learn to work in the garden; and boys should be taught to practice the art of grafting and budding, and to understand the theory of improving all kinds of fruit. A garden is a capital place to lecture on the laws of nature.

For the Genesee Farmer.

SYMPHYTUM, OR COMFREY ;

A new kind of Food for Men and Cattle.

In searching for aids in a new self-supporting system of general and liberal education, especially in the physical and dietetic departments, I was led, some ten years ago, to commence a series of experiments upon this vegetable : the interesting results of which I began, in September, 1842, to communicate publicly in my own native eastern region. This, for the public benefit, I wish still to do, as opportunities shall be afforded.

I have found this article truly of rare value ; the *herb* made into hay for cattle, and the *root* dried and ground to flour for man. Any who shall use similar experiments, I doubt not, will find similar results.

It is a native of this and many other countries ; found both in a wild state and also cultivated in many gardens for its healthful qualities. It is perennial ; very hardy ; the crop sure ; the growth luxuriant ; the produce abundant ; while the labor it requires is very small. In 1841, I obtained, of two years' growth of roots, on soil of moderately good tilth, after the caps of the roots were taken off to re-plant, when thoroughly dried and ground, at the rate of 24,200 pounds of flour the acre. In 1842, I obtained on the same soil, from the herb of the second years growth, at two cuttings, at the rate of 11,616 pounds of well-made, good hay the acre. It requires no other tilling, or attention, than digging the crop of roots in April, once in two or three years, and re-planting as you dig, about 7 or 8 inches apart both ways ; and cutting and haying the herbs, once the first year, and twice a year afterwards.

When ground in a coffee or corn mill, the root flour may then be used like other articles of food, according to the requisitions of health, convenience, or fancy, in various breads, gruels, puddings, griddles, soups, pastry and custards, and in such proportions as shall be found agreeable. It is, like arrowroot, sago, and oatmeal, very mucilaginous, nutritious, and easy of digestion. It operates well for the lungs. It has restored a lost voice, and is one of the best remedies for habitual coughs and incipient consumptions. It nourishes the feeble, and suits well a dyspeptic stomach, when no other food can be kept down ; and it sets all right in the bowels. I think it one of the best articles for sustenance and health ever made for man, and that on almost every account But let others cultivate and try it for themselves, and it will probably, with them as with me, be constantly growing in their estimation.

With kind regards to all concerned,

EZEKIEL RICH,

A Minister of the Gospel and an
Batavia, N. Y., 1845. Educator.

For the Genesee Farmer.

SCIENCE OF VEGETABLE NUTRITION.
POTATO-FATTED HOGS.

How is it that doctors do so disagree. Professor Emmons says, that plants "derive their sustenance almost entirely through their roots." *Per contra*, Dr. Lee is of opinion that at least 80 per cent. of all vegetable structure is derived from the atmosphere. Liebig's theory corroborates Dr. Lee's opinion : he says, "When a plant has matured the organs by which it obtains food from the atmosphere, the carbonic acid from the soil is no longer required." I have tried the experiment of clipping the leaves of Indian corn, after the pollen was develop-

ed : the result was, that no perfect ears were performed.

Professor Hall remarks, that different plants possess different powers—some absorbing more from the atmosphere than others ; that a vine running over a dunghill, or in the vicinity of animal and vegetable decomposition, will flourish better than in an inodorous atmosphere. This strikes at the doctrine of Dr. Emmons, and corroborates Liebig, Lee, and others.

Mr. True Remick, of Maine, feds hogs on potatoes—*prima facie* evidence that vegetable physiologists are mistaken in supposing that potatoes do not possess the fat-forming elements of Indian corn. Query—How many boiled potatoes did those hogs eat ? how hard was their fat ? did it not evaporate when exposed to the hot frying-pan ? Did it never occur to a farmer, that the leaf-lard of a potato-fed hog would evaporate full 15 per cent. in the frying ?
S. W.

For the Genesee Farmer.

MARL.

MARL—a species of calcareous earth, of different composition, and possessing fertilizing properties.—*Webster.*

The term "marl;" in common parlance, is applied to many deposits which contain lime, and by some to soils which are of a yellowish color, which contain a small portion of clay, mixed with silicious matter, with or without lime.

Shell-marl is a term more limited in its signification, and is used to denote those deposits which are found scattered through different countries, and are evidently produced by different crustaceous animals, while living in salt or fresh water. The shells of such animals are composed of lime, combined with phosphoric and carbonic acid, and, when fresh, contain ammonia. All these substances, separate or combined, are taken into plants, and without them many plants will not arrive at perfection. Shell-marl has, in countries where it is found, been considered equal in value with plaster of Paris, and, when applied to wheat lands, even superior to that article.

There is another substance, found precipitated from waters which flow from lime formations, which is often called marl. It is found in beds of considerable thickness, in some localities soft and friable, in others forming porous stones, of greater or lesser magnitude, when it is called *tufa*. This substance has been found valuable as a manure, when applied to soils destitute of lime.

Localities.—In searching for shell-marl, those places should be examined which are supposed to have been covered with standing pools or ponds of water at some previous period, and which have been drained by art, or become dry by natural causes. In such localities, it is often found resting upon a stratum of soft, unctuous earth, and covered with a quantity of vegetable matter.

Test.—The quality of shell-marl may be readily ascertained by putting a small quantity, when dry, into a tumbler, and pouring vinegar upon it : in proportion to the rapidity of its effervescence, so will be its value.
N. GOODSSELL.

RHUBARB, OR PIE PLANT.—After the plants have a good start, (say second year after planting,) hoe the earth from the roots 18 to 24 inches and as deep as the roots run down. Then put in a quantity (no danger of getting too much) of r tted cow manure, and the effect is astonishing the succeeding year—rendering it unnecessary to put barrels over them—the stalk being much more tender from its quick growth. You can in this way have cuttings twice a week from the same plant. This is the result of my experiment.
J. H. W.

ALBANY, April 22, 1845.

MESSRS. B. F. SMITH & Co.—GENTLEMEN: I send you a copy of my report on agriculture, with so much marked out as will bring it, I trust, within the moderate limits of the Farmer. If it shall be thought best, the balance of the report, with perhaps some additional remarks, will be published in the succeeding number.

I have reported a bill to grant \$5,000 a year, for three years, to the Fairfield Medical College, provided the trustees shall change the institution into an agricultural school. The buildings, chemical apparatus, &c., are well adapted to the object in view. The location is not so favorable as I could wish; but, with the ice once broken in this matter of agricultural schools, and their practical utility fairly tested, there will be no difficulty in establishing them wherever they shall be needed.

D. LEE.

REPORT OF THE COMMITTEE ON AGRICULTURE.

IN ASSEMBLY—March 20th, 1845.

Dr. D. LEE, of Buffalo, from the Committee on Agriculture, to whom was referred so much of the Governor's Message as relates to that subject, reports:

Speaking of agriculture, the Governor says:

"The interest involved is not merely the most important committed to our charge, but more important than all others."

This is no more than a just appreciation of that portion of the public interests committed by the House to the charge of your committee. Happy shall we be if any thing we can say or do shall serve to lessen the hard work now expended in producing a pound of wool, a firkin of butter, or a bushel of wheat.

Agriculture is a subject that public men are far more inclined to praise than to aid by any legislative enactments. However others may regard the interest of rural industry, your committee believe that, while legislating for half a million of farmers, we owe them something *more* than empty commendation—something *better* than a heartless lip service.

It is known to all, that no class in the community give so much muscular toil for \$100 as do the common field laborers in the state of New York. The hard work of skilful farmers is bought and sold at 9 or 10 dollars a month, and twelve hours toil is cheerfully performed each day. But the mechanic, the banker, the merchant, the broker, or the professional gentleman, thinks his service very poorly rewarded if he do not receive three or four times that sum.

If a man whose whole life is devoted to the cultivation of the earth, does not and cannot earn so much as the merchant, the physician, or the lawyer, in the course of a year, pray tell us what is the cause of this inability, that wise legislation may remove it. And if the agriculturist does earn as much as any non-producer in the state, then please inform us how it happens that an experienced farmer must sell his labor at \$120 a year, when he cannot hire one experienced in the mysteries of the law or medicine for less than \$1,000 a year.

Surely the toiling husbandman needs, if he does not *deserve*, as many good meals, as much good clothing, and as fine a house, as one that merely studies to acquire, not to produce, the good things of this world. Nevertheless, the fact is notorious, that the great body of our rural population somehow

contrive to work a little harder and fare a little poorer than any other class in the community.

We learn, from reliable statistics, that paupers increase among us much faster than population. The number that live from hand to mouth, only one step from the poor-house, is increasing with fearful rapidity. There are already more than 500,000 people in this state wholly dependent on their daily labor for their daily bread.

If the legislature will do as much to instruct the producing classes how to keep and enjoy the entire proceeds of their honest toil, as it does to teach all non-producers how to exchange their shadows for the working-man's substance, nine-tenths of our growing taxes for the support of the poor, and the punishment of crime, will cease for ever. On the contrary, so long as three-fourths of any community give the products of three, four, or six hands for the little earnings of one hand, just so long will hungry mouths, naked backs, and houseless heads, claim assistance by a tax on the property of those that are better off. According to the official report, the direct tax in this state for the year 1844 was \$4,243,100. This will soon be \$8,000,000, unless we cease to manufacture paupers, criminals, and needless litigation.

On what does the productiveness of the farmer's labor mainly depend? Surely not on his mere muscular strength; for in that case the mechanical power of a cart-horse will exceed five-fold in value the labor of an agriculturist. It is the sound judgment, experience, and acquired knowledge of the directing mind that imparts productive value to the labor of human hands. And it is mainly because the intellect employed in rural pursuits is less developed than the mind devoted to other and mere professional occupations, that agricultural labor is so poorly rewarded. The truth is, that *passive* intellectual faculties are utterly valueless. They produce nothing. Hence, as the mind of a human being lacks science or knowledge, the market value of his more physical force depreciates in price. Without going into an elaborate argument, your committee appeal to the ten thousand improvements of the age in which we live, as furnishing conclusive evidence that there is no power on earth so productive of great and beneficent results as the power of highly cultivated intellect.

Those that follow the plow, and swing the axe, and gather the harvest, have not, as a class, been instructed in the sciences which reveal nature's process for changing earth, air, and water into bread, meal, and clothing. Hence, to manufacture a barrel of pork, of flour, a firkin of butter, or 100 pounds of wool, from the ingredients necessary to form those agricultural staples, the farmer loses one-third or one-half of his labor by its misapplication. To make one ripe wheat plant, nature requires no fewer than fourteen simple and distinct elementary bodies. Each one of these substances has peculiar properties, and not one can serve as a substitute for another.

The laws established by the Creator of the universe, which govern all the changes in the form and properties of matter, whether in a crude mineral or in an organized condition, making the living tissues of plants and animals, are as uniform and unerring as the laws that regulate the rising and the setting of the sun. By studying the operation of these laws, the practical agriculturist is often able to effect a result in a day, which he could not accomplish in

a week while working against the purposes of nature.

It is not far from the truth to say, that 400,000 of the 700,000 children now attending our common schools, are destined to become practical operatives in the great art of making *something* into grain, grass, roots, milk, butter, cheese, wool, fat, lean meat, bone, or some of the numerous other products of rural labor. *Where* that something can be found, and *how* the raw materials of all cultivated plants should be combined so as to give the largest return for any given amount of capital and manual toil, are problems in practical husbandry, which science alone can solve.

If the ashes obtained by burning a ripe wheat, rye, oat, corn, barley, or timothy plant, be analyzed, not far from 80 per cent. will be found to be silica, or common flint sand. This silica is an indispensable ingredient in the above-named crops; and yet, not one particle of this mineral can enter the root of any plant except it be dissolved in water. Now, of all earthy substances, flint sand is the most insoluble. Indeed, you may boil it for hours in aqua fortis, sulphuric or muriatic acid, without dissolving it. How, then, is the practical farmer to dissolve this mineral, which, more than all others, forms the *bone* necessary to give strength to the stems of his grain, that they may hold up, without falling, the load of ripe seed in the ears?

Chemically speaking, silica is an acid, and will unite with a large dose of the two alkalies, potash and soda, and form a soluble silicate of those bases.

This explanation reveals the reason why the alkalies in wood ashes are so valuable as fertilizers on sandy soils. On comparing the analyses of maple, beech, and oak ashes with those obtained from cereal plants, there will be found a striking similarity in their respective constituents.

Next to clay, sand, and potash—lime, soda, phosphorus, sulphur, chlorine, and iron, are the most important minerals found in cultivated plants. To prepare these ingredients for use, the following is a cheap and easy process:

Take ten bushels of newly-slacked lime—i.e., ten before it is slacked—and mix it thoroughly with 20 bushels of loam or vegetable mould. Add to the heap five bushels of common salt and an equal amount of plaster of Paris. Moisten till the mass is like damp earth.

The plaster will furnish sulphur, and the common salt will yield both soda and chlorine. The latter will leave the sodium and unite with the caustic lime, forming a soluble salt, called the chloride of calcium. The sodium being first converted into soda, will then combine with the carbonic acid from the air and organized matter in the vegetable mould, and form a precious alkaline salt, which will dissolve common sand. This compound still lacks phosphorus and iron. Ground bones furnish the former, and coppers the latter mineral. If one can get the liquid excretions of domestic animals, or of the human species, and saturate the compost heap with this compound of ammonia, phosphoric acid, and of other valuable matters derived from plants, the fertilizing properties of this artificial manure will be greatly increased.

There is no branch of business in which the sciences of geology, chemistry, and of vegetable and animal physiology, are so useful to man, as they are to the practical husbandman. The term science is but another name for knowledge. It is, however,

usually limited in connection with natural phenomena, to the systematic investigation of the laws of nature. Of all men, the practical farmer is most interested in understanding and obeying these wise and salutary laws.

The fact is susceptible of demonstration, that from a general ignorance of these laws, we have wasted in the state of New York, within the last twenty-five years, the indispensable ingredients that go to form both *bread* and *milk* for our children, which, if placed in New York or Boston markets, would sell for one hundred millions of dollars.

The guano imported into Great Britain last year sold for \$4,000,000. It is retailed in Western New York by an exchange of four pounds of flour for one of guano.

To make an acre of wheat that will yield twenty bushels, the plants must have 12 pounds of phosphorus. To purchase that amount of a substance, which forms one of the constituents of the human brain, at a druggist's shop, will cost \$24.

The fact is notorious, that there are thousands, if not millions of acres in this state, which once bore 20 bushels of good wheat per acre, that now yield not more than ten bushels. To make our twelve millions of bushels of wheat a year, we annually consume about seven millions of pounds of phosphorus. It is the phosphate of lime contained in grass and hay, derived from the earth, out of which all our domestic animals form the solid earthy portion of their bones. At present prices, the phosphorus and ammonia annually thrown away in the solid and liquid excretions of man and his domestic animals, are worth some \$20,000,000.

A cargo of guano—phosphorus and concentrated nitrogen, derived from the fish on which sea-fowls feed—arrived in New York a few days since, which will sell at some \$60,000! What consummate folly, to throw away the raw materials which form our daily bread!

In a work just published in this country, M. Bous-singault states, that he has seen fields on the table lands of the Andes which have produced excellent crops of wheat *annually*, for 200 years. Guano is the fertilizer used on these fields.

Recent experiments in Scotland have demonstrated the practicability of growing 44 bushels of wheat on an acre having only 1½ per cent. of organized matter in the soil. It must contain, however, to a limited extent, each of the 14 simple elementary substances which form a wheat plant.

It is well known, that if a bin of corn be moistened, it will heat, and grow or rot. In the process of sprouting, a seed first imbibes some portion of the vital gas which surrounds it, which, uniting with the carbon in the starch, forms carbonic acid, and evolves heat. When starch thus loses one portion of its carbon, it is changed into a kind of sugar, making, as is well known, sweet bread from wheat a little grown. If a grain of wheat be surrounded by a little waxy clay, only a half-inch in diameter, it will not sprout, because oxygen gas cannot penetrate the compact earth. By sowing grain in wet weather, so that the harrow covers the seed with mud, thousands of bushels are lost.

It is a matter of great practical importance to know how to develop a large, vigorous growth of roots. On a poor soil, this can only be done by the aid of science. Deep plowing, and a thorough pulverizing of the soil, are indispensable to accomplish this object.

If it cost the farmers of New York twice as much land and labor to produce a bushel of grain as it does their competitors out of the state, how are the cultivators of the earth among us to prosper?

All the farmers in the Empire State should rise as one man, and insist that the science of keeping property, and the science of good husbandry, shall be taught in all their common schools.

The same mental cultivation which will enable an honest tiller of the soil to double the products, and double the value of his better-directed industry, will also qualify him to keep and enjoy a much larger portion of the nett proceeds of his labor.

It is now twenty-six years since the friends of agricultural improvement first made a vigorous effort to establish an agricultural college in this state. Your committee have before them an essay published in this city in 1819, of forty-two pages, advocating such an institution with unanswerable arguments.

At a latter period the lamented Judge Buel succeeded in procuring a naked charter for such a school; but not a single dollar could be obtained to aid private enterprise in teaching the unerring laws of nature to the young men who are to pursue the modern art of transforming solid rocks into fertile soils, and these, again, into human food and raiment.

Wise legislators conferred unlimited authority on a few Canal Commissioners to expend indefinite millions in cutting and beautifying *inanimate stone* along the line of the enlarged canal; but the law-making power refused to grant one dollar to teach the science of rural economy to the sons and daughters of practical farmers. Within the last twenty-six years there has been taken from the public treasury about \$200,000 to prepare the candidates for legal honors to study successfully the science of law. We have also four well-endowed medical colleges, now drawing from the public funds \$5,500 a year, besides \$200,000 before received.

We have so long paid a large bounty on all branches of unproductive industry, that no young man, of any honorable ambition, will consent to toil and sweat, and burn in the sun on a farm, for \$10 a month, when, as a clerk in a store, a bank, or a broker's office, or as a student in the doctor's or lawyer's office, he can expect, in the course of twenty years, to command five dollars to one, and at one-fifth of the severe bodily labor exacted of the practical agriculturist. But can all our ambitious young men become professional gentlemen, without rendering these professional pursuits utterly valueless? If learning and science are the great highways to honorable distinction and public favor, why deny these advantages to those that do more than all others to feed and clothe the whole community?

It is true that science is the greatest leveler in the world; but, unlike the leveling of ignorance and brute force, it ever levels upward. It takes the highest point of mental attainment already achieved for its standard; and then, wisely and humanely attempts to elevate all below up to that standard.

The object of this effort is to make the triumph of *mind over matter* universal and complete. All men blessed with a common share of common sense should have, in their every-day business operations, the full benefit of the best lights of modern science. Science gives to the poor man unknown and ever-increasing power over heat, light, electricity, chem-

ical attraction, air, water, and the solid substances which form the surface of the globe.

All these elements are brought into requisition by nature, in changing crude mineral matter into living organized beings—into the cultivated plants and domestic animals produced by the labor of the husbandman. To increase the knowledge of the producing classes does not detract, in the least, from the attainments of any class that may stand, or think they stand, above the common average of the community in which they live.

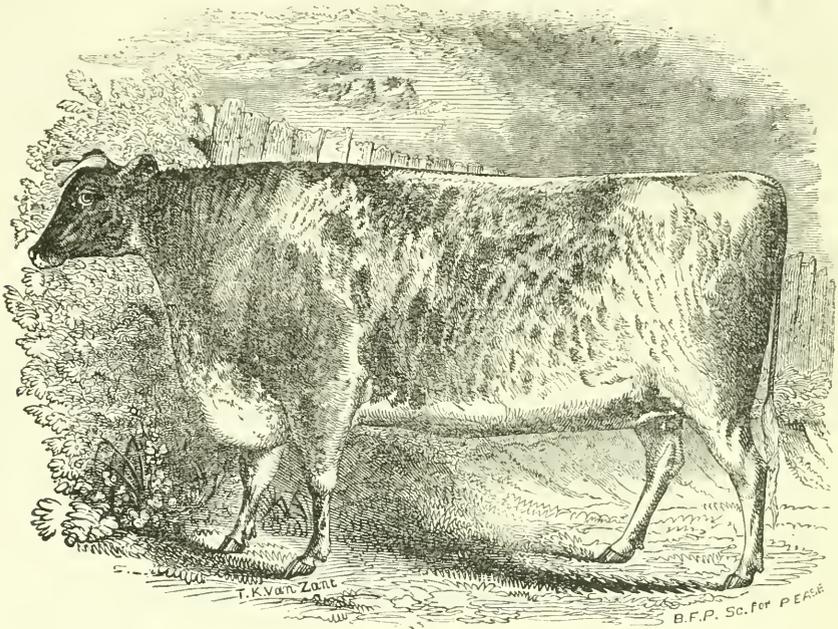
Why shall we refuse to do as much to make skillful and scientific farmers as we do to make skillful doctors and lawyers?

There are 11,000,000 acres under cultivation in this state, yielding an average product worth \$7 per acre. Communicate to the half-million of men who cultivate these lands a knowledge of the laws of nature which govern all the results of rural industry, and instead of exhausting the soil of its bread-forming elements at the rate of millions a year, they will improve the land and harvest, at the same cost in labor, three dollars per acre more than they now do. This will add to the productive value of our agricultural industry \$33,000,000 a year, and to the revenue of our canals more than one million of dollars: for a large portion of this will go to the cities on the sea-board, and be paid for in goods to be returned through our canals to the consumers. Thus the property dug from the earth will contribute a double toll to the state.

Who cannot see that commerce, manufactures, and all other pursuits in civilized society will be largely benefited by increasing the productiveness of rural labor? Hence whatever we give to agriculture is truly given to all classes. By unwise cultivation, we have all consumed much of the constituents of human food and clothing that a bountiful Providence spread over the virgin earth in the Empire State. Science now comes to our aid, and teaches us how to change a cold, compact subsoil, into a loose, friable, and most productive surface soil. It reveals to us *why* it is that a good soil will produce 100 pounds of ripe wheat plants, and yet lose only 15 pounds of its weight and substance by the operation, eighty-five pounds coming from the atmosphere.

VERY FINE HOGS.—A. Russell, Esq. of Deerfield, Mass., in a communication to the editor of the Massachusetts Ploughman, says, he fatted and killed a pig 11 months and 6 days old, that weighed 532 lbs. Respecting the best mode of feeding hogs, he says, "I fed him for the last six months entirely on corn ground in the ear, and wet. This was the largest hog ever killed of his age. I have tried various ways in feeding, and I have had the best luck in giving mixed ground feed, in the cold part of the year; wet it with warm liquor, and give it soon after it is mixed—always keeping a clean trough and a dry place for them to lie in."

It would seem that old Deerfield will soon stand at the head of the list for fat hogs: as it has long been *head and horns*, above all other towns for fat cattle. Mr. R. says, "Ten of my townsmen have handed me a list of the weight of 12 hogs that they have killed for their own use this winter, which beats the Connecticut hogs mentioned in the Hartford paper. Whole weight is 6,698; average, 558; the largest was 661, the smallest, 503; the oldest 20 months; the youngest, 14 months."



IMPROVED SHORT-HORNED DURHAM HEIFER ESTERVILLE.

ESTERVILLE, the property of E. P. Prentice, of Mt. Hope, near Albany, received the first prize for two-year-old heifers at the Cattle-show of the N. Y. S. Ag. Soc. at Poughkeepsie, 1844. She was sired in England by the Daniel O'Connell (3,537)—dam, Esterville, by Sir Alfred (6,469)—g. d. Amethyst, by Prince of Northumberland (4,826)—g. g. d. Amazon, by Crusader (934)—g. g. g. d. Amazon, by Sultan (1,485)—g. g. g. g. d. Bellona, by Mars (411)—g. g. g. g. g. d. Rolla, by North Star (458,) own brother to Comet, sold for \$1,000. Sir Alfred was, in 1840, sold to the King of the French.

For the Genesee Farmer.

WINTERING STOCK—A DIALOGUE.

(Continued.)

James. Brother H., when I got home I saw how miserable and poor my cattle were when compared with yours; so I resolved to do differently in future. But I must have some of the big beets; so you must inform me how to raise them.

Henry. I am glad that you have come to so good a resolution; and if you do but put it into practice, you will have both the satisfaction and profit of it. When you were here before, I forgot to inform you that you must not allow any of your stock to ramble over the fields when they are soft, nor before the grass is well up. What little they get early in the season, by plunging over the fields, is a real injury to the animals, and very hurtful to the ground. You never should turn into the pastures until they are up a good bite; they will then afford much more feed through summer, and the stock will do much better.

But to the root-raising: The essentials for raising a bountiful hoe crop of any description are, to have the ground rich—to keep it clean and well pulverized. Now I must inform you how I apply my manure—for you must have manure to make your ground rich. Stabling your cattle, and feeding them with roots in winter, it makes much more and much richer manure. The increasing of the quantity and quality of the manure is one of the most essential benefits of the root crop.

I prepare my ground in the fall, for all my hoe crops. You now must do the best you can, and next season you can do better.

You see that I have all my manure in the yard, and by the first of May have all the straw and useless forage trodden under foot, for manure. About the first of April I spread plaster all over my yards, about two tons; and about the last of May, or as soon as spring work is over, I put the manure up into heaps in the yards, and cover these heaps over with a thin coat of plaster—about two tons more. The manure remains in these piles through summer, and as soon as my fall crops are scoured, or as soon as I can, I apply this manure to my next spring crop, but previous to putting on the dung, I sow the ground with plaster—about two bushels per acre.

On the ground intended for the beets, I put of said manure 30 wagon or ox-cart loads per acre; and on the corn and potato ground, 25 loads per acre; spread it evenly over the surface, and then plow it deep and well, not leaving any unturned.

In the spring, as soon as the ground is sufficiently dry to pulverize, give it a thorough harrowing lengthwise of the furrows; it is then ready for marking for corn and potatoes. But the beet ground must be cross-harrowed, so as to mix the soil thoroughly. Harrow sufficiently: do not fear hurting it, if the ground be but dry. Then take your plow and ridge it into narrow ridges, $2\frac{1}{2}$ or 3 feet apart. Then with a marker, drawn by a horse, or with your hoe handle, make a mark on the top of the ridge, about 2 inches deep—drop the seed into it, about 2 or 3 inches apart, then cover them lightly with a hoe or rake.

The seed you can get at the Rochester seed store: put on 3 lbs. of the mangel wurzel, or the large white sugar beet, per acre. Try some of each, and

you will see which is best adapted to your soil ; and also get half a pound of ruta бага seed per acre, to mix with the beets—it gives a double chance for a regular crop.

Soak the beet seed in warm soft water, for three or four or even five days, changing the water occasionally. When ready to plant, pour off the water as dry as you can ; then roll the seed in white plaster or flour, to make it white, so that you can see how you are dropping it.

Soak the turnip seed in tanners' oil two or three days, to prevent the flies from eating the young plants. Mix the beet and turnip seed together before sowing, as I have stated above, 3 lbs. of one and half a pound of the other per acre : by thus doing, you have two chances for a bountiful crop. And sow as soon in May as the ground and weather will permit.

March 24, 1845.

WHEATLAND.

"N. Y. FARMER & MECHANIC" CRITICISM ON S. W.'S. ESSAY ON MANURE.—INDIAN CORN AS A GREEN CROP.

I have just had the honor to receive through the post-office two numbers of the "New York Farmer and Mechanic." It is a well-printed hebdomadal, on good paper, containing none of those long, commonplace tales, indigenous and exotic, which so generally monopolize the columns of those blanket sheets except "the cheapest newspapers extant." If the New York Farmer is not, at \$2 a year, the lowest-priced weekly in New York, in my humble opinion it gives as much valuable and interesting matter for \$2 a year as any other paper printed there.

The editor of the agricultural department of this paper, B*, in noticing the extracts from my Essay on Manures, as published in the Genesee Farmer, demurs to the assertion that "the atmosphere, and not the earth, is the storehouse of the elements of organic life." He first quotes a passage from Liebig, to show that the oxygen of the atmosphere converts the humus in the soil into carbonic acid, which is taken up as food by the roots of plants ; and then makes the unqualified assertion, that the earth is the storehouse, and the atmosphere the digesting agency of vegetable life."

B* is undoubtedly correct when he says that the earth is the storehouse for manures, and that science is with the farmer who fills it ; but science is also with the farmer who makes up for the paucity of his animal manures, by the use of lime, plaster, ashes, &c.—substances which have the power to receive and fix carbonic acid and ammonia in the soil, to aid in dissolving the incumbent humus, and then to perform still another part, by entering into the tissues in some form, to add to the organism of the plant itself.

If B.'s theory be true, why will a spoonfull of plaster, guano, or crushed bones, applied to a hill of corn, cause it to produce so much more than it would yield without such outward application ? I would ask, if nearly one-half of all vegetable structure is carbon, how is it that some soils produce good crops from year to year, with hardly a trace of soluble vegetable matter in them ? It is the well-settled opinion of Justus Liebig, corroborated by that of Sennibier, Ingenhauus, and others, that the carbonic acid of the air, serves for the food of plants, and that its carbon is freely assimilated by them. M. de Saussure was fully aware of the omnipresence of carbonic acid in the atmosphere before he ascertained the fact, by experiment, that it was present in the atmosphere of Mont Blanc, where eternal snows cover the earth's surface.

B* will admit that oxygen gas and water come from the air. We now come to nitrogen, which, with hydrogen, forms ammonia. Liebig, in his organic chemistry, says, "A certain portion of nitrogen is exported with corn and cattle ; and this exportation takes place from year to year without the smallest compensation ; yet after a given number of years, the quantity of nitrogen will be found to have increased ? Whence, we may ask, comes this increase of nitrogen ? The nitrogen in the excrements cannot reproduce itself, and the earth cannot yield it. Plants, and consequently animals, must therefore derive their nitrogen from the atmosphere."

On a dry prairie near Vincennes, Ind., Indian corn has been grown, without the aid of animal manures, more than 70 years in succession, with very little diminution of crop. This fine soil doubtless possesses all the inorganic matter necessary to form the inorganic structure of the plant grown on it ; but I would ask B*, Whence do the plants obtain the constituents of nitrogen and carbon, if not from the atmosphere ?

Editor B* claims the character of a *unique* master in the science of vegetable nutrition. So far from wishing to dispute his pretensions, I will freely acknowledge them, after he has succeeded in his experiment of cutting "three or more growths of corn-stalks, 4 feet high, from one seeding." I have grown here two crops of Indian corn from the same ground in one season ; but from two seedings. In Cuba, green corn stalks (mulsho) is grown for soiling mules and cattle ; but when one crop is cut, another is sown. The experiment of two cuttings might succeed in favorable seasons ; but three or more cuttings could not give "increase to pay the maling."

If I were growing corn for fodder, I would always sow it in drills, so wide apart that the soil could be worked during the first week of the plants' growth. No crop pays so well for early hoeing as Indian corn. A crop is often lost in this climate by neglecting to hoe it as soon as the plants are up. S. W.

EMUR, OR WHEAT BARLEY.

MR. EDITOR,—At page 49 of the Com. of Patents' excellent report for 1844, I noticed a statement in relation to wheat barley, and infer, from the remarks, that there is some *humbug* about it.

The kind of barley above-mentioned has been grown in this region, and we once sowed a bushel. It has the appearance of common barley, yields well, and has a clean, handsome kernel. We could not sell it to the brewers ; and not knowing any other disposition to make of it, discontinued raising. It found no favor among our farmers, and the seed may be lost. If, however, I can find any, I will send the Commissioner a sample. But I have great doubts whether it is of any particular use to the farmer. Yours, T. C. PETERS.

Darien, April 21, 1845.

THE ANNUAL HERD BOOK.—To accommodate such Short-Horn breeders as wish to insert pedigrees of the increase of their herds this spring, in the pages of this work, it will be kept open till the first day of July next, by which time it is to be hoped that all who wish to register their cattle will forward their respective pedigrees. The lists are fast coming in, and it will be a source of pleasure to the subscriber to make them as numerous as possible, that the array of American Short-Horns shall at least show some sort of respectability to their friends on the other side of the Atlantic. L. F. ALLEN.

Black Rock, N. Y., April, 1845.



HORTICULTURAL DEPARTMENT.

BY P. HARRY.

SPRING WEATHER—PROSPECTS OF THE FRUIT CROP, &c.

In this region we have had the most favorable spring for transplanting trees, and arranging and laying out gardens, orchards, and pleasure-grounds, that is within our memory : opening about the 10th of March, and continuing up to the 25th of April, with only a trivial interruption of a few frosty days. Vegetation has been brought forward gradually, and has not suffered in any locality that we have heard from, in Western New York, by severe frosts.

The last week has been unusually warm for April, and that, with the copious rains which preceded it, has caused a wonderfully rapid development of leaves and blossoms.

The country now presents a glorious and gladdening sight. Never have we seen fruit trees so promising as they now are : if we escape injury by frosts, we may reasonably anticipate the most abundant fruit crop we have seen for many a year. For this we have great reason to be thankful. Throughout Ohio, and other sections of the west, the entire fruit crop is destroyed ; and even the wheat crop, by combined drought and frosts, is in many sections ruined.

For vegetable gardening, the weather has not been so favorable. It has generally been too cold for seeds to vegetate, except in the warmest soils. We have no doubt that many of the early-sown seeds have rotted ; but the weather since the 24th of April has been so warm, that early vegetables will yet be matured in good season, where timely and proper exertion is made.

PROGRESS OF FRUIT CULTURE.

It is cheering to those who are laboring to promote the cultivation of fruit throughout our country, to witness the increased interest which has been manifested on this subject during the present season, compared with preceding ones.

It does now seem, that the importance of fruit culture begins to be justly estimated—at least, by a large number. If the same spirit be maintained for the next quarter of a century, of which we have not a doubt, every family in the land will be in the enjoyment of an abundance of choice fruit ; and not only that, but the fruits of North America will be shipped to every country in the world. We build these calculations on the known unbounded facilities which our soil and climate afford, as well as on the indomitable energy of our people, and their unequalled enterprise.

Orchards have recently been planted, on the most extensive scale, for the purpose of raising fruit for export to China and elsewhere. No pains nor expense have been spared by the planters to procure the most desirable varieties ; and we are proud to know, that Western New York has furnished some native productions that stand pre-eminent.

Our famous "Northern Spy" apple has been in great demand. All the trees that were in any way fit to plant have been sent out : many orchardists

have planted one hundred trees of this variety alone.

If proper attention is bestowed to this subject, we believe that in a few years a vast number of varieties, of superior merit to the best we now know, may be brought to notice, and contribute largely to the public good. Every man who aids in introducing a new and valuable fruit, is, in some degree at least, a benefactor of his race.

SPRING-BLOOMING HARDY TREES AND SHRUBS.

For the benefit of those who take an interest in the floral department, (and we hope they are not few,) we would mention a number of beautiful trees and shrubs now in full bloom, (April 28th :)

Double-Flowering Cherry.—This, like most other cherries, is a beautifully formed tree, and is now loaded with large clusters of double flowers, as double as a cabbage rose, about the size, or a little larger, of a 25-cent. piece. This is a most desirable tree for shade and ornament.

Double-Flowering Peach.—This resembles other peach trees in form and habit, with a great profusion of double rosy blossoms ; very handsome, and forms a beautiful contrast with the foregoing.

Large Double-Flowering Almond.—This tree resembles the peach : is of much stronger growth, and attains a larger growth than the peach usually does. The blossoms are just now beginning to open ; the color is a beautiful rosy red. When in full bloom, every branch resembles a wreath of delicate roses. A most magnificent tree.

Pyrus Japonica, or *Cydonia Japonica*—Japan Quince.—This is a low, spreading shrub or bush, with shining, glossy foliage, and the most brilliant scarlet and rose-colored blossoms, perfectly hardy, and a regular and most profuse bloomer. This we esteem one of the most superb shrubs cultivated. We once saw about 100 feet of a hedge of this shrub, in full bloom, as it is now, and it was certainly the richest thing of the kind we have ever beheld. No shrubbery should be without it.

Double-Flowering Sloe.—This is another low-spreading bush : flowers small and double, pure white, the whole bush completely covered when in full bloom, so that it resembles a heap of snowy wreaths ; flowers delicate and pretty. One of the finest and most desirable spring-blooming shrubs.

We should allude to several other beautiful spring-blooming trees and shrubs ; but space will not permit us at present.

PRETTY BORDER PLANTS NOW IN BLOOM.

To those who love flowers, none are more desirable than those of early spring. The *Primula*, or *Polyanthus*, used for borders, is a beautiful plant. Our borders now are quite gaudy with them. They are hardy, and of very easy culture.

The *Pansy* or *Heart's Ease*, too, is a sweet universal favorite. It turns up its pretty little face to the first warm spring sun, and blooms on till it is again buried beneath the snow. The fine new varieties are now as large and round as a dollar, and possess the richest tints.

Phlox Setacea is another low, pretty plant, much used for borders. It is called "Moss Pink ;" flowers of a fine lilac color, very showy.

Hyacinths, *Narcissus*, &c., are now in full bloom, and filling the garden with their delicious fragrance, which, with their varied and delicate colors and easiness of culture, renders them universal favorites.

WILD FLOWERS.

Ladies! If you wish to transfer some of the fine forest flowers to your gardens, you should commence with the season, and mark the locality of those you intend to transplant, and make such notes respecting their habits, &c., as will enable you to cultivate them successfully. Many of the prettiest are hard to be found after they have passed out of bloom. Multitudes of our native shrubs and plants possess great beauty; but because they are "wild," they are neglected. Many a door-yard, now without the shadow of a tree, shrub, or plant, might, by the expenditure of a little labor, be made at least agreeable to look at. There is no accounting for the horrid distaste which many people seem to have for anything or everything that is common. We have known people despise the most rare and beautiful plant, because it was "similar to something that grew in the woods." We are passionately fond of rare exotics; but we love not our own beautiful wild flowers the less. We wish that people of some refined taste would set an example in this respect, and endeavor to diffuse a taste that cannot fail to brighten and beautify rural life. If space permitted us, we would enumerate some of the fine spring flowers worthy of culture; but we would say, "Go to the woods and fields, and see them, and do as we have suggested."

THE FLOWER GARDEN.—INQUIRIES.

Annual flower seeds may now soon be sown. The ground should be rich and mellow.

Verbenas, Petunias, Phlox Drummondii, and *Chinese Monthly Roses*, and such plants as give a profusion of flowers from May till November, should now be planted out.

We have heard innumerable inquiries from those who were about improving their gardens in the way of ornamental shrubs and plants, what they should get. We would now suggest, that those who contemplate future improvement should make notes of the name and appearance of every beautiful tree, shrub, or plant they see or wish to obtain, so that they may be able to get it when the season comes.

CATERPILLARS.

It is now almost too late to guard against these destructive insects. We have noticed unusual quantities of them on our trees this spring.

Those who may have neglected it so far should, without a moment's delay, examine their orchards and gardens, every tree around their premises, and destroy the insects before they make their way into the leaves. On young trees, they are within the reach, and easily killed in any way; on those of considerable height, a piece of cloth or sponge may be fastened on the end of a pole of sufficient length, and this, dipped in oil or turpentine, will kill them instantan.

INSECTS.—Those who wish to be successful in raising fine fruit and vegetables, must be continually on the alert to guard against the ravages of insects. You may lose your fine bed of cabbages in an hour, by the want of proper vigilance; and so it is with every thing else. It becomes every man who tills the soil to study the nature and habits of insects; and this is a subject which most of us, to our very great disadvantage, are woefully ignorant of. We must get Harris, or some other good work on this subject, and study.

N. Y. STATE AGRICULTURAL SOCIETY.

Cattle-Show and Fair for 1845, to be held at Utica, Sept. 16, 17, and 18.

LIST OF PREMIUMS FOR 1845.

ON FARMS.

For the best cultivated farm of not less than 50 acres, exclusive of woodland, regard being had to the quantity of produce, the manner and expense of cultivation, and the actual profits:

First premium.....\$50 | Second ditto\$30
Third do.....20.

The persons making application for these premiums, must submit written answers to a series of questions, which will hereafter be published.

ON ESSAYS.

For the best series of Essays on the importance of scientific knowledge in prosecuting successfully the ordinary pursuits of agriculture.....\$100
For the best Agricultural Text-book for schools..... 100
For the best Text-book on Horticulture..... 50
For the best Essay on Subsoil Plowing, with the results of actual experiments in the state of New York..... 20
For the best Essay on Draining, with details of the results of actual experiments, showing the expense, and supposed increased value of the land..... 10
For the best Essay on Irrigation..... 10
For the best Essay on the Culture and Manufacture of Silk... 20
For the best Essay on the prevalent Disease in Potatoes..... 20

CATTLE. CLASS I.—Durhams.

Best bull, over 3 years old, ..\$15 | Second best.....\$10
Third best.....diploma.
Best bull, 2 years old10 | Second best Colman's tour
Third best.....diploma.
Best yearling bull10 | Second bestColman's tour
Third best.....diploma.
Best bull calfCol.tour | Second bestDiploma
Best cow, over 3 years old.. 15 | Second best 10
Third best.....diploma.
Best heifer, 2 years old10 | Second bestcol.tour
Third best.....diploma.
Best yearling heifer 10 | Second best.....col.tour
Third best.....diploma.
Best heifer calfcol.tour | Second bestdiploma

CLASS II.—Hercfords.

Best bull, over 3 years old.. 15 | Best cow 15
Second best 10 | Second best 10
Best bull, between 1 and 3 | Best heifer, between 1 and 3
years old 10 | 3 years old 10
Second bestdiploma | Second bestdiploma

CLASS III.—Devons.

Best bull, 3 years old..... 15 | Best cow 15
Second best 10 | Second best 10
Best bull, between 1 and 3 | Best heifer, between 1 and 3
years old..... 10 | years old 10
Second bestdiploma | Second bestdiploma

CLASS IV.—Ayrshires.

Best bull over 3 years old... 15 | Best cow 15
Second best 10 | Second best 10
Best bull, between 1 and 3 | Best heifer, between 1 and 3
years old 10 | years old 10
Second bestdiploma | Second best.....diploma

CLASS V.—Crosses of Native and Improved.

Best cow, over 3 years old... 15 | Best heifer, 2 years old 15
Second best 10 | Second best..... 10
Third best.....vol. transactions | Third best.....vol. transactions

CLASS VI.—Native cattle.

Best cow, over 3 years old.. 15 | Best heifer, 2 years old 15
Second best 10 | Second best 10
Third best.....vol. trans | Third bestvol. trans

WORKING OXEN.

Best team of 20 yoke from | Best ten yoke of oxen from
any one county 25 | any one town 20
Second best 15 | Second best 10
Best yoke of oxen..... 15 | Third bestcol. tour
Second best 10
Third bestvol. trans

In awarding the premiums on working oxen, 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.

THREE-YEAR-OLD STEERS.	
Best yoke	15 | Second best
	Third best, diploma.

TWO-YEAR-OLD STEERS.	
Best yoke	10 | Second best
	Third best, vol. trans.

YEARLING STEERS.	
Best yoke	8 | Second best
	Third best, vol. trans.

FAT CATTLE.	
Best pair fat oxen	15 | Second best
	Third best, col. tour.
Best ox, cow, or heifer	10 | Second best
	Third best, vol. trans.

A fat ox, taking a premium as one of a pair, cannot compete singly for another premium.

HORSES.	
Best stallion, 4 years old...	20 | Third best
Second best	10 | Best gelding horse
Third best	10 | Second best
Fourth best	10 | Best breeding mare
Best stallion, 3 years old...	15 | Second best
Second best	10 | Third best
Third best	10 | Best mare, 3 years old
Best pair matched horses	10 | Second best
Second best	10 | Third best

The variety of horses which possesses size, strength, and endurance for field labor, combined with that action which qualifies them for the carriage or saddle—in short, the "horse of all work"—is probably the most profitable class which our farmers can now engage in rearing; and to such, therefore, will the preference of the society be given. Horses taking premiums in pairs cannot compete singly for the premium for geldings.

S H E E P.	
CLASS I.—Long-Wooled.	
Best buck	10 | Best five ewes
Second best	10 | Second best
Third best	10 | Third best
	Best pen 5 lambs, 5.

CLASS II.—Middle-Wooled.	
Best buck	10 | Best five ewes
Second best	10 | Second best
Third best	10 | Third best
	Best pen 5 lambs, 5.

CLASS III.—Merinos and their grades.	
Best buck	10 | Best five ewes
Second best	10 | Second best
Third best	10 | Third best
	Best pen 5 lambs, 5.

CLASS IV.—Saxons and their grades.	
Best buck	10 | Best five ewes
Second best	10 | Second best
Third best	10 | Third best
	Best pen 5 lambs, 5.

Class I is designed to include the Leicesters, Lincolns, Cotswolds, and all the varieties of sheep which furnish the quality of wool suitable for combing. Class II includes the Southdown, Norfolk, Dorset, Native, &c.; and Classes III and IV, all those generally denominated Merinos and Saxons, whether of pure or mixed blood.

CLASS V.—Fat sheep.	
Best	10 | Second best
	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.

S W I N E.	
Best boar, over 10 months	10 | Best sow
Second best	10 | Second best
Third best	10 | Third best
Best lot of pigs under 10 months, not less than 4 in No. ..	10 | Second best

In awarding premiums on hogs, reference will be had not merely to size and 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, one cock and two hens	3 | For the best pair of ducks ..
	3 | Do do turkeys. 3
	3 | Do do geese... 3

For the best lot of black Poland, not less than 3.....	3 | For the best and greatest variety of fowls, by any one individual
For the best lot of large not less than 3	3 |

VEGETABLES.	
For 6 best stalks celery	2 | 2 best purple egg plants ..
3 best heads cauliflower	2 | Best half-peck Lima beans..
3 best heads broccoli	2 | Best " Windsor do. . .
12 best white table turnips .	1 | Best bunch double parsley..
12 best cabbots	1 | 3 best squashes
12 best table beets	1 | Largest pumpkin
12 best parsnips	1 | 12 best ears seed corn.....
12 best onions	1 | Best half-p'k table potatoes, 2
3 best heads cabbage	1 | Second best " " ..
12 best tomatoes	1 | Best variety seedling " ..

Discretionary premiums will be awarded on choice garden products not enumerated above.

FARM IMPLEMENTS.	
Best plow	15 | Best horse-power machine ..
Second best .. silver medal	10 | Best cultivator
Third best	10 | Second best
Best subsoil plow	10 | Best drill barrow
Best farm wagon	10 | Second best
Second best	10 | Best farm horse cart
Best half-dozen hand rakes .	dipl | Best ox cart
Best grain cradle	3 | Best horse rake
Second best	10 | Second best
Best half doz. hay forks .	dipl | Best half doz. grass scythes .
Best harrow	10 | Best do cradle do
Second best	10 | Best do dung forks
Third best	10 | Best thrashing-machine
Best fanning mill . silver medal	10 | Second best
Second best	10 | Third best
Third best	10 | Best straw-cutter . silver medal
Best improved ox-yoke . col. tr	10 | Second best
Second best	10 | Third best
Best axe	2 | Best clover-machine
Best farm harness	10 | Second best
Best saddle	5 | Best hoe
Best machine for cutting corn-stalks	5 | Best flax and hemp dressing-machine

Articles not presenting any new and valuable improvements, will not be entitled to premiums. Implements and machines must be tested as far as possible, in the presence of the committee.

BUTTER.	
For the best lot made from five cows, in 30 successive days—quality as well as quantity considered—25 lbs. of the butter to be exhibited. \$25	
Second best	15 | Third best

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, nor for 15 days preceding the trial. The cows to be owned by the competitors previous to the 1st day of April, 1845. 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 lbs. of the butter so made to be exhibited at the Fair at Utica, for the inspection of the examining committee. The particular breed of the cows to be stated, if known, and 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 Executive Committee 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. The increased list of premiums is offered with the hope it will induce extensive competition throughout the state. Let this object be accomplished, and an opinion approximating to accuracy may be formed by the public as to which of the several breeds of cows are the best for dairy purposes; and from those that prove the best, further improvement may be made.

Best 25 lbs. made in June	10 | Second best .. silver medal
Second best .. col. tour	10 | Third best .. do
Third best .. vol. trans	10 | Fourth best .. do
Best 50 lbs. made at anytime, 15	10 | Fifth best .. do

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; the mode of 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.

CHEESE.—Not less than 100 lbs.	
	One year old or over.
Best	15 | Fourth best, silver meda
Second best .. silver medal	10 | Fifth do, do
Third do .. do	10 |

Best	Less than one year old.	15	Fourth best	silver medal
Second and third	silver medals		Fifth best	do

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 and kind of salt used; the quantity of rennet used, and the mode of preparing it; the mode of pressure, and the treatment of cheese afterwards.

MAPLE SUGAR.

Best 25 lbs.	15	Third best	colman's tour
Second best	10	Fourth best	diploma

CORN-STALK SUGAR.

For the best experiment in the manufacture of sugar from corn-stalks, from one acre of northern corn cultivated for the purpose, so as to obtain the greatest quantity of sugar. . . 25.
The process of manufacturing and clarifying must be particularly stated, in reference to the maple and corn-stalk sugar.

S I L K.

Best specimen manuf'd	15	Third best,	colman's tour
Second best	10	Second best,	Diploma
Third best	col. tour	Best half-bus. cocoons,	1845, 10
Fourth best	vol. trans	Second best,	col. tour
Best pound reeled silk	10	Third best,	diploma

DOMESTIC MANUFACTURES.

Best woolen blankets, \$5; second, 4; third, 3.	Best rag carpet, 15 yards, \$3; second, 2; third, 1.
Best ten yards flannel, 5; second, 4; third, 3.	Best double carpet coverlet, 4; second, 3; third, 2; fourth, 1.
Best ten yards woolen cloth, 5; second, 4; third, 3.	Best pair woolen knit stockings, 2; second, 1; third, diploma.
Best woolen carpet, 5; second, 4; third, 3.	Best wove woolen stockings, 2; second, 1; third, diploma.
Best tow cloth, 15 yards, 1; second, diploma.	Best cotton wove stockings, 2; second, 1; third, diploma.
Best ten yards linen, 5; second, 4; third, 3.	Best lb. linen sewing thread, 2; second, 1; third, diploma.
Best ten yards linen diaper, 5; second, 4; third, 3.	Best linen woven stockings, 2; second, 1; third, diploma.
Best hearth-rug, 5; second, 4; third, 3; fourth, 2; fifth, 1; sixth, diploma.	Best linen knit stockings, 2; second, 1; third, diploma.
Best ten yards kersey, 3; second best, 2; third, 1.	Best knit cotton stockings, 2; second, 1; third, diploma.

FRUITS.

For the greatest variety of table apples, 5.	For the third greatest, vol. trans.
For the second greatest, . . . 3	For the best twelve sorts, not less than three of each, 3
Best new seedling apple, 3.	
For the greatest variety of table pears, 3.	
For the second greatest,	vol. transactions.
For the greatest variety of winter pears,	" "
For the best twelve quinces,	" "
For the best twelve peaches,	" "
For the best twenty-four plums,	" "
For the best six bunches of native grapes,	" "
For the best six bunches of foreign grapes,	" "

FLOWERS.

For the greatest variety and quantity, . . . gold medal.	
For the second greatest . . . 5	For the third greatest, vol. trans
For the best floral ornament, . . . silver medal.	
For the second best . . . 3	For the best seedling dahlia, 3
For the third best . . . vol. trans	For the second best . . . 2
For the best twenty-five varieties of dahlias, 5.	
For the second best . . . 3	For the third best, vol. trans.

PLOWING MATCH.

First premium, . . . 15	Third premium . . . 10
Second do . . . 12	Fourth do, . . . col. tour
	Fifth. . . vol. transactions.
For boys under 18 years of age.	
First premium . . . 10	Second . . . 5
	Third. . . vol. transactions.

Each competitor will be required to plow one-fourth of an acre of sward land in 75 minutes, the furrows not less than 10 inches wide and 6 deep; plowman to drive his team.

FIELD CROPS.—At Winter Meeting.

Best crop of wheat, not less than two acres, \$15.	
Second best . . . 10	Third best . . . 2 vols. trans
Best two acres of spring wheat, 15.	
Second best . . . 10	Third best, . . . 2 vols. trans
Best crop of Indian corn, not less than two acres, 15.	
Second best . . . 10	Third best . . . 2 vols. trans.
Best crop of barley, not less than two acres, 10.	
Second best . . . 5	Third best, . . . vol. trans
Best crop of rye, not less than two acres, 10.	
Second best, . . . 5	Third best, . . . vol. trans.

Best crop of oats, not less than two acres, 10.	
Second best . . . 5	Third best . . . vol. trans
Best crop of potatoes for table, not less than one acre, 10.	
Second best . . . 5	Third best, . . . vol. trans
Best crop of potatoes, quantity considered, not less than one acre, 10.	
Second best . . . 5	Third best, . . . vol. trans
Best crop of sugar beets, not less than half an acre, 10.	
Second best . . . 5	Third best . . . vol. trans
Best crop of mangel wurzel, not less than half an acre, 10.	
Second best . . . 5	Third best, . . . vol. trans
Best crop of ruta baga, not less than one acre, 10.	
Second best . . . 5	Third best, . . . vol. trans
Best crop of carrots, not less than one acre, 10.	
Second best . . . 5	Third best, . . . vol. trans
Best crop of peas, not less than one acre, 10.	
Second best . . . 5	Third best, . . . vol. trans
Best acre of corn for fodder, 5.	
Best half-acre of hops, 5	Best half-acre of tobacco . . . 5
Best " flax, 5	Best acre of cabbage, . . . 5
	Best acre of broom corn, 5.
Second best, . . .	Best acre of clover seed, 10.
	col. tour | Third best, . . . vol. trans
Second best, . . .	Best acre of grass seed, 10.
	col. tour | Third best, . . . diploma

Those who present claims to premiums for farm crops, must state in writing the following particulars: the condition of the soil at the commencement of cultivation for the crop; the previous crop and cultivation, and quantity of manure used upon it; the quantity and kind of manure the present season; the quantity and sort of seed used; the time and manner of sowing, cleaning, and harvesting the crop; the amount of the crop, determined by actual weight or measurement; and the expense of cultivation. The land shall be measured by some surveyor, who shall swear to the correctness of his survey, and that it was made with a chain and compass; and the claimant of the premium, with two other persons who assisted in measuring, shall certify under oath as to the quantity produced from the piece of land mentioned in the certificate of the surveyor—and a sample of grain shall be presented at the annual meeting, with the oath of the applicant, that the same is a fair sample of the whole crop.

MISCELLANEOUS.

Wrought-iron gate, with cast-iron pillars	10
Best iron wheelbarrow	silver medal
Ornamental cast-iron vase, on pedestal,	8
Best sample drain-tile	silver medal
Best quarter of an acre ozier willow	8

DISCRETIONARY PREMIUMS

Will be awarded for such implements, products, &c., not enumerated, as shall be deemed worthy of notice or encouragement.

REGULATIONS.

The premiums for essays and agricultural implements will be open to citizens of other states; all others will be confined to residents of this state, who are members of this society, or who may become so by the payment of one dollar on entering their articles.

The trial of plows will take place at Utica, on Tuesday, the 15th day of September.

No premiums will be paid on any animals or articles taken away before the close of the Fair.

Premiums not claimed within four months after they are awarded will be considered as donations to the society.

All persons who intend to exhibit cattle, horses, sheep, or swine should give notice to Theodoro S. Faxon, Utica, or Luther Tucker, Recording Secretary, Albany, previous to the 10th of September, that the necessary arrangements may be made for their accommodation; and all animals must be on the ground by nine o'clock, A.M. of the 17th September.

All those who intend to compete for the premiums on agricultural implements, butter and cheese, sugar, cocoons, silk, &c should have their specimens on the ground on the 10th, that they may be deposited in their appropriate places, and the rooms suitably arranged on the day previous to the Fair.

Applicants for premiums are requested to pay particular attention to the notes attached to the premiums on fat cattle and fat sheep, butter and cheese, field crops, maple sugar, &c.

The statements required from those who compete for field crops must be sent to Luther Tucker, Recording Secretary, Albany, previous to the 1st of January, 1846, and the premiums will be awarded at the annual meeting of the society, on the third Wednesday of January.

Competitors for the premiums on essays must forward their manuscripts to the Recording Secretary, Albany, previous to the 1st of January, 1846, free of postage.

No premium will be awarded unless, in the opinion of the judges of the class in which it is offered, the animal or article is worthy of such premium.

Prize animals and implements at the previous exhibitions, will be allowed to compete for the prizes; but they must receive a higher prize, or in a different class, to entitle them to a premium. Should the same premium heretofore given them be awarded, they will receive a certificate to that effect instead of the prize.

Animals and other articles offered for competition must be labeled with the names and residence of the owners at full length.

No viewing committee, with the exception of the committee on discretionary premiums, shall award any discretionary premium without the previous permission of the executive board, expressed through the President.

For the Genesee Farmer.

MR. EDITOR.—A correspondent of yours, over the signature of "Inquirer," in attempting to give an abstract of my statement to the State Agricultural Society, in relation to my flock of Merino sheep, for which a gold medal was awarded me, has fallen into so many & so gross errors, that instead of correcting them in detail, I forward you the report of the committee of the society, which embodies my statement referred to, with the request that you publish it, accompanying this.

I presume that "Inquirer" wrote in good faith: one finds enemies enough in this world of ours without making them voluntarily—without driving friends or indifferent persons into that attitude, by misconstruction and suspicion. But I feel constrained to say to "Inquirer," that farmers—especially those who are banded together to improve and dignify their calling—while they may be influenced by honorable emulation, should be chary, not only of wilful misstatements injurious to each other's reputations, but also of those *careless*, unintentional ones, which, uncorrected, are just as effectual to rob us of

The immediate jewel of our souls
as the envenomed falsehood of the deliberate slanderer.

The statement below embodies all the important information sought by "Inquirer." As to what "constitutes the peculiar excellence of my flock," it would perhaps be difficult to satisfy his curiosity on paper. This he could best do by inspection and comparison. To effect the former, he is invited to visit me; but if the latter would be more satisfactory—if "Inquirer," or any of his friends in Western New York should invite me to exhibit ten or a dozen pure-blood Merinoes against an equal number now owned by any one of them, at the Utica Fair, all I can say is, that I should cheerfully accede to so reasonable a request, only stipulating that the invitation should be made to me within thirty days, that my arrangements might be shaped to such an end.

Very respectfully, your obedient servant,

HENRY S. RANDALL.

"SHEEP.—The committee, consisting of Major Kirby, J. McDonald, McIntyre, and C. N. Bement, to whom was referred the statement of Mr. Henry S. Randall, of Cortland, for a premium 'for the best-managed flock of sheep,' awarded him a gold medal worth \$12. The statement concerning this flock is so well calculated to excite the attention of wool-growers, that the account of Mr. Randall is submitted in preference to any abstract that could be made:

MR. H. S. RANDALL'S STATEMENT.

"In the winter of 1843-4, I wintered in a separate flock fifty one ewes over one year old, two ewe lambs, two rams, one of them one, and one of them two years old. Of the ewes over one year old, twenty-eight were full-blood Merinoes; twenty-three were half-blood Merinoes and half-blood South-Down; the two ewe lambs were three-fourth blood Merino and one-fourth blood South Down; and the two rams were full-blooded Merinos. The flock were kept as follows, through the winter: They were fed with hay morning and night, and were, as a general rule, required to eat it up clean. At noon the flock were daily fed three bundles of oats and barley, (which had grown mixed, say three parts oats and one part barley,) until the 25th of December,

after which they received four bundles of oats. The grain was light and shrunken. They received no hay at noon during the winter, and usually consumed all the straw of the grain fed to them. They had a good shelter, and access to pure water at all times. From this flock I raised 53 lambs. The full-blood Merinoes, including two rams, and the two three-fourth blood lambs, (in all 32,) sheared one hundred and eighty-six pounds and four ounces of washed wool, which I sold at forty-eight cents per pound. Four of the full-bloods had two-years fleeces on. The half-blood merinoes and half-blood Southdowns, (twenty-three,) sheared eighty and one-half pounds of washed wool, seventy one pounds of which I sold at thirty-eight cents per pound. During the summer of 1844, the flock were kept in good ordinary pasture, and salted once a week. Out of this flock I have sold during the past summer and fall, ten full blood Merinoes over one year old and twenty full-blood Merino lambs for five hundred and twenty-nine dollars; and twenty-three half-blood Merino, and half-blood Southdown ewes, and sixteen three-fourth blood Merino and one-fourth blood Southdown lambs, for one hundred and ninety-seven dollars.

Expense of keeping 55 sheep one year, . . .	\$82 50
Received for wool, estimating that kept at the same price with that sold, . . .	\$119 99
Received for those sold,	726 00
	—————845 99

Remaining on hand, 39 of this flock.

I have submitted no estimate of the original value of the flock, not deeming it necessary, as the diminution of the original number is here stated.

HENRY S. RANDALL."

We cheerfully comply with the request of Col. Randall, knowing him to be one of the most ardent, indefatigable, and enlightened friends of agriculture and its concomitants that our state can boast. We trust to hear from him as a correspondent as often as is convenient.—ED. FARMER.

THE WHEAT INSECT.—A correspondent of the New York Mirror gives an experiment made by himself, which serves to throw some light upon the nature and character of the wheat insect. He says, "In the spring of 1844, I placed a bag containing half a bushel of white flint wheat, in a seed drawer, under glass, and near the furnace of my green house. On the 6th of March, 1845, I opened the bag, and to my surprise, found thousands of living insects, such as are now presented you—some were on the point of leaving the kernel, others were just commencing to eat through, and many were perfectly formed, and running about in all directions. Six years ago I used to soak my early grains in salt brine, for the purpose of destroying the eggs of the insect, which I assured my neighbors, much to their amusement and unbelief, was ensconced in the kernel. Now, by accident, the fact is made manifest. The insect would not have appeared till June, perhaps, had the wheat been sown. The warm situation it occupied in the greenhouse brought it thus early to maturity."

MR. COLEMAN'S REPORT.—The third number of Mr. Coleman's Report on European Agriculture is now in press in Boston, and will soon be ready for delivery. It is spoken of as being more interesting than either of the previous numbers

AURORA AGRICULTURAL INSTITUTE,
AT AURORA, CAYUGA CO., N. Y.

THE late Judge Buel, in one of his last public addresses, in speaking of agricultural schools, says, "I pretend not to the spirit of prophecy, yet I venture to predict, that many who now hear me will live to see professional schools of agriculture established in our land—to see their utility extolled, and to be induced to consider them the best nurseries for republican virtues, and the surest guaranty for the perpetuity of our liberties. They should be established—and will be established—and the sooner they are established, the better for our country."

The undersigned, being satisfied of the great public utility of such institutions, and feeling an earnest desire for their early introduction into our state, have, in order to meet what now seems to be a decided public sentiment in their favor, and call for their establishment, resolved to open such a school, and have already made arrangements therefor.

The Farm upon which the Institute is located is situated in and directly adjoining the beautiful village of Aurora, on the east bank of Cayuga Lake, in Cayuga County, sixteen miles from Auburn, and twelve miles from Cayuga Bridge and the Auburn and Rochester Railroad. The communication is direct with Auburn by stage, and with the Railroad by steamboat, in summer. The farm contains 242 acres, in a good state of cultivation. The soil is various; fruit abundant; buildings are good—part nearly new—and very pleasantly situated. The location is considered one of the most desirable of the many beautiful situations on the borders of the Lake, commanding an extensive and varied prospect of its waters and the surrounding country—and altogether admirably adapted to the end in view.

It is the intention of the undersigned that this Institution shall afford every facility for young men to make themselves thoroughly acquainted with the principles of agricultural science, and their judicious application to practical husbandry; and particularly to afford young men from our large towns the most favorable opportunity for preparing themselves for agricultural pursuits. It is also their purpose to some extent to test, by actual experiment, the correctness of principles in agriculture now received, but not yet well established, and report the same to the public.

The young men will be received into the family of the Principal, and be kept under his immediate and constant supervision. Particular regard will be had for their moral culture, and a strict observance of all laws and regulations required.

Terms, \$150 a year, payable quarterly, in advance. No pupils under fourteen years of age will be received. Applications for admission may be made to the principal, from whom any further information may, on request, be obtained.

CHARLES C. YOUNG, A.M.,
Proprietor and Principal.
ALEXANDER THOMPSON, M.D.,
Lecturer on Botany, Geology, Agricultural Chemistry, &c.
DAVID THOMAS, Visitor & Adviser.

REFERENCES.

B. P. Johnson, Esq., Rome, Oneida Co., President of the State Agricultural Society; Daniel Lee, Esq., Buffalo, Corresponding Secretary of the State Agricultural Society; James S. Wadsworth, Esq., Genesee; John Thompson, Jr., Esq., Rochester; W. E. Sill, Esq., Geneva; J. S. Seymour, Esq., Auburn; Hon. B. R. Wood, Albany; Joel B. Nott, Esq., Albany; Luther Taeker, Esq., Albany; Rec. Secretary of the State Agricultural Society; Joel Rathbone, Esq., Albany; Rev. Washington Rosevelt, New York; Wm. Curtis Noyes, Esq., New York; B. R. McVaine, Esq., New York; W. W. Bhester, Esq., New York; B. W. Bonney, Esq., New York; A. B. Allen, Esq., New York. April, 1845.

SALE OF FULL-BLOODED NORMAN HORSES

THE Subscriber having relinquished farming, will offer at public vendue, at his farm in Moorestown, Burlington County, New Jersey, nine miles from Philadelphia, on Tuesday the 28th of May next, his entire stock of Norman Horses; consisting of two imported Stallions, "Diligence" and "Bonaparte"; two imported Mares; two full-blooded Fillies, three and four years old; two Fillies by Diligence, from a half-blood Canadian mare, three and four years old; and one Filly four years old, by Diligence, from a well-bred English mare broke and kind to harness.

The undersigned deems it unnecessary to speak at large of the quality of these horses, so much having been said of this particular importation, (which is believed to be the only one ever made to the United States,) in all the principal agricultural papers. In a few words, they are the Canadian Horse on a larger scale, combining the form, activity, and hardihood of that well-known race with greater size and strength. "Diligence" has been a remarkably successful stallion; he has been exhibited at the Fairs of the Pennsylvania and New York Agricultural Societies, where he was not entitled to compete for the premiums, but received the highest encomiums from the committees. At the Fair of the American Institute, in New York city, in October last, he received the silver medal of the institute.

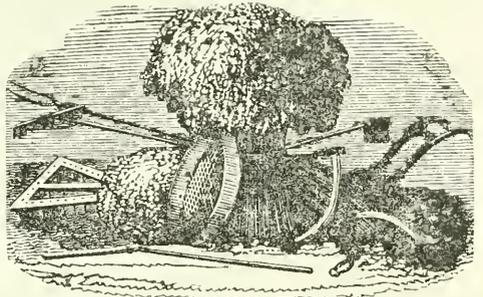
It is expected that a large number of the Colts of Diligence will be on the ground on the day of sale, some of which, no doubt, may be purchased.

EDWARD HARRIS,
Moorestown, Burlington Co., N. J., March 15, 1845.

SHAKER GARDEN SEEDS.

THE Subscriber having been appointed Agent for the "United Society," at New Lebanon, is now opening a large assortment of these deservedly popular and excellent Seeds, which are confidently recommended for purity and accordance with the label.

April 1. L. B. SWAN, 18 Buffalo-st.



ROCHESTER SEED STORE, FRONT-S T.,
BY B. F. SMITH & CO.

AWARE of the important relation which the seedsmen 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 C. F. Crossman, and under the inspection of the proprietors; others were raised by experienced seedsmen; while those varieties of foreign growth which experience has shown are the best, have been procured from the most responsible sources abroad.

The collection has been greatly enlarged this season, in order to accommodate all who wish to try whatever is new, rare and curious.

FIELD SEEDS.

Red Clover, large and medium, Timothy, White Dutch Clover, Oats, Barley, Seed Corn, Spring Rye, Italian and Siberian Spring Wheat, Early June Potatoes, Marrowfat and Field Peas.

VEGETABLE GARDEN SEEDS.

A choice and select variety of Peas, Beans, Cabbage, Cauliflower, Celery, Beets, Cucumbers, Melons Radish, Squash, &c., &c., Summer Savory, Thyme, and Sweet Marjoram.

FLOWER SEEDS.

The collection of Annual and Perennial Flower Seeds contains many new and choice varieties, raised for us by A. Stone, Esq., of this city; making our assortment altogether superior to any ever before offered in this city.

AGRICULTURAL & HORTICULTURAL TOOLS.

At our Warehouse, adjoining the Seed Room, may be found an extensive and complete assortment of Agricultural and Horticultural Implements, embracing every tool used in the cultivation of the Farm and Garden.

MASSACHUSETTS PLOWS.

We also have on hand 150 of the celebrated Massachusetts Plows, made in a superior manner from second-growth eastern timber, which we shall sell at a reduced price.

B. F. SMITH,
April 1. JAMES P. FOGG.

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

THE Proprietors respectfully announce, that their present stock of Fruit and Ornamental Trees, Shrubs, and Plants is unusually fine.

The Collection of Fruits comprises the most esteemed American and Foreign varieties: the trees are hand-some, thrifty, and of the most suitable age and size for successful transplanting; and being propagated with the most scrupulous care by the proprietors themselves, either from bearing trees in their own grounds, or from others of undoubted correctness, can with confidence be recommended as genuine.

A choice collection of Pears, comprising the most esteemed European varieties, selected by one of the proprietors personally in the best nurseries of France, is also offered: they are on Quince Stocks, intended for growing in the pyramidal form, and will bear the year after transplanting; they may be planted six feet apart, and are consequently admirably adapted for garden culture.

Over 2,000 trees of the valuable native apple the "Northern Spy" are yet on hand: this is generally acknowledged to be one of the best varieties cultivated.

The collection of Roses is very fine, including a very choice assortment of Standard or Tree Roses, 4 to 6 feet high: these are beautiful objects for lawns or borders—most of them are perpetual, or ever-blooming.

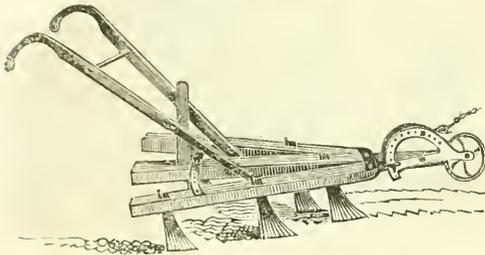
A large and splendid stock of Green-house Plants, including the finest new varieties of Roses and Geraniums, &c., are on hand, and are offered at low prices.

Trees, Shrubs, Plants, &c., securely packed for transportation to any part of the country.

Priced Catalogues sent gratis to all post-paid applications. The Public are respectfully invited to visit the establishment—location, nearly opposite the Mount Hope Cemetery.

All orders and communications must be addressed, post-paid, to ELLWANGER & BARRY, N.B. Scions of the "Northern Spy" apple, and other choice varieties, will be furnished in small quantities.

IMPROVED CULTIVATORS



FOR sale at the Agricultural Depot, adjoining the Seed Store, Front-street. B. F. SMITH & CO.

SEEDLING POTATOES.—We have a few bushels of Langworthy's Premium Seedling Potatoes for sale at the Rochester Seed Store, New Block, Front-street. B. F. SMITH & CO.

WORM BRUSHES, for the purpose of destroying Worms and Caterpillars on Fruit Trees, for sale by B. F. SMITH & CO., Bew Brick Block, Front-street.

BAGS! BAGS! BAGS!—I have a large stock of GRAIN BAGS on hand, such as Farmers and Millers will want; and shall be glad to exhibit them for sale at less prices than they have ever been sold in Western New York.

To be found at the well-known Hardware Store of E. WATTS, corner of Exchange and Buffalo-streets. JAMES H. WATTS. March 1, 2845.

THE IMPORTED HORSE "ALFRED," WHICH drew the first premium at the N. Y. State Agricultural Fair, held in Rochester, in 1843, will stand for Mares this season, (1845), at the following places, viz.:

At G. FORDON'S, near Geneva—Monday and Tuesday, April 25 and 29; ditto ditto, May 12 and 13; ditto ditto, May 26 and 27; ditto ditto, June 9 and 10; ditto ditto, June 23 and 24; ditto ditto, July 7 and 8.

At the OLD NORTON FARM, East Bloomfield—Thursday and Friday, May 1 and 2; ditto ditto, May 15 and 16; ditto ditto, May 29 and 30; ditto ditto, June 12 and 13; ditto ditto, June 26 and 27; ditto ditto, July 10 and 11.

At the AMERICAN HOTEL, State-street, Rochester—Monday and Tuesday, May 5 and 6; ditto ditto, May 19 and 20; ditto ditto, June 2 and 3; ditto ditto, June 16 and 17; ditto ditto, June 30, July 1; ditto ditto, July 14 and 15.

At JOHN BAKER'S, Macedon—Thursday and Friday, May 8 and 9; ditto ditto, May 22 and 23; ditto ditto, June 5 and 6; ditto ditto, June 49 and 20; ditto ditto, July 3 and 4; ditto ditto, July 17 and 18.

TERMS—Ten Dollars to insure a foal, payable on the 1st of March, 1846. Persons parting with Mares, before foaling time, will be held responsible for the services of the horse.

GEORGE FORDON, JOHN BAKER. April, 1845.

STOCK EXCHANGE—CATTLE, &c.

THE SUBSCRIBER has on hand a choice collection of improved thorough-bred cattle, embracing, already, superior specimens of the Short-Horn Durham and the Hereford, and a sample of the Holderness, &c., and he intends adding to his stock so as to be able to supply farmers and breeders in Western New York, Canada, or the Western States, who may wish to purchase Bulls, Cows, Young Stock, Sheep, &c., of the best breeds and most improved varieties, at reasonable prices. His design is, to establish a sort of Depot, or Stock Exchange, where orders can be supplied for any of the improved breeds of Thorough-bred, and for superior Grade animals, and where those who have choice stock of this character for sale can find a market for them, on commission or otherwise.

REFERENCES.—Editor of the "Genesee Farmer," L. B. Langworthy, Esq., and T. Weddle, Esq., Rochester. Hon. E. Corning, C. N. Bement, Esq., and Editors of the Cultivator, Albany; Hon. E. Mack, Ithaca; J. S. Wadsworth, Esq., Genesee; Judge Leland, Steuben county; Hon. D. Lee, Buffalo; Hon. J. McCollum, and W. Parsons, Esq., Lockport; M. B. Bateham, Esq., Editor of the Ohio Cultivator, Columbus, O.

The subscriber may be found on his farm, near the S. W. corner of the city of Rochester, on Genesee-street, (about half a mile south of Bull's Head;) or orders may be left at the office of the Genesee Farmer. T. H. HYATT.

Meteorological Observations.

MADE AT ROCHESTER, SEVEN MILES FROM LAKE ONTARIO, BY L. WETHERELL.

JOURNAL OF THE WEATHER FOR APRIL, 1845.

Days mo.	Thermometer.			Barometer.		Wind.	Observations.
	Sunrise.	Mid-day.	One h. after sunrise.	Sunrise.	Evening.		
25	29	42	35	29.83	29.82	W N W	Fair.
26	32	54	50	.85	.50	S W W	Cloudy—rain.
27	51	58	47	.59	.60	W N W	Fair—frogs first heard
28	50	50	44	.61	.69	NW NE	Fair—cloudy—rain.
29	52	76	59	.69	.66	S W W	Fair—loads first heard
30	50	76	65	.71	.65	S W W	Fair—Phœbe heard.
31	58	72	64	.65	.41	S W W	Fair—crocus & willow
1	48	40	38	.68	.50	W W	Cloudy—rain. [in bl.
2	35	54	38	.35	.55	..	Cloudy—snow & rain
3	29	38	33	.75	.39	N W	Cloudy snow.
4	44	48	38	.15	.49	..	Cloudy.
5	28	38	25	.55	.54	..	Fair—cloudy—snow.
6	20	41	32	.57	.41	..	Fair—cloudy.
7	24	32	26	.45	.54	..	Cloudy—snow.r.g. .03
8	22	28	26	.61	.75	..	..
9	20	38	36	.79	.50	N W W	Fair—cloudy—r.g. .15.
10	41	52	40	.14	.30	N W	Cloudy—rain.
11	35	41	34	.50	.65	..	Cloudy—fair—snow.
12	27	52	42	.76	.67	..	Fair—cloudy—r.g. .03.
13	46	62	48	.35	.40	..	Fair—aspens in bloom.
14	38	56	48	.57	.51	..	Fair—apricot ..
15	40	62	53	.60	.55	..	Fair—cloudy.
16	47	48	42	.49	.39	N E	Cloudy, rain.
17	41	54	49	.44	.51	SE NE	Cloudy—foggy—rain.
18	49	62	50	.59	.54	S E	Cloudy.
19	48	52	50	.47	.43	N W	Rainy day.
20	42	44	42	.49	.57	N W W	Cloudy—rain—r.g. .74
21	41	58	36	.60	.70	N W	Cloudy—fair.
22	44	62	54	.70	.50	W	..
23	56	72	64	.50	.45	S E	Cloudy—showers.
24	60	72	60	.55	.50	N	Cloudy—r.g. .37.

Max. (Mar. 30) ther. 76 deg.; do. bar. (Ma. 26) 29.85 in. Min. (April 9) " 20 deg.; do. " (April 1) 29.08 in.

REMARKS.—The last of March was very warm and dry. Summer heat the 29th and 30th—spring birds made their appearance, and plants began to blossom.

April—First half of the month very cold and dry; vegetation made but little progress. Frequent squalls of snow.

BEE-HIVES.

PARK'S NIAGARA BEE-HIVE, for sale at the Agricultural Depot, adjoining the Rochester Seed Store, New Brick Block, Front-street. B. F. SMITH & CO.

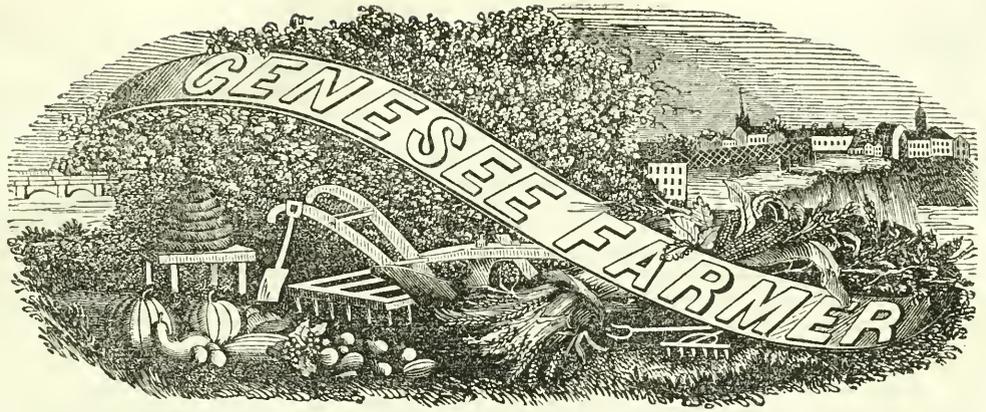
DALLIA, ASPARAGUS, and RHUBARB ROOTS, for sale at the Rochester Seed Store. B. F. SMITH & CO.

ROCHESTER PRODUCE MARKET.

Wheat,	90 a 96	Hay, ton,	\$7 50	8 00	Eggs, doz.	6 8
Corn,	37 1/2 a 40	Wood, cord,	2 00	2 50	Poultry, lb.	5 6
Barley,	40 50	Salt, bbl.	1 13	Tallow,		
Oats,	25 28	Hams, lb.,	5 6	Hops,	10 11	
Flour, (rect.)	4 25	Pork, bbl.	10 00	Wool	35 40	
Beans,	75 1 00	" cwt.	3 25	3 75	Sheep Skins,	50 75
Apples,	38 50	Beef,	2 00	3 00	Green H's, lb.	3 7
Potatoes,	18 25	Lard, lb.,	5 6	Dry Hides,	6 7	
Cloverseed,	4 00	4 50	Butter,	9 12	Calfskins, gr'n.5	4
Timothy,	1 1 50	Cheese, cwt.	500 6 50		May 1.	

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PUBLISHED MONTHLY.

BY B. F. SMITH & CO, PROPRIETORS,
At the Seed Store, Front Street, nearly opposite the Market.

DANIEL LEE, EDITOR.

FIFTY CENTS A YEAR:

Five copies for TWO DOLLARS; Eight copies for THREE DOLLARS.
 All payments to be made in advance. Money and subscriptions,
 by a regulation of the postmaster general, may be remitted by
 post masters free of expense. Address B. F. SMITH & Co.

LECTURES ON AGRICULTURE.

The undersigned, Corresponding Secretary of the N. Y. State Agricultural Society, will give free public lectures on the science and practice of rural economy, in the counties of Wyoming, Genesee, and Monroe, during the last week in June; in Oneida during the first week of July; in Madison, Cortland, and Chenango, in the second week of the same month, at such places as the Presidents of the county agricultural societies, and other friends of agricultural improvement, shall designate.

Lectures will be given in most of the counties of the State during the season; due notice of which will be published in the "Farmer," "Cultivator," and local newspapers.

A leading object of the State Society, in employing its Corresponding Secretary to visit the different counties is, to awaken public attention to the importance of diminishing the cost of growing grain, grass, and roots in this State, by adopting a better system of cultivation. It is believed that an improved system of agriculture may be generally introduced, and increase alike the wealth and the happiness of the whole community.

The undersigned hopes to receive the cordial cooperation of the farmers wherever he shall go. He claims for the cause, not for himself, a fair and candid hearing.

DANIEL LEE.

CONVENTION OF THE FRIENDS OF AGRICULTURE IN OHIO.

We are glad to see, by a notice in the Ohio Cultivator, that the friends of agricultural improvement in the Buck-Eye State are to hold a "State convention" on the 25th and 26th of June instant.

It is contemplated to establish a Board of Agriculture, encourage the formation of county societies, and make an agricultural survey of the State.

Ohio is eminently an agricultural State, and has the power to double her surplus products, and dou-

ble the revenue of her public works, by wisely improving the cultivation of her fertile soil. Her canals, McAdam roads, and railways, have cost a large sum of money; and she has only to foster agricultural science, in connection with the enterprize and industry of her rural population, to render her internal improvements highly productive, as an enduring investment of capital.

GREAT SALE OF IMPROVED SHORT-HORNED CATTLE.

Mr. E. P. Prentice, of Mount Hope, near Albany, will sell at auction, on Wednesday, the 28th of June, his entire herd of short-horned stock, numbering 50 in his catalogue. Most of this herd has been imported, and probably so good an opportunity to purchase some of the finest animals in America, at a cheap rate, will never again be offered in this country.

PREMIUMS ON FARMS.

The Monroe County Agricultural Society have resolved to grant premiums on the six best-managed farms, not less than 40 acres—reference being had to the general system of management and the profits obtained, rather than to natural advantages or expensive improvements.

Persons desirous of competing for the premiums are required to give notice to either of the committee, or to Mr. Fogg, Treasurer of the Society, at the Rochester Seed Store, before the 15th of June next.

DANIEL LEE, Chairman.

L. B. LANGWORTHY, Greece,
 J. H. ROBINSON, Henrietta,
 ELISHA HARMON, Wheatland,
 ROMANTA HART, Brighton,
 T. H. HYATT, Rochester.

"EVERY MAN HIS OWN FARRIER"—Containing the causes, symptoms, and most approved methods of cure of the diseases of horses. By FRANCIS CLATER; with notes and additions, by J. S. SKINNER.

For sale by Samuel Hamilton, successor to D. Hoyt, No. 6, State-street, Rochester. Price 75 cts.

USEFUL AND CHEAP.—A parlor stove has been invented at Baton Rouge, Louisiana, with an attached gasometer, by which as much gas can be extracted from the coal during the day as will serve for light during the evening.

WHEAT GROWERS, DO YOU HEAR THAT?

The good people of Ireland have commenced grinding Russian and Poland wheat in a large way, with the view of sending the flour to the British West Indies for a market. A cargo of flour, made from wheat purchased on the Baltic, has lately been sent to Barbadoes, and sold at a good profit. Coal is cheap on the coast of Ireland, and owing to the low price of freight out, flour can be sent from Dublin to Barbadoes, or South America, cheaper, it is said, than from New York or Baltimore to the same places. So cheap is the serf and peasant labor in the north of Europe, and so great are the facilities for sending grain to the seaboard, that the inhabitants of the world, now mainly supplied from the United States, will soon purchase the cheaper breadstuffs of continental Europe. Wheat can be delivered at 50 cents a bushel on the Baltic.

The emperor of Russia is doing much to advance the rural industry of his subjects, in the way of agricultural surveys, railways, model and experimental farms, schools, &c. The empress, Catharine II, established an "Imperial Economical Society," so early as 1765, which is mainly devoted to the improvement of Russian Agriculture. The New-York State Agricultural Society lately received a letter from its perpetual secretary, accompanied by a small volume of its transaction for the year 1844, in the German language.

From this volume we learn, that there is in the vicinity of St. Petersburg, between nine and ten thousand acres, in model and experimental farms, in connection with agricultural schools. At these colleges, as they are called, no fewer than 3,725 young men are studying both the *science* and the *practice* of rural economy. The course of practice and study embraces a period of from four to seven years.—These young men are to become the overseers of the estates of noblemen, and direct aright the labors of serfs and peasants.

When will the farmers of New-York wake up to the importance of teaching their sons the science of agriculture? If a knowledge of the unerring laws of nature, which govern all the results of rural industry, is so valuable in Russia, where human toil is so very cheap, can this same knowledge be worthless to the cultivators of the earth in the Empire State, where labor is, comparatively, very expensive? Heaven preserve the next generation of farmers in New-York, from whose minds the light of modern science has been most cruelly excluded. We must teach our children how to feed and clothe the human family, with as little labor, and as great an improvement of the soil, as is done elsewhere, or their unprofitable, unwise toil will hardly bring three good meals a day, with comfortable clothing and a fair shelter at night, on an average, from the cradle to the grave.

"AN ACT FOR THE PROMOTION OF
AGRICULTURE."

The above is the title of the law passed in 1839, granting \$8,000 a year for five years to the State and county agricultural societies. This law was renewed by the late legislature for three years, and until repealed. Only about \$6,000 are taken by it from the treasury—many counties having never organized societies, and raised by voluntary subscription the sum required to entitle them to aid from the State.

SHEEP ON THE PRAIRIES.

We learn, from persons familiar with the facts, that several thousand sheep have, thus early in the season, been driven from central and southern Ohio on to the prairies in Illinois. A gentleman of Buffalo has a flock of 3,000 in the neighborhood of Ottawa, on the Illinois river, which has been kept there for three or four years, with the loss of very few, (less than 100,) and with great success. The wool of this flock was made into cloth at the West, last year, and consumed at home.

The quantity of wool to be sent into this State from the almost boundless prairies of Illinois, Wisconsin, Ohio, and Missouri, will soon render the wool-growing business in New York a matter of small profit. Our farmers must study and practice the most rigid economy in providing both summer and winter forage for their flocks. Those that have a piece of ground well adapted to the production of turnips, should raise enough to supply their sheep with this root during all the cold season of the year.

There are not many dry sheep pastures but what will be much benefited by a top-dressing of gypsum. Leached ashes scattered over pastured fields will increase the yield of grass, and improve its quality. A pasture treated in this way, and fed by sheep a few years, will be in a finer condition to give a large crop of wheat. With skillful management, a flock of sheep can be made extremely serviceable to a farm, in the way of improving the soil. Hence, in this State, where the carcase is valuable for the butcher, and the manure for enriching the land for cultivation, we may still compete with the prairie wool-grower, who must depend exclusively on his fleeces for profit. We must study to grow 50 per cent. more grass, hay, oats, peas, beans, potatoes, and turnips for our sheep, on an acre of land, than we now do. A few oats and peas fed regularly to sheep during the winter are very valuable to keep them in condition, and develop a large clip of wool.

The manufacture of wool from the ingredients that go to form this animal substance is a matter of deep interest to the farmers of Western New York. It is practicable to increase both the weight and the quality of the fleeces, by judicious breeding and keeping. It is also practicable to increase the aggregate yield of mutton and tallow from any given quantity of food now consumed by 100 sheep. The living machinery that transforms grass, hay, &c., into lean and fat meat, wool, and the like, can be improved so as to do its work to a better advantage. The operations of this machinery should be well understood by every wool-grower that hopes to prosper by changing his cultivated plants into wool and mutton. Sheep should be regularly salted twice a week, and have a good shade to protect them from a hot mid-day sun. This remark will be more important to those having large flocks on the open prairies at the West than to the wool-growers in this State. We have seen several sheep that had been bitten by rattlesnakes in Illinois, some of which died, and others recovered.

THE LATE FROSTS.—The recent frosts have been very destructive to apples and peaches in several counties in Western New York. The corn crop is not far enough advanced to be much injured by this untimely freezing. The weather is still cold—(May 20th)—any thing but favorable to summer crops. Wheat generally looks well.

STATE CENSUS FOR 1845.

The amendments made to the old law directing the census to be taken once in ten years in this State, will render the returns of agricultural statistics full and highly interesting. Hitherto neither the national nor state census has told us how many cows are milked in New York, nor how many sheep are clipped, nor how many acres are sown in wheat, rye, oats, &c. The U. S. census gave the number of bushels of grain, but not the acres cultivated. It gave the aggregate pounds of butter, cheese, and wool; but not the number of cows milked, nor the sheep clipped.

The editor of this paper prepared several tables embracing many facts pertaining to rural affairs, which are a part of the law. The census is to be taken by *election districts*; and the marshalls are to be appointed by the supervisor, town-clerk, and town superintendent of common schools. They will receive \$1.50 per day for their services. It is to be hoped that the censuses to be taken this summer will be more accurate than any which has preceded it since the formation of our government. Every farmer should be careful to state the exact truth in answer to all questions relating to agricultural statistics. When all the facts are known, and fairly brought before the legislature, there can be no difficulty in placing the farming interest in the front rank of legislative favor.

Farmers must act together, and be ready at all times to foster their own prosperity, and ward off any evils that may threaten their interests. There should be an active farmers' club in every town in the State, for mutual instruction, and for the common improvement of all. We can better our condition in the world by enlarging our professional knowledge, improving our farms, our fruits, and our domestic animals. We can study the laws of Nature in the formation of fertile soils, in the production of vegetables and animals; and having learned the requirements of these natural laws, we shall realize the best gifts of heaven by complying with the same. Knowledge, virtue, and human happiness are progressive. God has given to the farmers of New York the ability to command and enjoy these blessings in an eminent degree.

COLMAN'S EUROPEAN AGRICULTURE;
PART III.

The third number of this popular work has come to hand during the present month. It is mainly devoted to the important subject of Agricultural Schools, as they are established and conducted in Great Britain.

Mr. C. speaks in terms of high commendation of most of these institutions. They are evidently doing much to improve both the tillers of the soil, and fertility of the earth on which they are established.

The present number contains several analyses of guano, with accounts of its use, &c.

Mr. Colman is a very agreeable writer; and we like the *author* all the more because the sympathies of the man are ever with the rights of humanity; and his leading object aims to abate human suffering, and elevate our race.

For sale by James H. Watts, agent in this city.

MUFFINS.—Take 3 pints of flower, 1 pint of water lukewarm, 1 tea cup full of baker's yeast, 1 great spoonful of sugar, 1 tea spoonful of salt—make them up in the morning for tea, or at night for breakfast, and bake them in muffin rings.

IMPROVEMENTS IN AGRICULTURE.

"The great truth that animal manures are nothing else than the ashes of the food produced from our fields, consumed or burned in the bodies of men and animals, has given the chief direction to all modern improvements in agriculture."—*Liebig*.

The above remarks deserve the profound consideration of every practical farmer. After an animal has attained his maturity, and adds nothing to his weight in the course of a year, it is obvious that the matter which escapes from the body must be the same in quantity as that which enters it. A very notable portion of the food of all warm-blooded animals passes out of the lungs in the form of air and vapor during their ceaseless respiration night and day, just as wood passes out of a chimney when burnt in a fire-place. The combustion of grass, hay, and grain in the system of the cow, horse, or sheep is not so complete as that of fire applied to the same substances in the open air. In the latter case, nearly all the combustible ingredients—carbon and hydrogen united with oxygen and nitrogen—are expelled into the atmosphere. In animal combustion, a larger portion of carbon, hydrogen, oxygen, and nitrogen remain with the ashes contained in the food taken into the stomach, and voided with the solid and liquid excretions.

The time will shortly come in this State when the liquid and solid manure derived from the combustion of one ton of hay, or 100 bushels of grain, will be worth half as much to make another ton of hay, or 100 bushels of grain, as the original crops were worth.

That portion of cultivated plants which escapes into the air through the lungs of man and his domestic animals, growing plants can regain by their roots and leaves, and thus reorganize into animal food. But the case is different with the ashes or earthy portion of all plants. If these minerals are taken from the soil in crops, and not faithfully restored, by replacing on our cultivated fields all the *salts* contained in the excretions of the human family and of domestic animals, the injury to our State and our race will be large, almost beyond calculation.

Nearly one-third of all the wheat grown on the globe is raised by the Chinese. For thousands of years this wonderful people have cultivated most successfully this bread-forming plant. For a long period their wheat-fields have been fertilized almost exclusively with the ingredients of wheat derived from its decomposition in the human system. In other words, they manure their fields with *night-soil alone*.

In Belgium and Flanders, the liquid excretions of all animals are diluted with twice or three times their bulk of water, and are then spread over the growing crops, or on to plowed ground, from a watering cart.

Many years of experience have demonstrated the fact, that the urine of a single cow for a year is worth \$9.50 to make into wheat to be sold at 70c. a bushel. In Holland, cows are kept up the year round in stables, mainly to save every particle of their excretions. The manufacture of corn, wheat, barley, oats, hay, potatoes, pork, beef, butter, cheese, wool, and horse flesh, can be reduced to an exact science. The laws of chemical affinity, of vegetable and animal vitality, are *uniform* and easy to be understood, so far as successful agriculture is concerned. One of these laws is, that no man nor vegetable can possibly make *anything* out of *nothing*,

Another is, that one simple substance, like carbon, can not be transformed into another simple element, like nitrogen. Clay cannot supply the place of sand, nor sand of clay. It will require as much matter, and the same kind of ingredients, to form ten million bushels of wheat or corn, in 1845, that were consumed for that purpose in this state in 1844. The same remarks will apply to all agricultural products, whether vegetable or animal.

How, then, can a practical farmer, cultivating 60 acres of arable land, send to market 20 tons of grain, pork, beef, mutton, wool, roots, butter, cheese, and the like, every year, to pay for his groceries, dry goods, nails, crockery, and mechanical work, and not ultimately sell all the ingredients in his 60 acres, which will form crops enough to pay for cultivation, fences, and taxes? Suppose you have the materials to produce 50 good crops in your now fertile soil, when those materials are worked up and sent to distant cities, where then will the largely increased population of the State go to find their three good meals a day, clothing, &c.? Do you say, to the West? But what right has the present generation to consume and destroy the natural fertility of God's bountiful earth, to the serious injury of those who are to succeed them?

By every principle of common justice and philanthropy, we should augment the natural productiveness of the soil at least 4 per cent. per annum, or double its fruits in 25 years. For in that time our race double their numbers, and their physical wants, in the State of New York.

THE ALPACA.

We are happy to learn that a few enterprising wealthy gentlemen of this State are about to import a lot of Alpacas from South America, this season. They are said to clip about 10 lbs. of wool, worth from 25 to 30 cents per lb. per head. They are very hardy animals, and those taken to England have done remarkably well. Several millions of pounds of Alpaca wool are annually imported into Great Britain. It is made into mousin de lains, and a variety of other fabrics, being long, fine, and almost of a silky texture. We doubt not that the Alpaca will prove a valuable acquisition to our present stock of domestic animals.

EXPORT OF WOOL FROM NEW SOUTH WALES.

In a late number of the London Farmer's Magazine, it is stated that the wool exported to the United Kingdom of Great Britain, from New South Wales, in

1827, was 320,683 lbs.	1840, was 7,000,727 lbs.
1830, .. 973,330 ..	1843, .. 11,942,557 ..
1835, .. 2,668,440 ..	1844, .. 14,000,000 ..

The above figures show a wonderful increase within a few years. The highest price realized for wool from Van Diemen's Land was 2s. 6d.

Prize wool from the Cape of Good Hope sold as high as 2s. 10d. per lb.

CHICAGO.—This city contains 10,864 inhabitants, according to a census taken in December. During the last year there were erected 871 buildings of all sizes. The foreign population of the city is as follows: 1,056 Germans, 972 Irish, 531 Norwegians, and 683 natives of other countries. There are three hundred dealers in merchandise of different descriptions, nearly one-half of whom sell at wholesale and retail. The different professions seem to be as well stocked as the mercantile community. There are 48 lawyers, 28 physicians, and 17 clergymen.

For the Genesee Farmer.

FALL PLOWING.

MR. EDITOR—I am a young farmer, though I confess to some grey hairs, having been engaged in other avocations through life so far: and in determining upon any process in the operations of my farming, I have to look at the reasons and rationality of it, before settling my mind upon the course best to pursue, not having the experience that other and better informed heads possess.

I for one thing want to know what are the advantages of fall plowing green sward. If turned over early in the fall the grass grows, or if late in the season and immediately frozen, it does not rot nor does any decomposition take place; and as soon as vegetation takes place in the spring, all the wild grasses start up, and by the middle of May it is pretty fair pasture. If you plow it again for spring crops, every sod and root is perfectly alive and unrotted, and no better off than if you plowed it twice in the spring. Why is it not a better process to turn it over well in the spring, harrow it lengthwise, and sow or plant it immediately before the grass-roots can start, giving the crop a chance to get ahead and master the foul grasses and weeds. H.

BRIGTON, May, 1845.

REMARKS ON THE ABOVE.

In answer to our young farmer with the old head, we will state what we think the advantages of fall plowing consist in:

With respect to its "killing the grasses," the freezing and thawing and exposure of the roots to the vigors of the winter, has a strong effect in weakening their vitality, and perhaps in killing some of them. But the greatest effect is produced by the bleaching (*Eliolation*, as the gardeners say,) the leaves, which are the lungs of all plants, and causing them to lose their color, and to become weak and feeble, so that when again plowed in the spring, if as late as May, when the dry season has commenced, and the sun has power, they easily wilt, and rot. This is the effect of the sun and exposure to all plants grown in the shade.

Another good effect is produced by the amelioration of the soil, by the disintegration and decomposition of its constituent parts; especially if they are inclined to clay, by the action of the frosts, and its absorption of the ammoniacal and other salts from the atmosphere and the snows, which is proven to contain a sensible portion of those all important items to vegetable production.

Another advantage is, the almost certain annihilation of the grub, wire, and cut worm, when in their incipient stages; especially when plowed late, when the insects are so torpid with the cold as to be unable to again burrow below the reach of the frost for protection.

Again, a good job of work is performed for the advancement of spring business, and at a time when there is little else to employ the teams about.

These are the principal advantages that strike us as most prominent in favor of fall plowing. We should like to hear from some of our experienced farmers on the subject.

L. B. L.

THE SUNFLOWER.—It is said of this unornamental but intrinsic flower, that it is destined to become one of our most valuable agricultural products.—One hundred pounds of the seed afford forty pounds of oil. The refuse of the seeds, after expression furnishes an excellent food for cattle.

From the N. Y. State Transactions—1844.

MANURES—THEIR WASTE, &c.

BY L. B. LANGWORTHY.

The vast importance to the agricultural community, of manures, is a subject almost too palpable to require my poor aid in enforcing its value and claims; yet I propose to treat the subject in a plain manner, adapted to the ability and comprehension of the common every day, practical farmer, which station is the bounds of my ambition in that line.

The present days are prolific with able, learned and valuable treatises on the subject. Chemistry and analysis are taking the place of superstitious dogmas and venerable vulgar errors, and some of the great lights of the age are engaged in developing and elucidating the mysteries of manures, which in fact and verity is the true and long sought *Philosopher's Stone*, which by-gone credulity supposed gifted with the magic property of turning all substances it touched into gold.

The object of this article is to show the waste and loss of a great part of the valuable properties—the very life blood, heart and soul of manures, as generally made and produced by a great majority of farmers in all parts of the country; even those who are ambitious of being estimated as good practical and economical husbandmen.

The great and prominent fault, as I consider it, lies in the exposure of the droppings of animals during the feeding season, promiscuously over great rambling barn-yards, wholly exposed to the rains and melting snows; whereby at least three quarters of the true and elementary properties of the manure are leached off and lost.

What should we think of the housewife, who, as she gathered her ashes for spring soap-making, should pile them out upon the snow, exposed to all weathers? Would not every one exclaim with the prompter, "she does not work it right." In what point are the two processes different?

It is only the liquid and soluble parts of barn-yard manure, which renders it superior to *sawdust*, or mere undecomposed vegetable matter; let any one observe a horse dropping deposited in the fall of the year, which has laid exposed to the weather till some day in May; crush it and it is a dry, pulvulent, inodorous mass of finely cut hay, without taste or smell, and is in fact worth no more than so much stubble, except that it is finer, and if mixed with the soil would sooner decompose and form *humus*, or the food of plants; the virtue is washed away by the great floods of winter and spring, and is careering on to its destination, the Atlantic ocean. During a rain or thaw, observe the pools, puddles and streams of dark colored, rich leachings about the barn-yard, that pass off into the next ditch, and are lost. Can this be economy? Is there no better process for preserving so valuable a material for the farm within the reach of those of ordinary means?

It has been speciously urged that barn-yards should be concave, or lowest at the centre, with vats to contain the liquid manure; but in most cases it is a fallacy, as the quantity of water that falls on the surface, and the drippings of roofs, and melting of snows, is so great, that it will fill up the hollow of the yard and pass off, nor could any sink or vats be constructed capacious enough to contain the liquids within the ability of common farmers, and even if it were possible, the quantity would be so diluted, that it could in no way be profitably used.

Tanks and drains attached to stables where cattle

and horses are housed, is undoubtedly a great saving and improvement, for containing the urine; but is such a departure from the habits and customs of our generality of farmers, that it can hardly prevail to any extent. None but the wealthy, or the *parvenues*, will go to the expense, or venture on the innovation.

Most barn-yards are *too large*, and many are without water, and cattle are obliged to travel half or three-quarters of a mile for drink, and then allowed to wander in the streets or fields for the rest of the day, depositing their droppings where they are of no use, beyond the reach of the owner. This is decidedly wrong; if manure is worth any thing, it is worth saving; and those who are so prodigal of their manure, should go to England, and see thousands of the poor gaining a livelihood by picking up the droppings of animals by the road-side, and selling it to the workers of the soil.

Barn-yards should be as *small* as the stock kept will permit, and care should be taken that descending grounds in the neighborhood do not send their surface waters into them. All surplus straw that cannot be eaten by the stock, should be liberally spread over the yard and under the sheds, to be beaten up and to absorb the liquids; being composed of hollow cylinders, when once filled with liquid manures, it holds it by capillary attraction, and will not part with it, even in heavy rains, and therefore is an important agent of absorption.

But after all, the true way to do the thing right—to make manure and then to save it—is, to *stable* and litter the animals, and make the manure under cover, and keep it there; but when inconvenient, it may be thrown out in heaps, the exposure to rains affecting it but little, in comparison to its lying scattered over an acre of ground.

It is a well ascertained fact, that the quantity of food required by the animal system to keep up its natural heat, is greatly influenced by heat and cold. Man or beast, when exposed to excessive cold, require one-third more food than when protected by housing or artificial heat; the *animal stove*, like the mechanical one, requires more fuel in cold weather than in warm; this is palpable to every observer, with respect to his own person, and is applicable to the whole animal creation, and in strict accordance with the eductions of philosophy. How important, then in the fattening process, or in the mere subsistence of animals, on the score of economy, is protection and warmth for the farm stock—to say nothing on the score of humanity—and when the increased value of the manure is taken into consideration, how important becomes the stabling and shed protecting system.

Another method is practiced with great economy, by the use of *feeding sheds*; they should be from twenty to twenty-four feet in depth, and as long as may be required; with a double roof, with purloin plates to sustain it; the posts twelve feet long and the beams at seven feet from the ground, leaving a large space above for the general store of hay for winter feeding, with a strong feed rack on the back side, and a long sloping brace every five feet, to protect and give confidence to the underlings, against the master cattle, and yet not so as to confine them, that they cannot see them and change places when they move; there should be sliding doors every twenty feet in front, to take in the hay, and a row of studs on the back side of the upper story, to secure a passage of four feet, and an opening over the rack, to feed through.

By having this great depth and small height, snows and storms do not beat in on the open side; there is space for the whole stock to stand or lie down.

How often do we see one or two of the master cattle stand or lie down at their ease, in common shallow sheds, in such a position as to keep out all the others—when there is room enough, if they could all agree. By this method, you only feed in the sheds, and litter them freely; whereby you insure the greatest part of the manure and urine under cover, by the time spent in eating and sleeping under them, and during storms and excessive cold. At least three-quarters of the whole winter's dropping will be under the sheds—and that three-quarters will be worth more than double the amount of leached and bleached material which lays five or six months exposed to the elements.

You also by this method save the trouble of stabling and tying up the cattle, and the manipulations of cleaning them and the stables, so objectionable to many persons not educated in that system.

If, as *Liebig*, the great agricultural chemist, asserts, and proves it too,—that the liquids of absorption contained in the dung of cattle, are worth thirteen times as much as the vegetable matter constituting its bulk,—and there can be no doubt but almost the entire active virtues of barn-yard manure reside in the urine and liquid absorption of the solids,—all the salts and ammonia are due to it, the rest is mere vegetable fibre, and constitutes mold when decomposed. Under this state of the case, the system of making and keeping manures under cover, is too palpable to be neglected.

In those localities where hay is worth any thing in market, and can be sold at a profit, the great saving in the quantity required to winter cattle, becomes a great item, by feeding from racks or deep bins under cover and in a warm stable—in place of scattering it on the ground and in the mud, with the animals constantly passing over it with their dirty feet, treading it into the filth and totally spoiling it.

Let any one who finds his thirty by forty feet barn too small to contain both his hay and grain, instead of enlarging it, or building another, put up one of these sheds, sixty or eighty feet long, according to his stock, and fill it up with hay, from the floor to the verge pole, and if he don't find it a comfortable operation on stormy days, and a mine of wealth the year round, then his humble servant will sign a *cognovit* that he believes wheat will turn to chess.

SOWS DEVOURING THEIR OFFSPRING.—Some have supposed that this is caused by a desire for meat, and they have fed pork to their sows to remedy the evil. But it is a mistaken view of the case. When they are confined to a sty or small pen, they are deprived of pure earth, and various condiments that conduce to their health, consequently a feverish habit is induced, which causes an appetite unnatural, and the unfortunate animal, in her friendless state, attempts to satisfy it by eating her own offspring.

It has been found that when hogs run at large, seeking various condiments as they please, they do not devour their young. Allow the sow as much room in the yard as convenient, and throw in fresh, pure earth, if there be not a supply; and if she be limited to a small space, where there are no green vegetables, give her weeds and grass sods, also charcoal and rotten wood.—*Boston Cultivator*.

For the Genesee Farmer.

WHEATLAND.

MR. EDITOR,—Having long been a reader of your paper, with pleasure and profit, I have ever been pleased with the practical communications from practical men which it has from time to time contained; but having no aspirations after the prerogatives of a teacher, I have been content to sit at the feet of others, and learn. A few observations, however, on the past and present state of agriculture, and of the agricultural community of which I am a member, may not be without interest to your readers:

The soil of this town is mainly an open gravelly or sandy loam, alternating with spots of clay, of the kind commonly denominated oak openings, with some intervals on Allen's Creek and the Genesee river. In days of yore, when the red man held undisputed sway, it was covered with a heavy, long growth of coarse grass, which was annually burnt off to make good feed for the deer, and good hunting for the lords of the forest. This annual burning prevented the growth of small bushes, and gave the country a beautiful and park-like aspect. In process of time, as the settlers became more numerous, this annual burning was suppressed, as it endangered the fences and buildings of the farmers. The deer and wolf, and the red man, gave place to the lowing herd, the bleating flock, and the white man; and the tall rank grass to huckleberry, oak, and hickory bushes.

At this period, the writer of these lines became acquainted with this town. The inhabitants belonged to that class of men whose patrimony consists in their own strong arms and resolute hearts, and whose fortunes were their habits of industry, economy and prudence; and truly they had need of all these, for their land, impoverished by the frequent burnings, returned a poor reward, and if they did not

Drive the venturesome plow-share to the *sleep*,

they tilled a hard and sterile soil. Their crops of wheat, for years, would not average more than from seven to ten bushels per acre; and if, by luck or chance, a poor farmer realized fifteen, he thought his fortune nearly made. You may be sure they were too poor to patronize agricultural journals, had there been any; for between the wants of their families and the pressing calls of the land offices for their dues, little leisure was left for mental culture, and but little money to pay for agricultural or other papers.

About the year 1812, the Wheatland plaster quarries were discovered. This was the dawning of a happier day for the farmers of Wheatland; but its value as a manure, and the proper method of applying it, were not understood till many years after this. After repeated trials and experiments, the almost universal system adopted is, to sow the plaster with clover, and alternate it with wheat. Wheat one year, then clover and wheat again; or pasture or mow one year, then fallow and sow with wheat. Under this system, which has been practiced for the last twenty years, our farms have gone up from their former miserable condition, to an average of twenty to thirty bushels per acre; and crops of larger yield are not unfrequent. Whether the system followed here is the best and most profitable may perhaps be doubtful, and perchance form a subject for further consideration.

Yours,

W. S.

Wheatland, April 21st, 1845.

From the Cultivator.

EXPERIMENTS IN THE CULTURE OF INDIAN CORN.

We are indebted to our friend Geo. Geddes, Esq., of Onondaga county, N. Y., for the following detailed account of several experiments made by him, with great care, the past season, in the culture of Indian corn. They will be read with interest, and our readers will be glad to learn that these experiments will be continued with the same exactness the ensuing season. Mr. Geddes says:

The soil is a deposit of gravel, mixed with sand and clay, resting upon a gypsecous shale. The previous course of cultivation has been as follows, viz: In 1837, a crop of corn was raised on a heavy sod turned under that spring, and slightly manured with barn-yard manure. The yield was estimated at 65 bushels to the acre. In 1838, corn was again raised, and without any manure; estimated to yield 50 bushels to the acre. In 1839, it was sown with oats, and yielded a very heavy crop. Grass seed was sown with the oats, which succeeded well.—The next four years it was pastured. Plaster was put on both corn crops and on the oats, and once or twice on the pasture.

The ground was plowed about the first day of May, six inches deep, and planted on the third and fourth days of that month.

The variety of corn was the improved Dutton;—that is, Dutton that had been selected from the earliest ears for a series of years.

Experiment No. 1—One acre was planted in hills three feet apart each way, six kernels in the hill.—Fifty loads of half rotted manure was put on this acre after it was plowed, and harrowed in as well as it could be done; it being so coarse that it piled up a great deal before the harrow. The hills had a hoe full of the best of the manure drawn in by the planter, and the corn dropped into it. It was hoed twice, and a cultivator was run once along each row both ways, at each hoeing. The account of the cost of cultivation, is as follows, viz:

To plowing and harrowing one acre,	\$1 50
“ 50 loads of manure, drawing and spreading, 12	50
“ 2 days’ work of one man planting,	1 50
“ cultivating for both hoeings,	50
“ hoeing twice, 3 days’ work,	2 25
“ harvesting, 3½ days’ work,	2 63
	<hr/>
	\$20 88

The product was 70½ bushels—at 4s.= \$35 25—20 88=\$14 37 for the use of the land; or the corn cost, besides the use of the land, \$0 29.6 per bushel.

Experiment No. 2.—The other acre was cultivated as follows: One-tenth was planted in hills three feet by two apart, six kernels in a hill, and without any manure. The account of the cost of cultivation is as follows, reduced to acres.

To plowing and harrowing one acre,	\$1 50
“ planting 2 days,	1 50
“ cultivating,	50
“ hoeing twice, 4½ days,	3 37
“ harvesting 3 days,	2 25
	<hr/>
	\$9 12

The product was 60½ bushels to the acre, at 4s.= \$30 12—9.12=\$21 00 for the use of the land; or the corn cost besides the use of the land, \$0 15.1 per bushel.

Experiment No. 3.—Another tenth was planted

the same distance apart, and the same number of kernels in the hill as the last—and was manured, by filling each furrow as it was plowed, full of barn-yard manure, unfermented—the amount used being at the rate of 150 loads to the acre. The cost of production was as follows, reduced to acres:

To plowing and harrowing one acre,	\$1 50
“ 2 men to fill the furrows with manure, ..	1 50
“ 2 days’ work planting,	1 50
“ 4½ days’ hoeing,	3 37
“ cultivating,	50
“ 3 days’ harvesting,	2 25
“ 150 loads of coarse manure,	18 75
	<hr/>
	\$29 37

The product was 70 bushels to the acre, at 4s.= \$35 00—29 37=\$5 63 for the use of the land; or the corn cost, besides the use of the land, \$0 42 per bushel.

Experiment No. 4.—Another tenth was the same distance apart, and the same number of kernels in the hill as the last, and manured with coarse manure in the same way, and had beside, a top dressing of half rotted manure, at the rate of 25 loads to the acre. The cost of production was as follows, reduced to acres:

To plowing and harrowing one acre,	\$1 50
“ 150 loads of coarse manure,	18 75
“ 25 “ fine “	6 25
“ 2 days’ work to put manure in furrows, .	1 50
“ 2 days’ planting,	1 50
“ 4½ days’ hoeing,	3 37
“ cultivating,	50
“ 4 days’ harvesting,	3 00
	<hr/>
	\$36 37

The product was 80 bushels to the acre, at 4s.= 40 00—36 37=3 63 for the use of the land; or the corn cost \$0 45.5 per bushel, besides the use of the land.

Experiment No. 5.—Another tenth was planted in drills, three feet apart, the corn four inches apart in the drills. It was manured with 25 loads of half rotted manure to the acre, put on after the plowing. The cost of production was as follows, reduced to acres:

To plowing and harrowing one acre,	\$1 50
“ 25 loads of manure,	6 25
“ drilling in seed 4 days,	3 00
“ 2 hoeings, 3 days’ work each,	4 50
“ cultivating,	50
“ harvesting (small ears) 4 days,	3 00
	<hr/>
	\$18 75

The product was 55 bushels to the acre, at 4s.= \$27 50—18 75=\$8 75 for the use of the land; or the corn cost \$0 34 per bushel, besides the use of the land.

Experiment No. 6.—The remainder of the ground was planted in hills three feet by two feet, six kernels in the hill, with a top dressing of 25 loads of half rotted manure to the acre. The cost of production was as follows, reduced to acres:

To plowing and harrowing one acre,	\$1 50
“ 25 loads of manure,	6 25
“ 2 days’ work planting,	1 50
“ 4½ days’ hoeing,	3 37
“ cultivating,	50
“ 3½ days’ harvesting,	2 44
	<hr/>
	\$15 56

The product was 65 bushels $\frac{1}{2}$ to the acre, at 4s. = \$32 75—15 56=17 19, for the use of the land; or the corn cost, besides the use of the land, \$0 23.7 per bushel.

It is proper to say, that the cost of labor for such small parcels, is a difficult thing to determine with perfect accuracy.

The stalks being of such equal value upon each piece, I have supposed it unnecessary to attempt any separate measurement; neither have I kept any separate account of the cost of the seed, for the same reason. The whole was plastered, but the expense being so slight, and costing the same for each piece, no account has been made of it. The manure is charged at its full value in each case, though the land is greatly benefited for future purposes. Hardly a quarter of its cost is justly chargeable to this crop. In No. 2, we have an example, in which the effects of the manure are easily traced through many years. The last manuring this piece had was in 1837—and it now produced 60 $\frac{1}{2}$ bushels to the acre. No charge being made against it for manure, it appears to be profitable above every other experiment. But if the account could be stated for a period of years for each piece of land as we have it for this year, I doubt not the manure would be found to pay fully all its cost.

These experiments were made chiefly to determine *how thick* corn should be planted—what is the *most convenient form to place the plants*—and whether the manure should be rotted and applied to the surface, or plowed under unfermented. The conclusion that now appears likely to be arrived at is, that hills three feet by three feet apart, put in rows, so that a cultivator can be used both ways, is the most convenient form for cultivation, and that six kernels put into each hill, will make the corn thick enough. I counted, and made examinations that satisfied me, that at harvest my hills averaged five stalks to the hill—no thinning was done, except by insects and accidents. That this is not too thick, is proven by experiment No. 6, where the hills were three feet by two feet, the product being 65 $\frac{1}{2}$ bushels to the acre, and with one-half the manure that was put on No. 1, which was three feet by three feet apart, and the product only five bushels more to the acre. In fact, I believe that more bushels with the same manuring would have been raised with the hills two by three feet, than three by three feet, but the extra labor of planting, hoeing and harvesting, will more than counterbalance the gain.

The labor required to plow under *unfermented* manures in any considerable quantity, is so great, and its great bulk compared with its value, making it so expensive to draw, and the fact that it is not felt until late in the season—and that the next plowing must be deeper, in order to bring it all up and mix it with the soil—are great objections to its use. That the next plowing must be deeper, in order to bring up all the manure, is evident from the consideration that every time the soil is saturated with water it must sink deeper, unless it is held up by some stratum that is impervious to water. If the contents of the barn-yard are piled up in the spring as soon as the frost is out, and covered with gypsum so as to prevent the escape of any of its gases, and turned and re-piled at midsummer, and again covered with gypsum, the seeds of weeds will be destroyed, and the manure will be entirely rotted in time to put on the corn the next spring. The manure used in these experiments was but half rotted, in conse-

quence of neglecting to turn and repile it. From the decrease of bulk, the expense of handling and mixing the manure with the earth, will be so much lessened as fully to compensate for all the expense of piling and rotting it.

The cost of the gypsum, too, will be but slight, as but little is required; merely enough to whiten the heap. The corn will then have its stimulus at the time it needs it most; and but few weeds will spring up from the manure. All these considerations lead me to prefer fine manure to coarse.

It is worthy of remark that in No. 2, where no manure was used, the yield was 60 $\frac{1}{2}$ bushels—in No. 3, where 150 loads of unfermented manure were used the yield was 70 bushels—a gain of 9 $\frac{3}{4}$ bushels to be ascribed to the manure; in No. 4, with the like amount of unfermented manure, and 25 loads of fine manure, the product was 80 bushels—a gain of 10 bushels to be ascribed to the fine manure—showing that one load of fine is worth more than six loads of coarse manure. While No. 6, which was manured with the fine only, yielded 65 $\frac{1}{2}$ bushels—a gain of 5 $\frac{1}{4}$ bushels to be ascribed to the same amount of fine manure. Showing that one load of fine is worth about three and a quarter of coarse manure. But the land on which No. 6 was raised, was not as rich as Nos. 2, 3 and 4, owing to the fact that it was so situated in the field that it had not been as highly manured in those years gone by, when manure was only drawn out of the barn-yard “to get rid of it.” Nos. 2, 3 and 4, were nearer the gate, and had been served about alike, and furnish the fairest test of the value of the different kinds of manure.

Some of the results obtained by these experiments were unexpected. The highest yield is very far below the great crops that have been reported. I know not why a hundred or more bushels to the acre were not raised on No. 4, with manure both on top and under the furrow, amounting to 150 loads of coarse and 25 loads of fine to the acre; and that too, along side of land that *without any manure*, yielded more than 60 bushels to the acre.

I purpose next year to plant all of this ground with corn, and carefully measure the product of each piece, with a view of learning the effects of this manuring for the second year. GEO. GEDDES.

MANURE MAKING.—There is one means of making manure on every farm, which is too commonly overlooked or not availed of—we mean, from the wash and waste liquors of the house. Cart a load of loam near the outlet of your sink, and carry the spout on to it; shovel over the heap occasionally, and in six or 8 weeks the mass will be enriched, and a fresh lot may be brought to undergo the same process. Thus, in the course of the year, several loads of manure may be made at a trifling cost, and of a quality hardly inferior to that from the barn-yard. This hint is worth something.—*N. E. Farmer.*

TO PREVENT SMUT IN WHEAT & OATS.

The following steep, recommended by Professor Johnston of Edinburgh has been tried in Scotland, and found to be alike serviceable to the crop, and a preventive of smut: Dissolve 1 lb. of phosphate of soda, 1 ditto of Epsom salts, 1 ditto of saltpetre, 1 ditto of common salt, and 1 ditto of sal-ammoniac, in 10 gallons of water, in which 300 lbs. of wheat or oats may be steeped 12 hours.

The seed should be dried before sowing or drilling, with plaster or quick lime.

EDUCATE FARMERS—AVOID LITIGATION.

Siloam, N. Y., May, 1845.

MR. EDITOR,—In casting my eye over the advertisements, in the April number of the Farmer, they rested upon these words, "Aurora Agricultural Institute." The thought struck me that the time has come: but in hastily running over the notice, I found near the bottom—"Terms, \$150 per year." I involuntarily muttered to myself, "No provision made yet for the poor farmer boy!"

I then asked myself, (as I do all others to whom these presents shall come greeting,) if our law makers could cast their eyes, at a glance, upon the many lofty foreheads and intelligent countenances of the lads in this State whose parents are not able to pay the \$150 above quoted, and are thereby deprived of access to this storehouse of knowledge, which I believe to be the most important in the world as regards this life—would they not at once act, and establish upon a firm basis an institution of this kind, (yes, a dozen of them,) and upon a platform that should admit, upon the principle of so many hours labor to be performed by each pupil, the dollarless lads that are to be found by thousands, and who by this blessing would become as intelligent and enterprising as any in the State. Then, thought I, what a change would appear by the next generation on the face of the earth! The sickly golden-colored corn, that yields from 7 to 10 bushels per acre would appear in a dark-green leaf, and a yield in proportion. The rusty, smutty nine-bushel-per-acre wheat would be seen in its natural straw-colored dress, yielding to the husbandman who had access to this nursery of sound knowledge his forty or sixty fold; the half-fenced and half-tilled farms that greet our vision as we travel through the country, would by the next generation disappear, and the farmer as well as the farm would be seen in so different a dress, we should conclude that we had, unobserved, been set down in another world.

But the objections that would be made by our law-makers, or almost all of them, to appropriating any funds to elevate the agriculturist, and to open the eyes of this nation to their true interest, rushed into my mind; and as I could not put my finger upon thousands that had been appropriated on matters of minor importance, and knowing my inability to put my thoughts together so as to make myself understood or interesting, I laid down my pen, heartily wishing that those who have the advantages of even a common education felt on this subject as I feel, and have felt for many years. But lo, when the May number of the Farmer made its appearance, I found that the farmers' friend, Dr. Lee, had been digging away, in Albany, on the very matter on which my thoughts had been so intensely fixed at home, and that he has mentioned some of the many thousands that have been dealt out in the manner above alluded to. Permit me to put my finger on a few of the Doctor's best sayings. Hear him while legislating for half a million of farmers:

"We owe them something more than a heartless lip service"—"\$120 a year is about all that can be realized by the experienced farmer; but the lawyer and the doctor must have 1,000"—"500,000 in this State that live from hand to mouth. The direct tax in this State, in 1844, was \$4,243,100, and in a few years will be \$8,000,000, except we cease to manufacture paupers, criminals, and needless litigation."

Let me mention a cure for all these evils, which you already know—let agricultural books be intro-

duced into our common schools forthwith—let some of the hundred thousands of the people's money that go for this and that be appropriated as above hinted, and the pennyless lads be gathered into them from all sections—let the lawyers stay at home and the farmers make the laws. Then all will understand the laws. Let meetings be called as soon as long evenings return, and in every school district let the peacemakers there plead as well as they can against that miserable practice of lawing one another. Let them plead for harmony, good-will, and a forgiving spirit. Let the impropriety of resorting to the glorious uncertainty of the law, when any difficulty occurs between neighbors, be urged with all the force and truth possible; for if a difficulty occurs between me and my neighbor, and we resort to law, others give the decision at last. Why not, then, without any of this cost or loss of time, call in a couple of neighbors if we can't think alike, and abide by their decision. Why, the evils that overspread our country like a flood, growing out of needless litigation, are beyond calculation. Not only the parties concerned are losers, but sometimes the whole community are drawn in for witnesses and jurors, and not unfrequently they take sides, some for plaintiff and some for defendant, and sometimes they get to sword's point, and the whole neighborhood is in an uproar. Oh misery! And who is benefited? Why the lawyer pockets the money, and the plaintiff and defendant find their way home with empty purses, and their business horribly neglected.

The community should have an eye upon the man they intend shall serve them as justice of the peace, and let that office be filled by a man who will see the parties that apply for a precept face to face, twice at least before giving a summons; and if he is not successful in stopping the difficulty, let him invite a man to see the parties whom he knows to be a peacemaker at heart. A short time since, 2 men in the town of Stockbridge, (adjoining us on the east,) were fleeced out of twelve hundred dollars each, and they left the difficulty just where it was when they began, and were glad to get off so well: you know who received the benefit.

Now, Mr. Editor, should not the things hinted at in this home-spun letter be kept before the public mind by every lover of peace? But I must conclude, as my sheet is full. J. F. S.

LIME AND BONE DUST.

Mr. Isaac Lefurge, of Hastings, Westchester county, broke up a lot of about three acres of a sandy loam. The greater portion had not been plowed for ten or twelve years, and was covered with alder bushes and wiry grass. The remaining portion had been used as a meadow for mowing. The whole was cross-plowed and put in fine order for rye. On one acre, twenty-three bushels of bone dust were applied, and on most of the remaining two acres, including the meadow portion, one hundred and fifty bushels of lime were spread. That where the bone dust was applied, may be considered very fine rye, averaging, May 20th, fully 4 feet high. That on which the lime was applied seems to indicate a total failure, not being more than six or eight inches in height, except that on the meadow part, which is somewhat better.

In the middle of the limed part about half a bushel of bone-dust was applied. The effect is equally striking as the other part of the field. The lime was the best of shell lime.

On a small part of the field, five bushels of artificial gypsum, from the ivory-black factory, were applied. If possible, the rye is worse than on the limed part.

Eight years ago, a load of yard manure was dropped in a heap on the poorer part of the limed field, and afterwards carefully scraped up and carted away. On this spot the rye is fully equal, if not superior to that receiving the bone, being of a richer green.

The lime and bone dust were harrowed in. The time of sowing the soil, and every circumstance, were such as to make the experiment a fair one.—*N. Y. Farmer and Mechanic.*

CANAL STATISTICS.

We compile the following abstract of canal statistics from the late annual report of the Canal Commissioners to the Legislature. The facts therein stated will be found very interesting :

“It will be seen that there is an increase in the tolls compared with 1843, of \$364,784. Of this increase, \$237,921, or 65 per cent. is on descending, and \$126,863, or 35 per cent., is on ascending freight.

“The total tonnage of all the property transported on the canals, ascending and descending, its value, and the amount of tolls collected for the five years preceding, is as follows—viz.:

Year.	Tons.	Value.	Tolls.
1840.....	1,416,046	\$66,363,892	\$1,775,747
1841.....	1,521,661	92,202,929	2,034,882
1842.....	1,236,931	60,016,608	1,749,196
1843.....	1,513,439	76,276,909	2,051,590
1844.....	1,816,586	92,750,874	2,446,374

“The total tons coming to tide water, for each of the last five years, and the aggregate value thereof in market, was as follows—viz.:

Year	Tons.	Value.
1840.....	669,012	\$23,213,573
1841.....	774,334	27,225,332
1842.....	666,626	22,751,013
1843.....	836,861	28,453,408
1844.....	1,019,094	34,183,167

“The whole quantity of wheat and flour which came to the Hudson river from 1840 to 1844, inclusive, with the aggregate market value of the same, and the amount of tolls received on all the wheat and flour transported on the canals in each year, from 1840 to 1844 inclusive, is as follows :

Year	Tons.	Value.	Tolls.
1840.....	241,862	\$10,362,862	\$700,071
1841.....	201,360	10,165,355	621,046
1842.....	198,231	9,254,773	606,727
1843.....	248,760	10,253,455	731,816
1844.....	277,865	11,211,677	816,711

“The tons of wheat and flour shipped at Buffalo, Black Rock, and Oswego, from the year 1840 to 1844 inclusive, and the total tons of wheat and flour which arrived at the Hudson river, were as follow—viz.:

Year.	Buffalo.	B. Rock.	Oswego.	Total.	To. tons ar. at tier wa'r.
1840....	95,573	12,825	15,075	123,473	244,862
1841....	106,271	21,843	16,677	147,791	201,260
1842....	107,522	13,035	14,338	134,895	198,231
1843....	146,126	12,882	25,858	184,866	248,780
1844....	145,510	15,660	42,293	203,472	277,863

“The per cent. of the tons of each class of property which came from each canal, in the last five years, is as follows—viz.:

	Champlain.	Erie.	Both.
Products of the forest.....	89.36	44.62	52.20
Ditto of agriculture.....	2.91	47.1	33.46
Manufactures.....	1.39	2.40	2.11
Merchandise.....	.02	.10	.07
Other articles.....	5.73	6.37	6.16
	100.00	100.00	100.00

WHAT SHOULD PARENTS DO WITH THEIR BOYS ?

Many parents have sons whom, when they arrive at years of discretion, they are uncertain what to do with. For instance, a respectable mechanic has a good, stout, hearty, and well-disposed son, whom he wishes to bring up respectably. If he is in easy circumstances, he somehow or other seems to think that his son must be brought up to some higher business than a mechanic. He therefore concludes that he must send him to college, and make him a lawyer, a doctor, or a clergyman, and the honest, well-meaning parent labors hard to earn money to pay the expenses of a collegiate education for the purpose of making him respectable—to make him take a higher rank in the world than that of a mere mechanic. Here is a great mistake. When the boy leaves college, what is he to do ? He is then just qualified for nothing. He turns pedagogue for a while. He beats learning into the youthful progeny. But few, very few, think of pursuing the business of a school-master as a permanent profession. After continuing it for a year or two, he quits it, and commences the study of one of the learned professions. Here are three or four years spent in preparing to become a professional man, and at additional expense to his father. He at last is admitted to the bar, or receives a degree of M.D., or is licensed to preach. The next thing is to get a living by the profession he has chosen, and this is not so easy a matter. All the learned professions are full to overflowing, and there seems to be no room for new beginners. The consequence is, that the young aspirant drags along without getting business enough to pay the rent of an office. Year after year he toils, or would toil, if he had any thing to do, without making half enough to pay his own expenses. To be sure, there are some whose superior intellect and commanding talents will enable them to rise at once to eminence, and to command a business which will render them independent ; but these cases are few and far between.

When such do occur, the superiority of mental power will shine out beforehand, and should be fostered. But the propensity which some mechanics have of bringing their sons up at college, to make them more respectable, we think to be a great error. It is injuring his son more than benefiting him, unless some extraordinary mental energy displays itself in the youth. He goes through college, and thence

Proceeding soon, a graduated dunce,

he is just fitted for—what ? He has spent the best part of his youthful days in qualifying himself for a profession, from which he cannot gain a living, or at least but a very scanty one.

In our humble opinion, as the professions now are, we should say to mechanics, and indeed to professional men in ninety-nine cases out of a hundred—Give your sons a good education, and then put them as apprentices to some respectable business. They will then, as soon as their time of apprenticeship is expired, be independent, capable of earning an honest living at once. The profession of a mechanic is daily becoming more and more respectable, thanks to the good sense and good judgment of the present age ; and it can no longer be thrown out as a mark of reproach, “You are a mechanic.” It is, on the contrary, an honor.

As the question has been recently discussed

among a few mechanics, what they should do with their sons, we should repeat, give them a good education, and then bring them up as mechanics or farmers, if you wish to insure them a comfortable, honorable, and independent living and station in society.

FOUNTAIN OF VICE.

Mothers, if you would train up your children to be useful members of society, keep them from running about the street. The great school of juvenile vice is the street.—There the urchin learns the vulgar oath, or the putrid obscenity. For one lesson at the fireside, he has a dozen in the kennel. Thus are scattered the seeds of falsehood, gambling, theft and violence. Mothers, as you love your own flesh and blood, make your children cling to the hearthstone. Love home yourself; sink the roots deep among your domestic treasures; set an example in this, as in all things, which your offspring may follow. It is a great error, that children may be left to run wild in every sort of street temptation, for several years, and that it will then be time enough to break them in.—This horrid mistake makes half our spendthrifts, gamblers, thieves and drunkards. No man would raise a colt or an ox on such a principle; no man would suffer the weeds to grow in his garden for any length of time, saying he could eradicate them at any time. Look to this matter, parents: see, more especially, that your children are not out at night loitering around some coffee-house. Mothers, make your children love home, and by all means encourage them to love you better than all other human beings.—*Quincy Herald.*

REMEDY AGAINST THE CURCULIO.—A correspondent writes as follows:

"The Curculio, or green moth, which commences its ravages on the plum about the first week in June, by depositing its eggs in plums, while the fruit is yet in an infant state, can be easily exterminated by preparing a mixture in the proportion of a bushel of wood ashes to a quart of soot and half a pound of sulphur, applied in the morning, while the dew is yet on the fruit, in sufficient quantity to coat the tree."

The remedy presented is a very easy one, and, if effectual, will be of great value. The curculio has long and justly been considered one of the most troublesome depreddators on the fruit orchard, and its destruction is a "consummation devoutly to be wished."—*Maine Cultivator.*

TIME OF SOWING SEED.—Parsnips, carrot, beet, and ruta baga seed, for stock, should not be sown early. Our readers will bear in mind that we have often warned them of the advantage of sowing these late; they grow more thriftily and it requires not half so much labor to weed them. Prepare the ground in May, have fine manure well mixed in the soil, and let the surface be stirred with a harrow or hoe a t several differnt times before sowing the seed, that all the foul seeds in the soil may vegetate and die before the young plants are up.

The fore part of June answers well for these seeds, except the ruta baga; this should not be sown before the 20th of June.—*Plowman.*

Stale urine, in which a little copperas has been dissolved to fix the ammonia, has been used for steeping seeds with signal success.

For the Genesee Farmer.

THE GENERAL SUBJECT OF THE POTATOE.

The following article, in substance, I contributed to the Albany Cultivator for March, 1844, which I have re-written, and do now offer for more extended circulation:

A very pleasant and obliging friend, an eminent physician, once said to me, "Give me a plenty of good potatoes, and I will never starve." A gentleman of talents and education, an extensive traveler on both sides of the Atlantic, while sitting at my table, April 1836, and feasting on my well-baked and delicious long reds, denominated them "bounties." Once, a little boy, while digging potatoes with me, exclaimed, "Good cracked open potatoes in the morning, O how good!"

The potatoe is indeed a noble and generous root,—a great dietetic blessing,—and, like the Indian corn, the boast, as well as the native, of this continent.—Though so excellent and valuable now, it was, so late as near the close of the 16th century, by Sir Walter Raleigh, who introduced it into Ireland, found in South America, a wild, unpleasant, and poisonous root, wholly unused by the aboriginal inhabitants; of course, it has, by cultivation, about a hundred years in Europe, and a hundred and fifty more in the northern parts of the United States, been brought to its present state of perfection.—There was, however, much prejudice against it, as against almost every new thing, and especially new kinds of food, causing a very scanty cultivation of it, even so late as the war of the revolution, which prejudice is not yet, in some parts, entirely eradicated.

For recommendation of this root, and encouragement in its cultivation, I will now state some of its more observable qualities:

1. It does not too highly excite the human appetite and thus render it, like many other things, out of due proportion with the powers of digestion.—This is indeed a grand affair in the province of temperance and health. Even the best varieties are not liable to be eaten to excess. I have known some, even Cicero, the prince of Roman orators, at the vegetable feast of his friend Lentulus, made sick by partaking too freely of beets; but, not of potatoes.

2. There is probably no kind of food that has a more just and healthful proportion of bulk and nutriment. Its soluble and nutritious matter is said to be 25 per cent; whereas that of barley is 83, wheat 85, rice 90, beans and peas from 89 to 93. This fact renders it easy of digestion, and unlikely to surcharge the system, and produce dyspepsy; a matter by no means unworthy of notice and sober reflection.

3. The potato, like milk, contains such a just proportion of aqueous substance, combined with its nutriment, that it is, for both man and beast, both food and drink. This is a great convenience, especially for those who labor abroad,—for those who would fatten cattle without water,—and for people at sea, where this root can be preserved.

4. It is very easily grown and cooked; of course it is a very cheap article of food. Hence it goes towards supporting a denser population, and is a great blessing to the poor.

5. It does not exhaust the soil like most other vegetables, especially oats and turnips, and leaves it in a good state for the succeeding crop. This is

no small matter for the consideration of the economical and forecasting farmer.

6. New varieties, and the best, are easily obtained from the top-ball seeds; taking, however, about three years to bring them to maturity; after which trial, and a just selection may be made.

7. It is very easily preserved, whether dried like fruits, or not; whether reduced to its farina or starch, or kept in its original state. It never rots without gross abuse or exposure, and it is my opinion, that it is never "strong," as it is called, nor of course poisonous, without too much heat from the sun, or fire, or warmth in the cellar, or being too long in warm or hot water at boiling.

If you wish to have good potatoes, the best they can be when brought on to your table, then defer the digging as long as you can without danger or injury from frost,—keep them, shaded, moist, and cool,—cook them not too much and as quickly as possible, and then have them away immediately from water and from heat. I think the potatoe in a raw state, cleaned and cut thin without paring, dried and ground to meal, would help much in *any* preparation of bread-stuffs, especially griddles and puddings.—Let the curious and economical try it; as also the beet in the same way.

As to the merits of different varieties; after trying, probably, as many as fifty, I have come, right or wrong, to the following results; namely,

The Chenangos, (known by many different names,) the Leopards, the Long Big Whites, the Oneidas, the deep Blues, and many others, are all deserving the attribute, "good." But on the whole, for real general merit, as to both production and quality,—for early growth, I prefer the Long Reds, (which I produced from the top seed myself,) mixed with the Blue Kidneys and Blue Pointers;—the Long Reds, after becoming acclimated, for feeding out to live stock;—and the Carters, far above any others, for late or common table use, and for market. These last yield well on good soil, and do in fact, when well cooked, approach in their quality the nearest of any I have ever know, to good wheat flour. They originated among the Shakers, as I have been informed, and have gained the preference of that shrewd, economical, and successful agriculturist, MARTIN VAN BUREN, ex-President of the U. S. A., and do procure for him an extra price in the city market. They are to be found in various places on and near the Hudson river, and east of it, and, probably, under different names, in many other parts of our country.

As to the manner of seeding, when I prosecuted agriculture, (which I discontinued two years since,) I planted about 15 bushels the acre, cutting the large ones to save seed. After trying the planting of both large and small, cut and not cut, I never perceived any difference in the quantity produced.

With regard to methods of cultivation:—here we find much prejudice and misconception. I will give my own method, towards which I was long approaching, while, in agriculture, as in many other things, especially in general and liberal education for both sexes, I was endeavoring with half the expense to double the profit;—something of an object surely:

Let sward ground be generally used, after becoming well rotted, either by being plowed long enough beforehand, or by previously growing on it, a crop of oats. Spread on some 30 loads of manure the acre, plow deep and fine just before planting, furrow

very lightly 3 feet apart, drop your seeds in the furrows about a foot apart, cover lightly and level, hoe once at the proper time, and once only, assisted with a light harrow or cultivator, leaving the ground as level as possible, unless it needs draining; in which case you may plow lightly and "hill up" some. If weeds appear, mow them with the potato tops just before they die either by age or frost, and hay the whole for cattle, which makes excellent hay, if well made. Peas and beans planted in the furrows with the potatoes are sometimes productive, and without injury. If you wish to get the greatest present profit from well-manured corn ground, then plant with your Indian corn some few pumpkins, and about 5 bushels of potatoes the acre. This I have proved by repeated experiments.—But do not, I beg, furrow your ground very deeply for any seed, do not put manure in the "hill" or "hole,"—do not plow between the rows, unless your ground needs draining,—do not "hill up:" but leave the ground as level as convenient until harvest;—for, the old practices are pernicious errors, causing much hard labor for nothing, or worse.

It is a maxim with me, founded on both nature and reason, that where there is placed the most manure, there is needed the most water. How does it seem then, I ask in the name of common sense, to put the manure in the hole, and then by hilling up, shed off the water from the very place where you caused it to be the most needed?

I once obtained at the rate of 634 bushels the acre, of early Blue Pointers. But my average crop, for 24 years, in the neighborhood of the Grand Monadnock, in "the Granite State," was about 200 bushels the acre. During many years, I did not boil, or steam, or bake potatoes for any brute animals, believing it not to "quit cost."

In 1842, I obtained from one-eighth of an acre, 26 bushels of Rohan potatoes, and rising of 600 lbs. of excellent hay, which was worth quite half as much as the potatoes.

Whoever would grow rich by farming in high, cold regions, must turn their attention much, and properly, to the growing, and best use, of potatoes and grass, oats and barley.

With regard to the late disease of the potatoe in this country, general the last year, and partial the year before, I have made very many and strict inquiries in very different and distant parts of the land, and have finally come to the conclusion, that it is an epidemic upon that plant, as sometimes upon the people, not yet to be accounted for upon any known principles of nature, but which, like the other, is subject to many and different facilities, and also to many and different obstructions and preventives.

Respectfully to all concerned.

EZEKIEL RICH.

Near Batavia, N. Y., May 11, 1845.

RECIPE FOR SWEET OR OTHER CORN PUDDING.—To four dozen ears of corn, (corn to be scored and then scraped from the ear,) add three eggs, two spoons full melted butter, one tea-spoon full of salt, two large spoons full of sugar, one quart of milk, and bake by a steady fire, in tin or earthen pans, two hours and a half, so that the top shall bake brown: then with sweet butter you can have a most sumptuous repast. It is a Nantucket dish, and in corn season is as much the ruling *dish* as are buckwheat cakes in their time. Try it. J. H. W.

Rochester, N. Y.



HORTICULTURAL DEPARTMENT.

BY P. BARRY.

ORNAMENTAL HARDY TREES & SHRUBS.

In our last number we mentioned a few trees and shrubs that had blossomed, or were then in bloom. We will now notice a few more that have blossomed during the past month. It is hardly necessary to state, that these notices and similar ones, that we may make from time to time, are not intended for the experienced cultivator, to whom the subjects we notice, and their seasons, are perhaps as familiar as the rising and setting of the sun. Our sole object is to benefit those who have just commenced, or who have begun to think of commencing, the work of ornamental gardening or the culture of trees and shrubs for ornament.

HORSE CHESTNUT.—(*Esculus hippocastanum.*)—This is a lofty, regular-shaped, beautiful tree. It ranks first amongst ornamental trees. It attains an immense size, 40 to 50 feet in height. Now, and for 10 days, it has been covered with long spikes, of beautiful white and pink flowers, of agreeable fragrance. The leaves, too, are very pretty. This tree is admirably adapted for ornament, either in avenues for which it is much used, or to stand singly on lawns.

OHIO BUCKEYE.—(*Esculus pallida.*) This species also attains a large size, is of a regular compact form; foliage dark-green and glossy; flowers pale, greenish yellow. This is a very desirable ornamental tree—it has just passed out of bloom.

LABURNUM, or GOLDEN CHAIN.—(*Cytissus laburnum.*)—This is one of the most beautiful flowering trees we possess—attains the height of about 15 feet. Those in our grounds, now, are loaded with long clusters of brilliant golden yellow flowers, which hang down like beautiful gold chains. It is perfectly hardy, and easy of cultivation.

There are three other beautiful species of the cytissus now in bloom—viz., the *purpureus* or purple-flowering, *falcatus* or sickle-shaped, and *pendulus* or weeping. The two last are of dwarf growth. The *falcatus* is a most profuse bloomer; showy yellow blossoms and delicate foliage. The *pendulus* is a slender, weeping species, with pretty bluish-pink blossoms. We have it grafted on the common species, 5 to 6 feet from the ground, and it makes a beautiful object for standing separate.

HAWTHORN.—(*Cratægus.*)—There are numerous species of the hawthorn that are very ornamental. The Red Flowering, now and for ten days past in full bloom, is a beautiful tree—the branches are completely covered with flowers of delightful fragrance, and these are succeeded by pretty scarlet fruit. The Double White, a variety of the English White Thorn, so much used for hedges, now in blossom in our grounds, is more admired than any thing else. The flowers are small, pure white, and very double, resembling pretty little roses. These are perfectly hardy, and will succeed almost anywhere. Several of the native species, now in full bloom in the woods and fields, all around the country, are well worthy of cultivation. The flowers are snow-white, very fragrant. The trees generally are of handsome form,

and possess a great diversity of fruit and foliage. In passing through the country, we find some grand specimens here and there by the way side, or in the fields, that the choppers have graciously spared—thanks to them.

AMERICAN JUDAS TREE.—(*Cercis canadensis.*)—This is a beautiful tree when in blossom, which is in the early part of April. The flowers appear before the leaves, in large numerous clusters—are of a fine purple color and pea-blossom form; leaves rich dark green, medium size, heart-shaped, and very desirable for its early blossoms.

STONELESS CHERRIES.—There is a chance for some of our farmers' boys to amuse themselves. Cherries without stones are produced in France—and if in France, they can be here. The process is as follows: Early in spring, before the sap is in full flow, a young bearing tree is divided in two, down to the branching off of the roots, the pith carefully removed with a wooden spatula, the parts again united, (the air being excluded by an application of potters' clay the whole length of the opening,) and bound together by woolen cord. The sap soon re-unites the severed parts, and in two years the tree will produce cherries of the best kind, and having in their centre, instead of the usual kernel, a thin, soft pellicle.—*Phil. Sat. Post.*

The above article has been circulated widely by country newspapers—editors, no doubt, believing it to be a very extraordinary and valuable discovery in fruit culture—really “stoneless cherries” must be a great delicacy in their luxurious imaginations. The worst that we wish them is, that they may live to witness the successful results of the experiment, and eat heartily of “stoneless cherries.” In our humble opinion, however, farmers' boys, who feel disposed, may amuse themselves in making experiments of a much more rational and useful character than this—let them all take such steps as will secure an abundance of good *old-fashioned* cherries first. This they cannot do, and need not attempt, by any unnatural process. New and improved varieties may be produced by the same legitimate and scientific course pursued by Van Mons, Knight, and others; but not by splitting the trees and removing the pith. It would be about as sensible to lop off a man's head, and take his heart out, with a view to producing a superior variety of the genus *homo!*

P.S. Since the above was written, we find this article in “Hovey's Magazine” for May. That being the only journal in this country that pretends to elucidate horticultural science, we should have expected some satisfactory vouchers for the authenticity of the discovery, as well as some exposition of the principles which it involves. We do not, however, find either, and we are at a loss to know what they wish their readers to think of it.

The small space necessarily allotted to us for horticultural items, in this journal, does not enable us to present our views as fully as we could wish on this or any other subject. The reader, we presume, is not at all sorry for that. The “stoneless cherries” remind us of the tricky Monsieur somebody, who sold such a quantity of wild single roses to our citizens, in the spring of 1844, under the name of *Blue Moss Roses*. These Frenchmen are queer fellows, some of them; they are continually startling the world with their horticultural discoveries and curiosities.

PLANT POTTING.

The following extract from an article on plant-potting, in the "Gardener's Chronicle," will be highly acceptable to our lady readers in particular, who cultivate house plants. It is, in our opinion, as correct and comprehensive as any thing on the same subject could be. There is no part of the culture of plants, in pots, of greater importance to their life and health than the potting, and none, we are very sure, more imperfectly understood. A large number of those even, who profess to be *experienced gardeners*, are groping in the dark on this subject. Give it a thoughtful reading :

"The first point to be attended to, in the process of potting, is to put a crock over the hole in the bottom of the pot—and to do this in the proper way requires attention. An oyster-shell answers well for large pots, keeping the concave side downwards. Pieces of broken pots answer equally well, provided they have a concave and a convex side, otherwise a very small portion of the soil, which might perchance get washed down to the bottom through the drainage, would clog up the crevices, and prevent the escape of the water. This, simple as it may be, is the first important step in potting. And let it never be forgotten, that a house owes much of its stability to a good foundation-stone; and this, be it remembered, is the foundation-stone in potting.

The next particular demanding attention is drainage, which should be of broken pots, varying in size according to the dimensions of the pot. In ordinary cases, the depth of drainage should be from an inch to an inch and a half. The potsherds which constitute the drainage should be nearly of one size, which will render the object more perfect. The broken pots can be easily separated, so as to suit the different sized pots, by means of sieves having large and small meshes; using the larger shreds for the large-sized pots, and the reverse for the smaller ones.

In order that the soil may be prevented from intermixing with the drainage, a little chopped moss should be sprinkled carefully over the shreds; this will effectually keep the soil and drainage apart; a considerable portion of moisture is at the same time retained by the moss, to which roots cling with singular obstinacy, because they rest on a healthy, well-drained bed. This condition secures to every plant healthy and vigorous action, whether it be in the tiny pot in a ward's case, or over the thousand acres which minister largely to the wealth of nations in every hemisphere. Drainage is the soul of gardening; it is, in fact, life itself to every green leaf under the cultivator's care. No plant can be productive, either in the garden or in the field, unless this is secured in a positive degree. Plants in pots, therefore, require the greatest care in this respect, because they are in every way artificially circumstanced; and this extraordinary deviation from nature requires, on the gardener's part, all his energies and all his talents to overcome. Perfect drainage secures to the superincumbent soil, under every circumstance, the means by which vigorous action is induced, or can be maintained for any length of time. Imperfect drainage destroys this action, by producing a glut of watery matter, and places the plant in a puddle of soured soil, when nothing but the very worst effects are produced.

In former days, the kind of soil used in potting was of a very fine description; in these latter times when cultivation is attended to, this kind of soil is

entirely discarded, and rough, turfy material, full of fibre, is now sought after, whether it is peat or loam. The reasons for this preference are obvious—the fine screened soil soon becomes a compactly close body, which neither air nor water can pass through; and we have already shown, that unless both these elements have free access, we are swimming against the stream. It may be said, that potting loosely, and not pressing the soil too firmly in the pot, would neutralize the effects of fine sifted soil: so it would, in the first instance, but the continued applications from the watering-pot would soon bring all the evils we have been describing. On the contrary, if coarse lumpy material, full of vegetable fibre is employed, it will require to be firmly pressed into the pot; notwithstanding this, the water will percolate through the whole without interruption; and in the absence of water, air fills up the crevices, as it should do—thus securing a rapid and healthy action. Some of the very coarsest of the soil should be placed immediately on the moss, in order to render the drainage more complete. These observations, with those which have preceded them, relating to the same subject, will be some guide to the amateur in a pleasing avocation—they will enable him to proceed on clear and definite ground. To the gardener in the higher walks of his profession—he that neither slumbereth nor sleepeth on the road to knowledge—they may be in some measure uncalled for; but to many, we trust, they will prove useful: and if plants, in future, are badly potted, blame not."

CATERPILLARS ON TREES.

In our last number we referred to the immense numbers of caterpillars which had then made their appearance, and suggested their immediate destruction.

We fear that but few have read our suggestion, and fewer still have acted in accordance with it.

To-day (May 26) we have traveled through some 40 miles of the country, and we could not safely say, that in all that distance, through one of the most beautiful and best cultivated portions of the country, where improvement is on the rapid march,—we saw an orchard where any pains had been taken to destroy the caterpillars. In many cases whole orchards were stripped of the foliage—the very trees in the door-yards hanging full—absolutely frightful. The idea of a plague continually occurs to us, in view of such hosts of these monstrous, unsightly insects.

What can people mean, by losing a whole crop of fruit, destroying the health of their trees, and swarming the country with insects, when *one day's labor of a man, at the proper season, would save all*? But we fear we are talking to very little purpose, and the subject is by no means an agreeable one; so we will drop it with the remark, that even if men's own interests would not prompt them from allowing such havoc on the fair face of nature, green and lovely as she now is —.

WEATHER—FRUIT CROP, INSECTS, &c.

During the past month, we have had greater extremes of heat and cold than we ever remember in the month of May—though to be sure our memory don't extend so far back as some people's. About the middle of the month—or we believe it was the 10th, 11th, and 12th, that were as hot as midsummer—vegetation seemed to fall pros-

trate, unable to withstand such premature heat, heavy rains succeeded that; and since, we have had cold, March weather, with an occasional hard frost; so that people have been muffled up in cloaks and over coats, and shivering around the stoves, wondering, with long, sorrowful visages, "When spring will open this year."

Withal, however we think the prospects of the fruit crop are tolerable good. Peaches, apricots, and nectarines, have suffered some injury, enough to cause a great many to drop off; but such an enormous quantity set this year, that we think enough will be left; for the last two weeks the cold weather has prevented much growth. The "curculio," or plum weevil, has been unusually active. He commenced operations two weeks earlier than we ever saw him. The prospects of a fine fruit season woke him up, but he got almost frozen to death—insects of all kinds have been so far, unusually numerous and destructive. About the 12th of May, the ground actually appeared like a riddle, from the perforations made by beetles of all sorts and sizes emerging from their subterranean winter abodes. We also learn from the Ohio papers, that the fruit crop is ruined there and in the adjoining states.

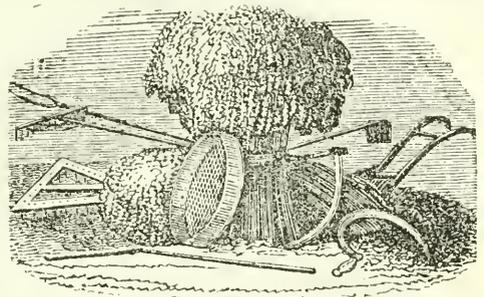
We believe that fruit-growers, who will be fortunate enough to raise a good crop, may promise themselves good prices.

LOCUS BORER EXPELLED.

A correspondent of the Albany Cultivator, says that his Locus trees last spring, for the first time were attacked by the borer, and in examination, he found 20 to 50 in a tree. He then cut the bark off, over the place they were at work and applied spirits of turpentine to the place, inserting it when necessary, into the holes with a feather. This he says, was effectual. As no more borers made their appearance during the summer.—The tree did remarkably well, and the incisions entirely closed up during the summer.

The Locus tree, we mean the Yellow Locus (*Robinia pseudacacia*) is beautiful both in form, flowers and foliage, grows rapidly, and its timber as is well known, is of great value, particular to the husbandman. Its culture for some years past has been greatly discouraged by the severe and fatal attack of the borer. We trust to the wonderful spirit of discovery of your times to find an effectual remedy, if the one suggested above should fail.

VEGETABLES.—The cold weather which we have recently experienced has been very unfavorable for vegetable gardening. All such as have been unprotected by glass are weak and sickly in appearance, and will most likely be a poor crop. Those who wish to have a good supply of vegetables, must not depend on the first sowing. You want your spring, summer, and fall crops of vegetables; and there are varieties adapted to all these seasons.—You must also take advantage of the weather—sow on the approach of a shower, and in every case the ground must be rich and mellow. Where drought ensues after you have sown your seeds, you must give your seed beds a good drenching in the evening, as often as necessary. Many seeds, too, at this season of the year, require soaking; you may gain a week or two by it; common observation will discriminate between that require much and little soaking. We soak, more or less, every seed we sow at this season. It arouses their vitality, and they push forward vigorously at once.



ROCHESTER SEED STORE, FRONT-ST.

BY B. F. SMITH & CO.

AWARE of the important relation which the seedsman 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 C. F. Crosmen, and under the inspection of the proprietors; others were raised by experienced seedsmen; while those varieties of foreign growth which experience has shown are the best, have been procured from the most responsible sources abroad.

The collection has been greatly enlarged this season, in order to accommodate all who wish to try whatever is new, rare and curious.

FIELD SEEDS.

Red Clover, large and medium.

Timothy, White Dutch Clover, Oats, Barley, Seed Corn, Spring Rye, Italian and Siberian Spring Wheat, Early June Potatoes, Marrowfat and Field Peas.

VEGETABLE GARDEN SEEDS.

A choice and select variety of Peas, Beans, Cabbage, Cauliflower, Celery, Beets, Cucumbers, Melons Radish, Squash, &c., &c., Summer Savory, Thyme, and Sweet Marjoram.

FLOWER SEEDS.

The collection of Annual and Perennial Flower Seeds contains many new and choice varieties, raised for us by A. Stone, Esq., of this city; making our assortment altogether superior to any ever before offered in this city.

AGRICULTURAL & HORTICULTURAL TOOLS.

At our Warehouse, adjoining the Seed Room, may be found an extensive and complete assortment of Agricultural and Horticultural Implements, embracing every tool used in the cultivation of the Farm and Garden.

MASSACHUSETTS PLOWS.

We also have on hand 150 of the celebrated Massachusetts Plows, made in a superior manner from second-growth eastern timber, which we shall sell at a reduced price.

B. F. SMITH,
JAMES P. FOGG.

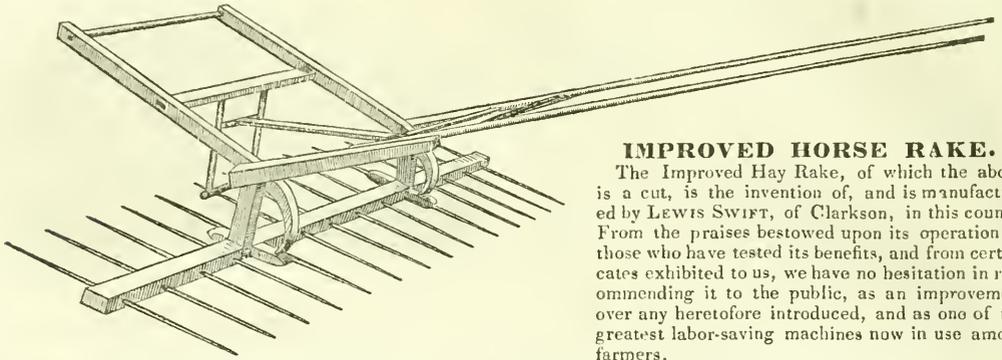
STOCK EXCHANGE—CATTLE, &c.

THE SUBSCRIBER has on hand a choice collection of improved thorough-bred cattle, embracing, already, superior specimens of the Short-Horn Durham and the Hereford, and a sample of the Holderness, &c., and he intends adding to his stock so as to be able to supply farmers and breeders in Western New York, Canada, or the Western States, who may wish to purchase Bulls, Cows, Young Stock, Sheep, &c., of the best breeds and most improved varieties, at reasonable prices. His design is, to establish a sort of Depot, or Stock Exchange, where orders can be supplied for any of the improved breeds of Thorough-bred, and for superior Grade animals, and where those who have choice stock of this character for sale can find a market for them, on commission or otherwise.

REFERENCES.—Editor of the "Genesee Farmer," L. B. Langworthy, Esq., and T. Weddle, Esq., Rochester. Hon. E. Corning, C. N. Bement, Esq., and Editors of the Cultivator, Albany; Hon. E. Mack, Ithaca; J. S. Wadsworth, Esq., Genesee; Judge Leland, Steuben county; Hon. D. Lee, Buffalo; Hon. J. McCollum, and W. Parsons, Esq., Lockport; M. B. Bateham, Esq., Editor of the Ohio Cultivator, Columbus, O.

The subscriber may be found on his farm, near the S. W. corner of the city of Rochester, on Genesee-street, (about half a mile south of Bull's Head;) or orders may be left at the office of the Genesee Farmer. T. H. HYATT.

Elmwood, Rochester, May, 1845.



IMPROVED HORSE RAKE.

The Improved Hay Rake, of which the above is a cut, is the invention of, and is manufactured by LEWIS SWIFT, of Clarkson, in this county. From the praises bestowed upon its operation by those who have tested its benefits, and from certificates exhibited to us, we have no hesitation in recommending it to the public, as an improvement over any heretofore introduced, and as one of the greatest labor-saving machines now in use among farmers.

It received the first premium at the State Fair at Rochester, in 1843. They are for sale in Rochester at the Agricultural Depot, adjoining the Seed Store, Front Street, nearly opposite the Market.

Meteorological Observations.

MADE AT ROCHESTER, SEVEN MILES FROM LAKE ONTARIO, BY L. WETHERELL.

JOURNAL OF THE WEATHER FOR MAY, 1845.

Days mo.	Thermometer.			Barometer.		Wind.	Observations.
	Sunrise.	Mid-day.	One h. after sunset.	Sunrise.	Evening.		
25	46	54	42	29.50	29.30	N W N	Cloudy—showers.
26	50	76	60	.40	.30	W	Fair—r.g. 75.
27	60	66	56	.45	.50	..	Fair—golden robin h.
28	52	70	50	.70	.75	..	Cloudy—fair.
29	48	64	50	.80	.85	N W W	Fair.
30	54	76	64	.80	.50	S E	Fair—cloudy—rain.
1	60	70	52	.55	.50	N W W	Cloudy—rain—r.g. .27
2	46	54	44	.60	.60	..	Fair—apple tree in bl
3	48	70	55	.60	.49	W N W	Fair—cloudy—pear ..
4	55	63	57	.49	.44	S W W	Cloudy—rain—r.g. .05
5	37	46	38	.67	.70	N W W	Fair—lilac in bloom.
6	42	68	44	.65	.30	S E	Fair.
7	50	42	40	.25	.40	N W W	Fair—rain—rice bd. h.
8	33	49	43	.76	.74	N W W	Fair—cloudy—r.g. .17.
9	36	58	45	.66	.88	..	Fair—quince in bloom
10	43	62	66	.87	.71	S S W	Fair.
11	59	86	71	.73	.71	W	Fair.
12	61	87	72	.65	.60	N S W	Fair—h.chestnut in bl.
13	66	85	64	.59	.45	S W	cloudy—r.g. .03.
14	65	84	61	.39	.29	S W W	Cloudy—sb'ry, r.g. 42.
15	46	38	34	.37	.60	N E N	Cloudy—rain & snow
16	35	43	37	.67	.67	..	Fair—frost.
17	34	60	52	.69	.55	W N	Fair—cloudy—frost.
18	58	67	62	.45	.40	N W W	Cloudy—rain.
19	54	76	61	.35	.41	..	Fair—cloudy.
20	47	58	54	.47	.56	N W W	Fair—rain—r.g. .07.
21	39	62	54	.63	.63	..	Fair—cool.
22	44	48	44	.60	.50	S N E	Cloudy—rain—r.g. 41.
23	42	64	53	.54	.52	N W	Fair—yel. rose in bl.
24	40	52		.61	.61	..	Fair.

Max. (May 12) ther. 87 deg.; do. (May 9) bar. 29.38 in.
Min. (May 8) " 33 deg.; do (May 7) " 29.25 in.

April—last half month much warmer than the first half.
May—from the 1st to the 25th coolish, with frequent frosts; the range of ther. 54 deg. Good weather for grass and English grain.

To convince the farmers that the present season is not uncommonly cold, I give the mean temperature of April and the first half of May, from 1840 to the present time:

The mean temperature of April,	1840, 47.80 deg.
Ditto ditto,	1841, 39.87 ..
Ditto ditto,	1842, 45.85 ..
Ditto ditto,	1843, 44.79 ..
Ditto ditto,	1844, 52.62 ..
Ditto ditto,	1845, 46.42 ..
The mean temp. of 1st h't May,	1840, 50.62 ..
Ditto ditto,	1841, 43.82 ..
Ditto ditto,	1842, 49.32 ..
Ditto ditto,	1843, 54.83 ..
Ditto ditto,	1844, 57.24 ..
Ditto ditto,	1845, 55.53 ..

SEEDLING POTATOES.—We have a few bushels of Langworthy's Premium Seedling Potatoes for sale at the Rochester Seed Store, New Block, Front-street. B. F. SMITH & CO.

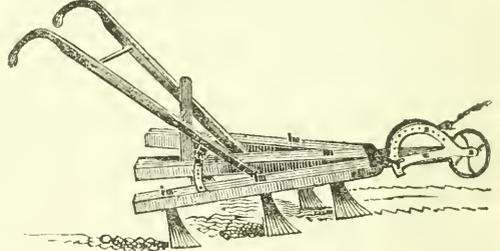
DUNN & TAYLOR'S PREMIUM SCYTHES, MANUFACTURED BY TAYLOR, HITCHCOCK, & CO., NORTH WAYNE, ME.

THE satisfaction which these SCYTHES have hitherto given, as superior cutters, has induced the Manufacturers to offer them for sale in many places where they have not before been known; believing that those who use them will continue to call for them, from year to year.

N.B. All Scythes warranted good to cut, and free from injurious flaws: if any should prove bad, others will be given in exchange.

For sale at the Agricultural Depot, adjoining the Seed Store, Front-street, Rochester. B. F. SMITH & CO.

IMPROVED CULTIVATORS



FOR sale at the Agricultural Depot, adjoining the Seed Store, Front-street. B. F. SMITH & CO.

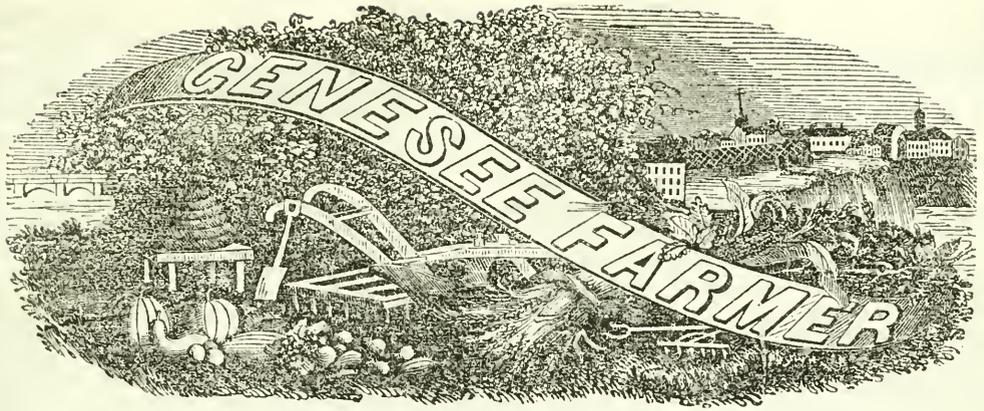
WORM BRUSHES, for the purpose of destroying Worms and Caterpillars on Fruit Trees, for sale by B. F. SMITH & CO., New Brick Block, Front-street.

ROCHESTER PRODUCE MARKET.

Wheat,	90 a 96	Hay, ton,	\$7 50	8 00	Eggs, doz.	8	9		
Corn,	37 1/2 a 40	Wood, cord,	2 00	2 50	Poultry, lb.	5	6		
Barley,	30	Salt, bbl.,	1	13	Tallow,				
Oats,	25	Hams, lb.,	5	6	Hops,	10	11		
Flour, (ret.)	4 25	Pork, bbl.,	10	00	Wool,	25	30		
Beans,	75	1 00 "	cwt.	3 25	3 75	Sheep Skins,	50	75	
Apples,	38	50	Beef, "	3 00	3 50	Green H'ds, lb.	3	7	
Potatoes,	18	25	Lard, lb.,	5	6	Dry Hides,	6	7	
Cloverseed,	4	00	4 50	Butter,	9	12	Calfskins, gr'n.5	4	4
Timothy,	1	1	25	Cheese, cwt.	500	6 50		May 30.	

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VOL. VI.

ROCHESTER, NEW YORK. JULY, 1845.

NO. 7.

PUBLISHED MONTHLY.

BY B. F. SMITH & CO, PROPRIETORS

At the Seed Store, Front Street, nearly opposite the Market.

DANIEL LEE, EDITOR.

FIFTY CENTS A YEAR:

Five copies for Two DOLLARS; Eight copies for THREE DOLLARS. All payments to be made in advance. Money and subscriptions, by a regulation of the postmaster general, may be remitted by post masters free of expense. *Address B. F. SMITH & Co.*

NOTICE TO CORRESPONDENTS.—Our kind friends have furnished us with much more “matter,” as the compositors say, than our paper can hold. We are not, however, the less grateful for these favors. If each subscriber to the Farmer will only send us one additional name, we will give him 24 pages of our present size, instead of 16; or 50 per cent more reading, without any additional expense, either for postage or paper.

Western New York with its 50,000 enterprising farmers ought to sustain an agricultural journal, second to none in America. Who will not lend a helping hand to extend its circulation and usefulness?

We are happy to learn from “Agricultor,” of Wyoming, that the cultivators of the soil in the towns of Pavilion and Covington are organizing an agricultural society auxiliary to the county society. Every town in Western New York should have an efficient Farmer’s Club, which should assemble as often as once a month, at least, for the mutual instruction of all its members. During two sessions of the Legislature, the friends of agricultural improvement met regularly every week, either at the Capitol, or at the rooms of the State Agricultural Society, for the purposes of discussing the most important questions connected with the practice or the science of Rural Economy. These discussions elicited a great many valuable facts from all parts of New York and the union; for many strangers visit the capitol of the empire state during the winter season.

The editor, who has already spent some weeks among the farmers of Western New York, is happy to say that his lectures thus far have been very well attended. There is evidently a growing interest felt by our hard handed yeomanry to lessen the cost of producing grain, wool, butter, cheese, pork, and beef, in this section of the State. They begin to understand that a saving of ten cents in the expense

of raising a bushel of wheat, is equal to adding ten cents to their profit on a bushel of this important staple. A little more thought and study, and a little less severe manual toil, will give them more money.

We have received another communication from “Enquirer,” in relation to Col. Randall’s sheep, &c., the publication of which we fear might lead to an unprofitable discussion, to the exclusion of matter more useful to our readers.

Our correspondent at Cornwall will confer a favor by sending his “article on or about sheep raising in Vermont; and how they live among the Green Mountains.”

TURNIPS.—As the crop of hay will be very light, we suggest to farmers the propriety of raising a good crop of turnips; or at least to make the attempt. The variety called the “Red Round” will do well on dry land, provided the soil is good, and the season favorable. The “White Flat Norfolk” is a kind well adapted to moist land. For feeding to stock, the “Large Scotch Yellow” is very celebrated among the turnip growers of England.

The application of unleached ashes, bone dust, charcoal, and common salt, scattered in the drills, or broad cast, will be found very serviceable to turnips.

FARMERS AND EMIGRANTS HAND BOOK.—The above is the title of a handsome duodecimo volume of 400 pages, from the press of D. Appleton, 200 Broadway, New York. It discusses with clearness, and an obvious knowledge of the matter in hand, the subjects of clearing forest lands, breaking and fencing prairies, constructing farm-houses in new countries, farming in general, farriery, cookery, and the prevention and cure of diseases.

To all persons about to emigrate to the west, this book contains a fund of information of great practical importance, while it will be read with interest and profit by any one engaged in rural pursuits.

For sale in Rochester by S. Hamilton, 6 State Street, successor to D. Hoyt. Price \$1.00.

VALUABLE MERINO SHEEP.—We see by the Ithaca Journal, that Mr. J. Speed, living in that vicinity, has clipped “from a large number of his ewes over five pounds per head of well washed wool. As an evidence of its quality, it is stated that Mr. S. has been offered for his whole clip, full blood and grade, 40 cents per pound. His flock numbers 60; about half of which only are pure full blooded animals.

THE EDITOR'S REPORT ON AGRICULTURE
IN THE ASSEMBLY.

It is stated in my report that "no class in the community give so much severe muscular toil for \$100, as do the common field laborers in the State of New York." A reviewer in the Ithaca Chronicle whom I take to be a limb of the law, thus comments on this and other statements of a similar import :

"Strange that a man of Dr. Lee's science and capacity should put forth, in a grave public document, statements so grossly erroneous, and so well calculated to array one class in society in hostility to the other. How stands the case? The lawyer commences, say at eighteen, and spends seven years of his life in acquiring a profession, before he can professionally earn a single dollar, and during this whole time he must eat, drink and wear. An able bodied young man can earn ten dollars per month the year round, besides board and washing, which would make it equal to fifteen dollars per month, or \$180 per year. Seven years of lost time would therefore be equal to \$1200. Tuition fees, clothing, &c. would cost about \$150 per year, which for seven years would be \$1,050. After he is admitted he must have about \$500 worth of books, which is a small allowance. Here then is spent in time and money, nearly \$3000, before the lawyer is ready to do business. And after that, some ten years are spent in a precarious livelihood, in convincing community that he has sufficient skill and capacity to be entrusted with their business. In this professional race, it is fair to say, that nine out of ten essentially fail of success."

I concede the entire truth of the whole case, as made out by this member of the Bar. But I demand a plain and satisfactory *reason why it is* that so many worthy and intelligent young men of eighteen are willing to forsake the axe, the scythe and the plow—throw away seven long years in the prime of life, and spend \$3,000, with a *certainty* that after *ten years* of professional competition, they will stand "*nine chances in ten* to fail of success?"

There is an ever active, a living cause which every where produces this lamentable result. What is it? It operated with equal force to induce some nine hundred young men to attend, at a large expense, the four Medical Colleges in this State, at their last terms; while the profession is so crowded that two or three doctors can easily do all their business by riding one horse, in almost any town in the State. The Regents of the University in their Report state that over *eleven thousand* students in our Academies alone, are now studying the classics—Greek and Latin. How little do all these liberal appropriations benefit the 500,000 field laborers, of whom my Report speaks as giving so much hard work for 100 silver dollars!

When the writer of this was eighteen years of age, the most he could get for chopping 100 cords of hard wood, and board himself, was \$30. At a subsequent period of his life he has received \$30 for amputating a limb. Now, if one that has had experience in the *art* of skilful chopping, and the *art* of surgery may know any thing of either, I assert that it takes about as much time and labor to learn one art as the other. I question both the justice and the policy that compels the same person as *farmer L.* to work hard *two months* and chop 100 cords of wood for \$30, while you pay him as *doctor L.* an equal sum for cutting off a leg about as easily as he could

fell a basswood sapling. The practical effect of this great disparity of compensation is, to make, at a ruinous sacrifice of time and money, about thirty times as many surgeons as there are are jobs requiring their professional services.

If you promise my son as high a reward for one day's work as a good lawyer, as you will give him for ten day's work as a good field laborer, then you offer him a clear *bounty* of 1000 per cent to go into a lawyer's office in this city, rather than on to a farm, and sweat, and toil, and burn in the sun. If he can find employment only one day in ten, as an attorney, he will receive as much in the course of the year as he would by tilling the earth, and have nine-tenths of his time to improve his mind, and prepare himself for the highest public honors. If it be requisite for him to study the languages, or mathematics to qualify him for any professional pursuit, there are thousands of good schools, supported in part by a tax on the farmers, for that purpose. But if it be deemed advisable to give him a knowledge of agricultural geology, chemistry and physiology, according to the recent improvements in those science, he must go, where other young men in this State have gone, to Elinburgh, Paris, or Giesen.

It is own 23 years since Judge Buel was chairman of the agricultural committee in the House, and first began to make his great but unsuccessful efforts, to establish at least *one* Agricultural School in this State. Shall another whole generation pass off the stage before the young men who are to follow the noble profession of Agriculture, shall have an opportunity to study its *science* in a truly scientific manner, without being compelled to leave this great agricultural State and go 3,500 miles to the monarchial governments of Europe?

In his Report of 1823, Judge Buel alludes to the facts that Union College had received \$418,000, Hamilton \$116,000, and that Academies were paid money from the treasury in proportion to the number of pupils studying the dead languages. He then truly predicted that this *forcing system* of making professional gentlemen, would result, as my legal friend from Ithaca says it has, in creating ten times more lawyers than the public good requires. Instead of resisting to the hour of his death the patriotic efforts of the lamented Buel to elevate the young farmers of this State—"to improve both the soil and the mind;"—and instead of abusing the chairman of the committee on agriculture for the last two years, for stating a few wholesome truths, all liberal minded men of all pursuits should lend their assistance to unite true science and solid learning with the Rural Labor of New York.

When I stated in my Report that "common field laborers" as a class gave much more hard work for \$100 than is paid by the mechanic, the merchant, the lawyer or the physician for a like sum, it never once occurred to me that any one could possibly torture the remark into a censure, or implied reproach on those classes of the community. One reason *why* rural industry is comparatively so poorly paid, is thus explained in that Report :

"The laws established by the Creator of the universe, which govern all the changes in the form and properties of matter, whether in a crude mineral or in an organized condition, making the living tissues of plants and animals, are as uniform and unerring as the laws that regulate the rising and setting of the sun. By studying the operation of these laws, the practical agriculturist is often able to effect a result in a

day, which he could not accomplish in a week, while working *against* the course of nature.

"On what does the productiveness of the farmer's labor mainly depend? Surely not on his mere muscular strength, for in that case the mechanical power of a cart-horse will exceed five-fold in value the labor of an agriculturist. It is the sound judgment, experience and acquired knowledge of the directing Mind, that impart productive value to the labor of human hands. And it is mainly because the intellect employed in rural pursuits is less developed than the mind devoted to other and more professional occupations, that agricultural labor is so poorly rewarded. The truth is that *passive* intellectual faculties are utterly valueless. They produce nothing. Hence, as the mind of a human being lacks science or knowledge, the market value of his mere physical force depreciates in price. Without going into an elaborate argument, your committee appeal to the ten thousand improvements of the age in which we live, as furnishing conclusive evidence that there is no power on earth so productive of great and beneficent results as the power of highly cultivated intellect."

Surely, it is not the *fault* of other classes that the intellect devoted to agricultural pursuits is not so familiar with the laws of Nature, which transform *earth, air and water* into good *bread, meat and clothing* as the writer of the above remarks could wish. Nor is it the fault of the 500,000 field laborers themselves. Their position in society has been extremely isolated; their opportunities for studying the natural sciences have been small indeed. I wish they were better. I have labored to make them so.

"But Knowledge to their eyes her ample page,
Rich in the spoils of Time did ne'er unroll;
Chill Penury repress'd their noble rage,
And froze the genial current of the soul."

Born, and raised with people that give twenty-six hard day's work for \$10 and board, I confess that all my sympathies are with the laboring classes. When a nation, in her hour of imminent peril, needs a great warrior or statesman, she must go to the *plow* to find a CINCINNATUS, or a WASHINGTON. Why then shall we wait till abundant wealth, stolen from the open pocket of honest industry, shall have cursed the worshippers of Mammon with all the evils of luxury, idleness and debauchery; and shall have filled our poor houses with paupers, our prisons with criminals, and made "Anti-rentism" with the *Indian mask off*, the ruling power of the State, before we will remember the despised "field laborers" who are held by many to be just fit to give ten hours toil for one?

We all know that, as a general rule, those that produce most of the good things of this world, do not enjoy as much more of these comforts and luxuries as their productive powers call into existence. Why is this? Clearly, to my mind, it is owing to a lack of knowledge *how to keep*, as well as *how to create* property. If all interest on money were abolished, and all rents on lands, houses and other property were discontinued forever, and all the products of human industry now in the world were equally divided, it would not help the difficulty at all. So long as laboring men would give three or five day's work for one, while the natural wants of all were alike, and give 100 cents for 80 cents, and 80 cents for 60, the property of the world would rapidly concentrate into a few hands. The remedy for this enormous evil is not in arraying one class against another---the poor against the rich---but in a com-

mon and generous effort so to enlighten the popular mind in matters of labor, money, trade, interest and rent, that every human being shall have an opportunity to work to a good advantage, and if he chose so to do, to *keep* for his own comfort the whole proceeds of his honest industry. It is vain for me to claim the poor privilege of robbing a day-laborer, his wife or his children of ten cents, which they have fairly produced, by any contrivance of interest or profit, and not concede the whole *moral principle* which forbids them the equal right to rob the *robber* when a fit opportunity shall occur for them in turn to take the advantage of a fellow being. We cannot long prosper as a State or a Republic, in evil doing. A just God will vindicate the rights of humanity.

You cannot go on, and concentrate the wealth of the Empire State into a few hands, and not by some indirection rob a large majority of its people. For the few can not possibly produce this wealth over and above their annual consumption. They can not possibly purchase it for they have no fair equivalent to give in exchange. In a community where every man is a sovereign, and the majority will rule just as it pleases, where is the safest depository of the great mass of the surplus earnings of three millions of industrious people? Is it in the coffers of one-tenth of those that produce it, with 60 per cent. of the whole population living from hand to mouth, with all the terrors of the poor-house driving them into dishonesty and crime? No. The public peace and safety require that the property of the State shall be pretty equally divided among the great mass of laboring men, to impart to the whole lump a conservative, law-loving feeling. Without this respect for law and order, the wealth of the rich is no better than chaff. Like all other vices and crimes, that of avarice overreaches itself. Instead of attacking the humble author of the Report in question with bitterness and denunciation, those that wish to live on the sweat of other men's faces, and not by the sweat of their own, should have been willing to establish a Model Farm and an Agricultural School at the public expense, so as to place the science of producing and of keeping property within the reach of the humblest day laborer in the State. If the result had been what the friends of science and rural industry united, anticipate from such union, similar schools could be established in all parts of the country wherever needed.

At the time my Report was written, I was called on to vote tens of thousands from the State treasury to pay citizen soldiers raised in the *city* of New York and in Albany, some two or three dollars a day besides their expenses, to each soldier, for suppressing civil discord and rebellion in one or two of the oldest and most respectable farming counties in the State. The tearing down of the land-office with entire impunity, in Mayville, by the farmers of Chautauque county, a few years since, was also fresh in my memory. I knew that no honest field laborer at present prices, can possibly support himself and family well, on the products of his own personal labor without capital, and lay up more than \$70 a year. At this rate it would consume the entire-surplus earnings of 100 field laborers to pay \$7,000---the annual interest on \$100,000. And when I called to mind the well known fact that the population of this State doubles only once in 25 years; while \$100,000 at 7 per cent. annual interest double in 10 years, and all at the expense of the little savings of laboring people, I thought I saw the reason *why* both an-

trenters and paupers increase in our rural districts much faster than population. If the cultivators of the earth in England and Wales, by our system of giving a good deal and getting a little back, were able, as Mr. Colman says, to count over a million and a half of public paupers, I feared that like causes would produce like effects in this Empire State. Its direct taxes last year were \$4,243,100!

Should a representative of a whole community while called upon to vote \$100,000 to erect a *new state prison*, wilfully close his eyes to evils of this magnitude, which no *art* can conceal, and no *effrontery* deny? It was to check a system of *levelling downward*, which robs the many to enrich the few, and thus prevent pauperism, high taxes and crime, that induced me to say a few words on the importance of teaching the useful science of keeping property to the half million of field laborers in New York. It cannot be denied that this science comes home to the bread and meat, the coat and trousers, the bed and shelter of every laboring person in the State.

Instead of yielding my position to the storm of criticism with which my Report has been assailed, I feel bound by a sense of duty to insist on the importance of the principle to the well-being of the community, that the great body of American sovereigns, who produce the wealth of the Republic, must understand how to keep for their own comfort and happiness, not half, nor two-thirds, but the entire proceeds of their productive industry. Secure to every healthy human being through life a sum equal to the entire products of one intellect and one pair of hands, and those the very ones which God has wisely given him to provide for all his bodily and mental wants; and that perception of *right* and of *duty* which his Creator has also placed in his bosom, will make him satisfied. Guarantee this measure of even and exact justice to all alike, and you may dispense with half your jails and prisons, half your taxes, and half your civil and criminal prosecutions. But if you establish an artificial system of exchange that takes from the proceeds of A's labor 10 per cent., and a like sum from the earnings of B and C, in order to give D 30 per cent. more than his labor calls into existence, the sense of *right* which God has given to A, B and C, to protect their abiding wants of hunger, nakedness and of sleep, is outraged. It matters not to a hungry stomach---to outraged humanity---by what tortuous indirection you rob a person of that which rightfully belongs to him. Human nature, hunger and nakedness, by the decree of Heaven, will not, and cannot be satisfied.

Man's physical wants, his powers of reason, and his moral perceptions, all rise at once to vindicate the inalienable rights of Labor and Humanity. How long will it take an intelligent, Christian people to learn and believe that the *golden rule* which commands them "to do unto others as they wish others to do unto them," is no idle fiction? This *duty* is impressed by our Maker on every fibre of the human constitution. It is a part of that breath of the Divinity which gave to the first of our race a living soul. God has so organized the loathsome reptile, that he can live comfortably in a cage 400 days on a single meal. On man, with all his exalted hopes and sense of just accountability, he has imposed the abiding necessity of having 1,200 meals in 400 days! The serpent needs no clothing, no artificial shelter. God has given it no hands to work and provide these things, and no powers of reason to direct its constructive energies aright, if it had hands.

There is now no mystery in the operations of nature which render it necessary for man to have one thousand meals in the same length of time that the nearly cold blooded reptile needs but one. I allude to this physiological fact as one among hundreds that might be named, all going to prove that infinite Benevolence has made the peculiar and extreme weakness, and destitution of the human body, the peculiar, and untold strength and riches, of the human soul. If, then, our necessities are a part of our nature, and the mothers of our invention, why shall not the inventions of all civilized nations in Agricultural Science be carried home to the understanding of every young man in the State, who is to cultivate the earth for a living? Where is the crime in telling "the 500,000 field laborers in New York," of a few of the "inventions," by the every day operations of which, honest, productive industry is robbed with impunity, to feed dishonest idleness?

He knows but little of human nature who supposes that a majority of the free citizens of this State will be content to work hard, and fare hard, live miserably and die, either in, or out of a poor-house, to enrich others.

Why is it that men, professing to be statesmen and republicans, are so unwilling to look at *both sides* of this great question of the rights of labor, and of the manifold wants of humanity? Is there anything so mysterious in producing property; or in learning to keep and enjoy a sum equal to the products of one mind and one pair of hands, which places these sciences above the comprehension of common day laborers? If so many thousands can, and do learn to get a great deal more than either their mental or physical labor produces in any form, are we sure that those that now get a great deal less than they produce, can not learn to keep at least their own? Do not so wrong the natural powers of the immortal mind. Be guilty of no such absurdity as attempting to maintain that *property*---a thing made by intellect, directing aright the mechanical power of human hands---has anything about it above the comprehension of the author of its being. In nineteen cases out of twenty, our loss of what we have, occurs from an attempt to get more than our own---to give to some one 99 cents, or a less sum, and get a dollar back. Instead of working and studying to produce all that we need, and to keep and enjoy a sum equal to to all that we produce, and wisely being content therewith, we gamble with our neighbors, and justly meet the gambler's fate.

CHARCOAL.---In one or two instances where charcoal has been applied to winter wheat in the State of Ohio, at the rate of 50 bushels to the acre, it has evidently prevented the injury of the very severe drought which has nearly ruined adjoining wheat fields. Mr. R. H. HAYWOOD, of Buffalo, is the owner of a large farm near Sandusky in Ohio, and has tried the use of pulverized charcoal with marked success. The crop is not yet harvested, but the benefit of the coal dust is very signal.

THE AMERICAN AGRICULTURIST ALMANAC.---Mr. A. B. ALLEN, editor of the American Agriculturist, has issued from the press of Messrs. Saxon and Miles, 250 Broadway, N. Y., an almanac for 1846, which contains a large amount of agricultural information in addition to the calendar for the year.

PHOSPHATE OF LIME.

Prof. Haywood, in a lecture before the "Norton Farmer's Club," England, estimates the weight of the phosphate of lime and magnesia consumed by a man in the course of a year, in his food, at 60 lbs. Unless he add to the substance of his bones, and increase his flesh, and whole weight, of course all this earthy matter must escape from his system. As the grain which he will consume in the next twelve months, must contain just as much bone earth, as did the grain that has fed him during the past year, his waste of these indispensable ingredients, obviously deprives the soil of its capability to sustain animal life, to the full amount of his consumption. The sum total of phosphorus available to plants in an acre of land, is usually quite small. Its annual waste in the liquid excretions of the 2,800,000 people now living in this state, exceed five millions of dollars. Guano is the only substance found in any considerable quantities, which contains phosphorus, as well as other constituents of our daily bread, meat, and milk, now daily thrown away. The loss of manure coming from our domestic animals, and the waste of decaying vegetables, are as five to one, when compared with that from the waste of all the materials that both feed and clothe our whole population.

We ought certainly to do as much as to save all the bones of our domestic animals taken from the soil, and put them back again in some form. In many countries, cows are kept up the year round, expressly to save all the salts contained in their food. Instead of dropping them down on two square feet, killing the grass, and robbing two square rods of the very things that form the grass eaten by the cow, they distribute these saline ingredients derived from the food of the animals, equally over the same surface from which the grass was taken. In this way the soil is enriched, instead of being made poorer and poorer. Three good cows are kept on a plot of land, which, under our wasteful system of husbandry, would keep but one. Every blade of grass consumed by any domestic animal, contains some of the most valuable substances of the earth on which it grew. That substance must be restored, not within one or two rods, or a half a mile of the place whence it was taken, but in contact with the very root of the plant. In some soils of extraordinary fertility, many succeeding crops may be removed, without either leaching out their salts, (as potash is washed out of a tub of ashes,) or carrying them off in the stomachs of animals, or in wagons and carts. But these cases are the exception to a general rule, and not the rule itself. So long as a bushel of wheat shall be worth eighty cents, the raw materials that nature requires to elaborate that amount of grain, must be worth at least thirty cents; and soon will be worth forty. A ton of pure guano will always be worth in New York, as much as one thousand pounds of good wheat flour, to make into wheat.

NUMBER OF ANIMALS IN AUSTRIA.

From the late census returns, as issued by the minister of commerce, in Austria, it appears to contain:

Horses,	2,300,000
Cattle,	10,400,000
Sheep,	2,500,000
Pounds of wool per annum,	5,500,000
Swine,	5,800,000
Goats,	1,245,000

PRACTICAL HINTS ON HAY-MAKING.

The season for making hay has now arrived. According to the census returns of 1849, the crop of that year exceeded three millions of tons in this State. It was foolishly estimated at ten dollars a ton—making its aggregate value more than thirty millions of dollars. Putting it at an average of five dollars a ton, our crop of hay is then worth more than any other harvested in New York.

Good farmers differ in opinion as the time in point of maturity at which grass should be cut. Some commence their haying so soon as the plants are fairly in blossom, whether herds-grass, timothy, or clover; while others wait until the seed is nearly ripe. Something is due to the consideration how much work in haying one has got to perform, how much "help" to execute the task, and how pressing the harvesting of wheat, barley, oats, and other crops may affect the farmer's arrangements for securing his hay. If one can choose his time, we think that all gramineous plants should be cut while the seed is in the milk, or just at the time when the seed begins to form. At that period the nutritious elements—those that form the starch and gluten of all seeds—are largely diffused through the stems and leaves of grasses.

Much sound judgment needs to be exercised in cutting grass at the right time, in avoiding rains and dews, and in curing hay just enough; or, neither too much, nor too little. If it were practicable, hay would be much better if cured in the shade, and free alike from the decomposing power of the heat and light of the direct rays of the sun. These dissipate much of the aromatic oil, and peculiar coloring matter in new made, and badly made hay.

It is a well known fact, that butter and cheese made from milk drawn from cows fed on ordinary hay, is pale and insipid when compared with the richly colored and admirably flavored butter and cheese made from milk which is itself made from green, and richly scented grass. Indeed, the fact is well known, that some soils abounding in alkalies, and free from an excess of moisture, yield plants of a more fragrant and oily character than others, which make better milk than is derived from plants that grow on sour, wet soils.

Rest assured, kind reader, that the alkalies potash and soda, and the alkaline earths lime and magnesia, have much to do, not only in correcting mineral acids in the soil, but they perform in the laboratory of plants an important function in changing vegetable acids into starch, sugar, and oils.—These valuable substances are largely developed in maize. And here let me digress to say, that as the crop of grass is very light this season, it is not too late to sow a few acres to corn, for fodder, and get a fair yield. I should sow two bushels to the acre. The seed should be soaked in brine 12 hours before sowing. Several farmers have assured me that they cut last year from six to ten tons of corn stalks per acre, equal to the same weight of good timothy hay.

It is better not to cut grass when there is a heavy dew early in the morning, if it can well be avoided. It requires a longer exposure after it is mown to the sun, than is desirable. Get your grass into winrow and cock as soon as it will answer; and then, by shaking it up light for the air to pass through the heap, finish the curing with as little sun as practicable.

In curing all medicinal plants, they are dried in the shade.

In stacking, or mowing away in a barn, calculate for yourself how much salt your sheep, cattle, and horses will need while eating a ton of your hay; and then spread, as you unload, that quantity evenly over the stack or mow. The writer of this has cured a good deal of hay, and has often put on too much salt to avoid injury to a pretty green mow, which was not exactly hay nor grass. While you put on salt *enough*, remember that cattle don't need to be scoured in cold weather with salted hay.

REDUCTION OF TOLLS ON PLASTER.

We have received a note from Mr. J. A. Thomson, of Cayuga, asking our views as to the probable increase of agricultural products to be sent through the Erie canal, and consequently the increase of revenue that might be realized by a large reduction of tolls on plaster.

We think the view taken of this subject by Mr. T. to be entirely correct. As a writer for the press in the city of Buffalo, and a member of the legislature, we have done what we could to call the attention of the public to the importance of reducing the tolls on the produce grown in Western New York. We regard the Erie canal precisely as we should a good public highway leading from Buffalo to Albany. It is gross injustice, to compel the people using this highway, to pay an extra toll to raise money to be expended in constructing and keeping in repair public roads, in locations where the tax-payers have not a particle of interest. If the people of the Chenango valley, for instance, deserve two and a half millions, to build them a turnpike or a canal, the money should be raised by a general tax on all the property in the state, and not by a *local tax* in one section, for a *local benefit* in another section.

We disclaim any mere sectional feeling on this subject, and are far from desiring to discuss, in this agricultural journal, the canal policy of the state. We trust, however, that the tolls on plaster will be reduced.

LORD TORRINGTON has just issued from the London press a small work "on the Agriculture of Kent," in which he says that for ten years he has never failed to grow a good crop of Swede turnips "by invariably putting charcoal in the drills with the seed." He pulverizes the soil very fine before planting, and scatters after the seed are in the ground, and before they are up, a top dressing of common salt, at the rate of 200 lbs. per acre. Wood ashes, bone dust, and guano are all used in Kent for both turnip and wheat crops. Ashes, coal saturated with urine, and salt are the cheapest and most valuable fertilizers to be had in this country.

ONLY FIFTY CENTS A YEAR!

Proprietors of the *Genesee Farmer*—

You have done much to acquaint all who should take your paper, that the *old price* has been reduced from *one dollar* to *fifty cents*; but I find that many who formerly took it when at fifty cents and discontinued it when advanced to one dollar, have never found out that it is back to the old price. Let every one then who does know the fact, *tell his neighbor* that he can now get in your agricultural paper for fifty cents, what at the lowest calculation is worth *twenty dollars* a year, were we deprived of the paper.

☞ *Sound it abroad!* ONLY FIFTY CENTS A YEAR.
W.

For the *Genesee Farmer*.

CULTURE OF PEAS.

MR. EDITOR—I wish to make a few inquiries thro' the *Farmer* concerning field peas. They are not much raised here, though I think they can be to advantage. I wish to know what kind of soil they want, and the time of sowing—whether they are as good for fattening pork as corn—how many bushels are an average crop from an acre, and whether they are a profitable crop—and their weight per bushel.

Your obedient servant,
CONRAD MILLER.
JACKSON, Luzerne Co., Pa., May 23, 1845.

In reply to our correspondent as to the advantages of the pea crop, we answer: that in very many cases, we consider it a very valuable item in husbandry, especially in wheat farming, when it is not desirable to go extensively into the wheat crop.—Indian corn is a costly and laborious crop to produce; and when land will with a tolerable certainty produce wheat, there is no other excuse for raising much corn, except to use up the time occurring between spring sowing, haying, and harvesting, and the fall months not otherwise employed. It is a *hard feeder* on land, and wheat does not follow well after it, except it was highly manured at planting, or followed by well rotted manures, or composts after the corn is off; while the pea is a *light feeder*, and a most capital preparation for wheat. Fall plowed swards, or even spring plowed clover leys, put into peas early in the spring, will be gathered and off the land before fall wheat sowing, and leaves the soil loose and free from weeds, and apparently richer than if it had laid idle all summer in the summer fallow.

One of the great advantages of the pea crop over their value in fattening hogs, is, they come in early, before corn or potatoes, and are only a trifle behind corn in the nutriment contained in equal quantities. Experiment and nice analysis show that peas contain more material for forming muscle or flesh than Indian corn, although corn excels in forming fat—qualifications exactly conforming to the necessity of the case. Peas are also raised with one half the actual expense and labor that corn is, and may be profitably fed to hogs in the straw.

The soil best adapted to peas, is a loam a little inclining to clay. Early sowing is important, even if before snow and frosts are past. Sow at the rate of 2 to 3 bushels per acre, according to size, and even more if *buggy*. They succeed best when plowed in with a light furrow, from four to five inches in depth, and harrowed down smooth for convenience of gathering. On good soil, the general yield is from 30 to 40 bushels per acre, and weight about 50 pounds. * * *

PROFITS OF FARMING.—We often hear it remarked that there is no profit in farming. Well—if there be no pecuniary *profit*, there is *pleasure*, and we know of no more rational way of enjoying the competency, which a man may have obtained by his industry and enterprise, than in cultivating and embellishing the earth, improving and increasing its products, and thus adding to the aggregate of human happiness. A gentleman farmer—and all farmers are or should be gentlemen—belongs to an order of nobility, that is not indebted to kings or princes for its institution, and may, if he chooses, be ranked among the greatest benefactors of the human race.—*Boston Courier*.

For the Genesee Farmer.

THE LATE FROSTS.

(IN A LETTER FROM CAYUGA COUNTY.)

The last spring has been characterized by great heats followed by severe frosts.* No visitation of this kind has been so intense and so late in the season, as that on the morning of the 30th, since the year 1817: that frost (28 years ago) happened two days later—on the first morning of summer; and all the apples and peaches in this neighborhood, *exposed to the sun while the rime remained on them*, perished.—It was noticed at the time, that an orchard on the west side of a thick wood, retained its fruit; and that a peach tree on the east shore of the Cayuga lake, protected by a hill from the morning sun, was also undamaged. These two exemptions from the general calamity were ascribed to two causes: the latter to the vapors of the lake, and the former to the exclusion of the east wind!

Some of the earlier frosts of the present season passed away with less injury, on account of the sky becoming overcast and the air warmer before the sun shone out; but the morning of the 30th had no clouds. Much damage, however, was doubtless prevented by the springing up of a cold wind, which rendered the transition to a higher temperature more gradual. Still, notwithstanding this favorable occurrence, all our grapes on the trellis are ruined, and the vines are so stripped of their leaves, that a long time will be required for their recovery. None have escaped but such as were climbing on young trees, and not quite all of these. The leaves of the trees doubtless afforded some protection.

Previous to this great frost, the cherries had grown thin on the trees, declining, and withering, and dropping, so that some kinds lost all, and the more hardy sorts, not less than one-half or three-fourths. Many young apples and pears also strewed the ground. In short, where in former years there was abundance, we shall hardly expect more than enough for home consumption.

Corn, potatoes, and every tender plant, whether from the hot-bed or grown in the open ground, have been cut down or damaged, unless well covered from the cold. Applied in this manner, it appears that woollen cloth is less efficacious than either cotton or linen. Paper has served a good purpose. It is worthy of remark, however, that when the covering was fastened *several inches above the plants—not resting on them*, the least damage was sustained.

There is a more effectual way of preserving plants from vernal frosts, however, which was suggested by my son, who resides with me, and which we have practiced with complete success: *Cover them with earth to the depth of one or two inches.* One or two sweeps of the broad hoe is sufficient to cover a hill of corn or potatoes, a tomatoe, or an egg plant; but beans, cucumbers, melons, and squashes, require more care, as the leaves and stems are more brittle. More care with the fingers will also be necessary in removing the earth from them; but the whole affair is a small job compared with *replanting*.

D. THOMAS.

Greatfield, 6th month, 1845.

* The warmth of summer-like mornings was suddenly absorbed by winds springing up from the north—north-easters coming up the bay through the Gulf of St. Lawrence, and becoming a little changed in their course.

To keep good apples from rotting—place them in a dry cellar with fourteen children.

For the Genesee Farmer.

THE CURCULIO.

MR. EDITOR—In your last number I saw an article copied from the Maine Cultivator, professing to give a "remedy against the curculio," and names the *destructive* as a "*green moth*." (!!)

It is not a matter of wonder that every person does *not* know what a *curculio* is; but it is a matter of wonder that constant readers of agricultural papers, most of which have again and again described and treated of this insect, and given engravings showing size, shape, &c., should not yet have "made his acquaintance," or at least have known whether he was a *worm* or *bug*. It is not a moth, or other worm, that does the mischief, as I have many times watched the curculio and seen him perform the process, and this he does with the skill of a professor of surgery—first cutting a segment of a circle, and then depositing the egg, after which the juice exuding from the wound forms a "sticking plaster." I am very skeptical as to the exterminating properties of the *remedy* he gives, (ashes, soot, and sulphur sprinkled on the tree,) *it cannot reach the egg*; and as for the curculio, he inhabits a sort of coat of mail, hard and resisting, and seems to care little for what surrounds him, *plums excepted*.

The *remedy* which will prove effectual, if the gardener does his duty, is to *anticipate him*, and never let him exist, which is done if all the *punctured* plums that fall to the ground are burned, or given to the hogs.

Now, sir, one word in relation to copying the article into the Farmer. I shall believe it was done without your supervision, as its erroneous description of the *curculio* must at once have satisfied you that the writer knew nothing of the insect of which he wrote. Yours, obediently,

Rome, June 5.

J. H.

MONROE GARDENS, GREECE, JUNE 16.

MR. EDITOR—I have been enjoying a sight which rarely occurs. At 11 o'clock, A. M., on looking in a direction a little to the west of north, I was surprised to see the whole breadth of Lake Ontario spread out before me, together with a broad belt of country adjoining, appearing like a large inclined plane descending quite to the water's edge. The landscape view was so clear, that the lines between the timber and cleared land were easily traced, and even many single trees in cleared fields were visible. A vessel passing near the north shore was distinctly seen, and the whole appeared as within twelve or fifteen miles. From the time I first looked in that direction until the lands in Canada disappeared, was from twenty to thirty minutes.

At half past twelve o'clock, the surface of the Lake from the position in which I saw the above was not visible. N. GOODSSELL.

No man is entitled to more than the honest products of an honest pair of hands, and no man's intellect is bestowed upon him to overreach and beguile his fellow; and whosoever so uses it, violates the law of God and Nature, and tramples on the rights of man.

The Western New Yorker says that John Wilder, Esq., of Perry, Wyoming co., has a calf, which at three weeks weighed 186 pounds, and at four weeks old weighed 208 pound. He means to take the premium at the county Fair. Beat this who can.

For the Genesee Farmer.

CATERPILLARS, LITIGATION & LAWYERS

MR. EDITOR—I can heartily sympathize with your correspondent in his indignation at the sight of orchards ravaged by the caterpillar. Every farmer who permits it is an enemy to his own interest, as well as the interest of his neighborhood; for the insect increases by his negligence, and another year will be still more abundant. As he remarks, one day's work at the proper season would prevent all the mischief.

I have been very successful in getting rid of these nasty pests; and the method I adopt is simple and sure. As soon as the nests are large enough to be easily distinguished, say almost the size of a lady's fist, I send a man with a small ladder into the orchard, with directions to go into every tree, and to destroy every web. He puts a heavy leather mitten on his right hand, and taking the worm, web, or nest in his hand on the limb, squeezes it into a mess, thus destroying its contents at one fell swoop. If there are any he cannot reach, he saws off the limb and crushes them on the ground. The operator should take a cold day, or only work at them when the weather is cool, for then they will all be in their nests. It only cost fifty cents to fill an orchard of five acres this spring, and the work was thoroughly done. If it had cost ten times that sum, I should have thought the money well laid out. By close attention for a few seasons, they will be almost entirely eradicated.

J. F. S. has good notions about litigation. If all the farmers thought like him, and acted upon his suggestions, lawyers and courts would be among the things that were. There are no litigated suits that could not have been settled without any trouble, if both parties had been willing to do right; or if they had fallen into the hands of honest lawyers.

J. F. S. will excuse me for suggesting to him and all other farmers and mechanics, a very short and easy way to avoid litigation. Let all agree at town meeting to submit their difficulties to a board of reformers. Let the board consist of three persons and choose them for the year. The law makes ample provisions for arbitration. Select the best men in town, and as there will be no party feeling to gratify, the selection will be sure to be a good one.—Public opinion will soon compel all who are in a contentious mood, to resort to this tribunal. Boards of trade in all large towns have their committee of reference, and they have been found very useful in preventing litigation. Farmers, of all others, should keep out of the law; and they should not complain of lawyers preying upon the hard earnings of industrious laborers, until they cease to employ them to ruin either themselves or their neighbors—nor should they complain of the increase of that profession, as long as they continue to give them all the offices of honor or profit. When farmers are true to themselves and their noble calling, lawyers will become scarce. P.

KEEP DOWN THE WEEDS.—Yes, don't permit a single weed to grow. Remember that all spurious vegetation is injurious alike to the growing crop and the soil. It costs more to mature one rank pig weed, than it does to ripen three times its weight of corn or any other grain. Let the hoe be busily employed.

Hon. Henry L. Ellsworth, late Commissioner of the Patent Office, has taken up his residence at Lafayette, Indiana.

For the Genesee Farmer.

A GARDEN.—CLAY VERSUS SAND.

MR. EDITOR.—How often do we hear a man say, "give me sandy soil for a garden: clay is too hard to work, and if you mix sand with it, it only turns the product into a still more adhesive mortar."—This assertion is true, so far as the sand and clay are concerned; but if you add coarse organic matter to the sand, and avail yourself of the frosts of winter to perfect the mixing, you will soon have a garden, worth two where sand predominates; Indian corn never suffers from drought on a soil thus prepared. It is with surprise I hear men of experience in gardening, denounce nature's choicest calcareous clays, as fit only for a subsoil, to keep the salts of a manured sandy surface from sinking. But a better experience proves that an alluminous soil, kept loose by fall plowing, long manure, &c., is much better than even a sandy surface with a clay subsoil; and it is as easily tilled, if its mechanical structure is attended to in season.

Go over an acre of growing Indian corn, planted in a greasy, calcareous clay, ameliorated by fall or winter plowing, long manure chip dung, and old sward: the soil between the rows will put you in mind of the soil in the woods; your feet sink into the mellow compost, whose very fatness would be oppressive to the senses, were it not expending itself beautifully in the growing crop. Then go over an acre of corn planted on a sandy soil, which has been even well manured: already the external evidence of animal manure in the soil is extinct before the crop is half grown; 'tis true that the sand beats the clay the first two weeks of the corn's growth, but now the odds is two to one in favor of the clay.

Alumina has a great affinity for, and power to retain the atmospheric gasses, which it gives off only as required for food to the growing plants. Sand, on the other hand, needs all the quickening alkalis, mineral and vegetable, to render it soluble. Its constant cry is, give, give. S. W.

GOOD INFLUENCE OF BIRDS.—Birds that come around our houses should be protected. Their influence is good on us and our children. Their hymns go up when we are silent; they never forget the song of praise and thanksgiving. It is well for us to listen to them, and be humanized by the kindly lessons they teach us. Let us not grudge them the little they take from us, but spare them for the sake of those we love best. The child who has watched for the coming of the birds, and has heard the notes of the robin near his chamber window, will feel their influence in after life as a holy remembered thing. No tone of music shall ever fall on his ear like that thrilling song in the dim twilight of early morning. It may strike on his memory when he will need it most, and the scenes and innocence of childhood will come to him again to bear him up.—Encourage this love for these things of nature, ye who would bring up your children in purity and peace. No after-teachings can give such holy feeling, and the impressions they make shall never be forgotten.

The spring has come, and the robin is back again. He has looked at his weather-beaten nest on the apple tree, and finding that a few repairs will make it good, is now pouring out his song to his old friends; and, although he took rather more than his fair share of our cherries, he feels that we are glad to see him, and were satisfied to take our pay in singing.

For the Genesee Farmer.

DEVON CATTLE.

MR. EDITOR—Having repeatedly been requested to give my opinion of the Devon Cattle, and from what stock those originated which I introduced into the country, I take the privilege of doing so, thro' the medium of your useful journal. But I feel a great reluctance in performing the task, knowing that there is a general distrust among the agricultural community, of all statements that are made thro' the agricultural journals, relative to any improvement in animals or seeds; and particularly, if the person making them have any to dispose of; it is then believed to be self-ish puffing, in hopes to profit by it. Whether the experience of the past has been the cause of this general want of confidence in each other or not, it is much to be regretted, for it destroys the foundation of all agricultural improvements, and very much prevents the usefulness of the journals.

We are liable to what is called prejudice. We have our favoritisms and our aversions, and frequently without being able to give the reasons, even to ourselves; and when any one expresses an opinion, it may be expected that it will receive a coloring from his feelings; and no one has a right to condemn because he does not receive the same impressions. But when any one states facts predicated on experience, it is expected that they can be realized by all who are equally accurate and persevering. But facts may be correctly stated, and at the same time be guilty of great deception. For instance, a farmer has six cows of a particular breed; one of them being a great milker, two of them only middling, and the other three very poor ones. If, in answer to an inquiry relative to the milking properties of his cows, he should give a statement of the quantity that the great milker gave, and make no mention of the others, he would convey the idea, that, as a breed, they were extraordinary milkers, when they were the very reverse. He does not tell a falsehood, yet he is guilty of gross deception. Or providing, that by extraordinary feeding and care, he increases his animals to a large size at an early age, but not stating the fact that they had received extraordinary feeding and care, the viewer takes it for granted that it was the general characteristics of the breed, is deceived, by the other's not giving the necessary explanation.

The Devons are a very distinct breed of neat cattle, possessing several characteristics peculiar to themselves, of which they are very tenacious.—They are uniformly red, varying to a bright mahogany; no white on them if pure, excepting the bush of the tail, and frequently a shade of white around the outer edge of the ears, which is more common with the heifers than the steers. Their white bushy tails are very remarkable, and are a sure test of the blood. When calves, the end of the tails which form the brush are always darker in color than the rest of their bodies. By the time that they are 8 or 12 months old, they commence changing their color, and at 3 years old they are purely white—which never fails in a pure Devon, and generally runs with the blood to a very great extent. They are small in the bone, fine and clean in the limb, straight on the back, full in the chest, prominent and bright looking eyes, keen in their looks, and are very active; and, as Lord Somerville says, "possess more of the appearance of what is termed blood in horses, than any other breed of neat cattle."

Their horns are long and fine, and yellow at the root when young. Skin yellow, soft, and silky to the hand, and hair frequently curled. Their uniform appearance renders them very easy to match for labor, for which none can excel them. They are excellent travelers, docile and tractable. Their beef is of the very best quality, being what fleshers term "well mixed," and proves remarkably well when dressed, and yields as much in proportion to the food they consume as any other breed.

There was originally two varieties of the Devons, possessing different properties of excellence. The south Devons were heavy in the fore quarters, long and elevated horns, active, vigorous, and lofty in their carriage, but rather light behind, and their tails sometimes heavy. The north Devons were long and fine horned, but the bulls rather inclined downwards, head and carriage not so lofty, tho' slimmer tails and much heavier in the hind quarters. The two breeds have been crossed, and have produced animals uniting the valuable properties of both.

Those which are now raised by me, Mr. Beck, of Sheldon, and others, who procured them from my stock, are a cross of the two breeds. The first which I got were the south Devons, from King, of Long Island; the second were the north Devons, from Patterson, of Baltimore, who received them as a present, from the celebrated Coke, of Norfolk, England. I crossed these two breeds, which made, as I think, a great improvement.

A few years ago, Mr. Vernon, of Genesee Co. imported a pure, thorough bred, Devon bull. He was rather light in color, and had rather a tender and delicate appearance; but he proved an excellent stock-getter. He is now owned by Mr. Dibble, of Batavia, and is a valuable acquisition to the farmers in that section. Mr. Beck bred from some of his best cows to him, which has produced most splendid animals.

WILLIAM GARBUTT.

WHEATLAND, June 8, 1845.

HARD-WORKING FARMERS, READ THIS.

Dr. Duncan, in his speech on the Army Appropriation Bill, exposes the profligate policy of the government in relation to war expenses. The major general receives \$7,144 88 per annum in salary or perquisites; equal to the income of twenty-four farms, capitol and labor included. A brigadier general receives \$4,600, equal to the proceeds of fifteen farms, each worth \$5,000, and labor included. An adjutant general receives \$3,884, a sum equal to the proceeds of thirteen farms, worth each \$5,000, and labor included. An inspector general receives \$4,133, equal to the proceeds of fourteen farms, worth each \$5,000, and labor included. A quarter master general receives \$3,767, equal to the proceeds of twelve farms, each worth \$5,000, labor included.— A commissary general receives \$3,568, equal to the proceeds of twelve farms, each worth \$5,000, labor included. A surgeon general receives \$3,628, equal to the proceeds of twelve farms, worth each \$5,000 and labor included. A colonel receives \$3,916, equal to the proceeds of thirteen farms; a major \$2,307, equal to the proceeds of eight farms; a captain \$2,184, equal to the proceeds of seven farms, worth each, in all cases, \$5,000, labor included.

Now, honest farmers, do you wonder that this country is perpetually in danger of "foreign invasions and domestic insurrections," when it is to be defended at such a price? Who can wonder at the patriotic reluctance of these military gentlemen to "beat

their swords into plowshares and learn war no more," when as good and as brave men as they, have to drive the plowshare to the tune of \$300 a year, and defend the country besides?

CHARITIES THAT SWEETEN LIFE.

Pleasant words! Do you know, kind reader, how potent a spell lies in a pleasant word? Have you not often thought of its power to soothe—to charm—to delight, when all things else fail? As you go on through the journey of life, have you not seen it smoothing many a ruffled brow, and calming many an aching bosom? Have you not noticed it in the house and by the way—at the fire-side and in the place of business? And have you not felt that pleasant words are among the "charities that sweeten life?" Ah! yes, and their influence has come over your own soul. Not long since, when you went hending to the earth, oppressed and weary with life's manifold sorrows—when dark clouds have hovered over you, and the blackness of darkness covered you—when you were ready to yield in despondency the pursuit of happiness, and give yourself up to unmitigated gloom—when no object of life seemed desirable, and even the friendships of earth were worthless in your eyes—when you would fain have passed the companion of your childhood unnoticed, as you met him by the way—oh! can you tell how, in such an hour, the sound of a cheerful voice—one pleasant word has dispelled the gloom, and given you to the world again—a man—hopeful, trusting man. You can tell us how like an angel-whisper was the kind enquiry of that companion, and how the tone of cheerful sympathy sent the dark clouds rolling from your sky, and, revealing the light of day—showing you that earth is not *all* a wilderness, nor man a being utterly deserted to wretchedness.

Or, when you come from the counting-room or work-shop care-worn and weary—when your brow has been furrowed and your thoughts perplexed—when troubles of the present and anxieties for the future have crowded every peaceful feeling from your heart, and when you almost dreaded to return to your own fireside, lest the sight of those dear ones there should increase your distress—tell us what has been the influence of a pleasant word at such a time. Tell us how that, ere you opened your door, the sound of glad voices reached your ear, and as you entered, how the troubles of your soul were laid at rest; and cares for the present and for the future, fled before the pleasant words of your smiling children and the gentle greeting of your wife.

Or, when the ire of your spirit has been roused, and indignant feelings have reigned supreme in your breast—when the angry threat was just raising to your lips, or the malignant wish about to burst from your heart—what mighty spell caused the storm so suddenly to subside, and spoke the turbulent waves so quietly to rest? Was it the whisper of a pleasant word that restored calmness to your tempest-tossed soul? Did the soft answer turn away your wrath?

Oh, learn this art yourselves, all ye who have felt its kindly influence from others. Speak pleasant words to all around you, and your path shall ever be lighted by the smiles of those who welcome your coming, and mourn your departing footsteps.

Mother, speak pleasantly, and be assured that answering tones of joy, and dispositions formed to constant kindness, shall be your reward.

Sister, brother, friend—would you render life one sunny day, would you gather around you those who will cherish you in the darkest hour? Let the law of kindness rule your tongue, and your words be pleasant as the "dew of Hermon," and "as the dew that descended on the mountains of Zion."

AGRICULTURE—SIXTY-NINE PATENTS GRANTED.

The large number of patents granted for applications pertaining to this class, may be taken as fair ground for the deduction that the subject is still one of great growing interest, and is, at present, engrossing a very large share of the inventive talent of our country. In the short space of one year, it could hardly be expected that any important revolution, any signal discovery, or many really useful inventions should be made in a pursuit claiming, above all others, the right of primogeniture. Advances, nevertheless, are constantly being made in this branch of industry. Every year it is acquiring fresh laurels, and a higher reputation for itself. The "sweat of the brow" is not now the mainspring of its operations, the grand key to its success; nor the open field the sole theatre of experiment. The closet, the laboratory of the chemist, are its nurses. The most exalted intellects are becoming farmers, as it were, in the retirement of their studies. Science, both chemical and physical, has become the palladium of agriculture. Since the publication of Liebig's valuable work on the chemistry of agriculture, we must date a new era in this science. It has, at least, received a fresh impulse from his labors; and its publication in this country, in newspaper form, for the low price of 25 cents, (when the ordinary bookstore price has been \$1,50,) will aid greatly in disseminating knowledge, so essential to farming interests. The use of guano as a manure has long been known in remote parts of the world, and this substance has been employed for many years to fertilize the barren soils on the coast of Peru; but it does not seem to have elicited attention, other than as a matter of curiosity, from the most enlightened agricultural portions of the world, until after the appearance of Liebig's work. The announcement that it was only necessary to add a small quantity of guano to a soil which consists of nothing but sand and clay, to procure the richest crop of maize, was sufficient to awaken an interest in the farmer, and excite the cupidity of the merchant. No writer has dwelt so much on the importance of nitrogen as a manure, as Liebig; and it is this feature in part, which constitutes the grand novelty and value of his work. In the above quoted assertion, where guano is added to clay and sand, we suppose not a trace of organic matter in the soil; and yet, by the addition of a manure, consisting chiefly of urate, phosphate, carbonate, and oxalate of ammonia salts, all containing nitrogen, we have the richest crops of maize. The husbanding of substances containing nitrogen, and attention to the proper methods for its fixation, will soon become objects of paramount importance with the farmer.

Plows.—Several important improvements have been made in this instrument during the past year; but they are chiefly for modes of fastening and so fitting the points and shares, that in case of wear or injury, they can be easily replaced by the farmer himself. It is a question, perhaps, yet to be decided, whether cast iron plows are more economical to the farmer than the plows with cast iron mould boards.

and wrought shares and points. In the latter, the mould board is liable to be broken, and if so, can hardly be replaced; but, as the share and point are the parts most liable to injury, if these are wrought in iron, and fastened in a simple and firm manner, the farmer who is in the neighborhood of an ordinary blacksmith, or may have one upon his establishment, can easily repair the damage, which, in the case of the cast iron plow, he could not do without sending to the manufacturer or the foundry for a new casting. This objection to the cast iron plow, is now, in a great measure, obviated by many dealers, who are in the practice of putting up with each plow, for a slight extra expense, two or more extra points and shares. Few plows have been patented during the past year. Several applications have been made for patents for the substitution of steel for cast or wrought iron in plows, and rejected upon the well-established ground that the mere substitution of one well known material for another is not the subject of a patent. Several cultivators and combined plows for light soils, have been patented; but nothing of definite value can be predicated upon this class of inventions. An ingenious instrument for digging potatoes has been the subject of a patent, and though it may fail to do all it professes, is certainly an approximation to an invention very much needed. This operation is one of vast labor; and a cheap labor-saving machine, which in case of very large crops, should leave one-tenth, or even a larger proportion of the crop in the ground, would be a welcome invention.

A promising improvement has been made in the grain cradle, by making the teeth of hollow metal, filling them up with wood sufficiently far to insure strength. The teeth glide very easily through the grain, and are not liable to the objection of warping and sticking where the grain is wet, as is the case with wooden teeth.

A simple and effectual instrument for gathering fruit from trees, has been patented, by which the ladder may generally be dispensed with, and the trees and fruit saved from injury.

Some important improvements have been made in smut machines, and in machines for hulling seeds.

The wheat fan, or winnowing machine, has been of late much improved by the use of the spiral fan in place of the old flutter-wheel fan; and, although the introduction of the spiral fan is not recent, yet it has during the past year been introduced under such modifications as to render the instrument very serviceable. In connection with this instrument also, an interesting and useful feature has been secured by patent, consisting of a mode of so operating the screens or sieves as to give just that motion which is imparted to them when they are used in the hand.

BEEHIVES.—A growing interest is evident in this branch of agriculture, and a large number of applications have been received. Seven of them have been patented, and a greater number rejected. Most of the alleged improvements have claimed to be remedies against the bee-moth, the pest of the apiarian. As bee culture increases, the bee-moth seems to become more numerous and troublesome, and should therefore be vigorously met by vigilance and ingenuity. In this latitude, it requires every attention to save the bees from this their great enemy; and so formidable has it become from numbers, that the same devices which may, perhaps, be found to give protection farther north, will not apply here.

Nothing yet seems to be of any value, except placing the hive upon the ground—the hives being made very tight, and the entrance of the bees being as low as possible.

From the Cultivator.

WHEAT CULTURE.

At one of the weekly agricultural meetings held during the past winter, the subject of discussion was the culture of wheat. Mr. McVEAN, member of the Assembly from Monroe county, made some very interesting and valuable remarks, which, at our request, he has furnished us for publication.

In offering a few remarks, said Mr. McVEAN, on the cultivation of wheat, I deem it most proper,—deferring the minor details of special cultivation, manures, diseases, and different varieties,—to introduce the subject by an exposition of the general principles and circumstances of soil, natural adaptation and climate, which will ever control the production of this most important crop.

An examination of the geological map of the state, will at once and most readily indicate to the intelligent observer, what portions of the state are most naturally adapted to wheat.

First in value, and occupying a large surface, is the Onondaga salt group. The rocks of this group are sometimes denominated the gypseous limestone, or shales; connected with which, are the plaster quarries, the water limes, and the salines of the state. This group, as a whole, embraces the most natural and enduring wheat soil of the state. It includes, and extends from Grand Island eastward, narrowing to a point in the county of Schoharie. Its soil is composed of diluvial swells, chiefly resulting from and based upon the limestone—a subsoil, susceptible of fertility at any depth, and which, with the substratum of lime-rock, is adapted to absorb the superabundant moisture. Hard water, a prevalent growth of oak timber, also upon much of its southern line a comparative absence of vegetable accumulation, and often of timber, consequent upon the annual burning of its natural product, the opening grass, characterize this group. With a surface at once beautiful and accessible, few portions of the state presented a more unpromising appearance of soil to the first settler. Its unsurpassed and permanent value has been demonstrated by time and experience, and it is due to the mineral character of its soil, and the fertility and adaptation of the subsoil.

Although I have dwelt on this group more at large, because of its natural peculiarities, I am far from claiming for it exclusive natural adaptation to wheat; and only mean to say that it is more generally and permanently so adapted than any other, as a whole—that as a whole it is more certain and enduring; and better resists every unfavorable vicissitude of season, climate, or defective cultivation; and that under continued cultivation, there has been little if any falling off, in its annual product of wheat except when managed with great imprudence.

I am aware that there are large portions of superior wheat soil embraced in the collateral geological groups, very much of which is but little, if at all, inferior to the above in natural adaptation to wheat.

Of these, extending north to lake Ontario, are the Niagara, Clinton and Medina groups: and towards the south, the Helderberg, Hamilton, and of the Chemung group, more or less of the northern

portion, according to the extent of the northern line drift; for it is an important fact that the diluvial current from the north, has conveyed and intermixed beneficially, the rock of each of these groups with all the others; conveying the fertilizing lime far south of the actual existence of the rock, in place. These various groups contain collectively a very large portion, perhaps one-fourth, and the most valuable soil of the state.

When the important question arises, where have occurred, and to what causes are due, the evident and conceded diminution of the wheat crop of the state? It will be found that it has occurred chiefly, in the last mentioned groups; and generally in the ratio of their distance from the first; owing, in some instances, to the deficiency of lime, deficient mineral qualities, and excess of vegetable matter and humus in the soil; very frequently to the too level and wet surface; but more specially and injuriously, to the tenacity and imperfection of the subsoil; resisting the escape of the superabundant moisture, whereby large surfaces are often supersaturated with water; inducing winter kill, debility, and various diseases of the plant, especially under the action of sudden and extreme frost, or heat and drouth. Collectively, these results become more manifest and injurious as the soil has been retained under long continued cultivation, so that only in the most favorable seasons can a full crop be realized in much of these soils; and in these have occurred the principal falling off in the wheat product of the State.

As there are large portions of soil thus circumstanced, in the wheat region of the State, and especially in the last named groups, it follows, if the premises are correct, that in no way can the area of wheat growing be so advantageously extended, and in no way can capital and means be so profitably applied, as in improving and adapting these lands, by open and thorough draining, where the mineral qualities of the soil are in other respects proper. It is an indisputable fact, that very large surfaces under cultivation, scarcely yield a remunerating return, from the causes here indicated.

In further illustration, and in order to a more comprehensive view of the whole subject as connected with the above general principles, I desire to remark briefly upon the influence of climate upon the production of wheat, as I am not aware that the importance of the subject is generally appreciated.

Perhaps there is not on earth a better wheat soil, than is to be found in New York; so far as the natural capability of the soil is concerned; and yet it is only when the most favorable circumstances of season and temperature combine with a proper condition of the soil, that we obtain products approaching those of Great Britain, from lands under no better cultivation, and inferior in natural adaptation to ours. The cause of this is to be found in the excessive character of our climate. Our growing crop has to surmount the extreme severity of our winter, and the more injurious and frequent spring frosts, acting upon a wet surface, producing what is called winter kill. The succeeding heat and drouth, acting with sudden change on the same wet surface, upon a plant flourishing only in a dry soil, and naturally incapable of resisting these adverse conditions. And finally, encountering the excessive heats of summer, (often in connection with moisture,) stimulating the plant to premature and diseased ripeness. Or, if the foliage is very dense, enfeebling and lodging it so that the grain is deficient in proportion to the straw. It is a

frequent occurrence, that the crop is heavier than can be carried to profitable maturity, under the influence of our climate; and practical farmers have long since learned that crops of a medium weight are generally the most profitable.

These influences of climate apply not only to the State, but with more or less injurious force, to all the U States, and in one extreme or the other of heat or cold; and it is probable, that in the south western States of the Union, the cultivation of the wheat is limited, more by the influence of climate, than by imperfections of soil.

In accordance with the above principles, and for the reason assigned, it will be always practicable to equal, or even inferior conditions of the soil, to raise heavier crops, where the climate is more temperate and uniform; for the reason, in addition to those stated, that the crop occupies the soil a much longer time in arriving at maturity, and is also less subject to the adverse vicissitudes and influences alluded to. This believed to be the case in some parts of Europe and in Great Britain, in which last, the crop generally occupies the soil, in a growing state, excluding the fall and winter, from the first of March to the middle of August; but doubtless its insular position has a favorable influence. In such climates also, it is more practicable, for the same reasons, to carry down the cultivation of wheat, to soils of inferior natural adaptation.

As the influence of climate is a fixed condition, and little subject to human agency, our alternative is to adapt our soil to the climate; and this we may do, chiefly, by laying the land dry, and obviating on a large extent of our soil, the injurious effects of superabundant moisture.

In clearing new land, the importance and economy of obtaining, or even planting, at proper intervals, narrow belts of timber, as protection against the winter winds, still engage the attention of practical men. The white oak, which retains its leaves through the winter, is admirably suited for this purpose, and indigenous to the soil.

In continuation, it may be remarked, that the winter frost, and the heat and drouth of our summers, while offering superior advantages for cultivating and subduing the fallows, affect injuriously at the same time the growing crop, especially in wet and heavy soils; urging their drainage also from the consideration that they are afterwards more easily and seasonably tilled, and more productive of all other crops as well as wheat.

The additional conclusions resulting from these general views and principles, are, that the first requisite, in the cultivation of wheat, is to be obtain a good soil, that a good soil is one that abounds in lime, is clean and dry, and right in the mixture and quality of its mineral matter, including fertility and absorbent qualities of the subsoil, that a soil containing vegetable fibre or humus in excess produces much straw and little grain, and that consequently alluvial soils are not well adapted to wheat except when naturally overlaid by a proper mixture of the neighboring (plant) minerals, that there is much unprofitable application of labor and capital, because of nonconformity to the natural laws of soil and climate, that the cultivation of wheat may be profitably continued or extended on large portions of our land, by adapting the soil to the climate, and thus to the cultivation of wheat, on lands that are too level or wet, provided the mineral qualities of the soil are proper in other respects.

I would finally offer the suggestion to practical men, that as good wheat soils are well adapted to the production of nutritious pasturage, it will be found most profitable at the relative prices of products and labor, to renovate the soil to a greater extent than is now practiced, by rendering pasturage necessary to the cultivation of wheat, in preference to costly or artificial manures, beyond a judicious economy and application of those that accumulate on the farm; and that lands not natural to wheat will be most profitably applied to other crops.

NEW POTATOES, raised by Mr. Stanton, of Hanford's Landing, were in market on the 27th June: good, considering the season.

WEEDS.—Let not one grow. All sourisng vegetation is injurious alike to the growing crop and the soil. It costs more to mature one rank pig weed, than it does to ripen three times its weight of corn or any other grain.



HORTICULTURAL DEPARTMENT.

BY P. BARRY.

STRAWBERRIES.

Though strawberries cannot be considered among the *indispensables* of life, they are, in our opinion, one of the greatest luxuries that the bountiful earth produces. They are a *cheap* luxury too, and that is a great point, now-a-days. Every family, possessed of ever so small a piece of ground, may sit down daily, during six or eight weeks, to a dish of delicious strawberries. A bed of 12 feet square will, if properly taken care of yield a moderate family supply.

The market of Rochester is but poorly supplied. We have no regular market-growers, as there are, and should be in the neighborhood of cities with such a large, and withal, so refined a population as that of Rochester. About the time that good quality fruit should have been abundant in the market, we saw miserable, small, insipid things sold for fifty cents per quart. Our "Ice cream saloons" and refreshment houses will give you enough to *remind* you of strawberries for a shilling, sufficient to *taste* of for two shillings. To be sure they give you a sprinkling of cream and sugar, and a spoon to eat them with! Now, this should not be so. Strawberries should be as plenty here as in any other place. We have as good soil for raising them as the sun ever shone on. We know by experience that our climate is suitable, for we grow here in the gardens of the city of Rochester and vicinity and throughout the whole country wherever pains have been taken, as good strawberries, as large and as fine flavored as we have ever seen elsewhere. Then why should we not have an abundant supply of them? Only think of the people of Cincinnati: What quantities they consume. Their market is not supplied by the *pin* or *quart*, but by the *ton*! Growers there, some of them, cultivate 50 to 100 acres; the price varies from six pence to a shilling per quart, and this is ample remuneration. We think there is a good chance for a profitable speculation in this business, in the vicinity of Rochester.

The proper time for making strawberry plantations is in August. Procure good, strong, well rooted plants, of the very best kinds: plant them in a suitable, rich, well prepared soil, and you will have a crop of fruit the following season.

Last year we planted Hovey's Seedlings the latter part of August. This season we have gathered a crop of beautiful fruit, some of them measuring 4 to 5 inches in circumference. These do better when planted with some prolific variety, such as Kep's Seedling. Ours were planted apart from any other, and the crop is smaller, not over one-third of what it otherwise would have been. This is owing to some defect in the fertilizing organs of the flower.

We will give some directions in our next number, to aid those who design making plantations.

CHERRIES.

Every year increases the number of good cherries, and consequently decreases the number of poor ones in our market. So far this season, the supply has

been tolerable; but we have not seen one much more than half ripe.

The "*Bigarreau de Mai*," were sold by Mr. Zera Burr, of Peintou, on the 10th of June, at six dollars per bushel. Last year, he told us, he gathered them ten days sooner. This is a valuable early variety. Kenrick says it was imported by Col. Wilder, of Boston, from France, from the Messrs. Baumann, of Bolwiller, being the very earliest variety known to them.

Davenport's Early Black, is another valuable early variety. The fruit is large, of a dark glossy, purple color at maturity. The flesh firm and fine flavored, and of a pleasant sub-acid. We have it bearing in our own grounds, and can recommend it as one of the best and most productive early cherries. It ripens, in ordinary seasons, from the 10th to the 15th of June.

Napoleon Bigarreau.—This is decidedly one of the largest and finest cherries known to us. It is heart-shaped, pale yellow color in the shade, bright mottled red on the sunny side, flesh white, firm, juicy, sweet and agreeable flavor. It may be used a great length of time; is not liable to crack or decay like many of the softer sorts. The tree is a vigorous and beautiful grower, and bears early and most abundantly. We have counted two dozen large, beautiful, perfect fruit on a portion of a limb four inches long.

TOBACCO A REMEDY FOR THE PEACH WORM.

A lady correspondent of the "Ohio Cultivator" says, "I once knew a tobacconist whose peach trees lived to a good old age, free from worm or disease. All he did was to tie a good bundle of tobacco stems at the crotch of each tree. The rain did the rest, and made a solution strong enough to prevent the worm from doing mischief."

There are so many nostrums recommended of late for vegetable as well as human diseases, that we feel it necessary to exercise a good deal of caution before recommending any. But as this comes from a lady, and a most enterprising one too, judging from her writings, and as it incurs little or no risk or expense, we think it might be well for those who are troubled with the peach worm to give it a trial.

We might as well mention here, for the satisfaction of Mr. Bateham's friends who may not see his paper, that he is already immersed in the good graces of the ladies of Ohio. His paper abounds with their writings on the various topics connected with agriculture, horticulture and domestic economy.

We may safely say that Mr. B. has already enlisted more female talent in his assistance than the oldest paper in the country can boast of. Really, there are some noble, manly ladies in Ohio.

One "*Rosella*," however, seems to take the deepest personal interest in Mr. B. He says her sentiments reach his pocket if not his heart. She says, "Now, girls! I propose that we all set about this work at once, and make a special effort, and at the end of the year let us see which of us will procure the largest number of subscribers, as a New Year's present for the (editor) bachelor." This she thinks will "gladden his cold heart, and enable him to engage the promised Assistant, to take charge of the Ladies' Department."

Can there be a doubt of Mr. Bateham's most triumphant success, where there are such ladies manifesting publicly such a spirit as this? We should

say most emphatically, No! If we could allow ourselves for a moment to envy any mortal man his lot, we would envy our friend Bateham. But we dare not; and can only say, that we rejoice heartily at the success he has hitherto enjoyed and the brilliancy of his future prospects.

FLOWERING SHRUBS, PLANTS, &c.

The following notices were prepared for the June number, but were unavoidably crowded out. We would have adled some more notices of fine flowering shrubs and plants, and of some splendid roses of recent introduction; but space will not permit. The rose, in the floral world, has been the grand object of admiration during the month of June. We have been enraptured with its beauty; but June is now gone, and with it the glory of its roses.

Snowballs and *Lilacs*, are common, well known, but nevertheless beautiful shrubs; and have by their lavish profusion of flowers rendered the shrubbery quite gaudy for some time past. Of the latter there are several species of the easiest culture, growing rapidly in any soil. *Scarlet* ones, quite a rarity were sold to our citizens last spring, (1844,) by a Frenchman, to which we have alluded in another place; but we have heard nothing of them. We "guess" he was joking.

VIBURNUM LANTANA.—This is a beautiful, erect growing shrub, and attains a pretty large size. It has just shed its blossoms, which were very ornamental through the early part of May. The flowers are white, and produced in large umbrels on the ends of the branches. The foliage is fine, dark green on the surface, and white underneath.

SPIRÆA CRENATA, or *Hæthorn leaved Spiræa*.—This is a beautiful, white flowering shrub, of small size. The flowers, in large clusters, cover the branches the whole length. The foliage is pretty, and the flowers remain longer than those of any other shrubs. It is now, and has been for two weeks or more past, a beautiful object. It should be in every shrubbery. The spiræa genus comprises many handsome species, both shrubby and herbaceous. A large number will show their blossoms in a week or so, and we will refer to them hereafter.

PEONIES.—This splendid genus, both herbaceous and woody, or what are called *Tree Peonies*, are in full splendor. Their gaudy, diversified flowers, and their easiness of culture, (for they will flourish in any common garden soil,) render them general favorites. We have over twenty-five splendid species and varieties, both single and double. These are all that our space will allow us to mention at present.

LIVE HEDGES.

No feature in a landscape, in our opinion, is more pleasing to the eye than live hedges or fences.—They at once convey the idea of beauty, utility, and duration—three points that should never be forgotten in constituting fences of any kind. As yet, our American landscape cannot boast of such ornaments, to any extent worth mentioning, not even in the highest cultivated and oldest settled portions of the country. The idea that the English hawthorn *only*, was suitable, has prevented many from attempting to make thorn hedges. This, however, as experience has shown, is highly erroneous. The American varieties will answer every purpose, and we think the time is come when American farmers, at least a large portion of them, throughout the older

states, have taste enough and means enough to introduce live hedges around, and in the vicinity of their dwellings, and most conspicuous parts of their premises.

The following extract from the "Gardeners' Chronicle" gives simple directions, which will enable every man or boy to raise thorn hedges in the cheapest manner. Seeds may be easily obtained within a few rods of every man's dwelling. Those who wish to avoid the trouble of raising the plants from seed, can procure them at a low price in the nurseries. The writer of the following paper, it appears, traveled in this country in 1843, and presented this, with other remarks, to the Botanical Society of Edinburgh.

RAISING THORN HEDGES FROM SEED.—The fruit should be gathered about the end of October, care being taken to keep the seeds of the luxuriant growing sorts separate from those of the dwarfer kinds. A pit should be prepared about 1½ feet deep, into which the fruit is to be put with a mixture of earth or sand. It should be turned several times during the season, and if dry, a little water may be added; one or two inches of soil being a sufficient covering to insure the decomposition of the pulp. During the following October, a piece of good ground should be prepared, and the seed sown as it is taken from the pit, pretty thick in drills about one foot distant from each other, or in beds three feet wide. In the succeeding spring the plants will begin to appear; at which time, and throughout the season, they must be kept clear of weeds. If properly attended to, the seedlings will attain a height of from six inches to twelve inches, the first year. The following spring the strongest plants may be either transplanted into drills, or placed where they are intended to remain as a permanent fence. The smaller ones should be left in the seed-drills or beds for another year, when they may be treated in the same manner. In forming a live fence, the ground ought to be prepared as soon as the snow disappears, by making a trench about two feet broad, and a spade in depth. Along the centre of this trench the young plants should be put about six or eight inches apart, and afterwards well watered and firmly trdden in. Care should be taken to protect the young plants from cattle, and to keep them clear of weeds. The second year after planting, the thorns should be headed down to within six or ten inches of the ground, and each year afterwards switched up on both sides to a centre ridge, so as to produce the shape generally termed *sow-backed*; hedges trained in this form, being less liable to be destroyed by snow resting upon them, than when cut flat at the top.—If the method here recommended be properly attended to, Mr. M'Nab has not the least hesitation in saying that an excellent hedge of native thorn may be acquired five or six years after planting. At several places he saw the indigenous thorns employed as a fence; at least, they had been planted with that intention, and had attained a considerable height, but from want of proper attention to pruning and weeding, they were so slender, that easy access might be obtained between each stem. From such instances of mismanagement, an erroneous opinion seems generally to prevail that hedges will not succeed in America. "But," he very properly remarked, "if newly-planted hedges in Britain were equally neglected, there can be no doubt that they would soon degenerate, and become no better than those which I observed in the United States and Canada."

GREEN PEAS.—The first in market this season, that we heard of, were sold on the 7th of June, at \$3 00 per bushel, raised by Mr. Budd, of Greece. On the 15th the supply was pretty good, at 4s. to 6s. per bushel.

The supply of other vegetables has, so far, been very inferior, owing to the severe, untimely frosts in the last of May, as well as the extraordinary variability of the weather up to the present time.

THE WEATHER, CROPS, FRUIT, &c.—One extreme has succeeded another with wonderful regularity, up to the present time. When we have had a hot day, the night, as a general thing, has been chilly cold. The consequence is, fruits mature slowly, and are greatly deficient in flavor and sweetness.

On the 30th of May we had a severe, killing frost—most kinds of garden vegetables, grape vines, &c. were cut down. Still, we escaped comparatively safe, in our vicinity, and for several miles back from lake Ontario. We happened to be in Batavia on the morning after the frost, and there the entire crop was destroyed: and so it was, we have been informed, through a considerable portion of the state west and southwest of our county.

Taking the whole country, on an average, the fruit crop will be very light, and prices undoubtedly high. This should induce people to exercise great care over what they have.

APOLOGY.—Our two or three paragraphs in the last number of the Farmer, were elegantly interspersed with blunders. *Locust*, for instance, was put "Locus," "your" instead of *our*; and in one or two places, for instance, at the close of the remarks on "Caterpillars," the meaning of a whole clause is perverted or completely obscured.

Unpretending as we are in the way of writing, we nevertheless feel anxious to have our orthography correct, and our meaning clear. We have seldom an opportunity of reading the proof of our articles, leaving that with the publishers; they, we presume, were too much engaged to bestow proper attention in the case alluded to. P. B.

A PLOWING MATCH was held at Geneseo on the 23rd ult. The premiums were awarded in the Court Room, after which Hon. Daniel Lee, of Buffalo, delighted the crowded audience with an eloquent and appropriate address upon subjects connected with the progress of knowledge in scientific Agriculture.

If any person wishes to know who and what Daniel Lee is, they should read his report on Agriculture made to the last Legislature. Every line and word of that report is as valuable as good sense and truth could make it. A happy day would it be for the laboring classes, if the truths which it contains were understood as they ought to be.—*Syracuse Standard*.

GEN. RAWSON HARMON, of Wheatland, in this county, passed through the city this morning, on a visit to the wheat-growing regions of Eastern Pennsylvania, Maryland and Virginia. It is his design to be present at the harvest in those sections, to observe the species of the grain, and to collect such information as may beneficially aid the culture of that great staple of the Genesee Country. Gen. Harmon has devoted very great attention to the subject, and his name is well known throughout the country in connexion with it. He has made trial on his excellent and well cultivated farm, of a great number of varieties of wheat and has brought the cultivation of them to great perfection.—*Rochester Daily American*, June 17.

GOOD PRICE FOR APPLES.—Mr. A. B. Rapalje, of Farmington, Ontario co., sold Golden Russets, in this city, on the 20th June, for \$3.50 per barrel.

ADVERTISEMENTS.

TURNIP SEED.

WHITE FLAT NORFOLK, for moist lands;
RED ROUND, or **RED TOP**, for dry land;
LARGE SCOTCH YELLOW, for feeding Stock;
WHITE GLOBE; and other varieties.
 For sale at the Rochester Seed Store, Front-street, by
B. F. SMITH & CO.

STOCK EXCHANGE—CATTLE, &c.

THE SUBSCRIBER has on hand a choice collection of improved thorough-bred cattle, embracing, already, superior specimens of the Short-Horn Durham and the Hereford, and a sample of the Holderness- &c., and he intends adding to his stock so as to be able to supply farmers and breeders in Western New York, Canada, or the Western States, who may wish to purchase Bulls, Cows, Young Stock, Sheep, &c., of the best breeds and most improved varieties, at reasonable prices. His design is, to establish a sort of Depot, or Stock Exchange, where orders can be supplied for any of the improved breeds of Thorough-bred, and for superior Grade animals, and where those who have choice stock of this character for sale can find a market for them, on commission or otherwise.

REFERENCES.—Editor of the "Genesee Farmer," L. B. Langworthy, Esq., and T. Weddle, Esq., Rochester. Hon. E. Corning, C. N. Bement, Esq., and Editors of the Cultivator, Albany; Hon. E. Mack, Ithaca; J. S. Wadsworth, Esq., Geneseo; Judge Leland, Steuben county; Hon. D. Lee, Buffalo; Hon. J. McCollum, and W. Parsons, Esq., Lockport; M. B. Bateham, Esq., Editor of the Ohio Cultivator, Columbus, O.

The subscriber may be found on his farm, near the S. W. corner of the city of Rochester, on Genesee-street, (about half a mile south of Bull's Head;) or orders may be left at the office of the Genesee Farmer. T. H. HYATT.
Elmwood, Rochester, May, 1845.

P.S. Two thorough-bred **BULLS**, of the Hereford and Improved Durham Short-horn breeds, are kept at the above place, for the accommodation of those wishing to improve their stock.

BAGS! BAGS! BAGS!—I have a large stock of **GRAIN BAGS** on hand, such as Farmers and Millers will want; and shall be glad to exhibit them for sale at less prices than they have ever been sold in Western New York.

To be found at the well-known Hardware Store of **E. WATTS**, corner of Exchange and Buffalo-streets.
March 1, 1845. JAMES H. WATTS.

AGRICULTURAL AND HORTICULTURAL BOOKS.

Just received and for sale at the Rochester Seed Store, Front-street.

THE American Poulterer's Companion; by C. N. Bement,
The New American Orchardist, with an Appendix; by Wm. Kenrick.
The New American Gardener; by Thomas G. Fessenden.
Blacklock's Treatise on Sheep.
Cobbett's American Gardener.
Dana's Muck Manual. **The Complete Florist**.
Every Lady her own Flower Gardener.
Dr. Smith's Essay on the Cultivation of Bees.

DUNN & TAYLOR'S PREMIUM SCYTHES,
 MANUFACTURED BY TAYLOR, HITCHCOCK, & CO.

NORTH WAYNE, ME.

THE satisfaction which these **SCYTHES** have hitherto given, as superior cutters, has induced the Manufacturers to offer them for sale in many places where they have not before been known; believing that those who use them will continue to call for them, from year to year.

N.B. All Scythes warranted good to cut, and free from injurious flaws: if any should prove bad, others will be given in exchange.
 For sale at the Agricultural Depot, adjoining the Seed Store, Front-street, Rochester. **B. F. SMITH & CO.**

BEE-HIVES.

PARK'S NIAGARA BEE-HIVE, for sale at the Agricultural Depot, adjoining the Rochester Seed Store, New Brick Block, Front-street. **B. F. SMITH & CO.**

GUANO.—For sale at the Rochester Seed Store. **B. F. SMITH & CO.**

Meteorological Observations.

MADE AT ROCHESTER, SEVEN MILES FROM LAKE ONTARIO,
BY L. WETHERELL.

JOURNAL OF THE WEATHER FOR JUNE, 1845.

Days mo.	Thermometer.			Barometer.		Wind.	Observations.
	Sunrise.	Mid-day.	One h. after sunset.	Sunrise.	Evening.		
25	36	61	52	29.51		S W W	Fair—cloudy.
26	47	70	56	.30	29.10	W W	Cloudy—fair—rain.
27	42	62	64	.46	.38	..	Cloudy—fair.
28	65	63	62	.30	.29	S W W	Cloudy—sh'ry, r.g. 81.
29	49	47	35	.48	.70	N W W	Cloudy—rain & snow
30	33	51	44	.80	.80	..	Fair—severe frost.
31	37	70	55	.82	.75	W N W	Fair—frost.
1	46	79	56	.75	.61	..	Fair.
2	58	84	79	.61	.59	W W	Fair—cloudy.
3	65	80	69	.60	.60	S W W	..
4	61	88	65	.61	.51	W S W	Fair—cloudy—sho'rs.
5	64	65	55	.45	.56	S W W	Fair—cloudy—r.g. 30.
6	50	68	53	.70	..	N W W	Cloudy—peas in mkt.
7	48	71	71	.65	.50	S W	Cloudy—rain—r.g. .01
8	76	88	80	.59	.40	S W W	..
9	79	82	69	.53	.49	..	..
10	62	83	70	.52	.49	S W	Fair—cloudy—rain.
11	61	72	63	.43	.43	N N E	.. r.g. 1.20
12	63	77	65	.33	.25	W N W	Fair—rain—r.g. .07.
13	61	82	67	.30	.38	W N W	Fair—cloudy.
14	55	70	53	.41	.60	N W W	Fair—cloudy—rain.
15	45	71	62	.75	.40	S E	Fair—cloudy—rain.
16	56	75	51	.55	.49	W N W	Fair—cloudy—rain.
17	45	64	53	.61	.69	N W W	Fair.
18	47	75	58	.74	.61	N W N	..
19	51	78	60	.61	.61	..	..
20	54	77	67	.61	.53	W W W	..
21	64	76	61	.46	.49	W N W	Cloudy—fair—rain.
22	52	74	61	.52	.34	N N E	Fair.
23	61	86	70	.34	.38	N W W	Fair.
24	62	82	65	.39	.40	W S W	Fair—cloudy—sho'rs.

Max. (June 8) ther. 88 deg.; do (May 31) bar. 29.82 in.
Min. (May 30) " 33 deg.; do (June 12) " 29.25 in.

REMARKS.

Range of ther. for the month, 55 deg.; do. of the barometer, .57 in.
Aggregate of the rain-gauge for the month, 3.08 inches.

Prevailing wind for the month, N.W.

The mean temperature of May, 53.78 deg.

" " " " May, 1844 52.65 deg.

Vegetation is about ten days later than last season. Cherries ripe last year, June 1st; this year, June 11th.

The extremes of heat and cold have been very great at this season. From the 10th to the 14th of May, ther. ranged, at one o'clock P.M., from 82 to 87 deg.; on the 30th, it was down to 33 deg., and a killing frost. A little frost near the city on the 17th of June.

FARMING TOOLS—For sale by B. P. SMITH & CO., Seed Store, Front-street—

- GRASS SCYTHES & SNATHS,
- GRAIN CRADLES,
- HAY FORKS, HORSE RAKES,
- QUINEBAUG SCYTHE STONES, (the best)
- ONE AND TWO HORSE CULTIVATORS,
- RAKES, HOES, SHOVELS, &c., &c.

July 1.

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MARKETS, CROPS, &c.

Wheat is selling in this market at 94 to 95 cents. Western is worth in Buffalo from 85 to 86 cents. In Ohio all crops have suffered exceedingly from protracted dry weather. The surplus of wheat, corn, flour, and pork to be sent to market from that great agricultural State will be much less this fall and the coming spring, than usual. In Michigan, Northern Indiana, Illinois, and in Wisconsin, the crop of wheat will be larger than usual, by reason, not of a prolific yield, but from the circumstance that more acres have been sown to wheat than in the preceding years. In Western New York the crop of wheat is about a fair average.

Wool is worth, in Rochester, from 25 to 34 cents per lb. The quantity to arrive in Buffalo from the West, this season, will greatly exceed that of last year, when it was less than 3,000,000 pounds. They have commenced the manufacture of woollen goods in Western Michigan and Illinois, in factories which will consume more or less of the clip just taken off.

BOSTON WOOL MARKET—JUNE 20, 1845.

Duty—The value whereof at place of exportation shall not exceed 7 cents per lb., 5 per cent. ad val. All whereof the value exceeds 7c. per lb., 40 per cent. ad val. and 3 cents per lb.

There has been but a limited business done in this article during the past week as the manufacturers buy sparingly.

Prime or Saxony Fleeces, washed, 40 to 43c. per lb.—American full blood do., 37 to 38—Do. 3/4 do., 35 to 36—Do. 1/2 do., 32 to 33—1/4 and common do., 30 to 31—Smyrna sheep, washed, 20 to 22—Do., unwashed, 10 to 15—Bengasi do. 6 to 12—Saxony, clean, 00—Buenos Ayres, unpicked, 7 to 10—Do. do., picked, 10 to 14—Sup. Northern pulled Lamb, 36 to 38—No. 1 do. do. do., 34 to 35—No. 2 do. do. do., 23 to 25—No. 3 do. do. do., 14 to 17.

Export of produce from the port of New York, from the 1st to the 23d of June—23,784 bbls. flour; 5,441 do. beef; 4,607 do. pork; 5,690 bush. corn; 2,456 kegs of lard.

ROCHESTER PRODUCE MARKET.

Wheat,	90 a 95	Hay, ton,	\$7 50	8 00	Eggs, doz.	8 9
Corn,	37 1/2 a 40	Wood, cord,	2 00	2 50	Poultry, lb.	5 6
Barley,	30 a 40	Salt, bbl.,	1 13	1 13	Tallow,	25 32
Oats,	25 28	Hams, lb.,	5 6	6	Hops,	10 11
Flour, (ret.)	4 25	Pork, bbl.	10 00	10 00	Wool,	25 32
Beans,	75 1 00	" cwt.	3 25	3 75	Sheep Skins,	50 75
Apples,	38 50	Beef, "	3 00	3 50	Green W'ds, lb.	3 7
Potatoes,	18 25	Lard, lb.,	5 6	6	Dry Hides,	6 7
Cloverseed,	4 00	4 50	Butter,	8 12	Calfskins, gr'n	5 4
Timothy,	1 1 25	Cheese, cwt.	4 00	6 50	June 30.	

IMPORTANT TO FARMERS.

ROGERS' SPRING-STEEL CULTIVATOR TEETH.

THE Subscriber has made arrangements with the Manufacturers of this superior agricultural instrument for a supply, and will keep them constantly for sale at 69, Exchange-street, opposite the Rochester House.

The following Certificates have been kindly volunteered by those who have used the Teeth.

Rochester, June 13, 1845.

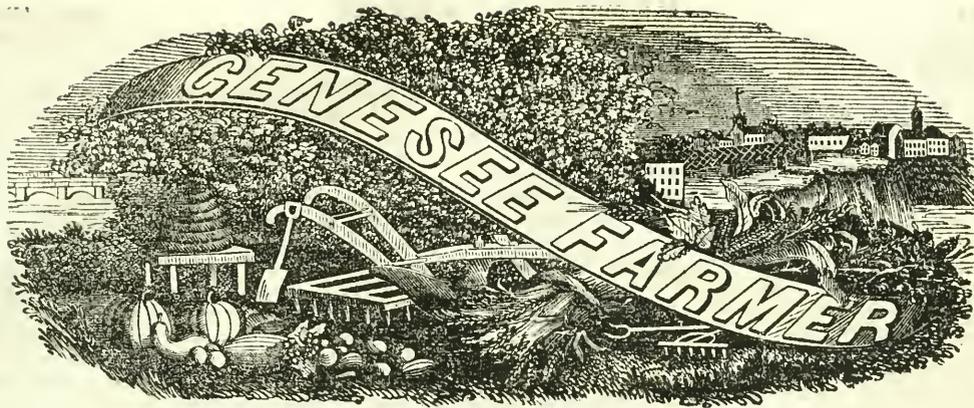
A. C. WILSON.

" Having used Rogers' improved Steel Cultivator Teeth, we have no hesitation in saying, that we believe them to be a great improvement for preparing fallow grounds. We feel confident, that with the Improved Cultivator we can prepare our ground for wheat better, and with one-fourth less expense than with the Plow and Harrow, in the old way. With the Cultivator, we plow our ground but once, harrow it lengthwise of the furrows once, with a sharp fine harrow, and then put on the Cultivator, having no further use for either plow or harrow. We find, by the use of the Cultivator that we are enabled to destroy the blue grass, which has been so injurious to our wheat crop, and which could not be killed by plowing, and are enabled to get more benefit from our clover by letting it get a larger growth before plowing, and having it remain under, until it has rotted.

Sylvanus Fisk,	Stafford.	Samuel March,	Stafford,
Harry Lathrop,	do.	John Thwing,	Le Roy.
Noah Randall,	do.	W. P. Benham,	Byron.
German Lathrop,	do.	B. F. Cash,	Le Roy.
Clark Daniels,	do.	O. Bassit,	Bergen.
L. A. Baker,	do.	Reuben Cash,	Le Roy.
J. R. Mess,	do.	Russell Kellogg,	Stafford.
I. N. Moss,	do.	Jacob Bushman,	Byron.
Erastus Cash,	South Byron.	Warren C. Rawley,	S. Byron.

BUCKWHEAT FOR SEED—100 Bushels for sale at the Rochester Seed Store, Front-street, by

July 1 B. F. SMITH & CO.



PUBLISHED MONTHLY.

BY B. F. SMITH & CO, PROPRIETORS

At the Seed Store, Front Street, nearly opposite the Market.

DANIEL LEE, EDITOR.

FIFTY CENTS A YEAR:

Five copies for TWO DOLLARS; Eight copies for THREE DOLLARS. All payments to be made in advance. Money and subscriptions, by a regulation of the postmaster general, may be remitted by post masters free of expense. Address B. F. SMITH & Co.

POTATOE ROT.

The editor of this paper has devoted much time, for the last three weeks to the investigation of the cause of this alarming and most destructive malady. He has examined affected plants in Oneida, Chenango, Cortland, Onondaga, Cayuga, and Monroe counties. At an agricultural meeting held in the village of Oxford, on the 16th of July, Judge Hyde of that place presented several potatoe vines having all the outward characteristics of the blight. These vines had one or more grubs in the pith of each vine, that measured one inch and a quarter in length, and about a sixteenth in diameter. These *larvæ* had eaten a passage through the centre of the vine, (commencing where it emerges from the earth,) a foot or more in length, and then made an opening out through the shell of the stem. Judge H., who is a close observer of natural phenomena, and an excellent farmer, has promised to keep these grubs till their final transformation into winged insects.

The writer of this searched for these grubs for two weeks through other parts of Chenango county, and in Cortland, Onondaga, and Cayuga counties, without finding any till last evening. Those that I now have were found in vines which grew in the garden of David Wright, Esq., of Auburn, to whom, and Col. Sherwood, I am much indebted for furnishing me with means of conveyance to remote parts of the county, to make observations on rust on wheat, diseased potatoes, &c. Both the wheat and potatoe crops are much affected in Cayuga and Onondaga counties, and not a little in Monroe. The diseased potatoes and wilted vines, obtained at Auburn, contain grubs precisely like those seen in Oxford. I have brought them to this city (Rochester) for farther examination. There is hardly a bushel of new potatoes in this market which do not contain more or less tubers already attacked with gangrenous spots, similar to the malady of last season. I have just been to the vegetable market, in company

with Mr. L. B. Langworthy, to compare the potatoes with diseased ones which I have collected in Cayuga County, and have also examined several patches in the suburbs of the city, in company with the same gentleman. The diseases here are identical in character with those in Cayuga and Cortland. I can discover no difference in the blotches on the tubers in this vicinity and those which I have seen in Oneida, Chenango, and Madison counties. There are two distinct insects now feeding on the potatoe plant in all Central New York; one that resembles in size, form, and I think habits, the striped cucumber beetle, *crioceris vittata* of Fabricius. This insect is mostly of a dark-brown color, with narrow white streaks along its body. It eats the tender tops and buds for blossoms, and causes them to wilt. It hides under the potatoe leaf, and is easily caught. It does but little mischief. Dr. Harris calls it *Phytocoris lineolaris*; order Hemiptera.

The perfect insect which punctures the potatoe vine just above the ground, and deposits the egg that forms the large active worm which I have got, is probably a beetle; although it may belong to the *Lepidoptera*, or butterfly and moth family. The egg is deposited in the pith of the vine. When it hatches, the grub, or *larva*, eats off the vine all but its thin bark, or covering. The length of the vine thus eaten out from the centre varies from one to six inches. The vine wilts, turns brown, and dies sooner or later, according to the extent of the injury. The hole where the grub eats out and escapes, can often be found. In a large majority of cases, the *larvæ* have made their exit, and of course are not to be seen. The following is a representation of it:



Mr. Wright, of Auburn, suggested, that when the grub changes into a beetle, miller, or perfect insect, it might descend into the hill and sting the young potatoes, and thus cause them to rot; or perhaps leave the egg to be planted with the tuber in the coming spring. I have just examined the diseased blotches on many potatoes with a good glass, and discern nothing like the nit of an insect. The decomposition of the potatoe is, I think, sufficiently accounted for by its unripe and defective condition. The organization of the elements that form *starch* and vegetable *albumen* is very imperfect. Hence, premature decay ensues. The law of vitality in a perfect tuber, which prevents the play of chemical affinities

in living matter, like the rotting of dead animals, and dead plants, has ceased to be operative in the unripe potatoe. It absorbs oxygen with greater or less rapidity, according to its soundness or unsoundness; and soon resolves itself into water, gases, mould, and minerals. If potatoes are dug and exposed to the decomposing influence of light, free air, heat, and moisture, they will rot with increased rapidity. Let them remain as long in the ground as practicable, and bury them promptly after they have been dug. One gentleman that owns a farm near to this city, lost 3000 bushels last fall, which rotted in heaps soon after they were taken from the hill.—We trust that the loss of this important article of food will not be so great this year as last. Nevertheless we are not without our fears that it will be greater. Already we have complaints from New Hampshire and Massachusetts.

Any information calculated to throw light on this interesting subject, will be thankfully received by the Corresponding Secretary of the New York State Agricultural Society, and published for the benefit of the whole community.

One hundred pounds of dry potatoes contain four pounds of ash, or mineral matter. Of this, 51 per cent is pure potash. Many experiments in growing potatoes and other plants in artificial soils, have demonstrated the important fact, that this alkali plays a material part in transforming carbon and water into starch, in all tubers, roots, and seeds.—Hence, potatoes watered with weak lye, have been greatly benefited by the operation. Those that apply to their fields while planting, a compound made by mixing one bushel of unleached ashes with half a bushel of lime, quarter of a bushel of plaster, and a quarter of a bushel of common salt, and put a small handful into the hill with the seed, and another on the hill after it is covered, have had the best success in raising potatoes.

I am not prepared to suggest at this time any preventive against the ravages of the insect that is now destroying thousands if not millions of bushels of this tuber.

HENS.—In order to fatten fowls rapidly, they should be well supplied with charcoal, broken into small pieces. *They will become very fat if shut up and fed on this substance alone.*

Alb. Qu. Jour. of Agriculture & Science.

If the editors of this Quarterly have any well authenticated facts, which show that "fowls will become very fat if shut up and fed on charcoal alone" we should be pleased to see them published in that valuable Journal. If the large per centage of carbon in coal and carbonic acid can be transformed by digestion alone with the addition of water, into "fat" without the intervention of an organizing plant, the discovery is worth knowing. Charcoal can be purchased on most farms in this State at from 2½ to 5 cents a bushel. Since there is no duty on American "fat" on entering the ports of Great Britain, the manufacture of our boundless forests into coal, and this coal into fat fowls, lard-oil, butter and tallow, without the aid of corn, peas, roots, or plants of any kind, will greatly simplify all our farming operations.

TURNIP FLY.—The Western Farmer and Gardener says that repeated and varied experiments have proved, that half an ounce of sulphur mixed with a pound of turnip seed, will completely prevent the ravages of the fly.

SCIENCE WITH PRACTICE.

Every farmer should adopt for his motto, "Knowledge with Labor," or, "Science with Practice."—Knowledge without labor, and labor without knowledge are alike nearly worthless. But knowledge with labor, or science with practice, gives to the honest cultivator of the earth, the best possible chance to acquire both wealth and distinction as a successful agriculturist.

Suppose a farmer wishes to sow land enough this fall to yield him at the least possible expense, 500 bushels of good wheat, free alike from *rust*, *smut*, and *chess*—what knowledge does he need to accomplish this object? Will any experienced farmer say that, to produce this amount of grain at the least cost in land and labor, no knowledge of the mineral constituents of his soil, of vegetable mould and muck, of an excess of moisture in the surface, or subsoil—no knowledge of the substances that Nature *must* have to form a perfect wheat plant, and the condition in which those substances should be placed, is useful to the wheat-grower?

It is a sad sight to view forty acres of wheat all blackened, and shrunken with rust, involving a loss of several hundred dollars, because the owner despised a knowledge of those simple laws of nature, which produce this parasite plant on the stems, leaves, and heads of his wheat. It is painful to witness the toiling husbandman, harvesting fifteen bushels per acre, where the amount of seed sown, the thorough tillage, and the hard work performed, would, by the aid of a little more knowledge of the nature and properties of wheat, have given him 30 bushels per acre. Thousands of farmers will reap this season an average of thirty bushels of corn on land that might grow seventy quite as well, with an equal amount of labor, if scientifically applied.

Too many farmers unwittingly prepare their wheat crop just right to be stricken, as it is termed, with rust. They fail to drain their wheat fields most thoroughly, and thereby induce the growth of sickly imperfect wheat plants, which fall an easy prey to parasites. They place their seed in soils that contain too much vegetable mould, and too little of the alkalies, potash and soda, too little of the alkaline earths, lime and magnesia; and too little phosphorus, sulphur, and chlorine. The young wheat plant finds its nourishment as a lamb would find his, provided you give it a gill of its mother's milk a day, diluted in a pint of bad water.

There is but little study, little knowledge, and no science brought to bear on the feeding and raising of wheat plants in the state of New York, which makes twelve million bushels of grain. The habits of this head-bearing plant, and what it needs to form a *firm, bright, glassy stem*, which *Uredo—rust*, cannot grow upon; and what it needs to develop a long ear, well filled with plump kernels, are matters that pertain to wheat culture, most sadly overlooked by those that toil too much with their hands, and exercise too little those nobler faculties of reason and common sense, which God has given them.

Every rational being that happens to have a mouth to feed, should study the science of transforming earth, air, and water into good, light, wheat bread. It is hardly possible that this knowledge will be utterly valueless to any one during the whole period of his existence, whatever his pursuit in life.

As a general rule, it is cheaper to grow 30 bushels of wheat on one acre than on two, provided the use of the land was given to the cultivator. On an

acre of well drained, well pulverised soil sown in wheat, scatter broad cast with a shovel, ten bushels of unleached ashes, five of lime—(ten will be better if not too expensive) two and a half of gypsum and an equal quantity of common salt. If possible, the ground should be entirely free from the seeds of weeds, that nothing but clean wheat plants may grow. The above compound will serve to make bright flinty straw, so little subject, as every observing man knows, to be attacked by rust. Deep plowing, thorough harrowing and early sowing, constitute prominent features in the practice of those wheat growers, whom the editor has lately visited, because of their notable success in this branch of husbandry. In Scipio and the adjoining towns in Cayuga County, the good effects of underdraining wheat fields, have been most signal this season. During the last four weeks we have collected many interesting facts relating to rust, smut, &c. in connection with shale, sand stone, clayey and muck soils. These will be embodied in our official report to the N. Y. State Agricultural Society.

Any gentleman that has made or shall make any discoveries relating to insects injurious to wheat, potatoes, apple, pear or peach trees,—relating to the *blight* which is now injuring, if not destroying so many quince trees as well as others, will confer an especial favor by communicating an account of the same to the Corresponding Secretary of the State Society, for publication in the current volume of its transactions, or to be made public through some other medium.

The study of Entomology—the science of insects—is becoming every year more and more important to the practical farmers of this State. The popular work of HARRIS should be in the family library of every cultivator of the soil. Let every young man that reads this article, begin at once the systematic study of his noble profession, if he designs to be a skilful and successful farmer. Let him unite knowledge with labor—science with practice,—and the great Fountain of all knowledge will reward him a thousand fold for his well directed efforts.

CROPS.

WHEAT in Western New York will turn out something less than an average crop. The weevil has got as far west as Onondaga county. We heard no complaint of this insect in Cayuga, although it may be there. The rust has done more injury in this part of the State to the wheat crop than any other cause.

CORN every where promises more than an average yield. The late warm, or rather hot weather, has brought it forward with great rapidity. Sixty days without frost will bring this crop to full maturity.

OATS are generally good. There is not quite the usual amount of land sown in this grain.

BARLEY will turn out more than an average crop. The acres sown are more than usual, and the yield is large. In Cayuga, Onondaga and Oneida counties, the farmers will be able to make their pork mainly on barley.

GRASS is everywhere very light. This fact, and the prospect of a short crop of potatoes, will make corn, oats, barley and peas in good demand.

Mr. JAMES V. DEWITT is our authorized Agent for the Farmer. He will, during the fall, visit different portions of Western New York and Canada.

E. W. Spaulding of Buffalo, is no longer Agent for the Farmer.

NEW-LISBON, O., July 18, 1845.

MR. EDITOR,—The May number of the "Farmer" containing Dr. Lee's Report on Agriculture to the New York Legislature, did not come to hand. I value it on account of the said Report, and want you to send me a copy of that number, to complete the volume.

Permit me to say to Dr. Lee, that I am glad there is one individual who is capable and willing to disclose some facts in relation to the state of society, which the favored few would rather keep concealed. I hope the "Farmer" will continue to discuss the rights of labor. They are not sufficiently understood. Well-directed labor creates all that is called wealth; consequently, if wealth is desirable, labor ought to have its share. He in fact supports society—he pays the taxes for the support of government. He demands not only an Agricultural Education, but an education equal to the wants of his nature, calculated to develop all his energies and virtues, that he may maintain that equality among his fellow-men which is the birthright of his being. He then does protest against the appropriation of public money to any grade of schools which is not free for all—the poor as well as the rich—as an act of flagrant injustice. Let the common school system be so amended and perfected as to meet the wants of all—the lawyer, doctor, merchant, farmer, mechanic, and day-laborer.

Yours with regard,

SAMUEL MYERS.

REMARKS.—The above was probably not written for publication. But as it embodies in few words what we regard as public sentiment in relation to the "rights of labor, and the rights of humanity," we give it to our readers, as a sample of many letters received by the editor from unknown persons.

Let every laboring man rejoice, for the day is at hand when our common schools will impart to the children of all classes that full mental development which will enable them to produce a plenty of all the necessities and comforts of civilized life; and to *keep and enjoy* in some form, the entire fruits of their better directed industry. When every man shall be allowed to consume, or retain for the benefit of himself and family, a sum equal to all that he earns, and shall have an opportunity to work at all times to the best advantage, **POVERTY, CRIME, and SUFFERING** will be nearly banished from a happy, prosperous people.

The great science of keeping the products of our daily labor, or of commanding a fair equivalent, in exchange for the labor of others, cannot long be excluded from the common school instruction of young men and women. A good education implies a knowledge not only how to create wealth, but how to retain it, so that no man shall have *more nor less* than his mental or physical powers call into existence.—Even handed justice forbids alike both the open and the covert robbery of any human being. No one will have too much, when he has only what he produces over and above his consumption. No one need have too little, when he can work at all times to good advantage, and be allowed to keep all that he produces beyond the daily wants of his hunger, nakedness, and sleep. Honest productive industry, will rise in value and respectability 100 per cent at once, if our laws will only secure to every pair of working hands and to the mind that directs them, the full enjoyment of a sum just equal to their productive efforts in society. Knowledge, virtue and industry would then have all the wealth in the State; while

ignorance, vice and laziness would have to go to work at some truly useful business, or starve. Now, the surplus earnings of the toiling million are made an immense corruption fund, to pollute the morals, debauch the habits, and enervate both body and soul, of all that reap where others have sown.

The science of trade—of getting a good deal, and giving little or nothing for it, at some-body's expense, is just beginning to wake up that Mr. Somebody. If he cannot learn to keep property to supply all his physical and mental wants as well as to produce it, then the *thing* created, is far above its creator.

FRENCH AGRICULTURE.

The *Presse* publishes some extracts from a work presented to the Agricultural Congress, now setting at the Palace of the Luxembourg, by the author, M. Catineau Laroche, and entitled, *France and England compared with respect to Agricultural, Manufacturing, and Commercial Industry, and the consequences to be deduced from this comparison*. It appears from this work, that England, in comparison with the extent of its surface, possesses four times more cattle than France. And as it is not possible to pursue a judicious system of agriculture without manure, and as the feeding of cattle is the most productive of supplying manure, it follows that before France can compete with England in agricultural wealth, she must increase her stock of cattle, but in order to do so, she must increase her pasture lands or meadows. "France," says M. Laroche, "possesses but 4,200,000 hectares of natural meadows, or only one-sixteenth of her cultivated soil. From this calculation it may be easily comprehended how insufficient is her supply of green food, and that it becomes absolutely necessary that she should substitute another to the triennial system at present in use." M. Laroche concludes by stating that "if the alternate system of cultivation pursued in England was introduced into France, the produce of corn would be doubled within twenty years. Fifty-five years since, the produce of Great Britain was estimated by Arthur Young at three milliards. At present it is estimated at five milliards 725 millions.

NEW ENGLAND SCHOOLS.—A writer in a Southern paper thus describes the free schools of New England:

"The poorest boy in the free schools feels as high and as proud as the son of the richest. You do not mean, said Gov. Barbour of Virginia, after visiting the superb free school at Boston, which he admired very much, that these schools are free? Indeed I do, said the committee man. You remember the boy that got the medal in the class that we have just examined, and the boy that lost it? The first is the son of that wood-sawyer there, (pointing to a man who was sawing wood in the street,) and the second is the son of John Quincy Adams, the president of the United States. The Virginian started in astonishment at a spectacle like this, and no longer wondered at the prosperity of New England."

THE MONROE COUNTY AGRICULTURAL SOCIETY will meet at the office of the *Genesee Farmer*, over the Seed Store, Front Street, on Tuesday, the 12th day of August, at 10 o'clock A. M., to make arrangements for the cattle show, &c.

For the *Genesee Farmer*.

A FIFTEEN MILE RIDE IN SENECA COUNTY AT THE COMMENCEMENT OF HARVEST—JULY 7th.

MR. EDITOR.—The soil in the south side of the Seneca outlet, near Waterloo, is a heavy calcareous clay loam; the blue limestone ledge for a short distance, in places, comes to the surface, affording a mine of wealth to the fortunate proprietors. Clover and wheat attain a perfect growth on this soil; as we progress southwest over a gently undulating surface, the stiff loam begins to be ameliorated by limestone and quartz pebbles, interspersed with small boulders. On both sides of the road we noticed a continued succession of fields of ripening grain; the wheat looked finely, the heads not as close together as I have seen them, but long and full. Notwithstanding the everlasting presence of wheat fields, I noticed more acres covered with flax, barley, and Indian Corn, than I had ever seen before in traveling fifteen miles. I must say, however, that these were the best fifteen miles of land I have yet seen in passing over seven of these United States. Had a Vermont farmer been present, he would have asked, Where are the pastures and the cattle. The axiom, "without cattle no manure, and without manure no corn," has hardly begun to be felt or understood by the Seneca County farmer. Hitherto, plaster and red clover have been the only manure necessary to insure a crop of wheat; but of late the use of live animal manures, are found necessary to bring back to the soil its original wheat-forming pabulum. Many of our large farmers have commenced increasing their flocks of sheep; as experience has taught them that sheep dung and clover must alternate with the wheat crop, to insure the best of rural economy.

As we approach the Seneca lake, the wood lots merge their distinctive character for beech and maple, into oak and hickory. The beautiful residence of John Delafield is almost hidden from the road, by an extensive grove of trees of the *quercus* family. The first truly ambitious mansion we noticed, was that of Wm. K. Strong; its prominent location on the rise above the east bank of Seneca Lake, in full view of Geneva, makes it a showy landmark in the prospective of that delightful place.

Stopped at John Johnson's, known as Scotch Johnson, one of the most masterly farmers in Fayette. He was at home, paying off his haymakers. What a pity he had not planted two or three trees on the south side of his sun-stricken mansion; but, like most Scotchmen, he has attended to the main chance. He pointed to a field of stout wheat, which he said had produced grain every other year, for the last thirty years. It was a heavy clay loam, with limestone pebbles, and a sprinkling of granite boulders. Fifteen years ago this field received fifty bushels of lime to the acre, since which it has been occasionally dressed with barn yard manure. Here was also the cleanest field of corn and potatoes we had yet seen. Mr. Johnson plows deep, keeps large flocks of sheep—some improved neat stock, &c.;—hence the secret why he has so much wheat and wool to sell. We next come to Christian Kimes—an excellent specimen of a Pennsylvania German farmer. Enormous barns, high, strong fences, large wheat fields groaning for the sickle, and follows harrowed to the death of all cohesion: but then, such stalwart prejudices against all that is yankee, or foreign—such honest, fully developed hatred

gainst book-farming—such unfeeling contempt for the poor, physically impotent, visionary book-making, and book-reading world. But I must confess that my respect for such men is hardly diminished by their failings. When I see with my own eyes the fruits and monuments of their indomitable industry, their Herculean powers of muscle, their all-conquering perseverance, their all and singular devotion to their own proper calling, verily, one such man is of more substantial use to the sub stratum of society, than a hundred mere idle, theoretical, unpracticed, blundering book-farmers.

We now stopped to dine at the house of Cornelius Bartlett, in the town of Romulus. His farm is bounded by the lake. It contains 220 acres of first rate land; the surface soil is the same heavy loam before noticed, the subsoil an impervious hard-pan; but as the inclination towards the lake is sufficient to carry off the surplus water, little inconvenience is given by the impervious subsoil. In a few instances, Mr. B. has underdrained some of his more level lots, to the great improvement of the surface soil. Here was a five acre field of corn, which gave a better promise of a heavy crop than any one we had seen. It was planted in drills three feet apart, in the rows; the field had received early in the spring sixty-two horse loads of barn-yard manure to the acre. The corn was now five feet high. It covered the ground so completely that the rows could hardly be distinguished. While the present high temperature and scorching sun was curling the leaves of every other field of corn we had seen, here, heat and moisture were so finely balanced, that vegetable decomposition, and vegetable growth went on *pari passu*, to the making of such a crop of corn and corn stalks, as is rarely seen. Mr. B had about two acres of corn sown in drills for fodder, which had been hoed once: from its present luxuriant growth it had the appearance of being sown broad cast. The same pains taken in the culture of wheat would save much seed, and insure a very large crop. Mr. B. will, when his crops are in, send to the Genesee Farmer, an account of his corn crop. He had a field of twenty-six acres of wheat which will probably yield 25 bushels to the acre; also, a promising field of spring wheat, with sundry other fields of summer grain. His stock of young horses were of good blood. His cows and other neat cattle, few in number, as are all our grain farmers', were of the improved breeds. His sheep we did not see. Our dinner was such as it should be the pride of every lord of the soil to set before his guests. It was composed of the substantial products and dainties of the farm, without the adventitious aid of far-fetched exotics. It was served by his own wife and her fair daughter, with that unpretending hospitality which does all for comfort, and little for show.

S. W.

For the Genesee Farmer.

DEVON CATTLE.

MR. EDITOR,—In my few remarks on Devon cattle, in the July number of the Farmer, I inadvertently omitted to give an opinion relative to their size and milking properties.

It is a prevalent opinion, amongst those who are not acquainted with them, that as a breed they are so diminutive in size, and such poor milkers, that they are of little value to the farmer: this I think is a great mistake. They are small when compared to the Durhams, but are generally larger than the

native cattle, and, when well fed on common foliage, the cows will weigh from 600 to 800 lbs. dressed, and the oxen from 1,000 to 1,500, and with extraordinary feeding they become very heavy, and always weigh well to their appearance. Their activity enables them to travel a great distance to market without much loss, and their smooth and sprightly appearance always secures for them the highest price in market.

I do not consider great size very desirable in any animal. The small-boned, fine, and smoothly-made animals, of all breeds, are generally the most profitable; and that breed of cattle which will yield the most profit for the food which they consume, is the most valuable for the farmer.

As milkers, they are similar to our native cows, there being poor, middling, and good ones amongst them. Their milk is very rich, yielding a large proportion of butter and cheese. It is my opinion, that very much depends upon the management of heifers for making them great milkers. They ought to be bountifully fed with succulent food the first season, and especially before calving; to expand their milk veins and enlarge their udders; and they ought to be very vigorously and carefully milked. The practice of letting heifers suckle the first season, is against their making good milkers.

WILLIAM GARBUTT.

Wheatland, July 10, 1845.

N. Y. STATE AGRICULTURAL FAIR.

A meeting of the Executive Committee of the State Agricultural Society was held at Bagg's Hotel, Utica, on the 10th July. Present—

B. P. JOHNSON, President.

H. W. Doolittle, Herkimer; E. P. Prentice, Albany; H. S. Randall, Cortland, Vice-Presidents. L. Tucker, Recording Secretary; D. Lee, Corresponding Secretary. George Vail, Troy; T. S. Faxton, Utica; Major Kirby, Brownville; J. M. Sherwood, Auburn; George Geddes, Oneida, Managers.

The President of the Oneida County Agricultural Society, E. Comstock, and a number of the officers and members of the society, were present at the meeting.

The following gentlemen were appointed a Committee of Arrangements for the Fair:

B. P. Johnson, Rome; Alex. Walsh, Lansingburgh; J. M. Sherwood, Auburn; George Geddes, Tyler, Onondaga county; Luther Tucker, Albany; E. Comstock, Rome; T. S. Faxton, Utica; Spencer Kellogg, Utica.

The following gentlemen were appointed a committee to confer with the rail-road and boat companies, in relation to the transportation of stock and articles designed for exhibition:

J. M. Sherwood, Auburn; Horatio Seymour, Utica; M. D. Burnet, Syracuse; L. B. Langworthy, Rochester; Lewis F. Allen, Buffalo; George Vail, Troy; Thomas Hillhouse, Albany.

The Judges for the Fair were appointed, and the list will be published as soon as it shall be ascertained from the gentlemen appointed that they will serve.

The following additional premiums are to be given:

For the best corn and cob crusher, to be operated by horse power,\$10
For the best grade yearling heifer, 6

2d best	"	"	Colman's Tour.
3d best	"	"	vol. Transactions.
Best heifer calf,	..... Colman's Tour.		
Best native yearling heifer,	..... 5		
2d best "	"	"	..... Colman's Tour.
3d best "	"	"	..... vol. Transactions.
Best heifer calf,	..... Colman's Tour.		
Best samples, (not less than three cheeses from each of ten dairies in any one county),	..... \$20		
2d best ditto,	..... 10		
3d best ditto,	..... 5		

A committee on behalf of the citizens of Utica, of which his honor, E. A. Wetmore, Mayor of the city, was chairman, waited upon the Executive Committee of the State Society. The several locations for the show-grounds, which had been selected as proper places for the exhibition, were examined by the officers of the State Society, and they decided that the grounds on Mr. Thorn's farm, on the New Hartford Turnpike, was, upon the whole, best adapted for the exhibition of the society, and the accommodation of the owners of stock who may attend.

The spirit manifested by the citizens of Utica, was most gratifying to the officers of the society, and gives assurance that everything desirable to make the approaching Fair one of the most splendid exhibitions ever witnessed in this State, will be done so far as the citizens of Utica are concerned.

We will not for a moment doubt that the farmers of Oneida, and of the adjoining counties, will present an exhibition of their stock, dairies, and domestic manufactures worthy, not only of Central New York, but of the Empire State.

The additional premiums offered for samples of the best 10 dairies in any one county, it is believed, will secure an exhibition from the best dairy counties, more extensive than has ever before been seen at the Fairs of the Society.

Permit me to say to the citizens of Utica, that there is much labor to be done, to have every thing in order for the Fair. Your enterprise and your energy are known and appreciated. If you would excel Poughkeepsie, let me say, it will all need to be put in requisition. That it will be so, I shall not doubt, unless reluctantly convinced when our grounds shall be thrown open to the thousands who will be in attendance on the 16th and 17th of September.

Persons desirous of becoming members of the Society, and of competing for the premiums, are requested to enter their names at the stage office of J. Butterfield & Co., adjoining the National Hotel, Genesee-street, Utica. The fees for membership are \$1.

STOCKTON BUTTER.

We hope the time is not far distant when the Stockton butter will be as much sought for in the eastern cities, as the far-famed Goshen butter now is. It is but a few years since the farmers of Stockton, N. Y., began to turn their attention to this important subject. We were informed a while since, by one of the best manufacturers of butter in Stockton, that the first that was put up in firkins, for transportation, was put up by himself, not more than six or eight years ago. Now it is a staple production of that county, and in that little town alone we were informed by a dairyman the other day, there are one thousand six hundred and twelve cows, most of which were kept for diary purposes.

There are two dairies with fifty cows each, some four or five with forty cows each, and a number with from twenty to forty cows each. The average amount of butter produced to each cow, is about 150 lbs., in some seven or eight months, and about 350 to 400 lbs. of cheese during the four to five months in which they manufacture that article.— Thus it will be seen that the manufacture of butter and cheese makes an important item in the products of one small town. Eastern dealers in such articles, who buy the Stockton manufactured butter, will probably get a good article. The dairymen there have been successful at our Agricultural fairs, and we trust the products of their dairies will be famed in the eastern market ere long.—*Fredonia N. Y. Censor.*

AGRICULTURE AS A PROFESSION.

The pursuit of agriculture is almost universally considered as merely a profession of commerce or trade, the farmer looking wholly to its pecuniary results. In a trading community, pecuniary considerations are always liable to control the judgment, and predominate over every other consideration.— Where the means are limited, and the farm must be cultivated as the only source of subsistence, pecuniary returns must, of course, be the main object.— Where, as in England, the cultivator is not the owner of the soil, but the annual rent must be paid, and he is liable, as in most cases, to be compelled to quit his occupancy at the pleasure or the caprice of his landlord, farming must be conducted merely as a matter of business, and there is no inducement to pursue the profession as matter of taste or sentiment. In many cases in my own country, it must, of necessity, be followed wholly as a means of support and of profit, and in some cases as a struggle for life.

But there are innumerable other cases, in which men have the power, under the most favorable circumstances, and I am most anxious they should have likewise the disposition to devote themselves to it as an elegant and liberal profession, worthy of a mind gifted even with the finest taste, and enriched by the highest cultivation. The United States present not many examples of very great wealth, at least when estimated by the standard of wealth which prevails in England, where, indeed, are to be found individual accumulations which distance all the dreams of oriental magnificence. But, on the other hand, no country upon the globe, and no condition of things since the establishment of society, ever presented more favorable opportunities than the United States for any one, by active and wholesome industry and a proper frugality, to acquire a competence, and that respectable independence, in which, with a full supply for the necessities of life, and an abundant provision for its comforts, there will be found within reach as many of the elegancies and ornaments, and luxuries of life, as a well-disciplined and healthful state of mind can require. I have seen too, frequently, such beautiful examples in our country villages, and scattered over several parts of a land in many respects favored by Heaven above every other, not to be deeply impressed with a condition of life, which, where its blessings are properly and gratefully appreciated, seems to leave a little more on earth for a rational and reflecting, a benevolent and truly religious mind to ask. Happy is it where its waters are not poisoned by an insatiate avarice, nor disturbed and thrown into confusion by

ambition of political office or distinction, or a feverish thirst for notoriety and excitement; but in a quiet, yet not stagnant repose, they reflect everywhere the tokens of that divine goodness, which seems in such examples to have poured out its richest earthly treasures. Now, I am anxious that agriculture should occupy that place among the liberal professions to which it can be raised, and to which, from its importance, it is entitled. But this can only be done by improving the education of farmers as a class—by multiplying, through the means of a most liberal and extended education, the charms of the country, and the subjects of interest which would be constantly more and more developed to a cultivated and inquisitive mind; and by showing that its successful pursuit, either as a matter of business or recreation, where a moderate fortune is possessed, or a moderate professional income is secured, is not incompatible with the highest improvement of taste, and even a vigorous and successful pursuit of learning; and that, where so pursued, under favorable circumstances, it affords as fair a chance of rational enjoyment and quiet usefulness, as any situation which the most lucrative trade, or the most successful political ambition, or even the highest professional eminence, can command.

But I fear, how much soever I may satisfy the sober and reflecting minds on this point, my opinions and persuasions will scarcely be heard, and far less heeded, in that rush for wealth, for office, and for notoriety, which, like a torrent sweeping over the country, carries every moveable object in its course. It seems, however, not less my duty to record my strong convictions, which the experience of a life not short has served only to confirm. I see in my own country every where proffered to an honest industry, a wise frugality, and a wholesome self-government, the most ample rewards: I see a wide extent of rich and beautiful territory, waiting the improving hand of skill and labor, to be had in many cases almost for asking, with every man to choose where he will pitch his tent, not only without injury, but to the advantage of his neighbor:—I see the means of education, of competence, and of substantial independence, held out to all who will avail themselves of them. In the midst of all this, I see thousands and thousands of young men, blest with education and fortunes adequate to supply all reasonable wants in the country, rushing into cities, exhausting their small means in the extravagances and dissipations of fashionable life; crowding all the professions to reptile; pressing on, with vexation and disappointment heaped upon vexation and disappointment, into all the avenues of political office and distinction, and into all the bitter strifes of political controversy; forcing their way into the pursuits of trade without talents for their prosecution, and almost sure to involve themselves in bankruptcy and ruin; and, in one form and another, dragging on through life without satisfaction to themselves and without usefulness to others, and too often a ruinous burden upon those whom it is now their turn to succor and relieve. I cannot, therefore, help wishing that the pursuits of agriculture might be made attractive to such persons; and that, with education, and that moderate fortune which would give them the command of the best advantages of rural life, they might find in it, as far as rational happiness and humble usefulness are concerned, that philosopher's stone, which in other places they are almost sure to search for in vain.—*Colman's Tour.*

DOES THE MOON INFLUENCE THE WEATHER.

From the fourth number of Dr. Lardner's Popular lectures on science, which has just been published, we make the following extract. The influence which the changes of the moon are generally supposed to exert upon the weather, seem very clearly shown by the Doctor to be fallacious:

"Among the many influences which the moon is supposed, by the world in general, to exercise upon our globe, one of those which have been most universally believed, in all ages and in all countries, is that which it is presumed to exert upon the changes of the weather. Although the particular details of this influence are sometimes pretended to be described, the only general principle or rule which prevails with the world in general is, that a change of weather may be looked for at the epochs of the new and full moon—that is to say, if the weather be previously fair, it will become foul; if foul, will become fair. Similar changes are also sometimes, though not so confidently, looked for at the epochs of the quarters.

A question of this kind may be regarded either as a question of science or a question of fact.

If it be regarded as a question of science, we are called upon to explain how and by what property of matter, or what law of nature or attraction, the moon at a distance of a quarter of a million of miles, combining its effects with the sun, at four hundred times that distance, can produce those alleged changes? To this it may be readily answered, that no known law or principle has hitherto explained any such phenomena. The moon and sun must doubtless affect the ocean of air which surrounds the globe, as they affect the ocean of water, producing effects analogous to tides; but when the quantity of such an effect is estimated, it is proved to be utterly inappreciable, and such as could by no means account for the meteorological changes here adverted to.

But in conducting investigations of this kind we proceed altogether to the wrong direction, and begin at the wrong end when we commence with the investigation of the physical cause of the supposed phenomena. That method of conducting physical inquiries, which was bequeathed to us by the illustrious Bacon, and which has led to such an immense extension of our knowledge of the universe, imperiously requires, that before we begin to seek for the causes of any phenomena we must prove, beyond the possibility of doubt, the *reality* of the phenomena, and ascertain, with the utmost precision, all the circumstances attending them. In other words, we are required to consider all inquiries of the kind now adverted to as mere questions of fact, before we take them as questions of science.

What, then, let us see, is the present question? It is asserted, that the moon produces such an influence on the weather as to cause it to change at the new and full moon, and at the quarters. But in this mode of stating the proposition, there are implicitly included two very distinct points, one of which is a simple matter of fact, and the other a point of physical science.

First, It is asserted, that at the epochs of a new and full moon, and at the quarters, there is generally a change of the weather. This is a mere statement of alleged fact.

Second, It is asserted, that the places of the moon, or in other words the relative position of the

moon and sun in regard to the earth, is the cause of these changes.

Now, it is evidently necessary to settle the first question before we trouble ourselves with the second; for if it should so happen that the first statement should prove to be destitute of foundation, the second falls to the ground.

The question of fact here before us is one most easily settled. In many meteorological observations throughout Europe, a register of weather in all respects has been kept for a long period of time. Thus the height of the barometer, the condition of the thermometer, the hydrometer, and the rain-gauge; the form and character of the clouds, the times of the falling of rain, hail, and snow, and, in short, every particular respecting the weather has been duly registered from day to day, and often from hour to hour.

The period of the lunar phases, it is needless to say, has also been registered; and it is, therefore, possible to compare one set of changes with the other.

This, in fine, has been done. We can imagine, placed in two parallel columns, in juxtaposition, the series of epochs of the new and full moons and the quarters, and the corresponding conditions of the weather at these times, for fifty or one hundred years back, so that we may be enabled to examine, as a mere matter of fact, the conditions of the weather for one thousand or twelve hundred full and new moons and quarters. The result of such an examination has been, that no correspondence whatever has been found to exist between the two phenomena. Thus, let us suppose that one hundred and twenty-five full moons be taken at random from the table; if the condition of the weather at these several epochs be examined, it will be found, probably, that in sixty-three cases there was not a change; so that under such circumstances, the odd moon in this division of one hundred and twenty-five would favor the popular opinion: but if another random collection of one hundred and twenty-five full moons be taken, and similarly examined, it will probably be found that sixty-three are not attended by changes of weather, while sixty-two are. With its characteristic caprice, the moon on this occasion opposes the popular opinion. In short, a full examination of the table shows, that the condition of the weather, as to change or in any other respect, has, as a matter of fact, no correspondence whatever with the lunar phases.

Such, then, being the case, it would be idle to attempt to seek for a physical cause of an effect which is destitute of truth."

IMPROVED BUCKLE.

One of the most valuable improvements which we have met for some time, is the "Compound Lever Buckle," invented by Henry Lawrence, of Chenango Co. N. Y. The article is intended chiefly for the use of the trace or tug in harnesses, and is equally applicable to the heaviest or lightest draft. Its peculiar advantages are, that it dispenses with the use of the tongue, thus obviating the necessity of cutting holes in the trace, and giving to it greater strength and durability. Every one has noticed that a trace breaks first where the tongue of the buckle goes through; this is owing to the whole strain of the draft coming on but a small portion of the trace, and to the leather becoming rotten and weakened by the holes' letting in wet. With this buckle, the trace

can be taken up or altered to any required position, and is instantly fastened with the utmost exactness, to a hair's breadth. It is an article of great simplicity, neatness and durability, and we have no doubt is destined to come into general use. The patentee has left one of the buckles at this office, where it may be seen by those interested in such improvements.—*Albany Cultivator*.

CULTURE OF THE TEASEL.

There are two species of the teasel; one called the *sylvestris*, from its inhabiting woody places; the other *fullonum*, referring to the class of men by whom it is used, viz: the fullers. Now most persons scarcely distinguish them apart; they regard both as one, and this is not very remarkable, as they look very much alike; but an inspection of the hooks of the scales or chaff of the flower heads will set one right; the latter has hooks bent outwards, while in the *sylvestris* they are straight. It is by the bent and exceedingly fine points of these flower scales or chaff that are fitted for the office in which they are employed, viz: that of raising a nap upon woolen cloths; and so important are they, that not a piece of broadcloth can be made without them. No machine or process has yet been devised which can perform this work, though many attempts have been made to supply their place. The teasel forms a natural family of plants by themselves. Their leaves are either opposite or stand in circles (whorls) around the stem. Their flowers are situated at the end of the stem, and are collected in an elongated oval head. Some persons probably consider them as a kind of thistle; but their heads are really different, though the family stands next to the great family of plants known in botanical treatises as the *composita*—a family in which the thistle tribe is found. The teasel is a biennial plant, or requires two years to come to perfection. It is hardy, belongs to the temperate climate, and bears frost well. It is not difficult for thorough-going farmers to cultivate it. It may be cultivated on almost any kind of soil, provided it is not too rich; the best teasel is, however, raised upon a rather stiff clayey loam. The ground is to be broken 'up early in the spring; the seed is sown in drills three feet apart, and may be put into the ground any time from the first of April to the first of June. It is better, however, to sow as soon as the field is sufficiently dry, as the young plant is not injured by frost, should it occur, and an opportunity given for a wider extension of its roots. The seed, when sown early in April, will require first hoeing by the middle of May, or when the leaf is about two inches long. Without entering upon an exact detail of what is to be done, it will be sufficient to state that the plant will require much treatment as maize or Indian corn; or that during the whole period it will require to be kept free from weeds. Attention so as to secure the growth of the plant is not so difficult as curing the teasel and putting it in a condition for market. This part of the business I will now speak of.

It may be considered as ready for picking when it has just past flowering; or when the petal (flower leaf) is ready to drop. Here is an important fact to be noticed; the crop must be attended to and gathered at once; for at this stage only are the heads and awns of the floral leaves sufficiently elastic and tough to be adapted to the fuller's use.

If, then, a careless farmer attempts to raise the teasel, he will, ten to one, lose his crop, or let it

injure, for want of immediate attention at the precise time at which it is required. But this is not all; the teasel being gathered at the proper time, would still be lost without careful drying; for at this time it is not like the dry head of the wild teasel which we see in the autumn, but it is full of the juices of the plant; and these must be evaporated in a mode which will prevent mould or mildew, and at the same time preserve the elasticity of the hooks. To effect this, Mr. Hopkins, of Cayuga county, has erected a number of buildings in form and size of the common corn-house or corn-crib, only the spaces between the thin scantlings are a little wider, in order to admit of a freer entrance of air. In the interior, temporary scaffoldings are put up about two feet apart, which are also formed of scantlings laid upon supports, with inch spaces between each.—Upon these platforms the teasel is laid to dry. Here being freely exposed to currents of air passing thro' the building, the moisture speedily evaporates and is carried away; and being at the same time in the shade, the material preserves its elastic property as well as flexible state, upon which its great utility in cloth dressing depends. From these remarks, it will be seen that the requisites for raising and curing good teasel, are first to cut it at the proper time, and second, to dissipate the moisture without injury to the head; and farther, that a lazy farmer is not the man to raise teasel. Such is not Mr. Hopkins. His teasel commands the price of the imported article, and in fact is the best sent to market. An acre, well managed, yields upon an average, 75,000 heads. Their price in market varies from eight to twelve shillings per thousand. Ten shillings is about the medium price. This plant is not supposed by Mr. Hopkins to exhaust the soil, but rather to benefit it, partly by the mechanical action of the roots, which, being somewhat of a tap form, penetrate deeply, and hence divide it; and thereby it is better prepared for corn and other crops. Without doubt a large proportion of the matter of the plants is strictly derived from the atmosphere through the intervention of the soil; still, like all other vegetable bodies, it has its inorganic constituents, which must be derived from the soil itself, and hence, thus far, the plant must impoverish the soil. So much then, for the teasel, which will probably always bear a fair price and pay for cultivation; yet, comparatively few seem disposed to grow it, either from the care which they are unwilling to bestow in curing it, as well as on account of the time required for the article to grow; as nearly two years must elapse before there is a return for the labor and expense incurred in its cultivation.—*Quar. Jour.*

AGRICULTURAL ANECDOTE.—Furious Cresinus, as mentioned by Pliny, the Roman historian, was originally a slave. Having been made a freed man, he purchased a small spot of ground, from which he obtained through his unwearied industry much finer crops than many of the neighbors who had larger farms. This excited general envy, which his enemies carried to such a length as to accuse him of employing magic charms to render his own grounds fertile and to impoverish theirs. The Edile caused him to be summoned to appear and answer the charge before the people of Rome. Cresinus obeyed the mandate, accompanied by his daughter, a fresh and healthy colored girl, charms which appeared to greater advantage from the simplicity of her dress.

The accused also brought with him the tools and implements of his profession. They were in excellent condition. His mattocks were remarkably ready; his plough was of an enormous size, and his cattle were all sound and fat. "Behold!" said this truly dignified and indignant farmer, "behold my whole magical equipage! behold the charms which I have recourse to! There are others, indeed, which I am not capable of producing before you—I mean the sweat of my brows, and incessant toils both by day and night." This native eloquence decided the matter; he was honorably acquitted by the unanimous voice of a numerous and applauding assembly.

PEA-BUG—*Bruchus pisa*.

Everybody has seen peas with weevils in them.—While the pea is growing and the pod is soft, the parent insect punctures the pod exactly opposite the young pea and deposits an egg. From this egg a maggot soon proceeds, which works its way directly into the pea, and feeds on its substance. The larva reaches its full size, and passes into the pupa state in the fall, and the succeeding spring emerges from the pea a winged beetle or weevil. The maggot may sometimes be detected in green peas, and Dr. Harris observes that few persons while indulging in this luxury are "aware how many insects they unconsciously swallow." By close examination, a small dark spot may be seen on the pea, and on opening it the maggot may be discovered. The germ of the pea is not always (perhaps not generally,) destroyed by the insect, but the pea is rendered unfit for culinary purposes. This is a serious injury, as all will acknowledge who are acquainted with the value of dry peas used in soups, and other forms on the table.

In this country, the insect is much less common in Canada, and the more northern portions of the United States, than further south. In Maine and Vermont, for example, they occasion but little damage, peas being there raised which are perfectly sound and free from bugs, and meet with ready sale in our large cities. The attack of the insect may, however, be in some degree obviated in any section. It is ascertained that its operations are only continued through a portion of the season, and by late sowing it may be avoided. But there is one objection to late sowing. In districts subject to great heat, and which are also liable to long drouths, a good crop of peas can only be obtained by early sowing, as the crop will not bear excessive heat.—In planting peas infested with bugs, it is always advisable to kill the insects in some way. This may be effectually done by pouring boiling water on the peas, and stirring them well for a few minutes. It will not much affect the vegetating powers of the pea. In some cases, where the germ has been laid bare by the gnawings of the insect, it may be killed, but we have often practiced the mode, and found no particular objection to it.

But we lately noticed a recommendation of Dr. J. T. Plummer, in the *Indiana Farmer and Gardener*, which is worthy of trial, as it will not only destroy the bug in its incipient stage, but may also render the pea fit for the table. His mode is to scald them immediately after they are gathered, keeping them in water, turned on boiling, for one minute. Dr. P. states further, that placing peas as soon as gathered in jugs or bottles, hermetically sealed, will keep them well, and that nothing can be seen the next year but the speck in which the larva died.—*Cult.*

From the Cultivator.

DURABLE FENCE—BARNs.

MR. L. TUCKER—Every farmer should have his lands well fenced. All will admit this, and yet how few have fences that can be trusted. In this climate, where frosts prevail, fences will need repairs every spring if built in the ordinary way; and it is one of the greatest vexations that farmers have to encounter, the inefficiency of their frost-shaken fences. The experience I possess in relation to the erection of permanent farm fences, has been considerable. A stone wall, which, for some farms, is the cheapest and most durable fence, should be constructed by first digging a trench eighteen inch deep by two feet in width. This should be paved with oak or yellow pine boards; and upon this commence laying the foundation, not with small stones that will work out, but with large flat stones that will lay well. It is likewise necessary to lay the stones lengthwise across the wall, which will bind and strengthen it. A wall put up in this manner will stand the heaving influences of frost much longer, and maintain its even and straight appearance, in which consists the beauty and efficiency of a wall, to amply repay the extra expense. Every wall should be made five feet high, which is a reasonable security for an enclosure against the depredations of most animals. It is my opinion that the cheapest fence for farms where stones cannot be had, and lumber is scarce and high, would be a fence constructed of cast-iron pickets, the pattern for the construction of which should not exceed one-eighth of an inch for the most part, increasing to one-quarter where the holes are placed for securing them to the iron bars. The bars should be twelve feet in length, cast very light, with holes in them at proper distances for riveting. The riveting process is simple, and soon done, any blacksmith being able to rivet from ten to twelve pannels a day. To make the pickets as light as possible it is necessary to groove the pattern through in the middle three-fourths of an inch, leaving three inches at the top and bottom solid, excepting the holes where they are secured to the bars. Three feet is length enough for a picket. The expense of construction would be lessened by the use of wooden posts instead of iron; the latter, however, would be preferable. A farm provided with a fence of this material, if kept thoroughly painted, would be fenced, not for a day, but for all time.

I have found the most durable way to set posts, and prevent them from being thrown out by frost, is to dig the holes large enough to admit of their being filled up with small stones and lime mortar; the lime prevents decay, and the stones prevent in a great measure the action of frost. It is of the utmost importance for farmers who wish contentment of mind, good neighbors, the enjoyment of their own property, and to be free from vexatious litigation, to put up good and sufficient fences both inside and out.

A FEW HINTS ON BARNs INTENDED FOR HAY.—The site for these buildings is of the first importance. It should be in the vicinity of the hay field, for in the hot and sultry season it is a saving of time and labor to have them thus located. It should be, if possible, dug into the side of a hill, which will enable you to draw the load near the roof, which elevation will enable you likewise to pitch the hay down. All will admit it is easier. If you have no

side hill on which to build, the posts of the barn should be at least fourteen feet high, which will secure ample bay-room, which is very much needed in all hay barns. The opening for putting in the hay should be at the east, as it will be shaded in the afternoon, the time in which most hay is put in. To construct barns for this purpose in the most economical way, I would recommend placing the posts upon the sills at the distance of twelve feet asunder, gird paralel with the sills half way up the posts, then board up by placing the boards lengthwise from plate to sill. For a roof match the boards close and lay two thicknesses, taking care to break joints.—Every barn should be provided with a conductor or lightning rod. An easy method is to put them up in the form of a half-circle, stretching along the roof, supported by non-conductors. The fluid coming in contact with either end of the conductor will travel to the opposite end, where it will explode into the air. Yours respectfully, H. COOKE.

TIVOLI, Dutchess Co., N. Y., 1845.

DUTIES OF WOMEN TO THEIR COUNTRY.

The shelter and protection of a free government also demand awakened and grateful energies. Since its welfare is involved in the virtue and intelligence of its subjects, the character and habits of every member of its great family, are of importance. I imagine that I hear from the lips of some of the young and sprightly of my sex, the inquiry, "Why need we concern ourselves in the affairs of politicians? What share have we in the destinies of our country?" The same share that the rill has in the rivulet, and rivulet has in the sea. Should every little streamlet tarry at the fountain head, where would be the river that dispenses the fertility—the ocean, bearing commerce and wealth upon its never-ending tide. Woman possesses an agency which the ancient republic never discovered. The young fountains of the mind are given in charge to her.—She can tinge them with sweetness or bitterness, ere they have chosen the channels where to flow, or learned to murmur their story to the time-worn pebble. Greece, that disciple and worshipper of wisdom, neglected to appreciate the value of the feebler sex, or to believe that they who had the moulding of the whole mass of mind in its first formation, might help to infuse a principle of permanence into national existence. Rome, in her wolf-nursed greatness, in her fierce democracy, in the corruption of her imperial purple, despised the moral strength that lay hidden under physical weakness. But our country has conceded every thing, the blessings of education, the equality of companionship, the luxury of benevolence, the confidence of a culturer's office, to those young buds of being, in whom is her wealth and her hope. What does she require of our sex in return for these courtesies? Has she not a right to expect that we give our hands to every cause of peace and truth—that we nurse the plants of temperance and purity—that we frown on every inroad of disorder and vice—that we labor in all places where our lot may be cast, as gentle teachers of wisdom and charity, and that we hold ourselves, in domestic privacy, the guardians of those principles which the sage defends in the halls of legislation, and the priests of Jehovah upon the walls of Zion.

The Hon. ZADOCK PRATT, has contributed \$250 to the Greene County Agricultural Society, to be expended for the purchase of agricultural premiums.

GREATEST IRON MINES IN THE WORLD.

In Newcomb, Essex county, N. Y., in one mine, there is sufficient ore within two hundred feet of the surface to make eighty million cubic feet of iron.—Two other mines, within two miles, are nearly as extensive as this; and at all, the ore may be quarried out to the open day like flagging stone. To increase the value of these mines, they are in the midst of a wilderness of wood, and situated directly upon a great water power. The western states abound in lead and copper; the country south of Lake Superior in copper and silver; the southern states in gold. Pennsylvania, Ohio, Illinois, Indiana, with many others, in inexhaustible beds of coal, associated also with iron ore, and all these in a country rich in the great staples of the vegetable kingdom. Well may we inquire, what country abounds so much in the elements of prosperity as our own?—And let us rejoice that these elements are neither owned nor controlled by a despot, but belong to the people.—*Quar. Jour.*

CINCINNATI PORK.

Under this head, a writer in the London Mark Lane Express offers the following remarks:

"It is strictly within my private cognizance that, during several months past, a number of provision-curers, headmen, and experienced workmen, have left some of the curing depots in Scotland and Ireland for Cincinnati, for Louisville, and a few of them for places as still more remote as St. Louis, Missouri. By these a better system will soon be introduced; and believe me, sir, if you knew, as I do, the mingled acuteness and energy of the American character, you would think with me, that nothing but encouragement is required to induce them to push their improvements—in *growth as well as in cure*—to the utmost attainable pitch of perfection. There are not wanting men of business, natives of the old country, who can make Americans alive to the particular markets in Great Britain, where varying modes of preparation are respectively held in favor. Go on with your movements of one-sided liberality, and as soon as the virgin soil of the Mississippi is fined down from the exuberant luxuriance that in some places unfits it for the general production of wheat corn, then will you have not pork alone, but beef, corn, and every important article, the production of which forms at present, the life and subsistence of the better portion of your population, pouring in where they are not wanted, to the certain inducement of some tremendous social revolution.

COL. H. S. RANDALL'S MERINO SHEEP.

Last season we noticed the enormous clip of the merino sheep of Col. Henry S. Randall, of this village. This season we learn that his Paular stock, including two rams, averaged over six pounds of *well washed* wool per head! A three year old ram sheared 13 lbs. 3 oz., (the heaviest fleece, we believe, ever taken from a *three year old* Merino in the U. S.,) and a yearling 8 pounds 8 oz. Many of the ewes sheared 6, 7, and 8 pounds per head, and one the unparalleled weight of 9 pounds 1 oz. Col. R. received the first premium on rams, and the first and second on ewes, at the State Fair, at Poughkeepsie, (1844;) and the gold medal of the Society, for the best managed and most profitable flock of sheep, at the annual winter meeting of the Society in Albany. Cortland against the world!—*Cortland Democrat.*

A MAN GROWN BY GUANO AND ELECTRICITY.

The New Haven Courier tells the following capital story:

"A citizen of this place, while recently on a tour in the State of New York, was induced to make himself one of the audience of an itinerant lecturer, who was holding forth upon the efficacy of electricity as applied to vegetable productions.

In the course of this harangue, *guano* was incidentally alluded to as a powerful agent in quickening the growth of plants; and the effects of this and electricity were displayed in such glowing language, that the auditory soon imagined themselves standing in the midst of a field, and endeavoring to measure the height of the grain before it was out of reach. The whole assembly were in a fine state of enthusiasm, and swallowed down the wonders revealed to them with opened mouths and starting eyes, when a plain-looking old farmer arose, and, with apparently much diffidence, begged to confirm the lecturer's statements, by the relation of an incident which he had recently witnessed, and to which he was a party.

"I have," said he, "a very bad boy, named Tommy: he's given us a good deal of trouble, and having tried various methods to reform him without success, I told my wife that it would be best to try something that was new, and rather more severe. Accordingly we agreed to shut him up at night in the barn. Well, one night while Tommy was roosting with the cattle, and I was in bed, there came on a tremendous thunder storm. It lightened sharp enough to put out a man's eyes, and the thunder never was beat. Feeling rather uneasy about the boy, I got up early in the morning, and went out to see how he fared. As I was going to the barn, I met a man most eight foot high coming towards me. I had never seen such a tall critter in all my life before, and I began to feel sorter scarible at having him about my premises.

"Hallo!" says I, as soon as I could speak, "who are you, and what are you doing in my barn-yard?" The strange looking animal answered in a little squeaking child's voice, "Why father, it's me—don't you know Tommy?"

"You!" says I; "why, Tom, how on airth did you get stretched out so long in one night? Why, you're growed as tall as all out doors, don't you know it?"

"Why, yes, father," says he, "I s'pose I have, for last night I slept on them bags of guano you put in the barn, and that and the lightning together just did the business."

EFFECTS OF DRINKING COLD WATER.

Dimness of sight, syncope, spasms of the chest and stomach, staggering, imperceptible pulse, and laborious respiration. Sudden death, says Thomson, has often been observed to be produced by drinking large draughts of cold water. Indeed, this effect of cold upon those who have suffered much previous heat, thirst, and fatigue, has long been known. Quintus Curtius, in particular, gives a very interesting account of the fatal effects which the army of Alexander the Great experienced on reaching the banks of the river Oxus, after a fatiguing march through the sterile and burning sands of the desert. Those who indulged in drinking freely of the stream died immediately; and Alexander, the historian remarks, lost more men by this means than he ever lost in battle.—*Medical Times.*

BUTTER.—One of the most prominent reasons why there is so much poor butter made, is, that the salt used is not good. Even the best of our common salt contains a considerable quantity of impure matter. Rock and bay salt, which are considered the purest that can be obtained, are mixed with small quantities of sulphate of magnesia and lime, nitrate of soda, and muriate of magnesia.

The following mode is recommended to render it pure.—“Put into a large kettle a peck of salt, with clear rain water enough to dissolve it: boil it, and skim off every particle of scum that rises on the surface; then dissolve 1 ounce of the carbonate of soda in four ounces of water, put it into the kettle, stir it well, then boil it again for ten minutes, skimming off the scum that rises; then strain the brine through several folds of flannel. A considerable quantity of earthy matter will thus be found in the bottom of the kettle, which is the cause of the impurity. After having thus strained it, add a small quantity (half an ounce or so) of muriatic acid to the brine, to neutralize the soda; and then put the brine again into the kettle, and boil it till it crystallizes, or in a shallow wooden vessel till the water is evaporated: the first is the quickest. After the salt is well crystallized, it must be washed, by putting it into a clean basket and throwing over it a bucket of perfectly pure water, and let it drain off rapidly; then let it be dried. Perfectly pure salt can thus be obtained, suitable not only for butter, but for preserving meat, &c.; and the increased excellence thus secured will well repay all the trouble and expense of preparation. It can be rendered more pure than is usually bought, indeed, if the carbonate of soda should not be added; but it is still better when it is also used.”

SAFETY IN A THUNDER STORM.—The following paragraph is extracted from Cavallo's Elements of Natural and Experimental Philosophy, and contains some valuable hints:

“With regard to personal security in time of thunder storms, if a person be in a house which is not furnished with a conductor, it is advisable not to stand near any metallic articles, viz: near gilt frames, chimney grates, bell wires, iron casements, and the like. In the middle of a room, upon a dry chair or table, or mattress, or other isolated articles, is the safest situation. Should a storm happen when a person is in the open fields, and far from any building, the best thing he can do is to retire within a small distance of the highest tree or trees he can get at; he must not, however, go quite near them, but he should stop at about fifteen or twenty feet from their outermost branches; for, if the lightning happens to strike about the place, it will in all probability strike the trees in preference to any other much lower object; and if a tree happens to be split, the person will be safe enough at that distance from it.

THE WEATHER AND THE CROPS.

In this region, and we believe throughout all central and southern Ohio, the past two or three weeks have been as favorable for the growing crops as the heart of man could desire. The fine rains mentioned in our last, have continued at intervals of not more than two or three days, so that the ground is now well saturated, and the warmth has brought on the corn with astonishing rapidity. The wheat, too, that was not killed by frost, has filled out more plump and heavy than has been known for many years in these parts, and the yield, though very light in straw, will, it is judged, be greater than for two or three years past, though this is not the case in many of the more northern counties, where the most wheat is commonly produced. We regret to learn that the late rains have not generally extended over the Reserve counties, and they are again suffering from drought to a degree that precludes all hopes of realizing a hay crop, so important to that region. If the farmers do not provide plenty of turnips, &c., in those parts, there will be great suffering among the cattle next winter.

Ohio Cultivator, July 1st.

Let each one do the good that is in his path and his calling, and his work shall remain, even if it seems to pass away, and will bear fruit in its time.

One of the Editors of the Courier and Enquirer, writing from Livingston Co., makes the following mention of a gentleman well known in these parts, and throughout the country, for his liberality in every praiseworthy enterprise:

This county is beginning to feel how much can be done by the wealth and exertion of a single individual. Mr. JAMES S. WADSWORTH of Geneseo, who has recently succeeded to an immense estate reaching probably two million, seems to be governed by a public spirit which, if generally shared by our wealthy men, would give a new aspect to the whole State. You recollect his munificent donation of \$10,000 to distribute that capital, practical book, the “School and Schoolmaster” throughout this State. He has still more recently established from his own funds and under his own supervision, a *School* which cannot be without a marked effect. From each town in the county—*twelve* in all,—he selects one boy, confining the choice under 14 years of age, of poor parents and of good spirit—This selection is to be made annually for three years, and the number is limited to thirty-six. These lads are taken to his farm in Geneseo, and placed under teachers, where they first receive instruction in the rudiments of knowledge and of the simplest gardening. As they grow up they are taught in the more advanced stages of education and in the more important wonders of agriculture. They are to remain in this condition, under the control and discipline of Mr. Wadsworth, until they are twenty-one years of age.—Having thus become skillful farmers and thoroughly educated men, fit for the public duties of good citizens as well as for labor of the farm, they are prepared to enter upon active life. The vacancies created by their departure are to be filled by repeated selections from the different towns in the county.

From such a plan, endowed with so much munificence, much good may well be anticipated. Mr. Wadsworth is certainly entitled to the warmest gratitude of the whole community, as well as the people of this, his native county.

REMEDY FOR THE BOTTS.—A correspondent of the Albany Cultivator says:—“Having seen many horses die with Botts, and many remedies given without effect, I was induced, by a merchant in Cambridge, to try the following for a horse of my own, after I had tried most of the remedies in common use without effect, and had given him up for lost: Half pint vinegar, half pint soft soap, half pint gin, and half pint molasses, well shaken together, and poured down while foaming. To my great surprise, the horse was, in five minutes, wholly free from pain, and ate freely; the next morning I was on my journey. I have since recommended and given the same in perhaps fifty cases, with the same good effect; not in one instance has it failed to effect a perfect cure.”

THE RED ANT.—The little Red Ant, where he is disposed to make himself familiar, is one of the greatest of all pests that afflict a household. He is always on hand in the sugar bowl, makes the preserve dish a sort of every-day lounge; and if a choice pie is set away any where for an extra occasion, this little fellow is sure to find it out and keep guard there. Several modes are recommended to drive him away. One is to strew sage leaves about the cupboard; another, to use cedar boughs instead, and a latter one is to guard any particular treasure with common salt. For instance, says the New York Farmer and Mechanic, if a safe or cupboard is to be kept from them, set it from the walls, so as to touch nothing laterally; then place a cup containing salt under each leg, so as to oblige the animals to travel through it. They will not do it.—*Prairie Farmer.*

PINS.—Two tons and a half of pins are put up every week at the pin factory in Derby, Connecticut. What becomes of all the pins?

Whenever you buy or sell, let or hire, make a clear bargain, and never trust to “We shan't disagree about trifles.”

The wheat crop has been all harvested in Michigan, and the quantity and quality are all that could be wished. No chance for high prices within reach of the lakes and canals.



HORTICULTURAL DEPARTMENT.

BY P. BARRY.

CULTIVATION OF THE STRAWBERRY.

In our remarks on strawberries, in our last number, we promised some directions for their culture in this. It is a simple matter, and yet there seem to be few of those who attempt to grow strawberries that understand—or, if understanding, that practice the most successful method.

In the first place, then, select a plot of ground of the deepest loamy soil in your garden, with a full exposure to the sun. Prepare it thoroughly by a deep spading, or trenching, to the depth of 18 inches, if possible, turning in, as you proceed, an abundance of strong manure. When this is done, rake the surface until it is fine and even, and mark out your rows with a line, 2½ or 3 feet apart. The latter is preferable, where land is plentiful; as it admits the air and light around the plants, and gives room enough for after culture.

Next, provide yourself with strong, well-rooted young plants, of the *best* kinds, (a list of which we shall presently give,) and plant them on the rows you have marked out, about a foot apart. The after culture necessary consists in keeping the runners cut off, and in giving a light dressing of manure, by spading between the rows every fall. A plantation thus managed will yield abundantly for four or five years, when it must be renewed. Those who prefer having their fruit clean, when gathered, will cover the ground between the rows with a light layer of straw, just as the fruit begins to ripen.

The following varieties are justly considered the best now cultivated in this country:

Large early Scarlet.—This is among the earliest varieties known, is exceedingly prolific. The fruit is large, fine-flavored, and handsome.

Keen's Seedling.—This is a large, beautiful, well known fruit, cultivated hitherto in this section more than any other. A most productive and regular bearer, with a very agreeable high flavor.

Ross' Phoenix.—This is a new American variety, produced from the seed of the foregoing, which it very much resembles, but is generally admitted to be superior. Indeed, we consider it to be the *very best* strawberry in the American gardens.

Hovey's Seedling.—This is also a splendid new American seedling, raised by Hovey & Co., of Boston, a few years ago. It has been disseminated rapidly and extensively through the country. It is in many of the Rochester gardens, and those in the neighborhood, where we have seen good crops on young one-year-old plantations.

Bishop's Orange.—A very fine, high-flavored, beautiful fruit. It is very productive, and ripens at an advanced season.

The *Alpine Strawberries*, red and white, should also be in every garden, as they yield their delicious fruit the whole summer, from the usual strawberry season till the approach of winter.

The *Bush Alpines* produce no runners, and make a tasteful and economical edging for beds in the kitchen garden.

HORTICULTURAL SOCIETY OF TORONTO.

This society, which was organized about a year ago, held its second exhibition for this season on the 18th of July. We were present on the occasion, and felt highly gratified at the increased interest which the society seems already to have excited amongst the gardeners and amateurs of that city and vicinity. The exhibition was held in the spacious verandah of the Government-house. It was much too small for the purpose, and prevented the articles from appearing to the best advantage; yet it was well arranged, and looked superb.

The Plant, Flower, and Vegetable departments were well represented, and spoke well for the skill and taste of the Toronto cultivators.

The Fruit show was meagre. We saw but two or three varieties of cherry, although in the middle of their cherry season; two or three varieties of strawberries, and a few currants.

We have no doubt, however, the society will give such an impetus to fruit culture as will, in a few years, bring it to its proper rank among the other departments.

The Vegetables were as fine as we ever saw. The premium rhubarb, by Mr. W. Burns, was of extraordinary size. Also, cucumbers by the same.

Melons, fine for the season, by Mr. Gray, gardener for W. H. Boulton, Esq., mayor of the city. The other vegetables were equally fine, superior to any we ever saw in the Rochester market; although around Rochester we have far superior gardening facilities, as regards soil and climate, &c. Our gardeners must bestir themselves.

In the Floral show, Mr. James Fleming, of the Yonge-street garden; Mr. John Gray, gardener to W. H. Boulton, Esq.; and Mr. Henry Turner, were the principal exhibitors. Each of these have excellent collections of plants. We noticed among their specimens some of the best new fuschias, roses, verbenas, &c.

Very good collections of Hardy Roses were exhibited by Messrs. Leslie & Co., and by Geo. W. Allen, Esq. The first premium was awarded to the former.

Three splendid Floral Ornaments were exhibited for prizes. One was a representation of a large garden vase, tastefully and elegantly made by Mr. McDonald, foreman in Leslie & Co.'s nursery and seed garden. This received the first premium. The second was awarded to W. Williamson, Esq., an ardent and tasteful amateur, for a fine representation of the residence of Sir Walter Scott. The third premium to Geo. W. Allen, Esq., for a large beautiful design made up chiefly of roses. Mr. Allen is one of the leading friends of agriculture and horticulture in Toronto, and to his exertions both societies are largely indebted for their organization and support.

We had almost forgotten to mention a magnificent *Hoya carnosa*, (wax plant,) the largest we have ever seen in a portable state, and exhibited by W. Cayley, Esq., and to which was awarded the first premium as the best exotic. It was neatly trained, and in full bloom.

There are many other articles we should like to notice, if space permitted, in order to show what our Toronto friends are doing. But it will be seen from what we have said, that they are advancing rapidly. Their society will be productive of vast good. If properly managed, and cordially sustain-

ed, as we feel assured it will be, its influence will be beneficially felt, in a few years, throughout the whole of Canada West.

Its next exhibition will be held in September. We will endeavor to be present.

THE FRUITS AND FRUIT TREES OF AMERICA, BY A. J. DOWNING, OF NEWBURGH, N. Y.

This work, for which we have been looking with considerable anxiety for some time past, has at length made its appearance; and from the rather cursory examination which we have given it, we can say that it is the most complete and useful book of the kind yet produced in this country.

This was to be expected, not so much on account of the peculiar qualifications of Mr. Downing, as of the great facilities afforded for the compilation of such a work, by the recent careful and systematic investigations of European as well as American Horticultural Societies, and the increased general attention given to fruit culture every where.

The work has evidently been prepared with a great deal of labor and care, and with a view to make it as perfect as possible at the present stage of American experience in this department. We cannot convey to our readers an idea of the importance of the work any better than by giving a sketch of the various subjects of which it treats.

Chapter 1. Treats of the production of new varieties of fruit.

2. Propagation of varieties, grafting, budding, &c.
3. Pruning.
4. Training.
5. Transplanting.
6. Position of fruit trees, soil and aspect.
7. General remarks on insects injurious to fruit trees.

8. The *Apple*—history, uses, propagation, planting, pruning, insects injurious to it, gathering, keeping the fruit, cider making; and a description of 186 varieties, with engraved outlines, natural size, of upwards of 30 varieties.

9. The *Almond*—history, uses, culture, &c.; with a description of 7 fruit-bearing and 2 ornamental varieties.

10. The *Apricot*—history, uses, cultivation, and diseases, with a description of 16 varieties.

11. The *Baberry*—uses, culture, &c., and description of 4 varieties.

12. The *Cherry*—its history, uses, cultivation, training, gathering the fruit; with a description of the several classes, and of 37 varieties, with engraved outlines of 31 varieties.

13. The *Currant*—uses, propagation, and culture; with a description of 10 fruit-bearing and several ornamental varieties.

14. The *Cranberry*—general remarks on its localities, culture, uses, &c.

15. The *Fig*—history, propagation, culture; with a description of 15 varieties.

16. The *Gooseberry*—its history, uses, propagation, and cultivation; with a description of 40 sorts, esteemed by Mr. Downing as most valuable.

17. The *Grape*—Its history, uses, soil adapted to its culture, propagation, cultivation under glass, with and without heat—descriptive figure of a vinery—Insects and diseases peculiar to the grape—a description of 35 varieties of foreign grapes, 3 of them figured in outline: *Black Hamburgh*, *Royal Muscadine* and *White Muscat of Alexandria*. Also a chapter on the cultivation of the *native grapes* in the

garden and vineyard—remarks on the diseases to which they are liable—and a description of twelve varieties, 5 of them figured in outline, natural size; viz: the *Bland*, *Cutawba*, *Els'ngburgh*, *Isabella*, and *Ohio*.

18. The *Mulberry*.

19. The *Nut*.—Description and cultivation of the walnut, hickory nut, filbert, &c.

20. The *Plum*.—Its history, uses, propagation and culture—soil adapted to it—Insects and diseases which attack it, with speculations on their causes, preventives and remedies—and description of 97 varieties, 29 of them figured in outline, natural size.

21. The *Pear*, as the author says, "the favorite fruit of modern times and modern cultivators."—Its history, uses, gathering and keeping the fruit, propagation, soil, culture—diseases—with a description of 233 varieties, 80 of them represented in outline figures, natural size.

22. The *Peach*.—Its history, uses, propagation, soil, and situation—pruning, training, insects and diseases, with quite an elaborate disquisition on the yellows; in which the author seems inclined to advocate the belief that this is a "constitutional taint," existing in many American varieties of the peach and produced, in the first place, by bad cultivation, instead of being, as many suppose, a "contagious disease"—to which is added, remarks on the distinctive characters of the leaves of classes—and description of 79 varieties.

23. The *Nectarine*.—History, culture, &c.—and description of 18 varieties.

24. The *Quince*.—History, uses, propagation, soil and culture—and description of five varieties—three fruit bearing and two ornamental.

25. The *Raspberry* and *Blackberry*.

26. The *Strauberry*.—History, culture, &c.—a description of 36 varieties, with figures of the two newest and best American seedlings: *Hovey's* and

27. The *Musk Melon*. [Ross']

28. The *Water Melon*.

29. The *Orange Family*.

30. The *Olive*.

31. The *Pomegranate*.

Then follows an essay on the "Duration of varieties of fruit trees"—and the book closes with a very useful appendage: a key to the pronunciation of French names.

INSECT BLIGHT.

MR. EDITOR.—At the request of several gentlemen, I give you a few lines upon the subject of the ravages of an enemy to our orchards, commonly called the insect blight. Some cases of it have occurred in this vicinity from year to year, but this summer it has been very prevalent; and unless all interested join in its extermination, the production of quinces, apples, and pears will be very much diminished.

Scolytus pyri is the name of the insect causing this destruction, and it is so small as to be rarely seen, though he leaves marks visible in almost every orchard and yard. I have this summer examined many branches stung by them, some just beginning to wilt, and others quite dead, without being able to find the insect in its beetle shape, though I have found the larvæ in the shape of a minute white grub, which would not be noticed unless carefully searched for.

From the fact that many of this year's shoots have been affected at the centre of the growth, I think

the eggs must be deposited in the spring; otherwise the grub moves about until he finds a tender place to commence his work. He enters the limb under or near a bud, taking a circuitous path towards the centre, in his way eating off most or all of the vessels which convey sap upward, so that the part above immediately wilts and dies. In quinces and pears the limb often dies for some distance below, in some cases extending even to two years' growth, and we can readily see how soon a few insects will destroy a fine and thrifty tree. To save the tree we must apply the knife freely, cutting away every limb as soon as it begins to wilt, a foot, if possible, below the point where wilting commences, and immediately burning the parts cut off. If this is delayed many days the destroyer escapes us, for he leaves almost as soon as his steps can be discovered. If trees are examined every noon, so much the better, for none would then escape.

I might write very much more about this enemy, but I know you like short articles. If a little attention is given to trees affected, we can easily exterminate Mr. *Scolytus*.
Yours,
J. W. BISSELL.

Rochester Commercial Nursery, July, 1845.

ANOTHER BOOK ON FRUITS.

We have been informed that a treatise on fruits by John J. Thomas, Esq., of Macedon is about to be published by Mr. Tucker of the "Albany Cultivator." We understand that it has been prepared and would have been published some time ago, but has been kept back lest it might seem to interfere with Mr. Downings work, which we have noticed in another place. We can say nothing of the character of the work, until we have seen it; but this much we feel assured of, that it will be a valuable book to the fruit grower of western New York particularly. Mr. Thomas is well known as an observing, correct man. We have great confidence in him and be speak for his work an extensive circulation. We rejoice to see books of this sort multiply. "In the midst of counsellors there is safety."

STATE AND COUNTY AGRICULTURAL FAIRS.

The State Fair will be held at Utica, on the 16th, 17th and 18th of September. We have reason to know that the exhibition at this grand Agricultural Jubilee will excel all that have preceded it.

The Ontario Agricultural Society will hold its Fair on the 14th and 15th of October, at Canandaigua. John Greig is President, and Wm. W. Gorham and Oliver Phelps Secretaries. Old Ontario contains many public spirited and skilful farmers.—The list of premiums offered by the Society, is very liberal.

The Oneida County Society will hold its fare at Rome, on the 9th of September. The farmers of central New York, are largely indebted to the untiring efforts of Mr. B. P. Johnson, President of the State Society, and Mr. Comstock, President of the County Society, for the improvements in agriculture so apparent in that portion of the State.

Livingston County Fair will be held at Geneseo on the 2d of October—W. W. Wadsworth, President.

Onondaga County Fare will be held at Syracuse on the 1st and 2d of October—S. M. Brown, President.

MARKETS.—Very little wheat is now coming to this market. Old is selling at 84 cents, new at 81. Millers are working up their old stocks.

Flour retails at \$4,12½ a 4,25 per barrel. It could not be sold by the quantity at more than \$3,75.

Wool has declined two or three cents per lb. since our last. There is but little coming in. Price ranges from 33½ cents downward. There is probably no fine Saxony sold in this city. The editor has seen one lot in Oneida county, that sold at 55 cents, and several that would bring from 45 to 50. The wool growers in central New York have greatly improved their flocks within a few years. We have many facts collected by personal observation, relating to wool growing, which will be published.

New Potatoes are worth at this time 37½ cents.

Corn sells at 40 a 44 cents.

Beans " 75 a 100 "

Butter " 9 a 10 "

Cheese " 4 a 5 "

For the Genesee Farmer.

"PRIME FACTS FOR THE FARMER," &c.

Is a pamphlet from the pen of M. R. Bartlett. Among the asserted facts is the cause of the *slobbers* in horses. This is a point of great practical interest, at this season. It begins to show itself about the middle of July. It is well known, that many causes have been assigned, and successively given up. It is to be feared that the *slobber-grass* of Mr. B. will be found in the same class.

Mr. B. maintains the cause of *slobbers* in horses to be the well-known grass *Digitaria sanguinalis* of botanists, the *Panicum sanguinalis* of Linnæus. The drawing given by Mr. B. of his *slobber-grass* was designed for this plant. Its common name is *crabgrass*, from its spreading, or rather prostrate manner of growth from the root; its more common designation is *finger-grass*, from the finger-like form of the associated spikes of flowers in divisions of *threes, fives, sixes, and sevens*. The plant is common in old cultivated fields, especially about gardens, but is not a very abundant or prolific grass. It is a common grass in Europe, and is not a native in our country, but is one of the multitude of introduced plants which follow in the track of cultivation. It is described by Sinclair, in his noted work on the grasses; and he states, on the authority of Schreber, that the seeds are collected in "some parts of Germany as a favorite article of food." It was one of the grasses cultivated at Woburn, and its product was found to be relatively small; but it cannot be believed to have produced in England any such effect upon horses as Mr. B. ascribes to it. The seeds of only one grass, a species of *Lolium*, are poisonous; and the grasses are famed for their nutritious and healthful properties. It seems highly probable, therefore, that Mr. B. has been mistaken in *his facts* in this case, and that the farmer is yet to discover the cause of the *slobbers*.

Experiment, however, is the test. If any farmer is in a situation to try the operation of this grass, it is hoped he will do it. After the disease has appeared in the horse, let him be fed for a few days on this grass—for it is easily collected, and a short time will be enough. A failure may lead in the way to the detection of the true cause of this disease.

It is not surprizing that the causes of *rust in wheat, slobbering in horses, and the like*, should not have been satisfactorily determined by our intelligent and observing farmers?
C. D.

Meteorological Observations.

MADE AT ROCHESTER, SEVEN MILES FROM LAKE ONTARIO, BY L. WETHERELL.

JOURNAL OF THE WEATHER FOR JULY, 1845.

Days mo.	Thermometer.			Barometer.		Wind.	Observations.
	Sunrise.	Mid-day.	One h. after sunset.	Sunrise.	Evening.	Prevailing wind.	
25	58	70	58	29.52	29.52	N W	Fair—Ailanthus in bl.
26	48	78	63	.54	.54	..	Fair—currants ripe.
27	51	77	63	.58	.55	..	Fair—first n-potatoes.
28	57	68	61	.41	.31	..	Cloudy—raspberry r.
29	58	67	52	.30	.40	..	Cl'dy—thunder, hail.
30	52	58	51	.37	.50	E	Cloudy—fair—rain.
1	48	72	60	.50	.37	SW NE	Fair—cloudy—rain.
2	60	70	55	.32	.33	S W	Cloudy—rain—r-g .59
3	51	71	57	.39	.49	N W	Cloudy—fair.
4	51	70	56	.54	.59	..	.. ..
5	51	81	63	.64	.52	..	.. ..
6	56	85	69	.63	.58	W	.. ..
7	63	88	68	.54	.55	W N W	Cloudy—fair—rain.
8	61	87	68	.56	.54	N W	Fair—Nepeta cat. in h.
9	52	76	60	.61	.63	N	Fair—Hypericum ..
10	52	86	63	.67	.61	N E	Fair—Asclepias ..
11	61	94	48	.58	.50	N W	Fair—wheat har. com.
12	66	66	82	.45	.33	N W W	Fair Catalpa cor.in bl.
13	74	96	83	.35	.31	..	Fair—very hot.
14	76	91	78	.31	.34	..	Cloudy—fair—rain.
15	71	94	77	.34	.44	N W N	Fair—cucumbers in m
16	63	102	77	.46	.36	N W	Fair—cloudy—sho'rs.
17	71	88	73	.26	.60	..	Fair—cloudy—r-g. 78.
18	63	78	63	.53	.60	..	Fair—Inula Hel. in bl.
19	59	84	63	.62	.60	..	Cloudy—fair.
20	63	97	82	.49	.39	SW NE	Fair—cloudy.
21	73	91	82	.40	.31	S W W	Fair—rain—r-g. 13.
22	66	73	68	.34	.42	N W W	Fair—Monarda d in bl
23	57	73	60	.44	.48	N W	Fair—Iberis anana ..
24	53	64	60	.50	.49	..	Cl'dy—rain—r-g. 42.

Max. (July 16) ther. 102 deg.; do. (July 10) bar. 29.67 in.
Min. (July 1) " 33 deg.; do (July 17) " 29.26 in.

REMARKS.

We had the hottest weather, from the 11th to the 16th of July, ever known in Rochester, the thermometer ranging from 91 to 102 degrees, at one o'clock P.M., in the shade. The mercury rose to 100 and higher in many of the eastern cities.

The extremes of heat and cold have been remarkable this season.

ROCHESTER PRODUCE MARKET.

Wheat,	51 a 87	Hay, ton,	88 00	10 00	Eggs, doz.	8 10
Coru,	37 1/2 a 40	Wood,cord,	2 00	2 50	Poultry, lb.	5 6
Barley,	30 40	Salt, bbl.,	1 13	Tallow,		
Oats,	32 35	Hams, lb.,	5 6	Hops,	10 11	
Flour, (ret.)	4 25	Pork, lb.,	10 00	Wool,	25 32	
Beans,	75 1 00	" cwt,	3 25	3 75	Sheep Skins, 00	75
Apples,		Beef, "	3 00	3 50	Green H'ds, lb.	3 7
Potatoes,	18 25	Lard, lb.,	6 8	Dry Hides,	6 7	
Cloverseed,	4 00	4 50	Butter,	8 10	Calfskins, gr'n.	5 4
Timothy,	1 1 25	Cheese,cwt.	4 00	6 50	July 30.	

ADVERTISEMENTS.

FARMING TOOLS—For sale by B. P. SMITH & CO., Seed Store, Front-street—

- GRASS SCYTHES & SNATHS,
- GRAIN CRADLES,
- HAY FORKS, HORSE RAKES,
- QUINEBAUG SCYTHE STONES, (the best)
- ONE AND TWO HORSE CULTIVATORS,
- RAKES, HOES, SHOVELS, &c., &c.

July 1.

AGRICULTURAL AND HORTICULTURAL BOOKS.

Just received and for sale at the Rochester Seed Store, Front-street.

THE American Poulterer's Companion; by C. N. Bement,
The New American Orchardist, with an Appendix; by Wm. Kenrick.

The New American Gardener; by Thomas G. Fessenden.

Blacklock's Treatise on Sheep.

Cobbett's American Gardener.

Dana's Muck Manual. The Complete Florist.

Every Lady her own Flower Gardener.

Dr. Smith's Essay on the Cultivation of Bees.

SEED WHEAT.

GEN. HARMON'S celebrated IMPROVED WHITE FLINT WHEAT for sale at the Rochester Seed Store, by B. F. SMITH & CO.

ELECTION NOTICE.

A GENERAL ELECTION is to be held in the County of Monroe on the TUESDAY succeeding the first Monday of November next; at which Election the following officers are to be chosen: A Senator for the Eighth District.

Three Members of Assembly for said county. Also, the sense of the people in relation to the proposed Convention will be taken.

Also, the proposed Amendments to the Constitution of this State will be submitted.

The following is the official notice from the Secretary of State.

HIRAM SIBLEY, Sheriff.

Dated Sheriff's Office, Rochester, July 26, 1845.

STATE OF NEW YORK: }
Secretary's Office, Albany, July 23, 1845. }

To the Sheriff of the County of Monroe:

Sir,—Notice is hereby given, that at the next general election to be held on the Tuesday succeeding the first Monday in November next, the following officers are to be elected, to wit:

A Senator for the Eighth Senatorial District, to supply the vacancy which will accrue by the expiration of the time of service of Gideon Hard, on the last day of December next.

Also, the following County Officers, to wit: Three Members of Assembly.

And at the same Election, the sense of the People of this State will be taken in relation to the proposed Convention, specified in the Act, Chap. 252, entitled "An Act recommending a Convention of the People of this State," passed May 14, 1845.

And also at the same Election the following proposed Amendments to the Constitution of this State will be submitted to the people, viz:

"In relation to the removal of Judicial Officers."

"For the abrogation of the property qualification for office."

Yours respectfully, N. S. BENTON, Secretary of State.

IMPORTANT TO FARMERS.

ROGERS' SPRING-STEEL CULTIVATOR TEETH.

THE Subscriber has made arrangements with the Manufacturers of this superior agricultural instrument for a supply, and will keep them constantly for sale at 69, Exchange-street, opposite the Rochester House.

The following Certificates have been kindly volunteered by those who have used the Teeth.

Rochester, June 13, 1845.

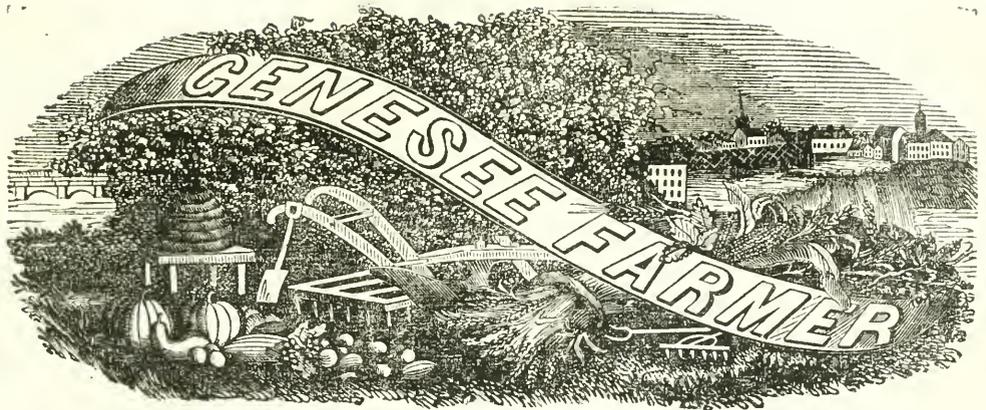
A. C. WILSON.

"Having used Rogers' improved Steel Cultivator Teeth, we have no hesitation in saying, that we believe them to be a great improvement for preparing fallow grounds. We feel confident, that with the Improved Cultivator we can prepare our ground for wheat better, and with one-fourth less expense than with the Plow and Harrow, in the old way. With the Cultivator, we plow our ground but once, harrow it lengthwise of the furrows once, with a sharp fine harrow, and then put on the Cultivator, having no further use for either plow or harrow. We find, by the use of the Cultivator that we are enabled to destroy the blue grass, which has been so injurious to our wheat crop, and which could not be killed by plowing, and are enabled to get more benefit from our clover by letting it get a larger growth before plowing, and having it remain under, until it has rotted.

Sylvanus Fisk,	Stafford.	Samuel March, Stafford.
Harry Lathrop,	do.	John Thwing, Le Roy.
Noah Randall,	do.	W. P. Benham, Byron.
Geiman Lathrop,	do.	B. F. Cash, Le Roy.
Clark Daniels,	do.	O. Bassit, Bergen.
L. A. Baker,	do.	Reuben Cash, Le Roy.
J. R. Moss,	do.	Russell Kellogg, Stafford.
I. N. Moss,	do.	Jacob Bushman, Byron.
Erastus Cash, South Byron.		Warren C. Rawley, S. Byron.

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PUBLISHED MONTHLY.

BY B. F. SMITH & CO, PROPRIETORS
At the Seed Store, Front Street, nearly opposite the Market.
DANIEL LEE, EDITOR.

FIFTY CENTS A YEAR:

Five copies for Two DOLLARS; Eight copies for THREE DOLLARS. All payments to be made in advance. Money and subscriptions, by a regulation of the postmaster general, may be remitted by post masters free of expense. Address B. F. SMITH & Co.

WHEAT CULTURE.

John Evans, Esq. of Mill Creek township, Western Pennsylvania, has harvested, according to the Erie Gazette, on three acres of land, "so poor a few years ago that it would not bear white beans," 123 bushels of wheat, which weighed 65 lbs per bushel. At 60 lbs. per bushel, the yield is a fraction over 44 bushels per acre.

This land has been brought up by deep plowing, leached ashes and clover sod, with a plenty of clover on it, turned in and mixed with the soil. Within the last three weeks we have been called to notice several instances, where the use of *unleached* ashes, scattered as a top dressing at the rate of 20 bushels per acre, at the time of seeding, has evidently increased the crop some ten or twelve bushels per acre. Any quantity from 2000 to 4000 lbs. of dry, hard wood ashes, spread evenly on an acre just sown in wheat, can do no harm, and will hardly fail of being of great service to the crop. The alkalies *potash* and *soda*; and the alkaline earths *lime* and *magnesia* are extremely prone to be washed, or leached out of the surface soil of cultivated fields. Hence unleached ashes are usually worth twice as much to make into grain and potatoes, as they bring to be used in the manufacture of pot and pearlash. One thing must be borne in mind, and that is, never to sow wheat on wet land without thorough draining. Unaccountable negligence in this regard has occasioned the loss of many thousands of bushels this season in Western New-York by *rust* and *shrinkage*. It is down right folly bordering on insanity, to be to all the labor and expense of plowing repeatedly, harrowing thoroughly, and sowing a plenty of good seed, in good seasons, and after all, permit water to stand on a compact subsoil, just long enough to ruin the crop. There is not a town in the state, perhaps, where cannot be found more or less fields whose crops suffer from the lack of good drains to carry off water that falls upon or collects below their surface. We have never seen the first man that re-

gretted having drained a single red of land. On the contrary, all commend the advantages which thorough draining has given them.

Be careful to sow nothing but clean plump wheat for seed. Wash that thoroughly in strong brine, or blue vitriol water and dry in lime, to destroy the seeds of smut and rust, that may, perchance, adhere to the kernels of grain.

By all means remember that it is far better to sow but five acres, and so feed the plants that they will give you 40 bushels per acre, than to sow fifteen acres, and starve the young wheat plants down to twelve bushels per acre, and have even that badly shrunken, with rust. Dont forget that it takes less seed, and fewer hard days work to raise 200 bushels on *six*, than on *fifteen* acres of land.

Nothing is more common in Western New-York, Pennsylvania and Ohio, than for land to be too rich in vegetable mould, to bring good wheat. The straw grows too rank, and thick, and is very liable to be affected by rust. To prevent this latter malady, Mr. HAYWOOD of the city of Buffalo, (as we intimated in a former number,) has used charcoal with signal success. Mr. H. is the owner of a tract of splendid wheat land near Sandusky, Ohio, where he has two flouring mills. He has kindly furnished us with a plot of seven wheat fields, taken for experiments this season, with the results, which follow :

- No 1. 20 acres. Applied 50 bushels of coal, ground fine, per acre. Yield 25 bushels of wheat per acre.
- No. 2. 4 acres. No coal applied. Wheat badly rusted; yield 5 bushels per acre.
- No 3. 15 acres. Coal as in No 1. Yield 25 bushels.
- No 4. 25 acres. Coal as in No 1. Yield 35 bushels per acre.
- Note*, No 4 was seeded with *old wheat*.
- No 5. 15 acres. Coal. Yield 25 bushels per acre.
- No 6. 8 acres. No Coal. Yield 5 bushels per acre.
- No 7. 6 acres. No coal. Yield 3 bushels per acre.

The soil, &c culture precisely alike except the use of 50 bushels of coal per acre as designated—sown in April and May. The soil abounds in lime and organic matter.

Mr. Haywood will apply 10,000 bushels of coal to the fields to be sown in wheat this autumn. It cost him \$30 per 1000 bushels. He grinds it in a common bark mill used by tanners.

Those of our readers, who have cleared the heavy forests of Western New-York, Pennsylvania and Ohio need few witnesses to satisfy them of the great value of wood COAL, and ASHES to make good crops of wheat and other grain.

We hope to see the duty on Onondaga salt shortly taken off; that it may be largely used with burnt lime to fertilize the soil. This tax on salt yields a little over \$200,000 revenue; and is, of all taxes, the most unequal in its operation on the farming interest of the State. The Legislature might as well impose a round tax on lime, gypsum, saw-logs and fire-wood, as one on the salt that seasons our potatoes, bread and meat.

Salt should always be made into a compost with slaked lime in the proportion of one of the former to two of the latter, mixed with a little muck or loam and moistened to favor the decomposition of the salt. Remove the present duty on salt, and its soda can be extracted by the aid of lime, and profitably used as a fertilizer in nearly or quite every town in the State.

We are sorry to see so little attention paid to saving the saline matter that escapes in the liquid and solid excretions of domestic animals, and of the human family. These salts are derived from the daily food of animals and cultivated plants, without which no plant nor animal could possibly live. What madness then, to wage a war of extermination against the very things that we must have to form our daily food and clothing! How many skin the land down to the bone, waste their manure, and at last denounce the barren soil, and emigrate to the West? In common fairness however, we are bound to say that the number of good farmers is rapidly increasing in this section. Closer observation, more reading and more thinking are producing their legitimate fruits.

THE STUDY OF AGRICULTURE.

Why should not a person study the profession which he is to follow through life? Is the skillful cultivation of the earth, a pursuit not sufficiently honorable to be regarded as a profession? or is agriculture of too small importance to be studied as a science, as well as practiced as an art? Why this resolute, this protracted, this hitherto successful opposition to the study of rural economy? We can not comprehend it.

Is there really danger that the rising generation will know too much about the nature and properties of the things which must ever form all their annual crops? Are we apprehensive that, if they study and understand the unerring laws of Nature, so far as they relate to the improvement of the soil, and the production of human food, we shall have an over supply of the necessaries and comforts of life? Perhaps it is thought that nothing can be learned about the things that unite to form the 20 bushels of "increase," from one of seed, that God gives to reward the well directed toil of the husbandman. If this is the stumbling block, let us see if we can not remove it out of the way.

A farmer sows one bushel of wheat, and harvests twenty. From what source does he derive the nineteen, to say nothing of the straw that supports the whole crop? Unless the whole increase is an entire new creation of matter, of course it must all come from somewhere. Now, it is obvious, that, it would be of no consequence whatever, where this matter came from, or what it was composed of, provided God gave an "increase" precisely according to the

amount of labor bestowed, irrespective of the folly, ignorance, or misapplication that might direct the same. But all experience confirms the truth of the remark that, Heaven does not so reward the labor of the farmer. The Author of our being interferes by no special providence to save the erring children of men from hunger, disease and death, provided they violate the laws of Nature. If an innocent child places its finger in a burning lamp, neither its innocence, nor its ignorance of the properties of fire, will save it from the full injury and pain of a burn.

God has conferred upon talking man, not only a sense of just accountability to his Maker, and his fellow man, but reasoning faculties, memory, and other powers, which, when fully developed, will understand all the natural laws that concern his subsistence and happiness. These moral and intellectual faculties seem to be created to no purpose, unless they are awakened into life and usefulness, by the physical and mental wants of humanity. As a stimulus to rural industry, our Maker has created a necessity for man to "eat bread in the sweat of his face." This necessity is, moreover, "the mother of invention," and the parent of knowledge. Man's necessities arising from hunger, cold and nakedness, led him to the use of fire, and to make a thousand discoveries in the arts. These necessities still exist in full force. Undoubtedly the Creator could easily have formed every acre of land, so that the most ignorant man alive, might plow and sow it, and reap 100 bushels of wheat on the same, year after year for his whole life time, without impairing its fertility. But such abundance would have been an enduring bounty on ignorance, if not on vice and crime. Knowledge is necessary to renovate any large tract of country, which has been much injured by unwise tillage; and this knowledge can be best acquired by uniting the study, with the practice of agriculture.

The study of agricultural science, implies no more nor less than the investigation of the laws of our own being, as social, physical, moral and rational creatures. It is only a question of time, when we shall begin to learn what it is that forms good bread, milk, butter, cheese, potatoes, beans, peas, lean meat, wool, and bone. We can not go on forever, increasing hungry mouths to be fed three times every day, and wasting to the tune of untold millions, the constituents of our daily food, and not pay for our folly.

Let us examine a few facts and figures on this subject. Most of the farming lands in France have been cultivated some two or three thousand years. By keeping an accurate account of the various substances applied to the soil, and removed therefrom in crops, for a series of years, they could test with considerable precision, how much of each ingredient must be applied to the earth to secure a fair return at harvest. We will give the main facts of a five year system of rotation, as practiced by M. Bous-singault at Bechelbronn.

Rotation: Mineral Matter: Phosphoric acid: Potash and Soda.			
1	Year Potatoes	• 113lbs	• 13lbs, • 58lbs.
2	" Wheat,	• 50	• 24
"	" Straw,	• 358	• 11
3	" Clover,	• 284	• 18
4	" Wheat—Minerals included in those of the 2 yr.		
5	" Oats,	• 39	• 6
"	" Straw,	• 60	• 1
"	" 2d crop Turnips,	• 50	• 3

In addition to the above, there was removed in the crops, 27 lbs. of sulphuric acid; 16 of chlorine; 114 of lime; 56 of magnesia, and 310 of silica, or sand. Of the latter, 242 lbs. were taken off in the two crops of wheat straw. To secure the above substances to the growing plants, no less than 7582 lbs. of mineral matter was applied in the manure and peat ashes in five years—being over 8 lbs. to one in the aggregate. The principal excess was in silica. Of this the quantity applied was 5049 lbs. The quantity removed 310 lbs. Excess, 4736. The difficulty seems to be in the fact that, to secure as much of a few things in the manure which the crops of wheat and potatoes must have, one must apply a great deal more of others than are really needed. Thus the silica restored in the manure was seventeen times larger than the amount taken in the crops, while the phosphoric acid given back in the whole five years, only exceeded the quantity removed by 13½ lbs. As this substance is used mainly in nature to form the seeds of grains, which are usually sold off the farmer, particularly wheat, there is great difficulty in keeping up the supply—for human urine is every where wasted except in China and Flanders.—Two crops of wheat take from the soil 35 lbs. of phosphoric acid. If you carefully put back every straw where it grew, you will restore just 11 lbs. of this valuable substance, leaving 24 lbs. taken up in the seed still unprovided for. How are you to supply this? Every acre wants its own mineral elements given back to it, that have been furnished to its straw or grass. It would be folly to rob one field to enrich another. Besides, it would require every grain of the phosphorus in eight good crops of oat straw, whether fed to cattle, or applied directly to the field, to make one acre of wheat, exclusive of the wants of wheat straw itself. As an acre of oat straw will weigh twice as much as 20 bushels of wheat, it will take 16 lbs of oat straw made into manure, to yield phosphorus enough to form one of seed wheat.

Every body knows that there would be some difference in a loaf of bread, whether it was made out of a pound of good wheat flour, or a pound of oat straw! We are wonderful nice about our own food, but we expect our wheat plants to elaborate fat, muscle, brain and bone for us, and use materials as foreign from human flesh and blood, as copper, arsenic, and lead! We are all exceedingly fond of good bread, milk, and potatoes, while we heartily despise the patient study that will inform us what are the simple elementary bodies that unite to make these articles of food. We greatly magnify the importance of blind hard work, as though man had the power to create a bushel of corn out of nothing, by dint of protracted and intense muscular toil. To study the nature and properties of the substances that Nature *must* have to form 80 bushels of this grain on an acre, is a perfect waste of time! A knowledge of these things can be of no possible use to the practical farmer! Who cares to know what there is in a kernel of corn, or a sound, mealy potato? These things can be made out of nothing, *only work hard enough!* A gallon of human sweat, spread evenly over an acre of land, is better than all the agricultural science in the world, because it can be sold any day in August for *fifty cents!*

If it were not for the indifference of farmers to the spread of agricultural knowledge, rural industry would raise at once 50 per cent in productiveness and value. So long as the tillers of the earth shall

work 12 or 15 hours in 24, to make something out of nothing, the balance of the world will give them but a precious little for their service. And why should they? If a farmer gives as much labor for one bushel of corn or wheat as he should for three, ought he not to exchange his badly directed industry, by giving three day's work for one with those that *study* their business, and make every hour's work tell to the best advantage? We can not blind our reasoning faculties, and then plead ignorance of the things that form our annual crops, as a reason why we should have more than the market value for our produce. There is no alternative but to lessen the hard work now expended in growing all our agricultural staples, by the aid of knowledge. If we cruelly withhold this knowledge from our sons, we indirectly give a bond that they shall be the hewers of wood and drawers of water for the better informed, and that too, at the smallest wages, all their days.

Kind reader, if you have a son, and believe with us, that the study of the laws of Nature will do him no harm, purchase for him Mr. Jas. F. W. Johnston's "Lectures on Agricultural Chemistry," latest edition, which will cost you but \$1.25. Let him buy as soon as he has thoroughly studied Johnston, Bousingault's "Rural Economy," which will cost a dollar and a quarter more. These invaluable works should be in every common school library in the state. We commend them to the attention of all teachers of young men in academies, and other seminaries. As Text Books, they may be regarded as standard works in all debates; although they differ in their respective analyses of certain plants, such as wheat, potatoes, and a few others. But plants differ in the proportion of their elements in different soils. The analyses of both are doubtless correct in the particular cases to which they refer.

There is scarcely ten farmers in the whole State that feed all their cultivated plants, including fruit trees, grape-vines, and straw berries as they should be fed. The same is true, to some extent, in regard to feeding, with the most appropriate and economical food, all domestic animals. How important, as well as interesting, is the study of the organic structure of all the living things kept on the farm! These organized vegetable and animal beings possess many *organs*, and each organ has its peculiar office to perform.

Do we work *with* or *against* the purpose of Nature, in our treatment of all these vital functions? Are we sure that we obtain the largest possible crops of peas, potatoes and corn, from any given amount of land and labor? or the largest return in good pork, for the corn, peas, and potatoes consumed by our swine? How is it in regard to the production of grass, carrots, beets, beef, butter, cheese and wool? Whose wool, worth 30 cents a pound, costs him the least money in land and labor? Whose cheese and butter yield him the largest profit or compensation for his industry? When we export 1000 tons of cheese to England this fall, how much truly valuable matter have we drawn from our pastures? Where are the *precise things* in boundless quantity, that make cheese, wheat, and wool?

What madness to resist the study of these things. The great "Empire State," with its five hundred thousand field laborers, can not support *one* agricultural school!

"O shame, where is thy blush?"

WATER.

There is no other substance on the globe that plays so important a part, alike in the mineral, vegetable and animal kingdoms as water. By measuring the surface and average depth of the ocean, and the surface and average height of the dry land, it will be seen that the latter can be placed into the deep valleys of the former so as to cover the whole planet with water more than 7000 feet deep, according to the calculations of De La Bache. The *stratified* rocks—those formed in water—on the Island of Great Britain are about $6\frac{1}{2}$ miles in thickness. The once perpendicular thickness of similar rocks in this country according to Prof. Rogers, was not far from forty thousand feet. These were formed partly by the solution in water, like common salt, or the salts of lime, but mainly by the mechanical wearing down and removal of rocks that had a prior existence.

Boussingault states that river water usually contains 1-30th in volume of air—and 1-50th of carbonic acid. As the atmosphere has only 1 part of carbonic acid to 2,500, it will be seen that for river water to hold in solution 1 part of this acid gas to 50, while it contains only 1 to 30 of common air, implies that water has some 1500 times stronger affinity for carbonic acid than it has for atmospheric air. This affinity of water for carbonic acid, is a matter of great practical importance in agriculture. Water and this gas are capable of supplying more than nine tenths of the whole weight and substance of cultivated plants. Indeed the balance of the ingredients found in vegetables, must be soluble in water, in order to enter the minute pores in their roots, and circulate freely through their capillary vessels.

Plants when subject to the action of solar light and heat have the power to decompose both water and carbonic acid. To form 9 lbs. of water, 8 lbs. of an invisible, elastic gas called *oxygen*, combine chemically, with 1 lb. of another invisible gas, which is 16 times lighter than oxygen, called *hydrogen*. To make 22 lbs of carbonic acid, 6 lbs of a substance like lamp black, called *carbon*, unites with 16 lbs of oxygen.

400 lbs of ripe potatoes taken from a hill and washed clean contain 300lbs of undecomposed water. Of the 100 lbs. of solid matter $94\frac{1}{2}$ lbs. are *carbon oxygen* and *hydrogen*; or the elements of water and carbonic acid. Of the balance ($5\frac{1}{2}$ lbs) 4 are incombustible minerals that make ashes, of which 52 per cent are pure potash. One and a half per cent of dry potatoes is another invisible gas called *nitrogen*, which forms about 79 parts in 100 of the air we breathe. We have stated on the authority of Boussingault that river water holds in solution 1-30th of its volume of common air.

Query: When water enters the circulation of plants, by their roots, containing common air, as well as carbonic acid, what is to prevent a plant from appropriating the nitrogen in the air to its use, as well as the undecomposed compounds called *water* and *carbonic acid*? If solar light will enable a plant to decompose water, carbonic acid and *ammonia*—the latter is a compound of nitrogen and hydrogen—why may it not at least appropriate the nitrogen brought into its laboratory in air like carbonic acid and ammonia, dissolved in water? Why should plants have more power to decompose a weak solution of nitrous, or nitric acid, formed as is supposed by thunder, or electric sparks in the heavens, than to separate a weaker compound of nitrogen and oxygen in common atmosphere? The theories of Liebig, Du-

mas, Boussingault, Petzholdt and others, are far from being satisfactory. But we do not wish to pursue the subject of the agency of water in supplying plants with nitrogen from the air.

Water expands, on congealing into ice, about five per cent. This expansion has a powerful effect in hastening the decomposition of all substances in the soil, penetrated by moisture and then frozen. The separation of particles seems to destroy their previous cohesion, and the mass falls into a comparatively loose friable heap. Fall plowing greatly favors this operation.

As both river and rain water hold carbonic acid in solution, it is important to study the action of water thus charged, on lime, granite and all other rocks and their fragments. All cultivated plants leave more or less mineral matter—ashes—when they are burnt. Why are not *leached* ashes as soluble in water after they have formed a part of an organized plant, as they were at the time they entered its roots dissolved in water? Why does not the same ocean that holds lime, magnesia, soda and phosphoric acid in solution, dissolve the thin coral, and the shell that covers the oyster? But we cannot go into organic chemistry; although it is hard to talk of the action of water in connection with the growth and decay of plants and animals, and not seem to dive a little too deep into the mysteries of Nature.

The irrigation, or watering of fields, by turning small brooks out of their natural course to be spread over the surface of meadows, pastures and plow lands, is quite too much neglected in this state. All such streams hold more or less of the mineral elements of all crops in solution; to say nothing of the value of the water itself. Never lose the wash of the road where you can command it; and especially, never allow running water any whereto rob you of any fertilizing ingredients. One might as well burn up his hay stacks, and milk his cows and throw the milk into the river.

When converted into steam, water expands to 1700 times its former bulk, and becomes lighter than common air. When compared to the latter, its weight is as 62 to 100. The abstraction of heat from the soil, by the evaporation of an excess of moisture, deserves the study of the farmer. The skilful control of this substance, never having too much, nor too little so far as man can govern it, will greatly improve the agriculture of New-York.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

We have received by our foreign exchanges a full account of the annual Fair of this society, which was held in Shrewsbury on the 18th of July. It numbers 7000 members, embracing a large portion of the nobility and gentry of England. The Duke of Richmond, President of the Society, stated in his remarks at the dinner table, that "the use of sulphuric acid (oil of vitriol) in dissolving bones presented one of the greatest advantages yet derived from the application of chemical influences on the soil."

We are not sure that we have described in the Farmer the mode of preparing and using this fertilizer; although we always state it in our lectures. It is this: In a small way one can sink an old barrel which will hold water, in the ground. Pour into this two gallons of strong sulphuric acid and ten gallons of water. Break the bones into pieces with an old axe or stone hammer, and fill the barrel with all the bones the liquid will cover. Stir them occa-

sionally, and in a few days the acid will have dissolved all the earthly portion of the bones, leaving the gelatirous portion undissolved. The latter can be applied to the soil dimly or placed in the compost heaps to be decomposed and mixed with the mass. The liquid is the more valuable portion, containing the phosphate of lime and a little magnesia and soda in solution. Dilute this liquid with 8 or 10 times its volume of water and apply in a watering cart, or pot to the soil.

The quantity may vary from one to three cwts. of bone per acre. To wheat, clover and turneps, this fertilizer is particularly valuable.

The Agricultural societies of England, Scotland and Ireland are in a very flourishing condition. They are busily engaged in organizing Farmer's Clubs all over the empire. The whole kingdom seems to be alive to the importance and practicability of greatly improving British husbandry. Every years experience demonstrates more satisfactorily than was before done, that the true system is to feed all living things, whether plants or animals, with the precise elements that form their organized tissues. What these elementary bodies are, and how to collect and prepare them for practical use, are the branches of agricultural science most studied.

THE FARMER'S LIBRARY AND MONTHLY JOURNAL OF AGRICULTURE.

We have received the two first numbers of a work under the above title, published by Greeley & McElrath, and edited by JOHN S. SKINNER, Esq. of New York.

Both the editor and publishers are well and favorably known to most of our readers. Large as is the work—100 octavo pages in each number or 1200 in a year—there is no lack of material to fill it with useful and interesting matter. One half is devoted to the reprint of the productions of foreign writers on agriculture, constituting "The Farmer's Library;" and the other moiety is designed to be a journal of current improvements, and events in every thing that pertains to rural pursuits. The plan is a good one, and if prosecuted with the taste, skill, and judgment displayed in the numbers before us, we have no doubt but the enterprise will be as successful as we know it to be meritorious.

It is now more than a quarter of a century since Mr. Skinner commenced in the city of Baltimore the first agricultural paper ever published in the United States. His experience has been great, and his reputation, particularly at the South, as an agricultural writer is so well established, that the "Farmer's Library" must find its way to the fireside of thousands of families. It is to be illustrated with numerous engravings and wood cuts, having more or less in each number. The Library portion of the July and August numbers contain Petzholdt's Lectures on Agricultural Chemistry. The author treats his subject in a style more intelligible than Liebig to the ordinary farmer. We do not think, however, that he has improved either on Johnston or Boussingault, only so far as his work is not so elaborate, and more concise. His "Glossary" is a curiosity; We notice a few of typographical errors in figures and technical terms; bating this the publication is faultless. The work next to be published is M. Von Thar's "Principles of Agriculture," a large work, which costs \$10 in London, but less than \$2, in the Farmer's Library. Price \$5 per annum.

STATE FAIR AT UTICA, TO BE HELD ON THE 16TH, 17TH AND 18TH OF SEPTEMBER, 1845.

Arrangements have been made with the several railroad companies, whose officers have acted with their accustomed liberality and public spirit, that all animals and implements intended for exhibition, shall be transported *free of charge*, by extra trains for that purpose, and that all persons visiting the fair shall pass at one *half* of the usual rates.

All animals and agricultural implements must be on the ground, at Utica, on the 17th, at 10 o'clock A. M., and at the Auburn and Rochester Depot, in this city, early on Tuesday morning, the 16th, in readiness for the 8 o'clock train, advices of which should be left with L. B. LANGWORTHY, No. 18 Buffalo street, or through the post-office, by the 10th of September, in order that suitable provisions may be made for their transportation.

All articles forwarded by this route, or any other, may be addressed to MESSRS. FARWELL & HARRINGTON, Utica, ticketed "State Fair," who will take careful charge of the same.

It is anticipated from the great exertions making by the people of Utica, and by the officers of the Society, together with its popularity, the show will far outstrip any former exhibition in this state. The preparations are on a magnificent scale, and from present indications, the show of animals, implements of husbandry, and the various curiosities and manufactures that will be exhibited, will constitute this fair the grand museum of agricultural articles for the state of New-York.

The Magnetic Telegraph will, on that day, be in operation from Utica eastward, and will prove no small attraction to those visiting the fair.

THE 18TH ANNUAL FAIR OF THE AMERICAN INSTITUTE.

This grand festival will commence on the 13th of October, and continue for several days. The spirited and patriotic gentlemen who have the Institute in charge, are making great efforts to render the approaching Fair more attractive than any which have preceded it. It is perhaps needless to say that the display of specimens of American art, skill and genius in every branch of industry, will be such as to gratify every lover of his country.

THE BOOK OF USEFUL KNOWLEDGE.—A Cyclopaedia of several thousand Recipes, and collateral information in the ARTS, MANUFACTURES and TRADES, including Pharmacy, Medicine and Domestic Economy, designed as a compendious book of reference, &c.—Messrs. D. Appleton & Co., are publishing in numbers, a valuable work under the above title. It is illustrated with numerous engravings, and the various subjects discussed, are treated in a manner to render them intelligible to non-professional readers.

For sale by S. Hamilton, successor to D. Hoyt, Rochester.

SHEEP HUSBANDRY.—We learn that the Harpers will give to the public this month, the long expected work of Mr. L. A. MORRELL, of Tompkins Co. on sheep husbandry. The large experience, and extensive research of Mr. M., not less than the importance of wool growing to the country, will secure to this work, at least, a general perusal, however much any may differ with the author in any views he may take of his subject.

CULTIVATOR FOR GETTING IN WHEAT.—Many of the best farmers we have seen use a *cultivator*, after the first plowing and one harrowing, to prepare the ground for winter wheat, and to cover the seed. It works much faster than the plow, and pulverizes the soil much finer. It covers the seed deeper than the harrow, and not quite so deep as the plow. Two-horse cultivators having eight or nine teeth are the kind of implement used.

FRANKLIN COLLEGE, TENNESSEE.—It is worthy of remark that Tennessee is the first State in the Union to establish and maintain an Agricultural College.—Franklin College is a brick edifice 120 feet in length by 40 in width, 3 stories high. Annexed, is a dining hall 60 feet by 30, with a kitchen 24 by 20. In addition to the above, there is a dwelling 60 by 20 feet.

The institution is five miles from Nashville, on a farm of 170 acres. It has about 80 students at this time, but is intended to accommodate 120 when the buildings are completed. Expenses for board, tuition, &c., \$100 per annum. Besides practical farming, the mechanical trades of saddlery, tailoring, shoe-making, blacksmithing, wagon making, cabinet making, and carpentering, are now carried on at the establishment.

Mr. FANNING deserves the gratitude of the South-west for the zeal, ability, and success with which he has undertaken and prosecuted this noble experiment of attempting to unite learning and science, with Agricultural and Mechanical labor.

SMUT INSECT. We saw yesterday at Gen. Harmon's twenty or more small brown bugs which have lately emerged from kennels of *smut wheat* leaving a small opening in the grain of smut like the aperture in the pea through which the pea bug escapes. Gen. H. placed full heads of smut, before the wheat was ripe, into a closely wrapped paper for the purpose of seeing if any insect would be developed in the heads of smut. The insect and heads were together when we saw them yesterday.

Mr. Hammon thinks that this insect is somehow the cause of this malady.

At Mr. Elisha Harmon's we saw a head of wheat free from smut on one side while every *kernel* on the other was nothing but smut.

BUTTER.—The protracted dry weather has produced a scarcity, or rather a deficiency in the quantity of butter. Speculators have made large purchases in expectation of a great rise in the value of the article. If the farmer can just as well keep his butter as to sell it, he will doubtless be the gainer not to sell very early.

The whole amount of butter and lard that reached tide water last season, was 22,596,300 lbs. Of this, Buffalo sent off 6,281,600 lbs.—Oswego, 3,521,970 lbs.—Whitehall, 1,068,000 lbs.—total, 10,872,000.

VEGETABLES AND FRUITS FOR THE STATE FAIR. The Railroad companies having kindly proffered to convey to Utica, every thing forwarded for exhibition at the Fair, free of charge, it is hoped that Monroe, and other western counties, will send a liberal quantity of Fruits and garden Vegetables.—Fruits are generally scarce, and those that have them, should select their best varieties, and either send or take them to this grand State Festival.

POTATOE ROT.—We have gained little additional information in regard to the cause of this malady, since our last number. It is hardly time yet for the injury of this season to develop itself. Many vines are more or less affected, but the tubers but slightly.

The potatoe worms which we took from the vines where the eggs that contained them were deposited, are now in the *pupa* state, being about three fourths of an inch in length, an eighth in thickness, and nearly black, as to color.

For the Genesee Farmer.

OAKLAND FARM—HUSSEY'S THRASHING MACHINE—IMPROVED FARMING, &c.

John Delafield, Esq., of Oakland farm, near Seneca Lake, has this season cut 104 acres of wheat in eight days, with Hussey's reaping machine, at a cost of,

1 man and team, 1,50
boy to drive, 0,50

\$2,00 per day.

8 days \$16,00

Int. on cost of machine, 100, 1 year, 7,00

23,00

The same work would have taken six cradlers eight days, this at \$1,50 per day, board included, would amount to \$72: showing a saving by the machine of \$49: which Mr. D. justly remarks, is nothing compared to the anxiety which every large wheat growing farmer suffers, from the paucity of good cradlers, their selfish caprice, their extortionate prices during the wheat harvest. Many a farmer with an excited, wo begone face, have I seen this season, riding about in search of cradlers: 'tis true he could find plenty of wild Irish and others, who, like Highland Willie, "could neither say nor do;" but experienced cradlers were few indeed; and when found, *only to think*, the price of two bushels of wheat for a single days work.

This machine is drawn by a pair of horses on low wheels, it cuts a swarth five feet wide with twenty knives, working horizontally, which are to be sharpened once a day with a whet stone: a man sitting on the side of the platform, pushes off the cut grain with a rake to the binders. The work is done expeditiously and neatly, not a waste head was to be seen. A field of oats had been cut with the same result.

My faith in the machine was secured the moment I heard Mr. D. dilate on the ease of body and mind with which he had compassed his present great harvest: when I saw the execution it had made, I had no longer a doubt of its economy and usefulness.—It is one of the few patented articles of the present day which is no humbug.

Here is a farm of 360 acres, without a foot of waste land, with a surface and subsoil such as Liebig himself would pronounce perfect. It was originally owned by the late Robt. S. Rose, Esq., who left it a well manured sheep pasture for several years after his demise, it was let out on shares to tenants, who did little more than replace a wheat crop by a crop of weeds and thistles. During the two years Mr. Delafield had occupied this farm, he has made or relaid four miles of fence, eradicated nearly all the wild mustard and foul weeds, planted an orchard, fruit yard, shrubs, vines, and flowers; erected barns, stables, sheds, &c. &c. He has an enthusiasm for his new and truly noble calling, which is, and has

been from the beginning, the never failing lever of success; an enthusiasm, which not only lightens his own labors, but which, while it says, *come boys*, infuses its own true spirit of light and progress, in the agricultural art, into the minds of his working men? An enthusiasm I may say, which, while it robs labor of its ignorance, its curse, leaves with it, its generous spirit, its intelligent experience, its physical blessings.

I must dissent from Mr. Delafield, in his estimate of the ability of our Seneca county soil, to produce Indian corn in its fullest perfection; his corn was well manured, planted on a first rate loam, but it was hilled and plowed too much; in a warm dry season, and all our corn seasons are dry; corn should not be hilled on a dry soil, and the plow should only be used early; the cultivator and hoe, is better than the plow for Indian corn. But Mr. Delafield is on the high road to scientific farming; he has his tons of crushed bones, his compost heaps are in progress; he will this fall sow wheat in drills, and he will apply inorganic manure to his soil, until it gives the maximum yield of wheat.

I visited this farm in company with a very intelligent, warm-hearted planter from Buford district, South Carolina, who, himself, plants 100 acres of cotton, and one hundred acres of corn. If I may judge from the spontaneous eulogy on Mr. D's farming, which came from him in all the earnestness of southern eloquence, such an example of agricultural life, management and success, was a more potent argument to his mind in favor of the value of free labor, than a hundred abolition lectures would have been. S. W.

For the Genesee Farmer.

HIGH PRICES OF CHOICE FRUITS.—A PREVENTIVE.

Why should a reason exist, that while in this region the finest qualities of fruit can be cultivated and grown, that we should have to pay from two to four dollars per bushel for peaches? and from one to three cents for a single one? The time was, within our recollection, that peaches of a good quality went begging in our streets at 25 cents the bushel. The reason is, that the early growers of this rich fruit (the price being so low) gave up the cultivation, and their trees have gone to decay without new ones to fill their places, and the few sagacious ones who did plant are now reaping high prices. The preventive must be to plant new trees, and let every man who has orchard room, go into the cultivation at once. The early Jo. apples, (a choice one to be sure,) is selling at thirteen shillings per bushel. Every one will admit it is too much, but it will always be that rare peaches and apples will cost high prices, without the remedy of planting new trees. W.

ROCHESTER, Sept. 1, 1845.

P.S.—Bissell & Hooker, on Main street, in Brighton, are propagating the best kinds of fruits, and no other, as is the case with Elwanger & Barry, of Mt. Hope Garden, and J. J. Thomas, of Macedon.

For the Genesee Farmer.

RUST ON WHEAT.

As wheat has suffered, partially, this season, from the attack of *rust*, the question is again asked, *what is rust?* Perhaps only two opinions have place, at present, among thinking men. The one is, that *rust* is a *fungus, uredo linearis* of botanists, which

is propagated like all similar vegetables, and grows within the stem and bursts it outwards; the other is, that is a deposition of sap in consequence of the bursting of the vessels and of the outer covering of the culm. So far as can be discovered, the circumstances of the appearance of rust comport with either supposition. The rust is rapidly formed in very hot weather immediately after the fall of rain or a heavy dew. This season the rust appeared without rain, in dry, hot weather, after dewy nights. If the rust is a fungus, hot weather attending rain or dew, promotes its growth and development; or, if the sap exudes from the burst vessels, the same is true. In either case, the sap is prevented from ascending into the head, and the shrinkage of the kernel is the necessary result.

I have lately examined the *rusted* straw by a highly magnifying power of the compound microscope. The outside covering is manifestly burst open, and the rust protrudes from the rent, a very thin layer of the covering being raised up and divided, or divided and then raised up. There is not the appearance of organized structure in the rust as it is seen in vegetables; but it looks like dried gelatinous or mucilaginous matter. The culm is not split through to the inside, but the inside is entire and firm, and the rust is wholly on the outside and in the divided covering of the stem. The form, appearance and position are all consistent with its being the dried, exuded sap; more so than with its being a fungus or uredo.

It is scarcely necessary to remark, that this rust is very different from the *red rust*, as it is often called, which is entirely external and easily rubbed off or washed away.

If rust is a fungus, it is not obvious by what means it can be prevented. If it is exuded sap, the use of salt, gypsum, and such substances as may give a firmer texture to the culm, would be valuable.

C. D.

PRAIRIE RONDE.

KALAMAZOO, August 19, 1845.

Mr. Editor—In the midst of the wheat harvest, in the month of July, I paid a visit to Prairie Ronde, in this county, and have had an itching ever since to send you a description of the way they do up the harvesting on a large scale—premissing that the prairie contains about 24,000 acres of plow land, literally as level as a house floor, of the richest quality.

My first inquiry was for the Harvesting Machine of Hiram Moore, the inventor. I was directed to an 80 acre field of wheat, and found it in full blast. It is a ponderous affair, moved by eight spans of horses, two abreast—four drivers; one hand to graduate the height of the sickle, one to tie up the bags, one to carry the bags to the wagon in attendance, and one who has a general oversight of the whole concern. It cuts ten feet wide, thrashes and chaffs wheat, and what is better still, does it in first rate order, cutting cleaner than any cradler that I ever saw work, and will cut five acres to each man employed. They commence by cutting with cradles a gangway to the centre of the field, and then a circle large enough to begin operations; after which they peel it off as you do an apple skin. They have been cutting for five bushels wheat to the acre, which is \$2 50 in cash.

I also saw Hussey's Reapers, cutting 30 acres per day with four horses, employing nine binders. The farmers thrash much of their wheat in the field from the shock, with a machine which gears on one of the wagon wheels. There were six thousand acres of

wheat on the prairie, and five-sixths of it was cut by Hussey's or Moore's Reapers, and it will average 20 bushels per acre. But, Mr. Editor, as the main beauty of this article will be its brevity, I'll close by expressing the wish that some competent farmer, among your subscribers in this state, would write a series of articles, giving a condensed account of our soil, climate, &c.

Respectfully yours,
KALAMAZOO.

AURORA HORTICULTURAL SOCIETY.

I lately had the pleasure of attending the fourth monthly exhibition of this society, in the present year; and judging from the success of the exhibition, the society is certainly in a prosperous state. The display consisted of vegetables, fruits, and flowers. The former were few in number, but fine; the fruits, notwithstanding the very hard season, were fine; peaches, nectarines, and apricots, having been mostly destroyed, but few were seen. There were, however, three sorts of peaches, fully ripe; and of pears and apples, about twenty different varieties, in fine eating order, and presented by David Thomas, of Greatfield. Very fine specimens of several varieties of plums were presented by C. H. Richmond, Samuel Hoyt, and others.

The flowers, however, were truly splendid. The large hall of the second floor of the academy, was wholly devoted to their exhibition. They occupied the platform which extends across one end of this large room; on either side, handsomely disposed on shelves, were the green-house plants, most of them in full bloom, and among which, profusely covered with flowers, was a splendid wax plant, or Hoya; in the centre, on light elegant shelves, extending more than twenty feet in length, and rising nearly to the ceiling, was a most brilliant profusion of cut flowers, which, for beauty, as well as for tasteful arrangement, could hardly be surpassed. Contributions to this part of the exhibition, were furnished from Auburn, Ithaca, and by many cultivators in the immediate neighborhood, and an extensive collection from Ellwanger & Barry, of Rochester. As a proof of their merits, as well as of the taste of those in attendance, it is only necessary to mention, that at the close of the Fair, when they were sold at auction, several single bouquets were sold for from three to four dollars each, the whole avails of the sale of cut flowers amounting to twenty-one dollars.

During the afternoon, the assembled hundreds in the show-room, were addressed with great effect, in off hand speeches, by Henry R. Schoolcraft, C. Mattoon, and Wm. H. Bogert, after which the awarding committees reported.

The fact that the society has succeeded in furnishing an exhibition once in each month during the present season, each successive one increasing in interest, is certainly a strong proof of the energy and intelligence which actuates the society; and the beneficial effects are strongly visible in the neighborhood.

Is there no other place in the western part of the State, where such a neighborhood society could be established?
A SPECTATOR.

FINE STRAWBERRIES.

Mr. Editor: The Alpine Strawberry is with many a favorite, from the lateness of the season in which it ripens, and its great productiveness. The fruit is not as large as most others, and a bed of it would not yield in any one day, as much as one of

Hovey's or Keen's seedlings, of the same size, yet the product for the season would ordinarily be more.

An Alpine, that to its present desirable qualities, should add great size, has been long desired. The usual methods of improvement, by sowing seeds, have been tried time and again, by amateurs and cultivators without the wished for result. Among the number has been Col. Stoddard of Palmyra, who, four years since, raised 2000 seedlings, one of which has astonished all who have seen it. The village paper tells *very large* stories about it, and Mr. Tucker, in the August number of the Cultivator, says of it, "we never witnessed so fine a display of fruit."

Being at Palmyra about the tenth of July, we took some pains to ascertain the facts of the case, which we give, as we received them from the most responsible sources. The bed of Col. S. is about 50 feet square; part of his vines were set out in August last; the remainder about October, the latter being runners from the former. The spot upon which they grew is made earth, about three feet deep, resting upon a kind of bog, and appeared like ordinary garden soil. The hills were set fourteen inches apart, and at the time of our visit, the leaves were about a foot above the ground, while much of the fruit grew on stalks still larger; the bed at a short distance presenting the appearance of a piece of red clover in blossom, so large and plenty were the berries.

We unite with Mr. Tucker in saying that it was the finest display of fruit we had ever seen. Upon a subsequent visit to Col. S., we learned from him that he had sold fruit to the amount of \$100, at 12½ cents per quart; that he had given away about five bushels, besides using them freely in his family, and this too, during the early part of the month, for the excessive drought of the latter part had prevented the young fruit maturing. The largest berries we saw measured three inches in circumference, but he assured us that he had picked some that were one inch larger.

Several of our citizens have procured plants, and the question will next season be thoroughly tested, whether they are a new variety, or whether this extraordinary fruitfulness and size was caused by congeniality of soil and good cultivation. By general consent, they are thus far considered an improved Alpine, and are called "Stoddard's Seedling."

BISSELL & HOOKER.

Rochester Commercial Nursery, Aug. 1845.

NEW YORK AGRICULTURAL WAREHOUSE.—The readers' attention is called to the advertisement of Mr. A. B. ALLEN, editor of the American Agriculturist, who has opened an Agricultural Warehouse in the city of New York. The establishment is devoted to the purchase and sale of rural implements, seed wheat, and other seeds, potatoes, fertilizers, fruit and ornamental trees, shrubs, wire cloths and sieves, and all other articles that come in the line of American agriculture.

Mr. A. is a gentleman in whose experience, judgment and integrity, the community can place full reliance.

ACKNOWLEDGMENT.—Our thanks are due to T. N. Davidson, Esq., of Wheatland, Loudon co., Virginia, for the interest he has taken in extending the circulation of the Farmer. Almost any one of our readers can easily procure ten new subscribers by taking a little pains. Who will confer on us that favor?

WORK AND WAGES.—The New York Evening Post gives some account of Mr. Simpson's endeavors to persuade the bounding nymphs of the ballet in Europe to vouchsafe the delights of their presence and their art on this side of the broad Atlantic. First he addressed himself to the as yet acknowledged though waning Queen of the light fantastic toe, the Taglioni. She might be induced to come, notwithstanding the dread of an ocean voyage, but she must have a hundred thousand dollars secured to her, in London, for a hundred nights of performance. Then going a step lower, he applied to the Neapolitan Cerito, but she had engaged so far ahead, and so binding, that she could entertain no proposition. Charlotta Grisi was so well content with her European position—expecting soon, doubtless, to inherit the royal mantle falling from the shoulders of Taglioni—that she would not; and there was only left the plump and pretty, but wide-mouthed German, Lucile Grahn.—Lucile has a wide mouth, but so has Fanny Ellsler; and of the two, Lucile is much the younger. If Fanny had her four hundred dollars a night, therefore, it was clear that Lucile should have at least as much; she demanded ten thousand dollars for twenty-six performances—with \$400 a week for four assistants of her own choosing, their passages all to be paid, and divers little perquisites and privileges, not specifically mentioned.

From the Farmers' Cabinet.

SMUT, RUST, AND CHESS.

Gross Isle, Wayne Co., Michigan,
March 3, 1845.

To the Editor of the Michigan Farmer:

SIR,—I lately consulted Professor J. F. W. Johnston, the eminent Agricultural Chemist of England, and author of the well known "*Lectures on the applications of Chemistry and Geology to Agriculture*," &c., on the cause and cure of those sad annoyances and causes of loss to the western farmer—smut, rust, and chess, in wheat. As his answer may probably prove beneficial to others beside myself, I beg to hand you a copy for publication in your paper. Believe me, very sincerely,

Your obedient servant, CHARLES FOX.

AGRICULTURAL CHEMISTRY ASSOCIATION, 8 BANK STREET, EDINBURGH.

About the smut and rust, your notice is all right. Steeping in a solution of salt that will float an egg, and then drying the wet seed with quicklime; fermented urine, blue vitriol (*sulphate of copper*), and arsenic, are also used as steepers for the same purpose of killing the fungus, with greater or less effect.—The rust arises from the over luxuriance of the growth of your wheat, which will diminish; but especially from the wetness of your soil, or the rains and mists to which, in the midst of so much water, your land may be subject. A good dose of lime, perhaps *plastering* your wheat, might help this disease; but it will lessen as your land is better drained, and rendered drier. But it is your chess in wheat which has amused me. Not that it is extraordinary that a farmer in Michigan should entertain that opinion, [that it is mutated wheat,] for it is prevalent over many other parts of the United States. Since I received your letter, I have amused myself further by reading *nineteen* articles upon the subject in the 7th, 8th, and 9th volumes of the *Cultivator*, your best periodical in the agricultural

line, and therefore am not surprised, that with other farmers you should hold the opinion that chess is a disease of the wheat, or degenerate wheat. The chess is a *bromus*—a kind of grass, which resembles in its straw the young wheat, but which branches out in the head like the oat. Assume, with all botanists, that species cannot be transmuted, and the production of wheat from a *bromus* is impossible. If it be impossible, then how are your facts to be explained? You mention two cases. 1st. That of *new land* when broken up and sown with wheat, chess comes up. This means, when correctly interpreted, that the seed of the chess was more abundant in the soil naturally, than the grass you added artificially; and perhaps also that more or less of your wheat was thrown out by the frost and destroyed. 2nd. On *old land*, where wheat is sown, if the wheat comes up thick and early, it will keep down the chess perhaps; if it is thrown out or picked up by birds, or destroyed by frost, the blank spaces will be filled up by the sprouting of those seeds which are most abundant in the soil, which with you seems to be chess, as in the flats of Yorkshire it is the wild mustard. Can you wonder that this seed should abound in the soil, when you remark how large a crop of seed the chess bears, when allowed to ripen? And it has ripened, and shed its seed for a thousand years, in your alluvial soils. The clay banks of your rivers are full of it. And though you extirpate it from your land, the first river flood that comes and overflows your land, will bring the mud and seeds of the banks, and sow your land with it again. And thus, in some places, generations may pass before this weed be finally extirpated, even where the greatest care is taken. Such is the case in Yorkshire, on the banks of the flat streams. No further off than Northallerton, a good farmer has extirpated with much care and expense, the wild mustard; but a flood comes, undermines a portion of the clay banks between which the river runs; and wherever the river flows over his land, the labors of years has again to be undertaken, before the same seed can be made to disappear. The error with the American farmers is, that they start from the false assumption that the change of wheat is possible, and thus come to see proofs—just as our forefathers saw ghosts—where only natural appearances present themselves. Believe it to be impossible, and the explanation of appearances may cost a little more thought, but the expenditure of that thought will lead to the truth.

(Signed)

JAMES F. W. JOHNSTON.

The learned Professor, it will be seen, supposes the chess to be a weed natural to our soil. I have never observed it in this district to grow except among wheat, or among grain crops immediately succeeding wheat. But being a distinct plant, it must grow wild in some part of our country; and be that where it may, these remarks will there aptly apply. But if the weed be not native here, we must explain the prevalence of this pest in this part of the country, by supposing that it has been brought here originally among grain seed; and may be prevented by scrupulous attention on our part, as to the cleanliness of our seed. By never sowing seed with chess among it, we can escape the loss we suffer from this weed; but all grain growers must be aware how much cleaning, and what care is requisite to separate the chess from the wheat. Once introduced into a farm, it may become impossible to eradicate it.

C. F.

MONROE COUNTY AGRICULTURAL SOCIETY.

LIST OF PREMIUMS AND JUDGES FOR 1845.

HORSES.

- Best Stud Horse, 4 v. Trans. and \$3 00
Second best, Colman's Report and 2 00
Third best, vol. American Institute and 1 00
Best pair Matched, Colman's Reports and 2 00
Second best, 3 00
Third best, vol American Institute and 1 00
Best Mare, (with colt,) Colman's Rep. and 2 00
Second best do., 3 00
Third best do., vol. American Institute and 1 00
Best colt, from 2 to 3 years old, 3 00
Second best, do., 2 00
Third best, do., vol. American Institute.
Best yearling colt, 3 00
Second best, 2 00
Third best, vol. American Institute.

Judges on Studs and Matched Horses.—Roman-ta Hart, Brighton; Donald McNaughton, Wheat-land; Z. Colby, Greece.

Judges on Mares and Colts.—Wells Springer, Henrietta; Jesse Harroun, Ogden; Wm. Tone, Chili.

CATTLE, Class I.

Thorough-bred Durhams, Herefords, Devons, and Ayrshires.

- Best bull, over 2 years old, \$8 00
Second best, do., Colman's Reports.
Third best, do., two vols. Transactions.
Fourth best, do., one vol. Transactions.
Best yearling bull, 5 00
Second best, 2 00
Third best, vol. Transactions.
Best bull calf, 3 00
Second best, vol. Transactions.
Best cow, three years or over, 5 00
Second best, Colman's Reports.
Third best, vol. Transactions.
Best heifer, two years old, 3 00
Second best, vol. Transactions.
Third best, vol. American Institute.
Best yearling heifer, Colman's Reports.
Second best, 2 00
Third best, vol. Transactions.
Best heifer calf, 2 00
Second best, vol. Transactions.

Judges.—William Garbutt, Wheatland; Wm. C. Cornell, Henrietta; Geo. C. Latta, Greece.

CATTLE, Class II.—Native or Grade.

- Best bull, over 2 years old, \$7 00
Second best, do., 5 00
Third best, do., 3 00
Fourth best do., vol. Transactions.
Best bull, from one to two years old, 5 00
Second best, do., 3 00
Third best, do., vol. Transactions.
Best bull calf, 2 00
Second best, vol. Transactions.
Third best, vol. American Institute.
Best pair steers, 3 years old, trained, 5 00
Second best, do. do., 3 00
Third best, do. do., vol. Transactions.
Best pair fatted oxen, Colman's Reports.
Second best do., vol. Transactions.
Best fatted animal, for beef, 3 00

- Second best, vol. Transactions.
Best pair working oxen, 5 00
Second best, 3 00
Third best, vol. Transactions.
Best milch cow, Colman's Reports.
Second best, 3 00
Third best, vol. Transactions.
Fourth best, vol. American Institute.
Best heifer, under two years old, 2 00
Second best, do., vol. Transactions.
Third best, do., vol. American Institute.

Judges.—Rawson Harmon, Wheatland; Ros-well Hart, Brighton; William J. Southerin, Roch-ester.

SHEEP, Long or Coarse Woolled.

- Best buck, Colman's Reports.
Second best, \$2 00
Third best, vol. Transactions.
Best three ewes, Colman's Reports.
Second best, 2 00
Third best, vol. Transactions.

Judges.—T. Weddle, Rochester; Gideon Rams-dell, Perinton; F. P. Root, Sweden.

SHEEP, Fine-Woolled.

- Best buck, Colman's Reports.
Second best, \$2 00
Third best, vol. Transactions.
Best three ewes, Colman's Reports.
Second best, 2 00
Third best, vol. Transactions.
Best three lambs, Colman's Reports.
Second best, 2 00
Third best, vol. Transactions.
Best three fatted sheep, Colman's Reports.
Second best, 2 00
Third best, vol. Transactions.

Judges.—John H. Robinson, Henrietta; Jared Colman, Rochester; Oliver H. Day, Ogden.

SWINE.

- Best boar, Colman's Reports.
Second best, \$2 00
Third best, vol. Transactions.
Best sow, with her pigs, Colman's Reports.
Second best, do., 2 00
Third best, do., vol. Transactions.
Four best pigs, under 8 months, 3 00
Second best, do., vol. Transactions.

Judges.—Matthia Garrett, Gates; Alfred Fitch, Riga; Stephen Legget, Henrietta.

FIELD CROPS.

- Best acre of wheat, four vols. Trans. and \$5 00
Second best, Colman's Reports and 3 00
Third best, Colman's Reports and 2 00
Fourth best vol. Transactions and 1 00
Best field of ten acres or more, four vol. Trns.
..... and Colman's Reports.
Best field, from five to ten acres, .. Colman's Reports.
Best acre of Indian corn, .. Colman's Rep. and 3 00
Second best, do., vol. Transactions and 3 00
Third best, do., vol. Transactions and 2 00
Fourth best, do., vol. American Institute and 1 00
Best acre of oats, vol. Transactions and 2 00
Second best, do., vol. Transactions and 1 00
Third best, do., vol. Transactions.
Best acre of peas, 5 00

Second best, do.,	3 00
Third best, do.,	vol. Transactions.
Best acre of potatoes,	5 00
Second best, do.,	3 00
Third best, do.,	vol. Transactions.
Best half-bushel of potatoes grown from seed,	5 00
Second best, do.,	3 00
Third best, do.,	vol. Transactions.
Best half-acre ruta бага,	5 00
Second best, do.,	3 00
Third best, do.,	vol. Transactions.
Best half-acre of mangel wurtzel,	5 00
Second best, do.,	3 00
Third best, do.,	vol. Transactions.
Best half-acre sugar beet,	5 00
Second best, do.,	3 00
Third best, do.,	vol. Transactions.
Best quarter acre of carrots,	5 00
Second best, do.,	3 00
Third best, do.,	vol. Transactions.
Best quarter acre of parsneps,	5 00
Second best, do.,	3 00
Third best, do.,	vol. Transactions.
(One-third of the premiums to be paid in books.)	
<i>Judges.</i> —Caleb R. Hobbie, Irondequoit; Jirah Blackmer, Wheatland; N. Haywood, Brighton.	

BUTTER, HONEY AND SUGAR.

Best 10 lbs. butter, in rolls,	\$3 00
Second best, do.,	vol. Transactions.
Best 20 lbs. packed butter made in May or June,	3 00
Second best, do.,	vol. Transactions.
Best 10 lbs. honey,	3 00
Second best, do.,	two vols. Genesee Farmer.
Best 10 lbs. maple sugar,	3 00
Second best, do.,	two vols. Genesee Farmer.
<i>Judges.</i> —James P. Fogg, Rochester; H. N. Langworthy, Irondequoit; Amos Sawyer, Rochester.	

All domestic articles, including butter, cheese, sugar, &c., must be labeled with the name and residence of the owner.

HORTICULTURAL.

(Funds raised by Gardeners and Amateurs.)

For the best 12 varieties of apples, 3 of each,	\$2 00
Second best, do.,	vol. Transactions.
Third best, do.,	two vols. Genesee Farmer.
For the best dozen pears, plums, peaches and quinces,	1 00
For the best new seedling apple, pear, and peach, each,	vol. Transactions.
For the best sample of grapes ripened in the open air,	2 00
Second best, do.,	vol. Transactions.
Third best, do.,	two vols. Genesee Farmer.
For the best two each, of musk melons, water melons, pumpkins, squashes, & egg plants,	1 00
For the best two heads each, of cauliflower and brocoli,	1 00
Best six each, of beets, carrots, parsneps, turneps, salsify, celery, cabbages, onions, and tomatoes, each kind,	1 00
Best assortment of double dahlias,	vol. Tr. and 1 00
Second best, do.,	vol. American Institute and 1 00
Best assortment of cut flowers,	vol. Transactions.
Second best, do.,	1 00
<i>Judges.</i> —P. Barry, Rochester; John Donnallan, Greece; Edward Hooker, Brighton.	

NON-ENUMERATED ARTICLES.

Judges.—Alexander Kelsey, Rochester; J. W. Bissell, Brighton; William Kidd, Rochester.

AGRICULTURAL IMPLEMENTS.

Discretionary Premiums will be awarded for all Implements presenting any new improvements, or otherwise deserving of particular commendation.

Judges.—L. B. Langworthy, Greece; B. F. Smith, Rochester; Marcus Adams, Ogden.

PLOWING MATCH.

To the owner of the team which plows one-fourth of an acre best within sixty minutes,

Colman's Reports and \$2 00

Second best, do., vol. Transactions and 2 00

Third best, do., vol. American Institute and 2 00

Fourth best, do., 2 00

The depth of the furrow must not be less than six inches, and the width not less than ten inches.

Judges.—Elisha Harmon, Wheatland; John H. Robinson, Henrietta; Dennis Church.

ON FARMS.

For the best managed farm, not less than 40 acres, reference being had to the general system of management and the profits obtained, rather than to natural advantages or expensive improvements,

four vols. Transactions and \$5 00

Second best, do., Colman's Reports and 4 00

Third best, do., two vols. Transactions and 3 00

Fourth best, do., two vols. Transactions and 2 00

Fifth best, do., two vols. Transactions and 1 00

Sixth best, do., two vols. Transactions.

Committee.—D. Lee, L. B. Langworthy, John H. Robinson, Elisha Harmon, Romanta Hart, T. H. Hyatt.

LADIES' DEPARTMENT.

Best 10 yards home made flannel, \$3 00

Second, do., two vols. Genesee Farmer.

Best 10 yards domestic fulled cloth, 3 00

Second, do., two vols. Genesee Farmer.

Best one-fourth lb. sewing silk, 3 00

Second best, do., vol. Transactions.

Third best, do., two vols. Genesee Farmer.

Best specimen of domestic manufactured silk, 3 00

Second best, do., vol. Transactions.

Third best, do., two vols. Genesee Farmer.

Judges.—Elihu Kirby, Henrietta; T. H. Hyatt, Rochester; Mrs. John H. Robinson, Henrietta;

Mrs. Elisha Harmon, Wheatland; Mrs. Joel Pound, Rochester.

DISCRETIONARY PREMIUMS.

Discretionary Premiums to be awarded to females for articles of domestic manufacture, not enumerated, according to the funds of the Society.

Judges.—James H. Watts, Rochester; William C. Cornell, Henrietta; Mrs. John Rowe, Riga; Mrs. F. P. Root, Sweden; Mrs. John Ayrault, Perinton.

COMMITTEE OF ARRANGEMENTS, FOR THE FAIR AND CATTLE SHOW.

L. B. Langworthy, T. H. Hyatt, James H. Watts, James P. Fogg, James Whitney.



HORTICULTURAL DEPARTMENT.

BY P. BARRY.

A PATTERN FOR A FARMER'S GARDEN.

The best farmer's garden we have seen in Western New-York, and one that we now take the liberty of referring to as a *pattern*, is that of ISAAC COX, Esq., of Wheatland. We called at his residence a short time ago, and were delighted beyond measure, with the order, neatness, and beauty of his premises.

His residence is beautifully situated about a mile south from the village of Scottsville, on the river road, and from its elevated site, commands a fine view of the river valley for a considerable distance, and of the noble wood-lands, and rich fields, that ascend in an easy, graceful slope from the waters of the Genesee to the distant horizon. As we sat with him on his comfortable verandah, and gazed on this grand picture, that bids defiance to the painter's puny imitation, we felt as though the man whose lot is cast in the country, even if it be toilsome, is in *reality* happy—blessed—if he did but know it, compared with his brother who is struggling amidst the fickle fortunes, painful excitements, dust, dirt, heat, turmoil and unceasing din of the city, with its awful conflagrations, its fiendish incendiaries, its reckless, lawless hordes of housebreakers and assassins, and its shameful dens of infamy. Oh! what a pity, we thought, that so many farmer's sons, should so far mistake their good, as to leave their happy country homes, their farms and gardens—pure air—beautiful scenery, and kind, candid, virtuous friends and companions, for the tempting pleasures (?) of a city life. But to our purpose: Mr. C.'s vegetable and fruit garden consists of a rectangular piece of ground of upwards of an acre. It is conveniently laid out in plots, with a main walk ten or twelve feet wide, through the centre, and one on each side four feet wide, within four feet of the fence, with cross walks at suitable distances; most of the walks are edged with chives, bush-Alpine, strawberry, or something appropriate.

The part nearest the dwelling is devoted to vegetables: and here, notwithstanding the unfavorable spring, and a protracted drought, we saw a very promising crop, in excellent condition, the ground all mellow and fine, and not a weed to be seen. The fruit department is more extensive, and contains a very choice collection of the finer fruits, adapted to garden culture, such as cherries, plums, apricots, nectarines, and a few peaches. He has a large peach orchard, just coming into bearing, immediately adjoining the fruit garden. The collection of small fruits, such as raspberries, currants, &c., is very extensive, and the crop of fruit immense. Among the raspberries we noticed three American species, that Mr. C. prizes very highly, as being hardy and productive. Currants, several varieties, fruit in prodigious quantities, and large and beautiful. Mr. C. made three barrels of excellent wine from the surplus currants of last year. Strawberries were mostly gone, except the monthly Alpines, of which he has an abundance. These occupy the fence borders and walk edgings, and were loaded with their delicious fruit. We also noticed a fine collection of Dwarf

Pear Trees, planted last spring; they looked well, many of them, even, bearing fruit. On one side of the garden, the west, is a high close board fence, for the protection and training of grape vines; these are planted the whole length of the garden, embracing a good collection of foreign and native varieties. On the east, or street side, is a substantial cobble stone wall, ornamented with climbing roses and honeysuckles, clambering over its top, from within, and showing a profusion of flowers.

The flower garden and shrubbery occupies a regular, handsome plot of ground, about one-fourth of an acre, between the dwelling and the road, tastefully laid out and interspersed with gravelled walks.—It is well planted with ornamental trees, shrubs, roses and herbaceous plants. An oval bed in the centre, filled with seedling verbenas, self-sown, in full bloom, was a splendid object. We counted some ten or twelve different colors. Other parts of the borders were filled with verbenas that had been wintered in the house, and with monthly roses that had stood out all winter.

But we have no space for further details, and we have only thus referred to these matters for the purpose of stimulating others to profit by the example we have recorded, as far as means and other circumstances will justify.

The country, as a general thing, is lamentably deficient in good, or even tolerable gardens; and we deem it a portion of our duty, to point directly to such instances as we may find worthy of imitation; so that while we advise what should be done, we can point out what is, has been, and *can be* done.

FRUITS OF THE SEASON.

Although the present season has been one of the most unfavorable for fruit we have had for many years, still, we have had so far, a tolerable supply, better by far than we anticipated.

Apples—We have had Early Harvest, Red Juneating, Sweet Bough and some others: they have sold on an average at about \$1.00 per bushel: as a general thing they are of inferior quality compared with other years.

Pears have been rather plentiful, but we have seen very few fit for anything but baking. The price has ranged from \$1 to \$3 per bushel, according to quality. The cultivation of the pear begins to attract attention;—10 years hence, we believe we will have one of the best Pear districts in America.—One of the best early pears we have seen or tasted this season, or we might say, that we have ever seen, is the "*Belle d'Aout*" or Belle of August. It is large, upwards of four inches in length, of a regular pyriform shape, beautiful yellow color, with a light red cheek—the flesh is white, very fine grained, juicy and melting, fully equal if not superior to the best Virgalieu—ripe August 24th. This is a very rare variety, little known in this country, but eminently deserving extensive cultivation.

The specimen to which we refer, was produced on a small dwarf tree in the Mt. Hope nursery, imported from France in the spring of 1844, and transplanted again last May. It is described on page 334 of Downing's work, but not figured as it should be.

Peaches.—The earliest good peach we have seen this season, is the "Early Purple," raised by Mr. H. N. Langworthy, of Irondequoit. Mr. L. sold them on the 18th Aug. for \$4 per bushel. This fruit ripens immediately after the "Early Ann," and one bushel is worth three.

The "Early Purple" is an old French variety.—We believe Mr. Langworthy obtained his trees from Mr. Parmentier, a Frenchman, many years ago; a nurseryman at Brooklyn, L. I. It is described as the "Pourpree hative" by Downing, page 480.—Mr. L. has a large and excellent peach orchard, and his trees this season are bearing an abundant crop. He will undoubtedly reap a rich harvest which he well merits, as a careful and enterprising cultivator.

Mr. Schenck of Brighton, one of our first and best peach growers, has as usual, a fine crop. He was selling his "*Crawford's Early Red*" on the 21st Aug., for \$4 per bushel—this is an excellent and beautiful fruit. Mr. S. has a new variety which he calls "Cooper's Mammoth," a New Jersey seedling, a large and splendid looking fruit, not ripe when we saw it. His "Sweet Waters" were fine, just ripening. Mr. S. will realize a handsome income from his large and splendid crop of peaches.

Aug. 27. The "Early Royal George" just ripe in the Mt. Hope Nursery—large, magnificent fruit, uncommonly high flavored, juicy and fine. It should be in every garden where there is room for a peach tree. Nobles' and Jacque's Yellow Rare ripe, are just coming in—both are first rate fruits.

Plums are both scarce and dear, we mean good ones—the sweet Blue Damsion were somewhat abundant. "Bolmar's Washington," our greatest favorite, have been sold at \$5 per bushel and retailed at a cent a piece, but they are gathered before they are ripe. The *Daily Democrat* tells of having received some measuring 7 inches.

We have before us, samples of the "Diamond Plum," produced on a young tree in the Mt. Hope Nursery. This is one of the most productive and largest plums grown, and excellent for cooking, and for these reasons highly valuable. It is oval shaped, dark purple or black color, covered with bloom. The plum is decidedly a favorite fruit with the people of Rochester, and despite the curculio, every fine variety will soon be produced abundantly in our gardens.

Apricots have been unusually scarce, the curculio took most of the crop to himself. We did not hear of any selling by the peck or bushel, but the few that have come into market, have been retailed at 3 cents each.

THE FRUITS AND FRUIT TREES OF AMERICA.

By A. J. DOWNING, OF NEWBURGH, N. Y.

In our last we noticed this work and gave a very ample sketch of its contents.

Since then we have had more leisure to review it, and feel bound to offer some exceptions to the unqualified remarks which we then made.

It is always one's duty in speaking of a work of this or any other sort, to speak of it just as it is.

In the first place, a person who was not aware of the character of this work, and who is in the habit of adopting the literal meaning of words, would suppose that "The Fruits and Fruit Trees of America" meant those indigenous to America—but it means no such thing. On the contrary, as the title page lengthily explains, "The culture, propagation, and management, in the garden and orchard, of fruit trees generally; with descriptions of all the finest varieties of fruit, native and foreign, cultivated in this country." That is what the work treats of. We therefore object to the title, as being in our humble opinion *inappropriate*, properly belonging to a work that Mr. Downing or some one else, some day or

other may be pleased to make. This however is a point of minor consequence, any farther than that we desire to have books as well as other things called by their right names—even though their sounds should be on a lower key. Turning from the title page to the preface the author opens thus:

"A MAN born in one of the largest gardens and upon the banks of one of the noblest rivers in America, ought to have a natural right to talk about fruit trees."

We do not by any means intend to question the truth of this sublime declaration of rights, any more than we would the truth of the declaration of American Independence. But we do question the good taste of the author in thus introducing himself among the pomological literati. He lays aside the usual expressions of diffidence, steps out boldly before his audience as we can easily imagine, and shouts out "I was born so and so, gentlemen, therefore I have a natural right to talk."

Well. There are several ways of doing most things: each one chooses his own. Mr. Downing chose his, so it's none of *our* business, only we must be permitted to say it is a queer one. For our own part we care not where a man was born, in the garden or the garret, on the Hudson or the Rhine, on the hill-top or in the valley, in the splendid mansion or the lowly cot, *his natural right is just the same*. All that we want of our author is the competency to execute the task he has assumed.

A MAN to prattle about *rights* of birth now-a-days cuts, in our opinion, a silly figure. But this also concerns the author more than us.

We have alluded to these things, only because they were blemishes that struck us the moment we opened the book, and which we think it only right to mention in this notice. There are other blemishes and defects, which occur to us as we peruse the book, but we will leave them for future notice.

☞ In consequence of a severe illness which has confined us to our room for three weeks past, we have been compelled to defer several seasonable articles intended for this number. P. B.

For the Genesee Farmer.

BURNING LIME WITH STONE COAL.

MR. EDITOR:—Could you publish the most approved method of burning lime with stone coal? The farmers of this region have suddenly taken a determination to try lime on their lands. They have limestone in great abundance, and stone coal (bituminous) convenient, but no one here knows how to set a kiln.

We have thriving, industrious farmers here, (principally Germans.) The land in these valleys is heavy limestone, excellent for wheat and corn. The present season has been very dry, and the frost injured much of the rye and some wheat. We read your papers with interest, and profit by their teachings.

"ONE OF US."

REMARK:

Build a kiln in the usual way for burning lime with wood, and lay a thin stratum of coal with a thick one of stone all the way from the arches to within two feet of the top. The quantity of coal to be used will depend on its purity. Enough should be used to burn the lime till it will slake—a larger amount will render the lime all the better, for the coal will supply some minerals necessary to wheat, which pure lime will not furnish, and does not contain.

NEW-YORK STATE AGRICULTURAL SOCIETY.

The meeting of the Executive Committee of the State Ag. Society for August, was held at the Society's Room in Albany, on the 14th—Present,

- R. P. JOHNSON, of Oneida, President.
- E. P. PRENTICE, Vice-President, Albany.
- ALEXANDER WALSH, Rensselaer.
- Geo. VAIL, Rensselaer.
- THOMAS HILLHOUSE, Treasurer.
- LUTHER TUCKER, Rec. Sec'y.

Letters were read from Hon. Win. H. Seward, Auburn; Hon. Luther Bradish, New-York; Hon. Josiah Quincy, Jr., Boston; Isaiah Townsend, Albany; James Gowen, Esq., Philadelphia; James S. Wadsworth, Genesee; Francis Ratch, London; James Taylor, Birmingham; Hon. John Savage, Salem; Lewis F. Allen, Esq., Buffalo; Paris Barber, Homer.

The Board then proceeded to complete the list of Judges to award the Premiums at the next State Fair. The following are

THE JUDGES TO AWARD THE PRIZES.

- Cattle, Class I.*—James Gowen, Philadelphia; J. S. Skinner, New-York; Thos. Hollis, Gilbertville.
- Cattle, Classes II, III, IV.*—Adam Ferguson, Watertown, C. W.; F. Jagersoll, Vernon; D. D. Campbell, Schenectady.
- Cattle, Classes V, VI.*—J. R. Speed, Caroline; Wm. Fuller, Skaneateles; Aaron Petrie, Little Falls.

- Working oxen.*—Sanford Howard, Albany; Andrew J. Bell, Lairdsville; Squire M. Brown, Elbridge.
- Sterra.*—E. P. Beck, Sheldon; Cliff Fames, Rutland; Israel Boies, Homer.

- Fat Cattle and Fat Sheep.*—Ela Merriam, Leyden; Lester Barker, Chilton; P. N. Rust, Syracuse.

- Stallions.*—J. M. Sherwood, Auburn; Wm. Jones, Queens Co.; Edward Long, Cambridge.

- Mares and Cotts.*—Anthony Van Bergen, Coxsackie; Willard Ives, Watertown; F. P. Bellinger, Herkimer.

- Matched Horses.*—Wm. Salsbury, seeds; Duncan Robinson, Fishkill; H. S. Woodruff, Auburn.

- Sheep, Class I.*—W. A. S. North, Duaneburg; Robt. Musson, Gilbertville; Jas. Parker, Jr., Trenton.

- Sheep, Class II.*—S. Waite, Jr., Montgomery; W. H. Sotham, Albany; Lyman Sherwood, Auburn.

- Sheep, Class III.*—Chester Buck, Lowville; Samuel Cheever, Stillwater; D. K. Gilt, Henderson.

- Sheep, Class IV.*—J. P. Beekman, Kinderhook; J. M. Ellis, Onondaga Hill; M. Y. Tilden, New-Lebanon.

- Swine.*—L. B. Laugworthy, Rochester; George Webb, Palatia; Hiram Hopkins, Cortlandville.

- Poultry.*—C. N. Bennett, Albany; T. H. Hyatt, Rochester; Storrs Barrows, South Trenton.

- Vegetables.*—D. B. Fuller, Hyde Park; B. W. Dwight, Chilton; H. L. R. Sanford, Volney.

- Plows.*—Geo. Geddes, Tyler; C. C. Denois, Auburn; M. L. Brauwer, Rome.

- Wagons, Harrows, Cultivators, Fanning Mills, Machines for cutting corn stalks, Horse Powers and Thrashing Machines, Drift-Burrows, and Straw Cutters.*—H. S. Randall, Cortlandville; G. W. Patterson, Westfield; Myron Adams, East Bloomfield.

- All other Agricultural Implements.*—Powery Jones, Lairdsville; John Williams, Jr., Salem; T. R. Hussey, Auburn.

- Butter.*—L. W. Bateman, Venice; Z. Barton Stout, Richmond Hill; Elijah Rhoades, Manlius.

- Cheese.*—T. C. Peters, Darien; Thomas Bureb, Little Falls; Harrison Blodgett, Denmark.

- Sugar.*—O. Hungerford, Watertown; E. Mack, Ithaca; Geo. B. Rowe, Canastota.

- Silk.*—Alex. Walsh, LaSangburgh; Samuel Thompson, Utica; John Walsh, Albany.

- Domestic Manufactures.*—Judge Conking, Auburn; Roswell Randall, Cortlandville; Le Grand Cannon, Troy.

- Fruits.*—J. J. Thomas, Macedon; Char. Downing, Newburgh; P. Barry, Rochester.

- Flowers.*—Prof. Jackson, Schenectady; Beoj. Hodges, Buffalo; Charles Tracy, Utica.

- Plowing Match.*—Lewis F. Allen, Buffalo; N. S. Wright, Vernon Centre; E. Marks, Tyler; Wm. Outley, Oaks Corners; John Johnston, Geneva.

- Miscellaneous and Discretionary Premiums.*—Thomas Farrington, Oswego; B. N. Huntington, Rome; Joel Rathbone, Albany; J. J. Viele, LaSangburgh; Oliver Phelps, Canadagua.

TRANSPORTATION OF STOCK.

The Committee on this subject reported that arrangements had been made with the different Rail Road Companies, whose officers with their usual liberality, had agreed to transport free of charge, all animals and articles designed for exhibition at the Fair.

They farther reported, that extra trains would be run, in which visitors to the Fair, will be carried for a sum not exceeding half the usual rates on the roads. Of their times of starting, notice will be given, as soon as the arrangements are completed.

SPLENDID SAMPLE OF WHEAT.

The Recording Secretary presented the following letter with the accompanying sack of wheat:—

I. TUCKER, Esq., Rec. Sec'y N. Y. S. Ag. Society:
 Sir—I send you for the State Agricultural Society, a sack of the wheat considered the best grown in old Castile, and sent me lately by a friend in the North of Spain.

The Talavera wheat, already familiar to English and American farmers, is also a Spanish variety. It came originally from Estremadura, a province in the south of old Castile, and of a milder and more uniform climate. The Castilian wheat, it may therefore be inferred, will prove a hardier species.

I have sent to Gen. Rawson Harrison a similar sack, and proposed to him, should its introduction be accomplished under his experienced and enlightened management, to name this variety the *Aguirre wheat*, after D. Mac-simo de Aguirre, our excellent Consul at Bilbao, to whose good offices I am indebted for the specimens I have received.

Gen. Harmon remitted me last winter, for a friend in France, several varieties grown under his care at Wheatland. Ten kernels taken indiscriminately from these, weighed,

of White Province, (Fren-h.) 8½ gr ins.
Wheatland Red, 5½ "
Virginia May,..... 5 "
Soul's Red,..... 5 4-10 "
Soul's White,..... 5 4-10 "
Talavera,..... 7 "
Improved White Flint,..... 5 "
The "Aguirre" weighed,..... 8½ "

A person as little acquainted practically with the tillage of wheat as the writer, would infer from the above table that a certain weight of French Province, White, or "Aguirre wheat," would furnish a greater amount of flour, and less amount of bran, than an equal weight of either of the other varieties.

The bread made from the wheat of old Castile, I have never seen surpassed in whiteness. In Spain, as you are perhaps aware, this universal article of consumption is not leavened.

What I send is for distribution, if you think worth while. I will seal up four or five pounds which might be kept in the rooms of the Society, as a standard whereby to determine the changes the wheat may undergo by culture in America.

Respectfully, yours,
 ISAMAH TOWNSEND.

P. S. I have just had weighed a half-peck of the wheat. The weight was 8 lbs. 9 oz., avoirdupois. This would give 68½ lbs. to the bushel. As this exceeds by 2½ lbs. the heaviest wheat (Hungarian) in Lawson's Museum, (Vide his Agriculturist's Manual, p. 14.) I think it wants verifying by a better balance than that I used, the scales of a corner grocery.

On motion of the President,

Resolved, That the thanks of the Society be tendered to Mr. Townsend for the splendid specimen of wheat accompanying this above letter; and that the same be distributed to members of the Society, with a request that they make trial of the same, and report the result to the Society.

The President was requested to procure a windlass and dynamometer, for the trial of plow.

The Rec. Secretary and Treasurer were directed to procure the necessary badges and tickets for the ensuing Fair.

The Rec. Secretary presented a copy of the 9th vol. of the *Farmer's Cabinet*, from the publisher, J. TATEM, Esq., for which the thanks of the society were voted.

The fifth annual Fair and Show of the State Agricultural Society is approaching, and the interest which is manifested shows that our Society has lost none of the confidence of the agriculturists of the State. The previous exhibitions have been attended by immense gatherings from different parts of our own State, as well as large numbers from other States in the Union.

The location of the Fair at Utica being near the centre of the State, will undoubtedly secure a larger attendance than at any previous Fair of the Society.

The arrangements it is believed will be such as to meet the expectations of the public, and the citizens of Utica are making preparations that will insure suitable accommodations for all who may be in attendance.

The list of premiums of the Society embraces a very great variety of articles—and are so extended as to secure a very spirited competition.

In the appointment of the Judges the officers have selected such names as will secure the confidence of the public, in the awards that may be made.

We would urge upon the friends of agriculture throughout the State to make vigorous efforts to bring out our citizens at the approaching Fair. Every year we have added to the list of our friends, from those who have attended our exhibitions, and we desire still to add to their numbers until every farmer in the State, as well as every other citizen, shall take a deep interest in our Society, which is identified with the permanent prosperity of the State.

Arrangements have been made for the ladies that will secure a tasteful display of the articles they may exhibit—and it is hoped that in this department we shall witness a display excelling that at any former meeting of the Society.

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 \$1.00, 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, 12 1-2 cents.

Members will be allowed to enter in carriages with their families, but no hacks or other public conveyances will be permitted to enter

* These weighed respectively, after being soaked 36 hours in a strong solution sulphate ammonia, 11—6½—6¼—6¼—5—7½ grains. I have not soaked any of the Castilian variety.

except when the inmates are members of the Society, without paying a dollar for each entrance, and the inmates, if not members, to furnish themselves with tickets.

Gentlemen may become members and obtain Badges at the sign-office of J. BUTTERFIELD & Co.—and at the Bookstores of I. TIFANY, G. TRACEY and BENNETT, BACKUS & HAWLEY, Genesee st., Utica, or at the Business Office at the show-yard.

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 on agricultural implements, butter and cheese, sugar, cocoons, silk, &c., should have their specimens on the ground on the 16th, that they may be deposited in their appropriate places, and the rooms suitably arranged on the day previous in the Fair.

No premiums will be paid on animals or articles taken away before the close of the Fair.

Every thing intended for the exhibition, must be on the ground at 9 o'clock, on the morning of Wednesday, the seventeenth.

Animals and other articles offered for exhibition, must be labelled with the owner's name and residence at full length.

THE SEVERAL COMMITTEES TO AWARD PREMIUMS.

The several Committees to award Premiums, are requested to report themselves at the Society's room at BAGG'S HOTEL on Tuesday evening, the 16th, or at the Business office on the show grounds previous to ten o'clock on Wednesday morning, the 17th, after which all vacancies will be filled, and the committees will enter upon their duties at twelve o'clock.

The Judges are requested to furnish their awards to the Recording Secretary by twelve o'clock on Thursday, that a list may be made out from which the Treasurer can pay the prizes immediately on the Reports being read from the stand.

The Judges will not award the prizes offered, unless in their opinion the animals or articles exhibited are worthy of the premium.

Prize animals and implements at the previous exhibitions, will be allowed to compete for the prizes: but they must receive a higher prize, or in a different class, to entitle them to a premium.—Should the same premium heretofore given them be awarded, they will receive a certificate to that effect instead of the prize.

No visiting committee, with the exception of the Committee on Disciplinary Premiums, shall award any discretionary premium, without the previous permission of the Executive Board, expressed through the President.

The annual Address will be delivered, under the large tent, at 3 o'clock on Thursday afternoon, by Hon. JOSIAH QUINCY, Jr., of Boston.

Immediately after the Address, the Reports of the Committees to award the Premiums will be read, and the Premiums paid at the Treasurer's office. The Treasurer will also be in attendance at the Society's Room, at Bagg's Hotel, on Thursday evening and on Friday, for the purpose of paying Premiums.

On Thursday afternoon, the PREMIUM ANIMALS will be exhibited on the grounds, separate from the others, with cards showing the premiums awarded to each animal, so that the public may have an opportunity of viewing the animals which have been adjudged worthy of the Premiums of the Society.

TRANSPORTATION OF STOCK.

Arrangements have been made with the different Rail Road Companies, whose officers, with their usual liberality, have agreed to transport, free of charge, all animals and articles designed for exhibition at the Fair.

Gentlemen who intend to send their stock by the Rail Road, must give notice at least one week previous to the Fair, to LUTHA TUCKER, Albany; M. D. BURNET, Syracuse; J. M. SHERWOOD, Auburn; L. B. LANGWORTHY, Rochester, or L. F. ALLEN, Buffalo, so that the necessary preparations may be made by the companies for their transportation.

Extra trains of cars, both east and west of Utica, will be run, in which visitors to the Fair will be carried for a sum not exceeding half the usual rates on the roads. Of their times of starting, notice will be given as soon as the arrangements are completed. The Packet Boat Companies have made arrangements to facilitate the conveyance of visitors, at reasonable rates.

It is expected that the operations of the MAGNETIC TELEGRAPH will be exhibited on the grounds during the Fair. It is intended by the proprietors of this work, to have it ready for operation from Utica to Little Falls, a distance of twenty miles.

Articles designed for exhibition at the Fair, may be directed to the care of FARWELL & HARRINGTON, Utica, who will take charge of them, as directed by the owners.

ADVERTISEMENTS.

MACEDON NURSERY.

THE partnership formerly existing between Thomas & Smith having been dissolved, orders for Fruit Trees, and triennial Shrubs and herbaceous perennial Plants, will be received by the subscriber. The list of fruits cultivated for sale having undergone a thorough revision and new grounds extensively occupied, many of the varieties can be furnished only in small trees till another year; hence when order cannot be fully supplied, the balance of remittances will in all cases be at once returned to the purchaser.

Address, post paid, J. J. THOMAS,
9mo. 1, 1845. [2m] Macedon, Wayne co., N. Y.

MACEDON NURSERY.

THE accounts of the late firm of "Thomas & Smith" Macedon, are left with the subscriber.

The business will be conducted as heretofore, upon the principle of propagating only select varieties of *proved* fruit.

A fine stock is now on hand, which will be much increased by the superior kinds recently fruited.

Several hundred fine trees of the May Bigarreau, the earliest of all good cherries.

8 mo. 28th 1845.—2 t.

WILLIAM R. SMITH.

ROCHESTER COMMERCIAL NURSERY.

BISSELL & HOOKER, [successors to E. Boardman,] Main-st., one mile east of the Court House. This extensive establishment embraces nearly 200,000 Fruit Trees, of different ages, thoroughly tested upon bearing trees upon the premises and in the city, which are offered for sale for cash or approved credit upon reasonable terms. Persons purchasing at this establishment, can be furnished with trees of any size, which will be warranted to be of the kinds represented.

A good assortment of hardy Ornamental Trees and Shrubs is also kept for sale.

Trees ordered by mail, will be carefully packed and forwarded to any address. A liberal discount will be made to those who purchase to the amount of \$50 or more at one time.

Address, post paid, BISSELL & HOOKER, or
Sept. 1, 1845. A. G. SMITH, Rochester, N. Y.

STRAWBERRY PLANTS.

J. M. THORBURN & CO., 15 John street, New York, and Aurora, Long Island, beg to inform the Horticultural public that they have now ready for delivery, 5000 of *Myatt's Eliza* Strawberry Plants, which they have proved by fruiting in beds for two seasons past, and can with confidence recommend this excellent Strawberry to the most limited grower. In England, where it originated, it maintains to this day its celebrity, and in Covent Garden market, London, yields to no other sort than the British Queen, which the *Eliza* is the parent of. It is of a large size, fine pine flavor, and cockscomb form, bright red color, and erect habit. Price for strong rooted plants in pots, 75 cents per dozen: out of pots from the bed, \$3 per hundred.

Also, *Myatt's British Queen*, unrivalled for every excellent quality, has fruited splendidly in a large bed the present season, and is indispensable to the smallest cultivator. No new sort in England equals it for general good qualities: nor in this country approaches it. Strong rooted plants in pots, \$1 per dozen, and from the bed, strong plants, \$5 per hundred.

Also, *Prince Albert*, very large and fine, great bearer, fine shape and beautiful color. \$1 per dozen: \$5 per hundred. It is one of the best sorts for forcing in pots.

Also, *Hovey's Seedling*, a well known good sort. \$1.50 per hundred: \$5 per thousand.

Also, *Ross' Phenix*, one of the best American varieties, well known around Hudson and Albany as a fine productive kind, \$1.50 per hundred: \$5 per thousand.

Also, *Scotch Pine Apple*, a very bright colored, oblong fruit, of a sprightly pine apple flavor. \$1.50 per hundred: \$5 per thousand. The above are quoted at prices which will encourage any one to plant a good sized bed at once. They will produce moderately next spring, and abundantly hereafter.

Strawberries, to bear fruit in perfection, should be kept clear of runners which can be used for forming new beds. A covering of three inches stable manure in winter is very serviceable, which fork in early in the spring. Keep well clear of weeds, and a good crop will follow. Place the plants 18 inches apart in the rows, and an alley of two feet between the rows.

Orders will meet prompt despatch and careful packing and forwarding.

Sept. 1, 1845. [2m]

NEW YORK AGRICULTURAL WAREHOUSE.

HAVING taken the commodious store, No. 187 Water street, the subscriber is now opening the largest and most complete assortment of Agricultural implements of all kinds ever offered in this market. Most of these are of new and highly improved patterns, warranted to be made of the best materials, put together in the strongest manner, of a very superior finish, and offered at the lowest prices.

SEEDS FOR THE FARMER.

Such as improved winter and spring wheats, rye, barley, oats, corn, ruta-baga, turnip, cabbage, beet, carrot, parsnip, clover, and grass seeds, improved varieties of Potatoes, &c., &c.

FERTILIZERS.

Peruvian and African guano, poudrette, bone dust, lime, plaster of Paris, &c.

FRUIT AND ORNAMENTAL TREES & SHRUBS.

Orders taken for these, and executed from a choice of the best nurseries, gardens and conservatories in the United States.

WIRE CLOTHS AND SIEVES.

Different kinds and sizes of these to be had at all times.

NEW AND IMPROVED IMPLEMENTS AND SEEDS.

The subscriber requests samples sent to him of any new or improved implements, seeds, &c. &c., which, if found valuable, extra pains will be taken to bring them before the public.

[3m-9] A. B. ALLEN, 187 Water street, New York.

MT. HOPE BOTANIC GARDEN AND NURSERIES, ROCHESTER, N. Y.



THE subscribers respectfully announce to their friends and the public, that their present stock which they offer for sale the ensuing Fall of 1845 and Spring of 1846, is the finest ever grown in western New York, and unsurpassed in quality by any establishment in the country.

The collection of fruits comprises the most esteemed varieties of the Apple, Pear, Peach, Plum, Apricot, Cherry, Nectarine, Almond, Grapes, &c.

The trees are well grown, thrifty, and beautiful, and have been propagated with such care as to ensure correctness.

All are warranted genuine as represented.

PEAR TREES ON QUINCE STOCKS intended for growing in the pyramidal form, and will bear the year after transplanting, also offered. Also over 3000 trees of the valuable native Apple, the "Northern Spy;" this is generally acknowledged to be one of the best varieties cultivated.

Strawberries, all the newest kinds, including the remarkable large productive new seedling.

"Stoddard's Washington Alpine," Raspberries, all the finest varieties.

Gooseberries and Currants of the largest and finest varieties.

Also a large and fine collection of Ornamental Trees and Shrubs. The collection of ROSES is very fine, including a very choice assortment of Standard or Tree Roses, 3 to 6 feet high; these are beautiful objects for lawns or borders—most of them are perpetual or ever blooming.

Herbaceous Plants, Bulbous Roots, Double Dahlias, Paeonias, &c., and a splendid collection of

GREEN HOUSE PLANTS,

including the most popular new Plants.

A new descriptive catalogue is in the course of preparation, and will be forwarded gratis to all POST PAID applications.

Trees and Plants packed in the best style, and shipped to any port or place that may be designated. ELLWANGER & BARRY.

Rochester, Sept. 1, 1845.

LIFE ASSURANCE AGENCY.

THE subscriber having been appointed agent for the Worcester (Mass.) and Nautilus (New York city) Life Assurance Companies for this region of country, respectfully invites Farmers, Artizans, and those in all conditions of life, to call on him for information on the subject.

He will issue policies in the above companies on lives, from \$100 to \$5000.

A pamphlet will be furnished, giving particulars. Call on

JAMES H. WATTS, Life Assurance Agent,

Corner Buffalo and Exchange streets, Rochester, Sept. 1, '45. Over E. Watts' Hardware Store.

SALE OF STOCK.

I SHALL SELL AT PUBLIC SALE on Wednesday, the 15th of October next at my dwelling, in Sheldon, Wyoming Co, N. Y., a large portion of my valuable stock of pure Devon cattle, consisting of Calves, Yearlings, &c., Steers, Heifers, Cows and Bulls of various ages.

One years' credit will be given on approved security, to all who wish it. E. P. BECK.

Sheldon, Aug. 20th, 1845.

BAGS!! BAGS!! BAGS!!!

THE subscriber has a large lot of Grain Bags, made of cotton and linen, manufactured in Boston, such as Farmers will be pleased with as regards quality and price. For sale at his office, over E. Watts' Hardware Store, corner Buffalo and Exchange streets, Rochester, Sept. 1, 1845. JAMES H. WATTS.

PEACH AND PLUM STONES WANTED.

THE subscribers will pay cash for large or small quantities of fresh Plum and Peach Stones at the Mt. Hope Garden and Nursery, on St. Paul street, near the Cemetery.

Rochester, Sept 1st. 1845. ELLWANGER & BARRY.

PAULER MERINO BUCKS.

40 Pauler Merino Bucks, from one of the best flocks in Vermont, for sale by RAWSON HARMON, Jr. Wheatland, N. Y., Aug. 28, 1845.

ROCHESTER PRODUCE MARKET.

Wheat	87 a 90	Hay, ton	\$10.00	12 00	Eggs, doz.	8	10
Corn,	37 1/4 a 40	Wood, cord,	2 00	2 50	Poultry, lb.	5	6
Barley,	30	Salt, hbl.,	1 13	1 14	Tallow,		
Oats,	32	35	Hams, lb.,	5	6	Hops,	10
Flour, (rect.)	4 25	Pork, lb.,	10	00	Wool,	25	32
Beans,	75	1 00	" cwt.	3 25	3 75	Sheep Skins,	50
Apples,	25	50	Beef, "	3 00	3 50	Green H'ds., lb.	3
Potatoes,	12	25	Lard, lb.,	6	8	Dry H'ds.,	6
Cloverseed,	6 00	6 50	Butter,	10	12	Calfskins, pr'n.	5
Timothy,	1	1 25	Cheese, cwt.	4 00	6 50		

Aug. 30.

MACEDON NURSERY.

THE accounts of the late firm of "Thomas & Smith" Macedon, are left with the subscriber.

The business will be conducted as heretofore, upon the principle of propagating only select varieties of proved fruit.

A fine stock is now on hand, which will be much increased by the superior kinds recently fruited.

Several hundred fine trees of the May Bigarreau, the earliest of all good cherries.

8 mo. 28th 1845.—2 t.

WILLIAM R. SMITH.

IMPORTANT TO FARMERS.

ROGERS' SPRING-STEEL CULTIVATOR TEETH.

THE Subscriber has made arrangements with the Manufacturers of this superior agricultural instrument for a supply, and will keep them constantly for sale at 69, Exchange-street, opposite the Rochester House.

The following Certificates have been kindly volunteered by those who have used the Teeth.

Rochester, June 13, 1845.

A. C. WILSON.

"Having used Rogers' improved Steel Cultivator Teeth, we have no hesitation in saying, that we believe them to be a great improvement for preparing fallow grounds. We feel confident, that with the Improved Cultivator we can prepare our ground for wheat better, and with one-fourth less expense than with the Plow and Harrow, in the old way. With the Cultivator, we plow our ground but once, harrow it lengthwise of the furrows once, with a sharp fine harrow, and then put on the Cultivator, having no further use for either plow or harrow. We find, by the use of the Cultivator that we are enabled to destroy the blue grass, which has been so injurious to our wheat crop, and which could not be killed by plowing, and are enabled to get more benefit from our clover by letting it get a larger growth before plowing, and having it remain under, until it has rotted.

Sylvanus Fisk,	Stafford.	Samuel March,	Stafford.
Harry Lathrop,	do.	John Thwing,	La Roy.
Noah Randall,	do.	W. P. Benham,	Byron.
German Lathrop,	do.	B. F. Cash,	Le Roy.
Clark Daniels,	do.	O. Bassit,	Bergen.
L. A. Baker,	do.	Reuben Cash,	Le Roy.
J. R. Moss,	do.	Russell Kellogg,	Stafford.
I. N. Moss,	do.	Jacob Bushman,	Byron.
Erastus Cash,	South Byron.	Warren C. Rawley,	S. Byron.

ELECTION NOTICE.

A GENERAL ELECTION is to be held in the County of Monroe on the TUESDAY succeeding the first Monday of November next; at which Election the following officers are to be chosen A Senator for the Eighth District.

Three Members of Assembly for said county.

Also, the sense of the people in relation to the proposed Convention will be taken.

Also, the proposed Amendments to the Constitution of this State will be submitted.

The following is the official notice from the Secretary of State. HIRAM SIBLEY, Sheriff. Dated Sheriff's Office, Rochester, July 26, 1845.

STATE OF NEW YORK: }

Secretary's Office, Albany, July 23, 1845. }

To the Sheriff of the County of Monroe:

Sir,—Notice is hereby given, that at the next general election to be held on the Tuesday succeeding the first Monday in November next, the following officers are to be elected, to wit:

A Senator for the Eighth Senatorial District, to supply the vacancy which will accrue by the expiration of the time of service of Gideon Hard, on the last day of December next.

Also, the following County Officers, to wit: Three Members of Assembly.

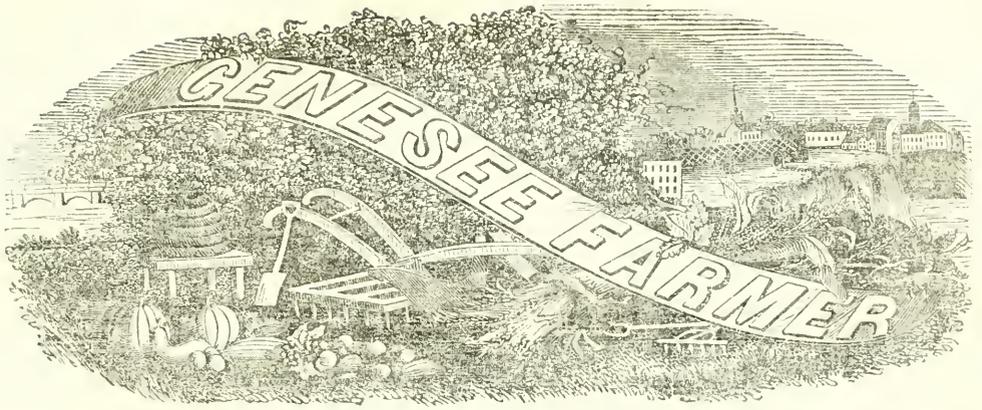
And at the same Election, the sense of the People of this State will be taken in relation to the proposed Convention, specified in the Act; Chap. 252, entitled "An Act recommending a Convention of the People of this State," passed May 14, 1845.

And also at the same Election the following proposed Amendments to the Constitution of this State will be submitted to the people, viz:

- "In relation to the removal of Judicial Officers."
 - "For the abrogation of the property qualification for office."
- Yours respectfully, N. S. BENTON, Secretary of State.

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VOL. VI.

ROCHESTER, NEW YORK. OCTOBER, 1845.

NO. 10.

PUBLISHED MONTHLY.

BY B. F. SMITH & CO, PROPRIETORS,
At the Seed Store, Front Street, nearly opposite the Market.

DANIEL LEE, EDITOR.

FIFTY CENTS A YEAR:

Five copies for Two DOLLARS; Eight copies for THREE DOLLARS. All payments to be made in advance. Money and subscriptions, by a regulation of the post-master general, may be remitted by post masters free of expense. Address B. F. SMITH & Co.

STATE AGRICULTURAL FAIR.

If the readers of this paper expect the editor to give a full and labored account of this great RURAL FESTIVAL, they will be disappointed. We have had too much to do in a business way, in connection with the proceedings of the N. Y. State Agricultural Society, for the last week, to command a moments time for taking private notes of the many things worthy of public attention. Taking the exhibition as a whole, it excelled any previous one made in this state; and Mr. Quincy (who is a judge of such matters in Massachusetts,) said that this was the largest and most attractive Fair ever witnessed in America.

From the number of badges and tickets sold, we estimated the whole number of persons that entered the gates, at 45,000, in the two days. Without going into details, the reader shall know in brief what most interested the writer of this: It was the fact that hundreds and perhaps thousands of plain common farmers, their wives and daughters, came forward as successful competitors for nearly all of the \$3000 awarded in premiums.

The lively interest taken in the agricultural progress of the year, by this class of our fellow citizens, inspires hope and confidence in the minds of those, who are giving their days, and their nights to the careful study of what will best promote the improvement of rural industry in the state of New-York. It is a great mistake to suppose that the extensive operations of our state and county agricultural societies, are carried on without a great deal of effort on the part of the few, who for the sake of the Cause, are willing to take the laboring oar. The officers of the state society for the last three or four years have had abundant reason to rejoice at the signal success which has crowned their gratuitous, patriotic and well directed efforts to improve both the soil and its cultivators in the Empire State. That there are no defects in the proceedings of the society is not pretended by any one. It would be strange in-

deed if among so many committees for judging of domestic animals, the products of the dairy, of the loom, of farming implements and domestic manufactures, there should be no oversight committed, and no unintentional wrong done to individual merit. Instances of this kind will occur, and are the subjects of regret to the Executive Committee.

It is due to Mr. B. P. JOHNSON, President of the society, to say that much of the good order that prevailed during the excitements of the Fair, is due to his untiring attention to every thing calculated to preserve quiet and harmony. Among the tens of thousands present, there was no disturbance, and scarcely an intoxicated man to be seen any where in the neighborhood of the exhibition. Mr. J. is a strict temperance man, and we admired more than fine Durhams, the happy fruits of celebrating a grand State Jubilee on temperance principles.

The Mayor of the city of Utica, Mr. Wetmore, the sheriff of the county, and the citizens who undertook to be at the expense of fitting up the grounds, acquitted themselves to the admiration, not to say the satisfaction, of all.

Great credit is due to Dr. A. Thompson, of Aurora, for the classical taste and architectural skill displayed by him in getting up a beautiful "Floral Hall," which won the admiration of all visitors.

At the close of the able address delivered by Mr. Quincy, Hon. John A. King, of Queens Co. offered the following resolution, which was unanimously adopted:

Resolved, That the New York State Agricultural Society are under great obligations to Hon. JOSIAH QUINCY, Jr. for the able and eloquent address this day delivered to the Farmers of New York, and that he be requested to furnish the Society with a copy of the same for publication in the Transactions of the Society.

On motion of H. S. Randall, of Cortland Co.

Resolved, That the Society are indebted to the Mayor and citizens of Utica for their spirit and liberality in carrying out all the preparatory arrangements for the State Fair, and their hospitality in receiving and entertaining the immense multitude, who could not be accommodated in the hotels.

Resolved, That we tender our thanks to the ladies and gentlemen of Utica, who gave us their aid and exertions in preparing and arranging the halls of exhibition on the show ground.

Resolved, That we tender the thanks of the Society to Dr. Alexander Thompson, of Aurora, for his unrequited services preparatory to and during the Fair in the direction & arrangements of Floral Hall, the designs and decorations of which elicited the universal admiration of the thousands in attendance at the Fair.

Resolved, That the Society take great pleasure in testifying to the unremitted efforts of T. S. Faxton, J. Butterfield, and the citizens of Utica generally, in carrying out most successfully the pledge given by the gentlemen named, on behalf of the citizens.

Resolved, That we tender the thanks of the Society to P. V. Kellogg, Sheriff, and to his deputy Mr. Johnson, and the others in his employ, for the admirable arrangements by which complete order was preserved on the ground.

Resolved, That the thanks of the Society are justly due and

most cordially tendered to the officers and superintendents of the several rail road companies from Albany and Troy to Buffalo, for their liberality in transporting animals for the Fair free of charge, and visitors at reduced prices.

B. P. JOHNSON, Pres't.

L. TUCKER, Sec'y.

LECTURE BY THE EDITOR.

We copy from the Onondaga Standard, the following synopsis of the Editor's remarks at a public meeting in the village of Syracuse, made from memory, by Mr. Cooper, because, (what is very unusual in such newspaper reports,) Mr. C. has happily given the *main points* of a discourse that occupied an hour in the delivery. We shall take another occasion to speak of "Union School," its Chemical Laboratory, and able Principal, as they deserve. Acting in concert with that excellent, practical, and scientific farmer, Mr. Geo. Geddes, Mr. Cooper has commenced a series of experiments in the culture of corn, which, we trust will be extended to the culture of wheat and other plants, that promise the most useful results.

There are a few statements below, that require a word or two of explanation.

1st. "The 97 per cent of the constituents of all plants found in the air," would, perhaps, be better expressed, by saying that from 85 to 99½ per cent of all plants is composed of carbon, oxygen, hydrogen and nitrogen, which are terrestrial bodies that abound in the atmosphere. A potatoe has only one per cent of mineral earthy matter in its composition. According to Sprengel, 100lbs of wheat straw, perfectly dry, contain 3½ lbs. of ash or mineral matter, and a like amount of dry wheat, 1 8-10th lbs. Boussingault, whom we regard as better authority, makes the former 7 per cent, and the latter, 2, 4-10th per cent. The average of cultivated plants, is not far from 3 per cent, as stated below.

2d. Of the amount of Silica (flint sand) in 100lbs. of the ashes of wheat straw, Sprengel makes it 81 per cent. Boussingault 67 per cent. We average the two, and call the proportion 75 per cent.

From the Onondaga [Syracuse] Standard.

DR. LEE'S LECTURE

On the Science of Agriculture, delivered at the Congregational Church, on the 22d inst., was one of great interest and importance. His views upon that subject were presented in a clear and lucid manner, and should have been heard by every practical farmer in the county.

He stated that mere physical labor is not sufficient, but that a knowledge of the organization of plants and their analysis and that of the soil, is required to enable the farmer to draw the greatest product from the soil for a given amount of labor; that the art of plowing, sowing and reaping may serve the purpose of wearing out a productive farm, but more knowledge is required to enable the owner to return annually to its fields the substances removed at harvest, at the least possible expense.

Plants are living beings, and the number which may be produced and brought to maturity on a given amount of land, depends upon the quantity and quality of food given them; and the quantity of food to be supplied to yield the greatest profit, depends upon the cost of the material and the value of the product.

The laws of nature are fixed and invariable. One element is not changed to another, neither can it be. Lime cannot be changed to soda, nor potash to iron.

Organized bodies are constituted of certain elements all of which are necessary to their organization.— By analysis we may ascertain what those elements are, and the relative amount of each required in such organization, and by a similar analysis of soils we may ascertain whether these elements are found there. It is important in this case to know how much of the substance of plants is drawn from the soil, and how much derived from the atmosphere, as those found in the atmosphere, need not, necessarily exist in the soil.

By experiment and analysis it has been ascertained that about 97 per cent of the constituents of all plants is found in the atmosphere, in the elements carbon, oxygen, nitrogen and hydrogen; these are constantly furnished by the burning of wood and coal, the respiration of animals, the fermentation, decomposition and decay of animal and vegetable bodies. In wheat the remaining 3 per cent is earthy matter, drawn from the soil; and is found to consist of 10 different substances, viz: silica, lime, potash, soda, magnesia, alumina, chlorine, sulphur phosphorus and iron. If there be a deficiency in any one of these elements there must be a corresponding deficiency in the product, and if either be wholly wanting, no perfect plant can be obtained. Nature is as willing to yield 40 bushels of wheat per acre as 10, provided there is no lack of material. [Here the reporter should have added, that a large excess of any one necessary ingredient, may be as fatal to the crop as the perfect absence of such ingredient. This was illustrated by saying, that to prepare human food in the form of a good hasty pudding, we must use a few *drachms* of salt to a few *pounds* of corn meal. If we reverse this ratio, and make a pudding by combining a few pounds of salt with a few drachms of meal, no child can grow well on such *daily food*. Young wheat plants are sadly injured by feeding them with the proper things, in the most improper proportions.]

If wheat be burned, one hundred pounds of the plant will produce about 3 of ashes, 75 per cent of which is silica, (common flint or sand) and this before it can be taken up by the plant must exist in a fluid state; but every one knows that flint is insoluble in water, therefore in its uncombined or simple state it is unfit for plants; some menstruum must be at hand through whose agency it may be rendered soluble. Silica is an acid, and when combined with potash or soda, the potash or soda being in excess, becomes soluble, and is then taken up, after which the vital energy of the plant disengages a portion of the potash, and the siliceous matter becomes again insoluble, forming the substance which gives to the straw a gritty feel. The liberated potash returns to the root and assists in the solution of another portion of silica, and thus a small amount of potash becomes of great service to the plant, and that small amount is as necessary to its development as the air we breathe to the continuation of life.

Farmers have been looking for some great desideratum which should render all soils equally productive, but no such thing has yet been found: one soil may show a deficiency of lime, another of potash, a third of phosphorus, and the true object of the science of agriculture is to ascertain how many, and which of the necessary elements are deficient and the cheapest means of supplying such deficiency.

He spoke of the difference in value of the same species of grass, grown upon soils constituted of

materials in proper proportion, and upon those where there was some deficiency; and to illustrate the effects of feeding plants on proper food, showed some heads of timothy, 8 or 9 inches long which he had been able to produce by furnishing a sufficient supply of such food.

He said that a state agricultural school and experimental farm are wanted, where this science may be studied, and the laws which regulate the transformation of the substances of the earth into useful plants, may be fully educed: that for the last 26 years efforts have been put forth to accomplish this end, but to no effect; that the state has amply endowed institutions for the benefit of other professions, but left the great science of agriculture alone to the care of individual enterprise.

With regard to the present effort there can be but one opinion. The physical wealth and strength of a nation must depend upon the value of its productions, and certainly none can be more valuable than those of agriculture; and since it is an object of wise legislation to develop the resources of the country, is it not the duty of the Legislature to encourage the efforts of that class constituting the strength of the nation, in their efforts to understand the hidden laws of nature? The state of New York possesses all the elements of agricultural greatness, yet no one will assert that its productions have yet attained the maximum of its power to produce.

Individual effort has accomplished much, but there is required a concentration of effort which can be obtained in no way so easily or justly as by the patronage of the State Legislature.

F. COOPER.

Union School, Camillus, July 25, 1845.

QUINCE TREES, SALT, PLASTER, &c.

OVIN, September 15th, 1845.

MR. EDITOR:—Will you permit me to ask you through the Farmer, a few questions, which you will have the goodness to answer.

1st. Will Peach or Plum Stones produce the same kind of fruit as the parent stock, and what the process of planting.

2d. Can you tell me the cause of decay in the quince, by the small branches dying, for the first I have discovered this season; and is there any remedy by washing the trees with any liquid, &c.

3. How, or to what should salt be applied, and in what quantity; what is your opinion on this subject.

4. Will plaster be more beneficial sown on wheat or grass in the fall or spring.

5. Do you, or do you not think it makes a difference with respect to the age or size of the moon, when wheat or plaster is sown.

A. B. D.

ANSWER.

1st. Peach and plum stones "will not necessarily produce the same kind of fruit as the parent stock," although the chances are in favor of obtaining similar seedlings.—The pits may be planted in a bed, nursery, or where one wishes to have the trees come to maturity. We prefer planting in autumn, after the fruit is ripe, as the most natural season; covering the stones only two or three inches, that they may freeze; giving them at the same time the benefit of a deep, fine, mellow soil.

2. We have paid some attention to the alarming malady which affects so many quince bushes or trees, in Western New York. The disease seems to be analogous to the blast in pear trees. There are some plausible theories advanced by writers on this subject, which are not altogether satis-

factory. Some regard the evil as the work of insects, and others, with perhaps, a better show of reasoning, treat it as the result of frost acting on the *immature* wood of the previous or present season. We can throw no new light on the subject.

3. In regard to the use of salt as a fertilizer, there is no crop which will not be benefited by the judicious use of common salt in combination with lime. On limestone soils it may happen that no additional lime is needed. Mr. S. M. Brown of Elbridge, Onondaga County, informed us a few days since, that he harvested over 400 bushels of superior white flint wheat, the seed of which came from Gen. Harmon, on 8 acres, this season; the large yield being ascribed to the use of 3 bushels of salt per acre, as a top dressing. We are not sure whether this salt was sown in the fall or spring, but shall have an opportunity to learn, as Mr. B. is President of the Onondaga A. Society, before which, the Editor is soon to deliver an address.

Salt is a compound of two simples—Chlorine and Sodium—both of which are found as constituents of most cultivated plants; and as salt is very soluble in water, these elementary constituents of plants are very prone to be washed or leached out of the soil. When farmers come to regard as they should do, all their plants as *living* things, which must be fed properly to do well, then they will begin to salt them a little, and often. The salts found in the liquid excretions of all animals, coming from their food, and their food taking them from the soil, if the soil lack them, their supply of food must be wanting in an equal ratio.

4. Plaster is a salt, and both on wheat and grass it should be sown in the fall, if on hand. But it had better be sown in the spring than not at all. Note well that you must drain all wet land before applying common salt or gypsum.

5. "The age and size of the moon" have little or nothing to do with the sowing of wheat and plaster.

AGRICULTURE IN WESTERN NEW YORK— THE CENSUS.

Many eastern papers express surprise, that several of the best farming counties in Western New York should be on the *decline* in point of population. This fact is worthy indeed of our consideration. "Coming events cast their shadows before."

We have long contended that the farmers of Western New York were, unconsciously, violating a fixed law of Nature—that the result of this violation must be disastrous, not only to the cultivators of the soil, but to the whole community. According to the late census, Genesee county contains fewer people by 1079 than it did in 1840.—Twelve towns in Ontario county have lost 765. The comparatively new county of Chautauque has also lost 1375 of its population within five years. In all western counties, there are more or less towns whose rural population has greatly diminished. Why should farming in this part of the State be less profitable and attractive now, than at any former period? Our eastern cities and markets are expanding with unabating rapidity.

There is a potent reason why Scipio, and 200 other towns in this State, are losing that best of all wealth, their industrious, and upright inhabitants. It is with unaffected regret, that we impute much of this growing evil to a lack of foresight and wisdom on the part of New York politicians, legislators, and the farmers themselves.—We have long been pained to witness how few public men

there are among us that seem to care a straw whether one tenth or one half of the hardy tillers of the earth are compelled to emigrate from this their native State, and become the powerful and successful rivals of their friends here, or not. Political honors, sordid avarice, and supreme selfishness in every form, seem ready to usurp the place of all noble ambition to advance the great industrial interests of the Empire State. The acquisition of property at the expense of other men's labor, and not the production of wealth, by honest manual toil, is the leading idea of the present time. The laws of Providence that govern the formation of wheat and other grain, the growth of roots, grass, and domestic animals, are treated with derision. It is true, the Legislature of New York, and its State officers, can drive tens of thousands of honest agriculturists away from its partially exhausted fields. This they have done already. But the time will soon come when the claims of rural industry will be able to obtain a hearing before the law-makers of the State. Public servants will have to give a good and sufficient reason *why* not a bushel of Western New York grain, except wheat is permitted to pass through the Erie Canal to tide water. Or if it do go forward, *why* it is subjected to so high a toll as to consume a little more than all the profits on coarse crops, like oats, barley corn, peas and potatoes.

Prominent among the causes that drive Western New York farmers out of the State, is the fact that the Canal Board virtually prohibit them from sending to tide water corn, barley, peas, oats, potatoes, and hay, which are the leading staple articles of this section. One bushel of wheat exhausts the soil of some of its most valuable constituents, more than three bushels of corn. If we compare the effects of wheat with those of other crops, the disparity is still greater, showing the injurious influence of continuous wheat cropping. A wise system of *rotation* would remedy this evil. But this is impracticable so long as the Canal Board will not allow any coarse grain to go to New York, to pay for the western farmer's tea, coffee, sugar, nails, and dry goods. It is now 20 years since the Erie Canal was opened to lake Erie. During all this period, the tolls have been maintained up to the prohibitory mark against most of the products of Western New York farmers. This is strikingly illustrated by the fact that, while the crop of corn is equal to that of wheat—and at the west it is much larger—the revenue from corn and meal is only as *one to one hundred and fifty* when compared with the income from tolls on wheat and flour. The toll on corn and meal last year was not far from \$5,000, while that of wheat and flour was in the neighborhood of \$350,000.

A strict analysis of the census returns of Chautauque county will show a loss of rural population in five years, of nearly 2,000, as the village population has increased.—Along its 40 miles of lake coast, that county has some 250 square miles of corn land, not equalled by a like body in the State. With tolls at three cents a bushel, instead of *eight*, not only Chautauque, but six or eight other counties could send corn to New York market. But as the matter now stands, the treasury loses the revenue, New York, the trade, and this State, its most valuable citizens, who emigrate to the wheat lands at the West.

The farmers of Chautauque, Wyoming, Allegany, Livingston, Erie, Niagara, Orleans and Monroe, send no small amount of oats, barley, hay, potatoes and corn to the cities and villages along the canal for a market. Heavy articles

are now sent from Buffalo to New York, and others from New York to Buffalo, at 12 cents per hundred lbs. over toll, or at \$2,40 per ton. If the Canal Board will reduce the toll on oats to 2 cents a bushel, they will bear transportation. For 3 bushels will weigh only 100 lbs., and as 100 lbs. will go from New York to Buffalo at 12 cents, add 6 cents toll, and you make the whole expense of freight on 3 bushels, 18 cents. This would not only largely increase the revenue of the canal, so far as corn and oats are concerned, but it would prevent the injury of the soil, by excessive wheat culture. We wish every farmer to understand that, when oats are worth 36 cents on the sea board, they should command at least 30 cents to send there on all the canals in the State.

The farmers in Western New York that raise a surplus of hay, potatoes, and apples, should be allowed to send these weighty and cheap articles through to tide water, at a dollar a ton. At present, they pay little or no revenue. A boat will take 60 tons of pressed hay—we saw them pressing it ten miles north of Rome, for New York, a few days since. In such a cargo, the State would get \$60, beside \$14 on the bare boat. Every man knows that \$74 is better than no toll, to say nothing of the toll on back freight. We have got to pay for the canal—keep it in repair—pay the lock tenders, and all, whether we use it or not. If it be sound policy as we believe it is, to allow Wisconsin *lead*, Ohio and Pennsylvania *coal*, and Onondaga *salt* to pass through the canals of this State at a low toll, why not also increase the income of the State, by inviting our own citizens to use it, by sending their corn, oats, barley, peas, potatoes, and even turnips and hay to market?

If the Erie canal was really made to use, common sense dictates that the rate of tolls on agricultural staples shall be so arranged that it can be *used*. For 20 years the tolls have been *prohibitory* against three fourths of the agricultural freight of Western New York. They are not less a perfect bar to the passage of a large amount of western tobacco, hemp, pork, lard, and corn, that now reach New York and Boston *via* New Orleans.

CORRECTIONS.

MONROE COUNTY FAIR—The Fair will be on *Tuesday the seventh of October*, instead of the 8th as printed in the hand bills and other notices.

The Fair of the American Institute will commence on the *sixth of October*, instead of the 13th as named in our September number.

ACKNOWLEDGMENT—Our thanks are due to F. Childs, Esq. of Richmond, Va. for the interest he has taken in extending the circulation of the *Farmer*; will our friends in other sections of the country follow his example by sending us a long list of names, with pay in advance?—we shall see.

THE AMERICAN SHEPHERD.

This long expected work has come to hand. It fully meets our high anticipations. We cannot now notice this book as it deserves, but shall have frequent occasion to allude to its contents hereafter. Both the Author L. A. MORRELL, of Tompkins Co., and the publishers HARPER & BROTHERS, seem to have spared no reasonable pains in procuring engravings, to illustrate the form and organic developments of the various breeds of Sheep. The style is plain, and the subject always rendered intelligible to common plain farmers, while there is a large amount of truly scientific knowledge on Sheep husbandry communicated to the reader.

The book should be in every Wool growers library; and in the library of all our Common Schools.

PAULER MERINO BUCKS.

40 Pauler Merino Bucks, from one of the best flocks in Vermont, for sale by RAWSON HARMON, Jr. Wheatland, N. Y., Aug. 28, 1845.

For the Genesee Farmer.

DEVON CATTLE—ONCE MORE.

MR. EDITOR—In my few remarks on Devon Cattle, published in the July No. of the Farmer, I stated that the first Devons which I got were the South Devons, from King's stock, of Long Island, which was a mistake. I procured them from G. W. Featherstonhaugh, Esq., who informed me that they were such. When at the State Fair, at Utica, on 17th, I had the satisfaction of forming an acquaintance with J. A. King, Esq., who informed me that Mr. F. procured the Devons from his father, and that they were the pure North Devons, imported by him directly from the celebrated Coke, of Norfolk, Eng.

It was not until recently that I became acquainted with the general characteristics of the South Devons, and find that they possess few of the peculiar traits which distinguish the North Devons from all others. Those which I first had were North Devons, but were of a distinct family from my second purchase, and were different in many points of excellence. I crossed them, and sometime after made a second change, by breeding from Mr. Dibble's splendid Bull, which made a great improvement in many important points.

W. GARBUTT.

Wheatland, Sept. 25.

INDUSTRY AND ECONOMY.—The Indiana Farmer and Gardner tells the following simple and no doubt truthful tale, which admirably illustrates the certainty of competence and independence, if the humblest individual will but practice rigid economy in keeping down his expenditures, while he is diligent in the creation of property by honest industry:

About eight years ago a raw Dutchman, whose only English was a good natured yes, to every possible question, got employment here as a stable-man. His wages were \$6 and board; that was \$36 in six months, for not one cent did he spend. He washed his own shirt and stockings, mended and patched his own breeches, paid for his tobacco by some odd jobs, and laid by his wages. The next six months, being now able to talk good English, he obtained \$8 per month, and at the end of six months more had \$48, making in all for the year, \$84. The second year, by varying his employment—sawing wood in winter, working for the corporation in summer, making garden in the spring, he laid by \$100, and the third year \$125, making in three years \$309.

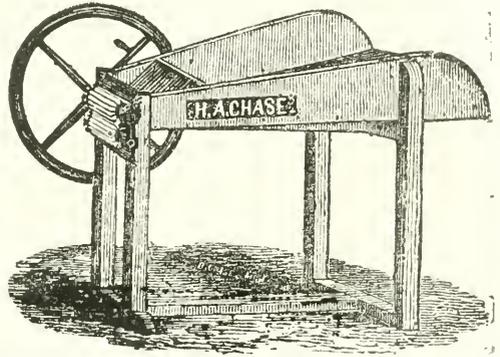
With this he bought 80 acres of land. It was as wild as when the deer fled over it, and the Indian pursued him. How should he get a living while clearing it? Thus he did it: He hires a man to clear and fence ten acres. He himself remains in town to earn the money to pay for the clearing. Behold him! already risen a degree, he is an employer! In two years' time he has 20 acres well cleared, a log house and stable, and money enough to buy stock and tools. He now rises another step in the world, for he gets married, and with his amply built, broadfaced, good-natured wife, he gives up the town and is a regular farmer.

In Germany he owned nothing and never could; his wages were nominal, his diet chiefly vegetable, and his prospect was, that he would be obliged to labor as a menial for life, barely earning a subsistence, and not leaving enough to bury him. In five years he has become the owner in fee simple of a good farm, with comfortable fixtures, a prospect of rural wealth, an independent life, and, by the blessing of Heaven and his wife, of an endless posterity. Two

words tell the whole story—Industry and Economy. These two words will make any man rich at the West.

SANFORD'S PREMIUM STRAW CUTTER.

This Machine took the FIRST PREMIUM at the State Fair at Utica, September, 1845.



TO FARMERS AND OTHERS.

THE subscriber is now manufacturing and offers for sale, SANFORD'S PERFECT STRAW CUTTER, which has now been fully tried and proved by competent judges to be far superior to any other similar machine in the State. Some of the best farmers in this and adjacent counties have witnessed its operation, and have certified to its great value. It cuts straw or hay with great rapidity, and very fine. Its cheapness also, compared with other straw cutters, should not be forgotten.

During a recent meeting of several of the officers of the Onondaga co. Agricultural Society, held in this village, they were invited to examine it and see it in motion, and all, with great unanimity, approved and recommended it to the public.

The following is the certificate of the President of the Onondaga co. Ag. Society.

TO THE AGRICULTURAL PUBLIC.

I recently witnessed the operation of "Sanford's Perfect Straw Cutter," sold by H. A. Chase, of the American Temperance House, Syracuse, and most cordially recommend said machine to all persons wishing to cut straw, hay or stalks, for feed to be given horses or cattle. Simple in its construction, least liable to get out of order by use, and for ease to the operator, and despatch with which the work is done, it cannot be surpassed, if equalled, by any machine, constructed for the same purpose, that I have ever seen. Its operation is only to be seen to be admired, and the machine and its principle approved.

SQUIRE M. BROWN,

President of Onondaga co. Agricultural Society.

Elbridge, July 21, 1845.

Other recommendations might be added, but it is deemed unnecessary. The machine speaks for itself. Those wishing a superior straw cutter, are invited to call at the American Temperance House, on

H. A. CHASE.

Syracuse, September 5th, 1845.

For sale by B. F. SMITH & Co., at the Rochester Seed Store, Front Street.

THRASHING MACHINE COVERS,

WARRANTED water proof, and not to crack, constantly on hand and made to order, by the subscriber.

Orders through the Post Office will be thankfully received and promptly attended to.

Manufacturer of awnings, bags &c. No. 5, second story Curtis' Block, Rochester. E. C. WILLIAMS.

MACEDON NURSERY.

THE partnership formerly existing between Thomas & Smith having been dissolved, orders for Fruit Trees, and Ornamental Shrubs and herbaceous perennial Plants, will be received by the subscriber. The list of fruits cultivated for sale having undergone a thorough revision and new grounds extensively occupied, many of the varieties can be furnished only in small trees till another year; hence when orders cannot be fully supplied, the balance of remittances will in all cases be at once returned to the purchaser.

Address, post paid,

J. J. THOMAS,

9mo. 1, 1845.

[2m]

Macedon, Wayne co., N. Y.

SALE OF STOCK.

I SHALL SELL AT PUBLIC SALE on Wednesday, the 15th of October next at my dwelling, in Sheldon, Wyoming Co., N. Y., a large portion of my valuable stock of pure Devon cattle, consisting of Calves, Yearlings, &c., Steers, Heifers, Cows and Bulls of various ages.

One year's credit will be given on approved security, to all who wish it.

E. F. BECK.

Sheldon, Aug. 20th, 1845.

From the Rochester Daily Democrat.

SKETCH OF JOSIAH QUINCY'S ADDRESS.

Mr. Quincy addressed himself to the President and gentlemen of the New-York Agricultural Society, and remarked that if there was any position in this world which should inspire a man with eloquence, it was that which he now occupied—the position of a speaker on the subject of agriculture. He was standing in the centre of the agricultural population of the greatest State of our Union. Before him the lovely valley of the Mohawk was stretched out in the distance—a valley celebrated in history, and rendered glorious in song. Before him were thousands and tens of thousands, who had felled the forest and made the wilderness bud and blossom like the rose. He stood amidst the evidences of unequalled skill and industry. Beneath him was a soil, rich in its products; and above him a Heaven which kindly watched over all. We stand in the great temple of Agriculture—a temple at the uprising of whose columns, the morning stars sang together. It is a temple not made with hands, but is as high as the heavens and as broad as the earth. But alas! the age of inspiration is passed, and he never rose to address an audience when he felt more sincerely to ask indulgence than now that he was about to address the members of the New-York State Agricultural Society.

He thought that the agricultural society had made a great mistake; for he thought it an absurd thing to send to Massachusetts for a man to teach New-York Farmers how to manage their farms. He wished to be understood at the outset of his remarks, that he did not believe that what he should say, would make two blades of grass grow where one did before, or add ought to the product of wheat or corn. All these things must go on in their old fashioned way, for aught he had to say.

He proceeded, however, to remark, that all must feel that the Farmer is more than the Farm, and the influence of his vocation upon the mind of more consequence than the vocation itself.

The position of the American Farmer is one of immense importance, and the true influence of that position should be understood. It should be understood, that the individual may know what course to pursue. To the public it is of the highest importance; for every thing which relates to agriculture has an influence upon the State.

"Princes or Kings may flourish or may fade;
A breath can make them, for a breath has made;
But a bold yeomanry, our country's pride,
If once destroyed, can never be supplied."

Mr. Q. said that many farmers were dissatisfied with their position, and often contrasted their condition with that of the successful merchant and politician. This is wrong. The farmer should be content to enjoy the ordinary blessings of life, and to transmit the enviable heritage of industry and a good name to his posterity.

What, he asked, is the great object of pursuit of man on earth? It is happiness—happiness here and forever; and the great question is, whether agricultural life offers as great opportunities of happiness as any other? To be happy is, unquestionably, the great object of life; and the greatest blessing that the external world can give is Health. "Health of body," says the son of Sirach, "is above all riches;" and where best is health to be found? Look around you, and on the countenances of the tillers of the earth you will see bright eyes and blushing cheeks, as well as strong muscles and brawny arms. These tell us that the first of earth's blessings belong to those who till upon the earth's bosom. But health is not always appreciated. Very many prefer wealth to it; and it is not unfrequent to hear the farmer complain that the merchant sometimes makes more money in one year than he can in a lifetime, and inquires whether that vocation is most to be desired which is thus slow in accumulating wealth? But what price does the merchant pay for this rapid accumulation of wealth? He sacrifices health of body and serenity of mind. Follow him through the crowded streets of our commercial marts. Trace him to his counting room or his workshop, and learn the difficul-

ties which he encounters. For a time, his health continues; but premature decay is often his portion; and what is worse, with his health, vanishes his peace of mind. Those engaged in hazardous vocations do, he conceded, sometimes get rich rapidly. But there is great risk. When the farmer plants his seed he expects an abundant return in kind; but the merchant often "sows the wind and reaps the whirlwind"—a very bad system of agriculture.

Few merchants can carry on their business successfully upon their own means. They must borrow; and Solomon says, "The borrower is a servant to the lender." If success comes, does it often come quickly? Possibly years of labor may be rewarded with riches; but how seldom is even this seen? In the great commercial cities of the land, at least 90 per cent. of all engaged in mercantile pursuits, fail. The fortunate holder of a lottery prize is placarded at every corner of your streets; but what becomes of the ninety and nine who draw blanks?

After all, a farmer may ask, what is the advantage of great wealth? And what is wealth? "A man is as well off," said a great New-York capitalist, "who is worth half a million, as if he were rich!" Punch says that when Rothschild was told that Louis Phillipe's income was but \$50 a minute, his eyes filled with tears, and he remarked, "I was really not aware of the King's destitution!" "We will conquer all India," said Perus to his Prime Minister; "we will then cross over to Asia and conquer that. We will then find other nations to conquer; and when all are subdued, we will then sit quietly down and enjoy ourselves." "But why," said the Minister, "may we not now sit down and enjoy ourselves without going to so much trouble?" It was the prayer of an inspired sage, "give me neither poverty nor riches," and the great Bacon said, "seek not proud riches, but such as you can get honestly, spend frugally and leave cheerfully." Could there be a better definition of contentment found? "Tell your master," said a Roman General to a Persian ambassador, who found him cooking his frugal meal with his own hands, "Tell your master, that all the gold in Persia could never bribe a man who is content to live on turneps;" true as it was patriotic. If a man would be happy, he must have limited desires.

Health of body and contentment of one's state, is all that nature can give, and to say that agriculture is best adapted to secure this result, is but saying what has been a thousand times said before. If you have these certain rewards, you are rich. You need not covet the riches of the merchant. The amount of premium is in proportion to the risk run.

All men wish to be esteemed, and all should desire to be useful. Who more than the farmer, can be gratified in both? The great mass of the human family must be farmers: and upon them rests the destiny of the nation. They have the power to give direction to those upon whom is devolved the immediate guardianship of our institutions. To do this right, it is desirable that they should be intelligent, for the continuance of our institutions depends upon the virtue and intelligence of the people. If a nation would be free, it must be first intelligent and virtuous. The farmers hold, by their numbers, the gift of office. If they distribute these gifts discriminatingly, our Republic will long continue. If they play falsely, they will find, when it is too late, that they have sold their birthright, and have no room for repentance.

But it may be said that although collectively Farmers have power, individually, they are of little value like the ocean; in its combined majesty, it has power to bear the mighty fleet, but in isolated drops, it is of no service.

Some find fault that Farmers are not sufficiently noticed and admired. But all such should remember that notice and admiration are not essential to happiness. Still even here, farmers have as little to complain of as any other class of community. Almost every Chief Magistrate has been a Farmer either before, during, or after his elevation. We have had the Farmer of Mount

Vernon, the Farmer of Monticello, the Farmer of the Hermitage, the Farmer of Ashland, the Farmer of North Bend, the Farmer of Tennessee, the Farmer of Marshfield, and the Farmer of Lindenwald; thus proving, that although all Farmers cannot be Presidents, all Presidents must be Farmers.

In Agricultural life, continued Mr. Q., there are very great opportunities for usefulness. When you place yourself in the ground, you know not the extent of its product; but when you sow the seeds of virtue, you are sure of an abundant return. One hundred years ago, there lived in Boston, a poor Tallow Chandler—wise and honest. It was his custom every morning, to repeat this text: "See a man diligent in business, he shall stand before Kings." This seed was sown in good ground. His youngest boy was "diligent in business," and he did "stand before Kings." He snatched the lightning from the clouds, and cast sceptres from the hands of Kings.—On his death bed, he said that to his father's precepts, he attributed his success in life. He caused a monument to be reared to that father's memory; but his noblest monument was his son's character. The example which he gave of thrift and diligence, has induced thousands to imitate his example; and yet unborn millions will testify to the benefits of a single scripture text upon the mind and character of Benjamin Franklin.

Mental improvement is essential to the happiness of a Farmer. In my ideal of a Farmer, is included more than mere reaping of fields and filling of barns. He did not expect a Farmer to be learned in what is not useful. But if he enjoys health, let him know something of the admirable machine which is thus kept in healthful operation by an Almighty hand. Let him know something of the physiology of the vegetable world, and every blade will speak to him of the beneficence of the Creator. It is in the power of every man to devote a portion of his time to these sublime pursuits. It will make his walks pleasanter and his flowers sweeter.

Nothing, continued Mr. Q., is more important than mental culture, except moral discipline. Every condition of man involves trial, but not in the same degree. It is not from every condition of life that the narrow gate is entered through the eye of a needle. There are comparatively few temptations in agricultural life. It is a life which rests upon no man's promise, but upon His who hath promised summer and winter, seed time and harvest.

And while free from temptation, such a life gives complete scope for the performance of all those duties which make men better and happier. Every man cannot render himself conspicuous in the eye of the world, by rendering great service to his country. But it is not they whose presence draws forth the shout of the multitude, who alone are useful. God approves the services of the venerable Patriarch whose presence draws tears from the eye, and blessings from the tongue of those who have felt his unostentatious acts of kindness.

The farmer, like the patriarch of old, stands at the head of his family. When the Great Law Giver led his chosen people out of bondage and established them in Judea, all His dispensed institutions proved how much He thought of the influence of agriculture in forming human character. To remember and love Him, and rejoice before Him on national anniversaries and festival days, was the great command. The second was like unto it—kindness to the stranger and the fatherless. Nor was the brute forgotten. The chosen people were directed to remember them when they should gather in their fruits, and not to "muzzle the ox that treadeth out the corn."

The scenes which surround the Farmer, cannot but lead his mind upward. The high mountains—the lovely valleys—the green fields and the dancing brooks—all cheer him on his joyous pilgrimage. The glorious sun sends his rays to the millions of the tillers of the earth, to enrich their toil, and to cheer them on in their career of happy contentment.

The religious feeling is no where so naturally produced, as amid the rural scenes with which the farmer is surrounded. The Shepherd boy of Israel, while keeping

his father's flocks, was filled with admiration of God's munificence, and exclaimed, in holy rapture—"What is man that Thou art mindful of him, or the son of man that Thou regardest him?" Veneration and love bursts spontaneously from his lips; and when all wrapped in holy gratitude, he exclaimed, "The Lord is my Shepherd; I shall not want." But anon, his voice comes to us from the camp and the tented field,—from the palace and the throne; but in a tone how altered! The inspiration of the shepherd does not follow him. The remorse of conscience and the despair of guilt are there; and as he remembers his joyous pastoral life, well might he exclaim—"Oh! that I had the wings of a dove that I might flee away and be at rest!"

Nevertheless, some of my hearers may say—"Well, that is all very poetic; but I want to be rich. That is the success at which I aim, and I never can be happy as a Farmer." No, nor you never could be happy in any vocation. How could you be happy while you are envious, avaricious, ambitious? You have no more chance to be happy, under any circumstances, than were the envious, avaricious and ambitious angels who rebelled and were cast out of heaven. The inspired penman summed it all up in a few words—"With contentment there is great gain."

The agricultural life, said Mr. Q., is one eminently adapted to produce human happiness and virtue. But he should despise no other calling. Despise not the wealth of the merchant. It has been earned at a cost which it is impossible to estimate. While the farmer rests quietly after his day of toil, the sleep of the merchant is disturbed by overwhelming fears. The rewards of your labor is sure. You know that so long as God's promise lasts, you are safe; while he knows that a "change of times"—the slightest interruption in the wheels of commerce, may engulf him in irremediable ruin and bankruptcy.

Envy not the student. His pale cheek shows at what expense his knowledge is obtained. He is shut up in the smoky cabinet or cloister, while you enjoy the pure breezes of heaven.

Envy not the distinguished statesman. His name may be in every mouth; but envy and malice follow him. And he feels that should he attain the highest stations, he will make hundreds of enemies for every office it is in his power to bestow.

The situation of the Farmer is that in which the Almighty placed his people in their days of comparative innocence, and to that situation many of His laws refer; and when in the fullness of time, the Messiah came, it was to the shepherds that his advent was announced, by a chorus of angels. It has been honored as the choice of the great and good of all ages. It was chosen by the Almighty for his people under the old dispensation, and they were the earliest recipients of his favor under the new. Agriculture conduces to health and competence; and in giving these, it gives all this life can bestow, and, if rightly improved, they will open to him a glorious future.

At the close of this beautiful address, thus imperfectly sketched,

J. A. KING, Esq., paid Mr. Q. a deserved and very handsome compliment, and moved a vote of thanks to the distinguished speaker; and that a copy be solicited for publication.

This was carried unanimously; and after a vote of thanks to the citizens of Utica,

The State Agricultural Fair for 1845, was declared closed.

For the Genesee Farmer.

AGRICULTURAL FAIRS.

MR. EDITOR—The summers scorching heat being over, and the refreshing showers which have lately fallen, having restored to the parched fields their wonted garb of luxuriant green, I resolved to pay a visit to my numerous farming friends; and as I passed along, I was charmed to see the delightful

change that the few refreshing showers had made in restoring foliage to its former vigor. The fields of wheat that had been early sown were very spotted, owing to the severe drouth, but were fast recovering their uniform hue. The seed time has been unusually fine; and the wheat crop never was put in in better condition; and I believe it is generally admitted that a favourable seeding is usually followed by a bountiful harvest.

I first called upon friend A. and found him and all the family actively engaged in preparation for the coming County Fair; the mother and daughters were busily employed on various articles of domestic ingenuity and skill; and I could not but admire how beautifully it called into activity the energies of the youthful mind, in planning and adjusting the various specimens of their industry. The boys too, were engaged with equal zeal in fitting and preparing the stock for exhibition, and it was really delightful to see what a beneficial effect the "Farmers' Jubilee," (for such it ought always to be called,) had upon these youths, each one cheerfully performing his appointed task.

I next called on friend B. and found the same lively activity; all busily engaged in preparing for the joyful day, where each could exhibit the evidence of his industry and skill, and enjoy the more exalted pleasure of a social visit from all parts of the county.

I remarked to B. that these exhibitions must have a very beneficial effect in improving the social feeling and active energies of the community, and especially of the young; and that it could not be possible that any one could have the least objection to them. B. shook his head, and with a look of sincere regret, said, "yes sir, however unaccountable it may appear, there are many farmers who do not approve of our societies, and will not give them their support; there are others who occasionally attend the fair, but not for the satisfaction of the social interview, and the pleasure of seeing, and comparing other's productions and stock with their own, but purely as a matter of money making; their only motive is the premium, and they never attend, nor pay as members, unless they are confident that they have something to exhibit that will take a premium; and if they do not get it they are vexed and abuse the managers, and condemn the Society."

I answered, I am astonished to hear it, friend B; I thought that the Farmers' Jubilee would be so congenial to the noble feelings of every cultivator of the soil, that there would not be one in the County, who would not be highly gratified in attending, and take pleasure in contributing something towards making the exhibition interesting and useful, regardless of the premiums; for that is not the object of the society, and ought not to be the motive for attending the fair. It is intended as a social interview, for mutual improvement, to see and compare what each one is doing, and to ascertain how he does it, and not for the sake of a few dollars.

I passed over the way and called on farmer C: was kindly received—the civilities of the day were passed—and friends inquired after—the weather discussed; and the daily avocations talked over; but not one word about the fair. Dinner being ready, all were seated at the table, and I was struck with the difference in appearance between the young members of this family, and the one I had left. None of that active and lively animation which youths exhibit, when buoyant with future hopes. I at last

mentioned the coming fair, and that A. and B. were very busy preparing for it.

I saw a gleam of hope in the countenance of each young member present, speaking in language that could not be misunderstood, that they would have been glad to be thus employed, but father C. says no.

I took the liberty to inquire his objections to the society, and remarked that he was denying his children, the satisfaction of a social interview with their fellows, and checking their active energies for useful improvement. He replied "that he never had thought of it in that light, but considered it a mere speculative business; a few big farmers, and busy managers took all the premiums, and always would do so, for his part, he had no objections to the society, if it could but be fairly managed, and, that he was not alone in that opinion, for a majority of the farmers agreed with him.

I endeavored to reason with him, and stated that if the farmers generally would take an interest in the management of the society, that they could soon put things right; but he said no, it was no use trying to do anything, as long as the like of A. and B. who were rich farmers, took all the money.

I returned to A. and informed him of C's objections to the society, and he frankly declared that that objection should be done away in future, on his part; he would not take any more money from the society, and if he should be a successful competitor, the premiums should remain in the treasury. The money never was his motive for attending the fair; the satisfaction of the social interview with his fellow farmers was a bountiful compensation to him; the greatest benefit to be derived from these exhibitions, was the encouragement it gave to the young, by stimulating them to thought and action.

I again saw A. and his views were the same as those expressed by B. He too resolved to do all he could to remove the prejudice that existed amongst his fellow farmers against agricultural societies and exhibitions, and declared that it should not again be said of him that he attended the fair for money. I also called on friend G. and he heartily approved of the resolutions of A. and B. and hoped that it would be generally followed by all the active friends of the society and of agricultural improvements.

Respectfully, T. D.

Sept. 24th, 1845.

For the Genesee Farmer.

LETTER FROM WYOMING COUNTY.

MR. EDITOR,—The pursuit of agriculture is admitted to be the noblest and most useful avocation of social man; and in no way can the statesman, philanthropist, and the lover of domestic happiness, do so much good, or promote the happiness of his fellow so well, as by fostering the interests of the cultivators of the soil, and advancing them to their real dignity, and deserved standing in society. And it is truly gratifying, in this our day, to witness the increasing interest in society in favor of the true mode of increasing social happiness and national greatness.

I was highly gratified to learn, that it was your intention to visit various sections of the State, (and particularly ours) to endeavor to arouse the farmers to a sense of their true interest: and I hope you will favor us with a special acknowledgment of this kind, as our county is placed in somewhat an inland position, and we, young in the science: Yet

through the instrumentality of your valuable yet unassuming journal, together with the countenance bestowed by the State, the subject of agriculture is acquiring a more prominent position among the subjects of national interest than formerly.

Our county Fairs are tolerably well attended, and the number of competitors at our plowing matches is respectable, and in addition, I understand that the towns of Pavilion and Covington, are forming an Agricultural Society, auxiliary to the county Society, which I have no doubt the enterprising inhabitants of these sister towns will make both pleasing and profitable.

And I further hope that you will from time to time publish the fruits of your labor, in your valuable journal, through which medium your humane exertions are beginning to be extensively realized. It is my opinion as a practical farmer, that the more immediate your approach, owing to your position, the greater the effect; and were it within your power to spend in each neighborhood, time, sufficient to ascertain the nature of the soil, their crops, tillage, and treatment of their animals, it would very much increase your usefulness, as your advice might be the means of placing many in a better track.

When in our county, I hope you will not forget, to visit Mr. Beck, of Sheldon. We consider him an honor and a great acquisition to this county; he is from Scotland, and brought with him the practical experience of that country, and has, with his judicious management, more than doubled the products of his farm in seven years.

I am convinced that you, with all lovers of beauty and symmetry, will be delighted to see his splendid stock of Devon Cattle: they are so uniform in color and appearance, that it is difficult to distinguish the one from the other. I think a sight of his stock will convince the unbiased, that the complaint of "diminutive size and poor milkers," has been made for effect.

On Tuesday the 10th inst., his splendid bull "Wallace," three years old, with two heifers, passed through Buffalo on their way to Michigan, and were very much admired by all who saw them, and it was admitted by some of the best judges of stock, that they could not be surpassed by any in the Union.

That beautiful cow and calf which our distinguished fellow laborer in the good cause, L. F. Allen, exhibited at the State fair at Poughkeepsie in 1844, and which he sold to D. W. Colt, Esq. of New Jersey, were from Mr. Beck's stock.

It is to be hoped the time will soon come when every farmer in Western New-York at least, will become convinced of his true interest and his duty to posterity, and become a supporter and a contributor to our Agricultural journals; we will then advance with rapid strides. Your most obt. servant,

AGRICULTOR.

Wyoming County, June 17, 1845.

CHAIR OF AGRICULTURE.

The officers of the Agricultural Society for this District, have determined upon petitioning the Legislature for the insertion of a clause, in the new University Bill, for the establishment of a Professorship of Agricultural Chemistry; and also for an apportionment of funds to be applied in procuring a Model Farm in each district. Seeing that the successful cultivation of the soil is a matter of paramount interest to all, inasmuch as its products are necessarily looked upon as a permanent means of meeting our imports, and being as well the employ-

ment of the bulk of our population, a denial of the first request can scarcely be anticipated; should not the Legislature accede to the second, the Model Farms will have to be established by the exertions of the individual societies—for instance, as joint stock affairs; there are surely a sufficient number of individuals in each district willing to subscribe £5 or £10 each for such a purpose.—*St. Catharine's (C. W.) Journal.*

The project for starting a model farm, combining a school for teaching all important branches of an English education, together with a sufficient knowledge of the inductive sciences to enable the youth intended for farmers to investigate all the principles of the vegetable and animal economy of nature, and the actual experimental application of their knowledge to the business of their calling, has long been a subject of intense interest with many enlightened agricultural gentlemen of this State. Our talented friend, Doct. DAN'L. LEE, has several times brought the subject before the Legislature of this State, and an act was passed, authorizing the constitution of such an establishment; but it proved but a "barren sceptre," as no funds were provided for sustaining or commencing such an Institution.

A project is now on foot to make a joint stock concern for Western New York, the shares to be \$100, and the dividends to be 20 per cent annually, payable in tuition. If properly managed, I can conceive of no course more desirable for our youth, than the combination of study with actual experiments in preparing and cropping the soil. One half of the time devoted to study, and the other to the cares and management of certain portions of land, and its crops set off to his charge, and the experimental applications of manures, and the different manner of the various processes of tillage, actually testing all the projects and nostrums which are so rife in these go-a-head times. If, Mr. Editor, some energetic and intelligent person would undertake this project in earnest, I think it could not fail of success, and it must result in becoming an agent of great and lasting benefit to that *trade* of all TRADES the

FARMER.

For the Genesee Farmer.

THE AGRICULTURAL STATE FAIR AT UTICA.

Not having heard the premiums declared off, I can only give a hasty *improvisation* of what I saw and heard at the great fair at Utica.

Arrived Wednesday, at 3 A. M., went with sundry others, male and female, to M'Gregor's, a fine house near the Rail Road; at this time filled with sleepers, from garret to basement story; some on beds, some on carpets, others on the painted canvass covered floor of the dining room; the landlord had gone to bed, fagged; his polite sub regretted that he could not give, even the ladies, a place to sleep. As is generally the case, the ladies made less ado at their fate than their male friends. Being used to all sorts of life, I had only to lean back in a chair to forget all sympathy for the spoiled ones, of what fools call good fortune.

A good breakfast, with a very large, and *sharp set* company here, was not, as the Spaniard says, "*dos sopas*," but two breads, denoting the Yankee character of the house, such jonneycake as even a Rhode Islander might envy, and coffee that was not roasted under the burning ruins of Broad street; but such was the paucity of waiters, that the over modest got

very little coffee; a sensible looking farmer opposite me, said he could get no coffee: I hailed a passing maid, directing her to the poor colleeless man, he was promptly supplied; "how come you to call him a poor man," asked my *voisin*, because, said I, the appeal was to human sympathy; had she been the landlady, I would have called him rich, to touch her self interest.

Standing at the over-thronged gate at the fair waiting for the human tide to subside, I was invited to the officers room, where I had the pleasure to greet our friends of the Cultivator and Genesee Farmer, Luther Tucker, and Doctor Lee: I left them seated behind piles of diplomas and dollars; encumbered with pen, ink and paper, those et ceteras of drudgery, which are the offset to the honors of office.

That which struck me first as I entered the fenced enclosure, was the green luxuriance of the timothy and clover sward under my feet; never again will I deprecate the Siberian snows, the moist, rainy atmosphere of Oneida county, since these give the only sure pledge of those green pastures which the sunny, fruit-bearing west, with its warm, calcareous soil can only hope for, in a wet season.

I found all access to the hall of Flora and Pomona nearly impracticable, from the dense mass of men and women crowding its portal, but in mercy to the masses, every female seemed instinctively to have left her bustle at home, as if she had a presentiment of the great jam at the great fair.

Around the circle were pens containing stock and four-footed animals of the farm, we are told, to the number of 683, all of the improved breeds: here were the stately short-horned Durham, the quiet looking Devon, the short legged bull of Holderness, cows, calves, sheep, hogs, and now promenading the moving inner circle, the graceful horse.

Here were costly buggies, and costlier carriages, drawn by horses covered with plate mounted harness, filled to overflowing with the fairest and best dressed of the rural fair. In vain did I look for that badge of the farmers *intrinsic* calling, the neat, plain, well painted lumber wagon, with its comfortable spring seats, drawn by horses, whose spirit and bearing needed no tinsel to set them off; would such an unpretending show have been out of place at this great farmer festival, where the intrinsic should always predominate over the extrinsic?

Here was a great display of agricultural implements; improved plows, harrows, straw cutters combined with corn shellers, stoves and steamers, cheese vats, and Hussey's invaluable reaper, besides a thousand and one other articles too numerous to name here. But the greatest show was the everlasting throng of the people of all ages, sexes and condition, now congregated here to witness a festival, got up, not in honor of a man, or to subscribe the ends of a party, but simply to advance the interests and elevate the social standard of that single class of the people which provides sustenance for all the rest.

Dined with my kinsman B. F. B., then went sixteen miles in the country to visit my "next of kin;" returned next day in time to hear Mr. Quiney's address. I kept my eyes on the speaker just long enough to see that he suited the action to the word, then it did me good to see how eagerly the surrounding mass of men and women "devoured up his discourse." His biblical allusions, in corroboration of the high respectability of the farmers' calling, went directly, not to their vanity, but to their spiritual

life. When he honourously adverted to the *semi-larceny* which had made all our Presidents, and would-be-Presidents, farmers in turn, the smile on every sunburnt face, told that the orator was addressing a sovereign people.

I have heard some men deride the purposes of an Agricultural Fair: one rich farmer who could not spare the dollar, comforted himself by saying it was all a *speculation*; one friend who had been rather badly lodged, disposed to be a little witty at the expense of the citizens, observed, that a town set down in the last census as on the decrease in population, ought at this time to afford ample quarters for all.—It is perhaps gratuitous to say, that with such men 'tis hard for me to sympathise. Of all arts, that of agriculture is perhaps the most imperfectly understood. Liebig, the prince of Agricultural Physiologists says, "that man knows not yet what height and strength nature has allotted to plants;" we are acquainted only with the size they usually attain.—Let us then make our agricultural fairs to the farmer, what the exhibition of new inventions and improved machinery are to the mechanist, both the stimulous and the guide towards that perfection which man has not yet attained. S. W.

TESTS OF A THRIVING POPULATION.

Charles Smith, in his Tracts on the Corn Trade, estimated the population of England and Wales in 1760, at 6,000,000, which is sufficiently near the truth for our present inquiry. The entire consumption of grain at that time, he estimated to be 7,566,350 quarters; of which 3,750,000 quarters were wheat, and of the remainder, 1,026,125 consisted of barley, 999,000 of rye, and 1,791,225 of oats.

The change which has taken place in the species of grain used for bread in England since the period referred to by Charles Smith, is notorious. Rye has almost entirely ceased to be employed. The same remark might almost be applied to barley; and oatmeal and oat cake are not consumed to any thing like the same extent as in the previous century.—Almost every individual now uses wheaten bread; and in some of our manufacturing towns, the inferior sorts even of wheaten flour have been rejected by all except the most indigent classes.

The total average produce of grain in England and Wales, has been estimated within the last ten years, at 29,450,000 quarters; of which 12,450,000 quarters consist of wheat. (M'Culloch's "Statistics of the British Empire," i. 529.) It would thus appear, that whilst the population of England and Wales has doubled, the consumption of wheat, as well as of other grains, has nearly quadrupled; for the home producer is unable to supply the demand of the consumers, and an annual average of at least 500,000 quarters of wheat may be added to the total quantity produced at home, on account of foreign importations.

Test by Butcher's meat.—In a similar manner, in regard to butcher's meat; if we take the market of the metropolis, we shall find that the number of cattle and sheep annually sold at Smithfield, has doubled within the last century, whilst the weight of the carcasses has also more than doubled in that interval. In the early part of the last century, 1710, according to an estimate made by Dr. Davenant, the nett weight of the cattle sold at Smithfield, averaged not more than 370 pounds, whilst calves averaged about 50 pounds, and sheep 28 pounds. In 1800, the nett weight of cattle was es-

timated at 800 pounds ; of the calves at 140 pounds: of the sheep at 80 pounds.

Again in 1742, we find 79,601 head of cattle, 503,-260 sheep to be the numbers sold at Smithfield : in 1842, the numbers had increased to 175,347 cattle, 1,435,960 sheep. According to the calculation which M'Culloch adopted for the amount in 1830, when he sets down 154,434,850 pounds for the supply of butcher's meat required in London. If we assume the population to have then amounted to 1,450,000 exclusively of some suburban districts, we should find the average annual consumption of each individual to be very nearly 107 pounds.

The returns obtained by the Statistical Society of Manchester, as to the cattle sold in the markets of that town, furnish an annual consumption of not less than 105 pounds of butcher's meat for each inhabitant. In Paris, on the other hand, the quantity has been estimated by M. Chabrol, from 85 to 86 pounds per head ; and in Brussels, it is supposed to average 89 pounds. We thus find that the consumption of animal food in the towns of England, far exceeds that of foreign cities : and as this consumption has gone on steadily increasing, we are warranted in concluding that the labor of the English people is not only more efficient as compared with that of other nations, but is daily acquiring greater efficiency, if the present be contrasted with previous results.

The following curious fact of speculative science applied to trade, is from the appendix, and has been furnished to Dr. Twiss by Mr. Dixon, an eminent land surveyor at Oxford:

"The present mode of calculating the probable yield of wheat of a given district for the coming harvest, is as follows: About the time that the wheat is blooming, generally about the beginning of June, a person will go round with a gauge secreted in a hollow cane, which forms a triangle when opened, and represents a certain portion of an acre of ground. This is placed over various portions of the standing crop in the best and worst parts of a field : the number of ears of wheat comprised within the triangle is counted, and the probable quality of the grain is taken into calculation according as the spring has been wet or dry. On the former supposition the grain is likely to shrink ; on the latter, to harden and come out plump. It may be observed, that if there has been a good general rain during the last ten days of April, and the first ten days of May, on the average, no more wet is required for wheat. An expert gauger will form a very accurate estimate of the probable produce of a given district by this method."—*Foreign Paper.*

FATTENING ANIMALS.

There are some rules which may be advantageously adopted in feeding animals, which, however obvious they may be, are too often passed over or neglected. Some of these will be specified ; and

1st. *The preparation of Food.* This should be so prepared that its nutritive properties may be all made available to the use of the animal, and not only so, but appropriated with the least possible expenditure of muscular energy. The ox that is obliged to wander over an acre to get the food he should find on two or three square rods ; the horse that is two or three hours eating the coarse food he would swallow in fifteen minutes if the grain was ground, or the hay cut as it should be—the sheep that spends hours making its way into a turnip, when if it was sliced, it could be eaten in as many minutes—the

pig that eats raw potatoes or whole corn, when either cooked, could be eaten in one-quarter of the time—may indeed fatten, but much less rapidly than if their food was given them in a proper manner.—All food should be given to a fattening animal in such a state, that as little time and labor as possible, on the part of the animal shall be required in eating.

2d. *The Food should be in abundance.*—From the time the fattening process commences, until the animal is slaughtered, he should never be without food. Health and appetite are best promoted by change of food rather than by limiting the quantity. The animal that is stuffed and starved alternately, may have streaked meat, but it will be made too slowly for the profit of the owner.

3d. *The food should be given regularly.*—This is one of the most essential points in feeding animals. If given irregularly, the animal indeed consumes his food, but he soon acquires a restless disposition, is disturbed at every appearance of his feeder, and is never in that quiet state so necessary to the taking on of fat. It is surprising how readily any animal acquires habits of regularity in feeding, and how soon the influence of this is felt in the improvement of his constitution. When at the regular hour the pig has had his pudding, or the sheep its turnips, they compose themselves to rest, with the consciousness that their digestion is not to be unseasonably disturbed, or their quiet broken by unwonted invitation to eat.

All creatures fatten much faster in the dark than in the light—a fact only to be accounted for by their greater quiet. Some of these creatures that are the most irritable and impatient of restraint while feeding, such as turkeys and geese, are found to take on fat rapidly when confined in dark rooms and fed at stated hours by hand. There is no surer proof that a pig is doing well, than to see him eat his meal quickly and then retire to his bed, to sleep or cogitate until the hour of feeding returns.—*Alb. Cult.*

PROPORTION OF BUTTER IN MILK.

Every farmer's wife knows that there is a vast difference in the milk of cows, in regard to the quantity of butter which they will afford. We once owned a cow which gave a great flow of milk, but from which very little butter could be obtained.

Boussingault, in his "Rural Economy," relates the following experiment:

From 100 lbs. of milk he obtained	
Cream,	15.60
White curd cheese,	8.93
Whey,	75.47

100.00

The 15 pounds and 60 hundredths of cream yielded by churning—

Butter,	3.33..... or 21.2 per cent.
Buttermilk,	12.27

The reckoning with reference to 100 lbs. of milk, consequently stands thus:

Cheese,	8.93
Butter,	3.33
Buttermilk,	12.27
Whey,	75.47

100.00

He goes on to state that, taking the whole of the milk obtained, and treated at different seasons of the year, he finds that 36,000 lbs. of milk yielded 1080 lbs. of fresh butter, which is at the rate of 3 per cent.



HORTICULTURAL DEPARTMENT.

BY P. BARRY.

For The Genessee Farmer.

MR. EDITOR:—Have the goodness to give me a small space in your valuable paper, that I may endeavor to soothe my kind friend Mr. Barry, who after having given his unqualified praise to my recent volume on Fruit Trees, has suddenly been seized with the war fever, and most unaccountably opened his largest Paixham gun upon it.

In the first place, I regret to have outraged his feelings by the title of my work—"The Fruits and Fruit Trees of America." Mr. B. thinks it unfair that the work describes not only *native* fruits, but, also (as indeed the title page explains,) "all the finest varieties of fruit, native and foreign, cultivated in this country."

Now it is certainly something quite new, this complaint that a work contains *too much* information—more than the reader is led to expect from the title. I congratulate myself if the work in question truly has this great merit.

But I believe the only objection to the title is not a valid one in any sense. By the "Fruits of America," I do not understand merely our native fruits; but all fruits that are cultivated, naturalized and adopted into this country. He falls into the same error as some of the enlightened inhabitants of Europe, who still think that true *Americans* are all Indians, or at least have a copper skin. Ah! as Mr. B. is well aware, it is a motley collection, from all countries that makes the American people.

Again, the example of previous writers most entirely sustains me. Lindley's "British Fruits"—is it a work on the *native* fruits of Britain? By no means. There are not half a dozen British varieties in it. Its three volumes of beautiful plates and description are occupied almost entirely with the Fruits that originated in Flanders, France, and Germany, but cultivated in British England. In like manner, Loudon's great work, the "Arboretum Britannicum, or trees and shrubs of Britain," contains every hardy or half hardy tree of the four quarters of the globe, that has been introduced into England, or Ireland. So too Poiteau's "Pomologie Francaise," is not, as Mr. B. would suppose, the fruits of France—the *native* fruits merely, but all the fine fruits introduced into, and cultivated in France. Indeed this is so well understood by authors and the public, that I am surprised that any person could suppose it possible that my volume of 600 pages, could be occupied by our native fruits only. Our native fruits worthy of cultivation (and which so far as it lay in my power, I have fully done justice to,) would have occupied but a few pages, and the work, had it ended with them, would have been by no means what the public demanded at this moment. In its title therefore I am certainly sustained by the established customs of previous writers, and the facts themselves. The work treats of the fruits and fruit trees of America.

I might have overstepped the limits of the title had I added largely celebrated fruits, not yet introduced here. But this I was careful not to do.

But my great offense in this work your critic considers to be in the following bold and arrogant lines with which the preface commences.

"A man born in one of the largest gardens, and upon the banks of one of the largest rivers in America, ought to have a natural right to talk about fruit trees."

Mr. Barry kindly misunderstands my meaning, and delicately hints his opinion of the sentence in the following manner. "A man to prattle about rights of birth now-a-days, acts, in our opinion, a silly figure."

I am really deeply mortified that I should cut such a "silly figure" in the eyes of Mr. Barry. In some future work I may hope to obtain his commendation by expressions of profound humility and ignorance of the subject of which I am about to treat. But in the meantime I am bound to think that some portion of the public does not share with him entirely in this opinion, at least I have been presumptuous enough to gather this notion from numberless letters of thanks for the volume from strangers in all parts of the country, and from the fact that the work in question, has in little more than two months gone through *three editions*, and that corrections are now making for a fourth.

I frankly confess that I supposed in writing the passages above quoted, that thousands of cultivators to whom I am, and may always be personally unknown, would be glad to know that I had not undertaken without any previous preparation, to write upon a subject, which more than any other in the circle of gardening requires practical knowledge and long investigation. I supposed that such persons would like, to know what right an author had to ask their time and money for a thick volume on such a subject. Not what civil or political right, but what right by position, natural advantages, and long devotion to the subject. It certainly does not appear quite self evident to me that a man born, and living always in the deserts of Zahara, would have quite so good a natural right to write a description of the northern Spy apple as Mr. Barry who is a nurseryman, and lives near the original tree. At least I think his readers might incline to think Mr. B's advantageous position had given him certain rights to occupy the ear of the public on this topic, which they might feel inclined to deny to the Arab. But I may be wrong here, and I confess that though I was *born* in America, and have always lived in a garden, I may yet be taught by more intelligent foreigners who have settled on our side, that I have no shadow of right to talk about the fruits and fruit trees growing in our own country.

No one can be more sensible, Mr. Editor, of the defects of the volume on fruit trees than I am.—The subject is one full of difficulties, and it was not undertaken without diffidence, or pursued without great labor.

The unusual patronage which it has already received from the public, I am sincerely grateful for, and I trust by the kindness of our horticulturists, and constant and repeated investigations of my own, to render it in future editions far more complete than it at first appeared. But you will allow me to express my regret that the editor of your horticultural department should dislike its title, or deplore my bad taste in telling my readers candidly, at the outset, that I was born a gardener, and claim to know a little more of the nature and practice of gardening

in this country than any one who has but just set foot upon its soil.

Sincerely yours,
A. J. DOWNING.

Newburgh, N. Y. Sept. 12, 1845.

REPLY TO MR. DOWNING.

My friend Mr. Downing need not have been at the trouble to endeavor to "soothe" me. I thank him cordially for his kind intentions; but I would suggest that he reserve his *soothing* materials for other quarters, where they appear to be more needed. The readers of the Farmer will recollect the remarks in the last No., that called forth the above *soother* from Mr. Downing. I simply stated, (as I had a perfect right to do, and without the remotest feeling of ill will towards the author,) my objections to the title of his book, and the style in which he commenced his preface. The book had become public property, and was fairly liable to whatever criticisms the public might choose to make. Mr. Downing, as an author, we might naturally suppose, would receive such criticisms, in a manner becoming his position. But this he has not done. Because I took the liberty to add a *little* censure to *much* praise, he cries out like a petted, spoiled child, seemingly under the mistaken impression, that I am at war with him and his book; when the fact is, and I beg of Mr. D. to remember it, that if he published "Tristram Shandy" and appended to it his entire biography, entitling it, "*The Fruits and Fruit Trees of America*," I should not have experienced a single warlike feeling; nor do I think any one else, more than myself, would have been in the least offended. The man is very much mistaken who thinks his neighbor at war with him, because he happens to object to his views and notions. Readers! what think you of such a man?

My objection to his title, "Fruits and Fruit Trees of America," was, that it did not represent *truly* the contents of the work. As, instead of noticing and describing *all the fruits of America, and none else*, as would be necessary to justify the title, it describes only the *cultivated fruits*, more than three-fourths of which Mr. Downing himself designates as *foreign*.

This objection can be shown to be valid, by the plainest reasoning: for instance,

If we should hear of a work being published, entitled, "The Forest Trees of America;" would we not naturally expect that work to treat exclusively of the native trees of our forests, instead of containing a notice of a few of them only that might happen to be cultivated in our gardens and being more than seven-eighths occupied with descriptions of the forest trees of other parts of the world, merely because they were cultivated in our gardens, pleasure grounds or green houses? Who would say that such a work was true to its title?

Again, supposing a work to be published, entitled the "Herbaceous Plants of America;" would any sensible man expect to find in that book only such species as had been subjected to garden culture, and all the rest left out, and in their stead such foreign plants as were cultivated in our gardens? would any man say that such a book was true to its title? If it would be, then is Mr. Downings—if not, neither is his. The thing is self evident.

Nor can Lindley's three beautiful volumes of descriptions of the fruits of Flanders, France and Germany, entitled, "*British Fruits!*" alter the case

in the least. It only shows, what we well knew before, that Mr. Downing is not the only author who has given his book a title at variance with the real character of the contents.

With regard to the remark I made respecting what I considered *bad taste* in Mr. Downing, in introducing the circumstance of his birth on the banks of the Hudson, in a large garden, &c., in the very first lines of his preface: I can only say, that I have not seen a person open that part of the book without being provoked to a hearty laugh; and I have heard several of Mr. D's. personal friends express a regret on account of that, as well as other matters, unbecoming in such a work. Mr. D. justifies the paragraph by saying, that thousands of cultivators to whom he is personally unknown, would be glad to hear it, as it would be a guarantee that he had come to his task prepared. That he was in fact "*born a gardener.*" Well, now, I put the question to every individual who has seen the paragraph alluded to, if it could possibly convey to any mind a knowledge of the fact that Mr. Downing was well prepared to execute his task, or that he was even "*born a gardener?*" no such thing. It simply proclaims the fact of his birth on the banks of the Hudson. There were other ways enough, to convince his readers of his qualifications.

Mr. Downing's readers, will have seen by this time, what importance he places on this thing of *birth*. I freely concede to him all the advantages, (and I admit that they are many and valuable,) that it may have conferred upon him, and acknowledge that he has just reason to be proud of it; but I must insist upon it, that if it had been so ordained, that Mr. D. had been born on the banks of the Nile, or even in the "Deserts of Zahara," which he chooses to speak of, he might to day have been just as great and as good a man as he is—and been equally skilled in the science of Pomology and had as great a "*natural right to talk about Fruit Trees.*"

"Born a gardener," indeed! There is not another man on this continent who could say such a thing. We have heard of men being born *poets*; but who ever heard of men being born a *gardener*? Mr. D. has great reason to be thankful for this great *natural* advantage over every body else. I have been laboring and studying hard all the day and a great portion of the night, for 10 long years to acquire what little knowledge I possess. Had I been "*born a gardener,*" this trouble would have been avoided, such however was not my fortune.

I rejoice heartily to hear of the "numberless" letters of thanks received by Mr. D.; even if they be as "numberless" as the stars. Not an individual in this country looked more anxiously for that book than I did. I sent to New-York for it, full a month before it was published; and when received, I gave it a lengthy notice, and recommended it to the attention of every cultivator; and I think I may flatter myself, that I aided a little in creating that "popularity" of which Mr. D. boasts. I appreciate fully the value of the work, and thank Mr. D. for it; but nevertheless I shall not hesitate to speak, when I think proper, of its faults or failures.

P. BARRY.

TRANSPLANTING.

The season is now at hand for transplanting. Let it be remembered that the fall—we mean early in the fall, as soon as the leaf begins to color and drop,

is the best season of the year for transplanting all hardy trees, shrubs and plants. All forest deciduous trees intended for shade and ornament around dwellings and along streets, avenues and pleasure grounds, should be removed at this season, as well as all hardy fruit trees, such as apples, pears, plums and cherries. The rather more tender fruits, such as peaches, apricots, nectarines, and all tender and half-tender shrubs, roses, &c., are transplanted in spring with greater safety: though even these may be removed with safety, if done early and planted on a dry soil and protected by throwing a quantity of litter or rough stable manure around each. But whether transplanting be performed now or next spring, let it be done *well*. Dig large holes for the roots, prune off carefully all bruised or broken parts, set the tree in the place prepared for it, and see that the roots are all in their natural position—not curled or bent up; then fill in good rich mellow earth among the roots; not the earth dug from the bottom of the hole, but earth prepared for the purpose. Use a pail of water to wash the earth in among the fibres. For small trees this is unnecessary. When the earth is all filled in, press it down with the foot. Guard against deep planting. A tree should not be planted more than an inch or so deeper than it stood before, to allow for the earth settling.

PROSPECTS OF A HORTICULTURAL SOCIETY FOR MONROE COUNTY.

The manner in which our citizens begin to appreciate the value of fine fruit, and the importance of careful and exact culture and management, induces us to believe that we shall very soon have a Horticultural Society. During our residence in Western New York, we have never seen so much curiosity—such a spirit of inquiry respecting the names of fruits as we have this season, amongst both growers and consumers. This spirit is but the necessary result of our progress. In the earlier stages of our fruit culture, people cared but very little for the nomenclature; if they could but procure a fruit that was eatable, it was deemed sufficient. Now however, it is not so. Fine fruit begins to abound in our gardens and orchards, and there is growing up a natural and very proper desire to know the peculiar properties and names by which each is known amongst cultivators generally. This leads to an interchange of inquiry, which will necessarily lead to Association.

The daily press of Rochester, (the Democrat particularly,) has several times during the past summer recommended the formation of a Society here, and pointed out Buffalo and other places less favored, where flourishing and efficient Societies exist, as examples. Several gentlemen amateurs have been agitating the matter too, with commendable zeal. We would mention JAMES H. WATTS, in particular, whose counting house has been a sort of show-room for fruit during a part of the season.

Indeed, there seems to be a general conviction of the necessity of such an organization among all who take an interest in the progress of Horticulture.—We have abundant material to sustain a Society.—The gardens of the city of Rochester and surrounding country, could furnish fruits and flowers enough for weekly or monthly exhibitions, as the case might be, and we have not a doubt but before we should be organized one year, we should have such a spirit awakened as would enable us to erect a hall—not a magnificent hall like that of the Massachusetts Society—but one of moderate, suitable dimension for

our exhibitions. But it is rather premature to consider this part of the subject. The great object is, *first* to organize the Society. This will undoubtedly be done soon, and we trust when the movement is once started, that every fruit grower, and every man interested in the improvement of the garden and orchard throughout this county, will come forward and contribute his assistance. It will be for his individual, as well as for the general good that he do so. The vast benefits resulting from the operations of these Societies wherever they exist are now well known. But the other day, a correspondent of one of our city papers, writing from Boston, said, in speaking of the profusion of fine pears and other fruits there, "For nearly all these luxuries, she is indebted to the Horticultural Society." And this is true. We have as fruitful and fine a fruit region as can be wished for, and why not avail ourselves of all the benefits of Association, to enrich our gardens and orchards? There is hardly a place of importance, east or west of us, that cannot boast of a Society. See the little village of Aurora, Cayuga co.: what beautiful exhibitions she has recently had. Her example is enough to make us feel ashamed of our apathy on this important subject. But never mind; when we do act, it will be in right good earnest.

GATHERING AND PRESERVING WINTER APPLES.

People can know nothing about how long apples will keep, except they will take particular pains to gather and put them away in the best manner.

Apples intended for keeping should be allowed to remain on the trees until severe frosts are apprehended or until they begin to ripen and drop.

They should then be carefully picked from the tree with the hand, and placed gently in baskets, the least carelessness now wounds and bruises fruit in such a way as may in a great measure lose the whole crop. The apples when picked by hand from the tree into baskets, should be transferred carefully to new barrels. When the barrel is filled it should be gently shaken, and it should be so full that the cover will press closely to the fruit.

The barrels should then be placed in a dry cool situation, where they can remain till the weather renders it necessary to remove them to the cellar. A fruit cellar should be cool and dry, and during winter should be frequently opened in fine weather for the admission of air.

MASSACHUSETTS HORTICULTURAL SOCIETY.

A correspondent of the Rochester Democrat, writes that the recent exhibition of this Society, held on the 20th inst., surpassed any of the preceding ones. The supper he said was a brilliant affair. 600 sat down, mostly ladies. Speeches were delivered by Mr. Webster, Mr. Everett, who had just arrived from England, Caleb Cushing, minister to China, Mayor Davis, and several other distinguished gentlemen. The widow of Alexander Hamilton was present and many others of note.

We rejoice that the progress of this noble Society is onward. It is to America what the "London Horticultural Society" is to England. The interest it is exciting, the knowledge it is collecting and diffusing on the science and practice of horticulture, together with the finest fruits of the earth which it is collecting from all parts, and scattering over the land, render it truly a national blessing.

It is an honor not to Massachusetts alone, but to the Union.

PREPARATION OF ORCHARD GROUND.

Those who intend to plant orchards whether of peaches, apples or other trees, should have their ground in proper order, by deep and frequent plowing and manuring. And where the soil requires it, for apples and pears particularly, compost heaps should be in readiness to use when planting the trees. Swamp muck and stable manure mixed about equal quantities of each make a good compost, and is easily had. Leached ashes or lime or even both, may be mixed to advantage, particularly where the soil to be planted, is not naturally calcareous. It is much easier to put land in proper order before than after planting.

NEGLECTED GARDENS.

The fall is the season to renovate and improve neglected gardens. All superannuated unhealthy trees, currant and gooseberry bushes, old worn out raspberry and strawberry plantations, should be dug up and cast away. The ground should be thoroughly manured and spaded, or trenched to the depth of 18 inches at least.

When spring comes, the ground thus worked will be in readiness for planting. If postponed till spring, most likely, other labors will take precedence and it will be postponed. Garden walks should be laid out and improved as it can be done much easier now, than in Spring, and at a much less cost.

SECURING CELERY FOR THE WINTER.

The usual method of digging up celery in the autumn, and putting it away for winter use in barrels or boxes of dry sand, renders it dry shrivelled, and insipid. A much better way is to leave the plants in the trench where they grow, and, on a fine dry day, when the soil is dry, earth it up to the tops, and then cover it with straw litter and boards securely, so as to exclude the frost. It can then be taken out as wanted, during winter, with all its natural freshness and flavor unimpaired. Some people apprehend that it will rot in the trench, but if carefully earthed up, and covered when perfectly dry, there is not the least danger. In many cases it would not be convenient or practicable to keep celery in this way, then the other method must be resorted to. Wherever it is kept, it should be as cool as possible not to freeze.

For the Genesee Farmer.

FINE FRUITS.—Nature through a long succession of ages has produced, in a natural way, all the valuable and superior fruits now esteemed and cultivated: and she is still working at her trade, with an increased natural ability, from the means furnished by man, in selecting and bringing together so many excellent varieties of her productions; whereby many new and interesting kinds are produced. It only needs observation and a proper attention to our orchards, nurseries and gardens, to discover and introduce to public notice for the benefit of the community, many new, valuable and rare varieties which will add greatly to the comfort and blessings of life.

We observe with great pleasure that a number of gentlemen have joined in the praiseworthy attempt to bring out and make known all the new seedling varieties produced in this region, and have establish-

ed a depot at the office of JAS. H. WATTS, Recording Secretary of the Monroe Agricultural Society, corner of Buffalo and Exchange streets, for that purpose; where all connoisseurs and amateurs are invited to present any thing of value in the fruit line, and to inspect the beautiful productions of our favored region.

We trust that the increased interest manifested by citizens and country neighbors, will induce the constitution of a HORTICULTURAL SOCIETY the coming year, from which great benefits and much satisfaction to the lovers of fine fruits will arise.

STORING CABBAGES.

A very good and compact method of storing cabbage is, in the same manner that we have practised with the sugar beet. Select a dry piece of ground, cut the heads of the cabbage from their stumps, and place them in parallel rows, with the top part down, and any desired length or width. Make these rows one less in width and length every layer, so that when the heap is finished it will come to a point, and appear very much like a pile of cannon ball in an arsenal. Over this heap, place a covering of straw, and then put on the dirt sufficiently thick, the same as on a potatoe heap, to keep out the frost, and the work is done. The earth should be patted down hard on the four sides, making the top sharp like the roof of a house, so as to shed rain well.—*American Agricult.*

PRESERVING DAHLIA ROOTS.

Many people complain that they cannot succeed in preserving Dahlia roots through the winter.—Nothing is easier. A Dahlia root is as easily saved as a Potatoe. Let them be taken up on a fine dry day after the tops have been killed by frost, and exposed to the air and sun till quite dry—all the earth should be shook from around them—when perfectly dry they can be put away on a shelf in the cellar or in a box of dry sand. They should be examined during winter, and if any show signs of decay, the part should be cut off and the root dried. In putting them away, the name and color of each, if known, should be written on a wooden label and this hung on the root with wire. It is satisfactory and convenient to know the name and color in planting, and besides, these systematic habits should be cultivated by all who aim at having neat gardens.

BULBOUS FLOWERS.

Plantations of Bulbous Flower roots, such as Tulips, Hyacinths, Narcissus, Crocus Lilies, &c. &c., should be made immediately, so that the earth may get settled before severe frosts set in. For these, the soil should be a light, rich, sandy loam, deep and mellow.

When the beds are planted, they should be covered over with leaves or litter 3 or 4 inches deep, to prevent them being drawn out with the frosts. Very early in the spring the beds should be raked off as soon as the ground is thawed, as the Bulbs flower at a very early season, the crocus blooming frequently amidst the snow.

BUFFALO HORTICULTURAL SOCIETY.

We had intended to give in this number some account of the first annual exhibition of the Buffalo Horticultural Society, and of the admirable Address of Geo. W. Clinton, Esq.; but the large space occupied by the State Fair prevents.

Our Buffalo friends shall be duly noticed in our next.

Meteorological Observations.

MADE AT ROCHESTER, SEVEN MILES FROM LAKE ONTARIO, BY L. WETHERELL.

JOURNAL OF THE WEATHER FOR SEPTEMBER, 1845.

Days mo.	Thermometer.			Barometer.		Wind.	Observations.
	Sunrise.	Mid-day.	One h. after sunset.	Sunrise.	Evening.	Prevailing wind.	
	26	63	73	68	29.58	29.57		NW S	Fair—Cloudy.
27	63	71	62	29.48	29.53	SE NW	Cloudy—Fair—Rain.
28	60	70	57	29.75	29.79	NW	Rain ..
29	55	75	69	29.72	29.54	SE	.. Cloudy.
30	61	77	65	29.57	29.50	SE NW	Cl'dy—f'r—r'n-r. g. 24
31	53	70	55	29.60	29.60	N W	Fair—
1	52	85	67	29.60	29.38	NW SW	.. Cloudy—Rain
2	63	75	63	29.32	29.18	W	.. F'r—r'n-r. g. 44
3	60	82	67	29.32	29.32	W	.. .. .. 02
4	62	84	60	29.31	29.38	N W	Cl'dy .. Rain
5	57	75	54	29.43	29.51	..	.. Rain
6	48	69	59	29.58	29.43	N W N	.. ..
7	69	74	60	29.08	29.44	SW NW	.. ..
8	51	61	48	29.58	29.67	N	.. .. r. g. 25
9	46	67	60	29.45	29.49	SE W	Fair—
10	50	67	50	29.55	29.67	N W	Cloudy Rain.
11	44	66	49	29.74	29.84	..	.. Fair .. r. g. 08
12	42	64	45	29.90	29.88	N E	.. ..
13	47	62	57	29.74	29.38	SE S	.. .. Frost.
14	61	70	56	29.27	29.16	SW NW	.. .. R'n r g 1-13
15	52	72	56	29.41	29.54	W NW	.. ..
16	44	65	48	29.70	29.76	N W	Fair.
17	44	80	70	29.73	29.33	SW	.. ..
18	66	78	60	29.43	29.50	N W	.. Rain.
19	48	68	58	29.55	29.50	..	Cl'dy—Sh'r—r. g. 14
20	56	81	56	29.32	29.23	..	Fair.
21	46	56	42	29.38	29.50	..	.. —rain. r. g. 83
22	38	59	43	29.63	29.63	NW N	Fair—cl'dy-rain-frost.
23	45	58	49	29.59	29.36	SE S	Cloudy Rain.
24	46	52	47	29.42	29.60	SE NW	.. .. Rain—r g 61
25	43	48	48	29.70	29.60	W NW	.. ..

Maximum (Aug. 29) Ther. 85 deg. do. (Sept. 12.) Bar. 29.90 in.

Minimum (Sept. 22.) Ther. 38 deg. do. (Sept. 3.) Bar. 29.08 in. Range of the ther. for the month. 47 deg.

Total am't of rain that fell in June, July and Aug. 10 in.

Do. do. same months in 1844, 3 1/4 inches.

Do. do. do. 1843, 5 1/4 "

The season has been regarded as having been very dry at this place; but, from observation, and from knowledge derived from other sources, I deem that it has been much drier east, south and west than in Rochester and its environs.—September has been very cool and rainy.

ROCHESTER PRODUCE MARKET.

Wheat,	87 a 90	Hay, ton,	\$10.00	12 00	Eggs, doz.	8 10
Corn,	37 1/2 a 40	Wood, cord,	2 00	2 50	Poultry, lb.	5 6
Barley,	30 40	Salt, bbl.,	1 13	Tallow,		
Oats,	25 20	Hams, lb.,	5 6	Hops,	10 11	
Flour, (ret.)	4 50	Pork, bbl.,	10 00	Wool,	25 32	
Beans,	75 1 00	" cwt.,	3 25	3 75	Sheep Skins, 50	75
Apples,	12 25	" "	3 00	3 50	Green H'ds, lb.	3 7
Potatoes,	18 25	Lard, lb.,	8 10	Dry Hides,	6 7	
Cluverseed,	6 00	7 00	Butter,	10 12	Calfskins, gr'n. 5	4
Timothy,	1 25	1 50	Cheese, cwt.	4 00	6 50	Sept. 30.

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MT. HOPE BOTANIC GARDEN AND NURSERY, ROCHESTER, N. Y.



THE subscribers respectfully announce to their friends and the public, that their present stock which they offer for sale the ensuing Fall of 1845 and Spring of 1846, is the finest ever grown in western New York, and unsurpassed in quality by any establishment in the country.

The collection of fruits comprises the most esteemed varieties of the Apple, Pear, Peach, Plum, Apricot, Cherry, Nectarine, Almond, Grapes, &c.

The trees are well grown, thrifty, and beautiful, and have been propagated with such care as to ensure correctness.

All are warranted genuine as represented. PEAR TREES ON QUINCE STOCKS for DWARFS and PARAMIDSs, can also be furnished of the finest varieties. These will bear the first or second year after transplanting, and are beautifully adapted to garden culture.

3,000 fine thrifty young trees of the famous New American Apple, the "Northern Spy," are also on hand.

STRAWBERRIES—All the fine new esteemed varieties, including Stoddard's new Alpine.

Also a large and fine collection of Ornamental Trees, Shrubs, Roses, (including a quantity of splendid Standard or Tree Roses, 3 to 6 feet high) Herbaceous Plants, Bulbous Roots, Double Dahlias, &c.

Our new descriptive catalogue will be sent gratis to all POST PAID applications.

Trees and Plants will be packed in the best style, and shipped to any port or place that may be designated.

It is for the interest of purchasers that they forward their orders now, without delay, that they may be executed in proper season. Address ELLWANGER & BARRY.

Rochester, Sept. 1, 1845.

MACEDON NURSERY.

THE accounts of the late firm of "Thomas & Smith" Macedon, are left with the subscriber.

The business will be conducted as heretofore, upon the principle of propagating only select varieties of *prædæ fruit*.

A fine stock is now on hand, which will be much increased by the superior kinds recently fruited.

Several hundred fine trees of the May Bigarreau, the earliest of all good cherries. WILLIAM R. SMITH. 8 mo. 25th 1845.—2 t.

ROCHESTER COMMERCIAL NURSERY.

BISSELL & HOOKER, [successors to E. Boardman,] Main-st, one mile east of the Court House. This extensive establishment embraces nearly 200,000 Fruit Trees, of different ages, thoroughly tested upon bearing trees upon the premises and in the city, which are offered for sale for cash or approved credit upon reasonable terms. Persons purchasing at this establishment, can be furnished with trees of any size, which will be warranted to be of the kinds represented.

A good assortment of hardy Ornamental Trees and Shrubs is also kept for sale.

Trees ordered by mail, will be carefully packed and forwarded to any address. A liberal discount will be made to those who purchase to the amount of \$50 or more at one time.

Address, post paid, BISSELL & HOOKER, or A. G. SMITH, Rochester, N. Y. Sept. 1, 1845.

ELECTION NOTICE.

A GENERAL ELECTION is to be held in the County of Monroe on the TUESDAY succeeding the first Monday of November next; at which Election the following officers are to be chosen—A Senator for the Eighth District.

Three Members of Assembly for said county.

Also, the sense of the people in relation to the proposed Convention will be taken.

Also, the proposed Amendments to the Constitution of this State will be submitted.

The following is the official notice from the Secretary of State. HIRAM SIBLEY, Sheriff. Dated Sheriff's Office, Rochester, July 26, 1845.

STATE OF NEW YORK: }

Secretary's Office, Albany, July 23, 1845. }

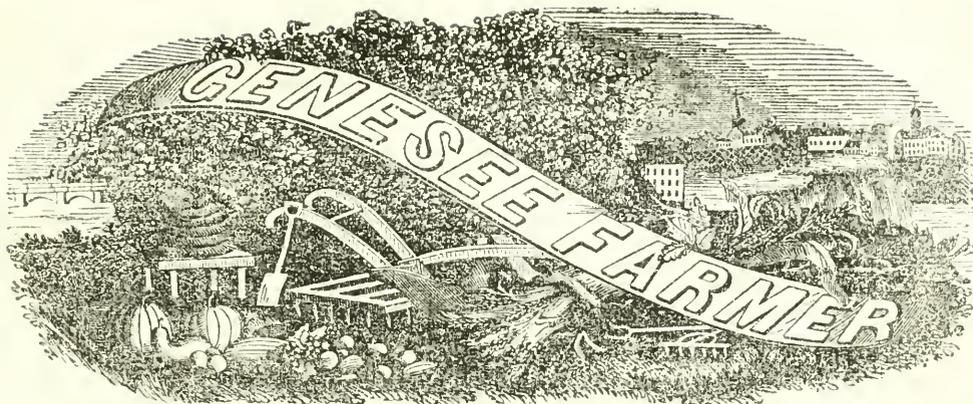
To the Sheriff of the County of Monroe:

Sir,—Notice is hereby given, that at the next general election to be held on the Tuesday succeeding the first Monday in November next, the following officers are to be elected, to wit:

A Senator for the Eighth Senatorial District, to supply the vacancy which will accrue by the expiration of the time of service of Gideon Hard, on the last day of December next.

Also, the following County Officers, to wit: Three Members of Assembly.

And at the same Election, the sense of the People of this State will be taken in relation to the proposed Convention, specified in the Act, Chap. 252, entitled "An Act recommending a Convention of the People of this State," passed May 14, 1845.



VOL. VI.

ROCHESTER, NEW YORK. NOVEMBER, 1845.

NO. 11.

PUBLISHED MONTHLY.

BY B. F. SMITH & CO, PROPRIETORS.
At the Seed Store, Front Street, nearly opposite the Market.

DANIEL LEE, EDITOR.

FIFTY CENTS A YEAR:

Five copies for TWO DOLLARS; Eight copies for THREE DOLLARS
 All payments to be made in advance. Money and subscriptions,
 by a regulation of the post-master general, may be remitted by
 post masters free of expense. *Address B. F. SMITH & Co.*

ENLARGEMENT OF THE FARMER.

We find it impossible to publish in the Farmer, at its present size, all the matter which is regarded as most worthy of a place in its columns. The liberal patronage already received, and the more extended subscription list which is confidently anticipated, induce the Publishers to increase the number of pages, for the volume of 1846, from 16 to 24.— This will make a large double column or two volume of about 300 pages, printed on *new type*, and on good paper, which will be sold at *Fifty Cents*.

The present Editor has made arrangements to settle on a farm in Monroe County, and will devote his undivided attention to the Practice and the Science of Agriculture. He hopes, by dint of both Mental and Manual labor, and the assistance of kind friends, to make the GENESEE FARMER a paper that will commend itself to the best regards of every well-wisher to the great Agricultural Interest of the country.

The tools for the analysis of soils, and the microscopic investigation of parasitic plants, insects, the organic structure, growth, and strength of Wool, and many other most interesting natural phenomena, will be in his possession.

KNOWLEDGE and IMPROVEMENT is our motto.

POPULATION OF THE STATE.

Returns are published from a sufficient number of the counties of this State to furnish the ground of an estimate in regard to the whole population to be exhibited by the census of the present year. In 1835 the number of inhabitants was 2,171,517. In 1840, 2,428,921. In 1845 it will be in the neighborhood of 2,670,090.

The increase in the period, from '35 to '40 was 495,483. The increase from '40 to '45, according to this estimate, was 254,404.

It is probable that, as an *agricultural* State, New York has nearly reached her acme of population.

The best cultivated and most densely peopled counties suffer an incessant drain of emigration to the west. Scarcely a young man comes to his majority, but his head is filled with visions of the prairies of Wisconsin, and he loses no time in putting money in his purse to seek a home where land is cheaper. —*Rochester Daily American.*

We are unwilling to believe "that as an *agricultural* State, New-York has nearly reached her acme of population." And yet without a change of State policy, it is demonstrably true, that our rural population, and country mechanics must continue to emigrate faster than their natural increase. The same causes which have *reduced* the agricultural population, within the last five years, in twelve or fifteen of the best farming counties in the State, and cut down the number of mechanics and tradesmen in the cities of Hudson, Schenectady and Utica, and in many villages will, if allowed to continue in full force, operate still more injuriously on the whole industrial interests of the commonwealth. The same wrongs only in an inferior degree, which drive so many thousands of the sons of toil from Europe to America, are fast growing up in the Empire State, to expel from her borders her most enterprising and useful young men and women. We create an artificial condition of things, which renders productive labor less valuable to the owners of human muscle and mind in this State, than in more favored regions.

Suffering humanity flees from England, Ireland and Germany to this country, not to escape the oppression of kings, queens and dukes, but cruel extortions of capital and insatiable avarice. If labor were permitted to enjoy in peace all that calls it into existence in Europe, it would remain there, work, eat, drink and be happy. But capital taking the advantage of human hunger and nakedness by a monopoly of land and its fruits, compels labor to support millions, not only in idleness, but in the most debasing luxury and extravagance.

From such a burthen on productive industry, whether imposed on the east or west side of the Atlantic, outraged humanity will escape if possible.— If we compare a man's productive powers, from the cradle to the grave, with his physical, social, intellectual and moral wants, we discover the "fixed fact" that we must establish for him a very low standard of *comfort*, or give him all that one pair of hands and one intellect can reasonably produce in order to carry him well through the world.

In England, agricultural labor is robbed of about one half of its earnings. In this State the man that produces ten bushels of wheat, corn or potatoes, finding every thing but the earth which God created, can usually retain, for the support of himself and family, seven bushels.

In Illinois and Wisconsin he can keep for his own use and benefit nine tenths of his crops. If he was allowed to do this in New York, or in England, who would not prefer to till the soil where he was born, and surrounded with all the blessings of kindred and civilization, to emigrating to any new country or foreign land?

Capital can take about one tenth of an industrious and very frugal family, and they will bear the privation without murmuring. But when it exacts thirty per-cent, the natural and abiding wants of a human being are forced to rebel against the demand. If the cultivators of British soil had only to pay tithes, and could retain nine-tenths of all that their labor produces, very few of their numbers would live on barley gruel, emigrate, or go supperless to bed.

We have not yet stated the causes now at work, which will ultimately check emigration from New York to the new States, and territories. It is the great amount of capital in the civilized world, which will soon monopolize all the vacant lands on this continent adapted to agricultural purposes.

Few are aware of the deep anxiety of nearly all men in all civilized nations to obtain a parchment title to a large surface of tillable land. It has ever been the master passion of the American people; it is the besetting sin of all, rich or poor, emigrants from abroad. And why?

Because it is the most convenient means of robbing other men of a portion of their productive energies that the wit of man has ever devised.

The rapid enlargement of farms in this State is only a sample of what is in progress in the new States, on a much more extended scale.

The following statement taken from a late English paper, illustrates the principle and the growing evil, to which we desire to call the public attention:

"The Soil of Scotland now belongs to little more than 3000 great proprietors—as many as might conveniently assemble in the West Kirk of Edinburgh, or the City Hall of Glasgow. One third of the whole lands of the country, were supposed to be under strict entail, in the days of Adam Smith; and more recently all the ancient proprietors of a whole county, (with one exception,) have been bought out by one noble family; and by another, sixty or seventy small estates have been purchased during the minority of the heir.

The soil of England, which in 1815, was in the hands of about 30,000 proprietors, had been in the hands of about *eight times* that number only forty years before. In other words, the proprietors of England were reduced from 240,900 as they were in 1765, to about 30,000; all in the course of forty years, or a little more than a single generation; and there is every reason to believe that the process has been going on with equal rapidity from 1815 to the present day."

This evil, like many others, will eventually cure itself. It will be overruled by a just Providence for the common good of this whole human family. It is a law of Nature that the poor shall multiply faster than the rich. The same majority which will have the physical power, will also have the intellectual

power to keep and enjoy all the good things or a fair equivalent, that their hands and their heads shall give to the world.

Then they will be as well off in Europe and in this State, as their Creator designed they should be. Man will see a practical illustration of the truth of the remark, that our Maker has created the elements of the human food and clothing, in infinitely greater abundance than his rational creatures have the power to increase and consume.

Our insane love of money will, perhaps, be the last passion to yield obedience to COMMON SENSE. But yield it must, for every body cannot become rich nor happy by robbing every body. Humanity has *rights* which we trust soon will be respected in the State of New York. When this principle is fully recognized, then New-York will become the best State in the Union to emigrate to, rather than a fine country as it now is, to emigrate *from*. Secure to every human being in the Empire State, his natural and inalienable birth right, to work at all times to a good advantage, and to keep all that his honest toil shall produce, and you will soon have more industry, more intelligence, more virtue, more wealth, and more people in New-York, than can be found on any other equal territory on this planet.

COLMAN'S EUROPEAN AGRICULTURE.

The fourth number of this work has come to hand. It is an improvement on those which have preceded it. It is devoted to the discussion of "Agriculture a Commercial Pursuit;" "Fairs;" "Markets;" "Corn Duties;" "Mode of Adjusting Labor and Wages;" and contains some valuable information of a practical character, relating to the cultivation of garden vegetables, fruits, &c.

Mr. C. has been a little excited by the remarks of critics, which appear to have roused him, perhaps unconsciously, to a more vigorous effort. He describes very graphically, what he has seen; and his heart and pen are always on the side of humanity.

It is for this reason that his work will, when completed, be popular among the masses of the human family. The author enters with becoming feeling, into all the evils and injuries that afflict the laboring people of Great Britain. For this service he deserves the gratitude of all that work for a living in this country. For the fact cannot be denied that we are manufacturing paupers at home, as well as importing them from abroad, at a fearful rate. An ounce of preventive is better, in this complaint as well as others, than a pound of cures.

Mr. James H. Watts of this city is agent for the Work.

OHIO CULTIVATOR.—It gives us great pleasure to see by the Ohio Cultivator, that our friend Bateham is meeting with that success in his new enterprise in the Buckeye State which he so highly merits.—The Cincinnatians, ever discerning as they are liberal, are subscribing by hundreds for this agricultural journal. The Mechanics and Business Men of Ohio see at a glance how deeply they are interested in the prosperity of the Farmer.

INDIAN CORN.—We predict that within six months, the whole duty on Indian Corn from this country will be removed by the British Parliament; and the toll on corn from Western New York, passing thro' the Erie Canal, will be reduced 50 per cent.

COUNTY FAIRS AND CATTLE SHOWS.

As a general remark it can be truly said that these Exhibitions, throughout the State, have been better attended, and more worthy of the Farmers of New York, this Autumn, than at any previous season.— This statement will apply to Monroe, Livingston, Chautauque, Onondaga, Yates, Tompkins, Tioga, Jefferson, Madison, Washington, and we doubt not many other counties from which we have no information. Premiums have been awarded on Crops and Domestic Animals, which show a decided improvement on those of former years. The number of competitors has usually been larger than at former exhibitions, and every thing evinces a growing interest in these Annual Festivals. The good spirit should be kept alive by the establishment of a FARMERS' CLUB in every town in the State. The members of these Clubs should meet, as they do in England, once a month, for the discussion of agricultural topics in which all can participate, and both communicate and receive much valuable information. If the tillers of the soil would meet oftener, and talk over all matters pertaining to good husbandry, the advantage would soon be very great. They would soon discover the value of agricultural papers, in which the knowledge of the wisest could be concentrated, and there scattered broad-cast over the whole State.— Knowledge is the grand Lever that will move the Agricultural World.

The Addresses delivered at the County Fairs, so far as we have seen them, show more reading and research on the part of the speakers, than can be found in any former efforts of the kind. Good books on the Science and the Art of Agriculture are much sought after, and doing a great deal to instruct and elevate the young farmers of the whole country.

For the Genesee Farmer.

WAYNE CO. AGRICULTURAL SOCIETY

Held its annual fair at Palmyra, on the 1st and 2d of the present month, with the usual interest in the exhibition. It was interesting to observe the visible improvement in domestic animals, since the commencement of these fairs a few years ago. The young horses were very fine, and consisted largely of the colts of the celebrated "Alfred," of "Samson" and of the Morgan horse, "Tiger." These three distinguished stallions were also themselves upon the ground and excited great attention. *Samson*, probably the finest specimen of the English draught horse in America,* appeared more like a locomotive for strength, than any animal we have seen; and from the power he has shown in draught, it was presumed he could draw, alone, any yoke of oxen. His half blood colts partake largely of his strength and hardihood. *Alfred*, to whom was awarded the first prize of the State Society at Rochester, is well known as a superb specimen of the English carriage horse; and the Morgan *Tiger* is a fine specimen of the Morgan breed of horses, remarkable for energy, hardiness and fire. The mania for fast-driving and carriage-breaking, is evidently declining, and horses for strength and endurance becoming more esteemed, especially by our farmers, nine-tenths of whom, in going "to mill, to market, and to meeting," rarely want to, or ought to drive more than four or five miles an hour. A wagon will wear out in ten years

* Every friend of agricultural improvement, will learn with regret, that this fine horse died suddenly and almost unaccountably, a few hours after his exhibition on the grounds.

by running six or seven miles an hour, while it would last more than twenty at four miles an hour.

Fine Durham cattle were shown, and many specimens of improved native cattle. But many of the best animals in the county were not on the ground, being excluded from premiums by former success in this respect. Agricultural Societies, to maintain the interest of their fairs, must adopt some new course to bring these fine fellows again together.— A very good lot of young steers and heifers were presented by several cattle breeders, as a proof of the excellence of their stock, a practice well worthy of imitation. The display of fine wool sheep was good; and of swine, decidedly meagre.

The committee on poultry, although prevented from visiting any hen roosts, gave a premium to one applicant from a written statement. He keeps his hens in a large airy house, warm in winter, and lets them out every day, using no yard. By this plan, and with much cleanliness and attention, he has cleared 90 per cent., the manure paying for attendance. Specimens of good, fresh eggs were shown, which had been kept two years.

The Horticultural exhibition, though not large, was decidedly fine. Sweet potatoes of his own raising, were presented by H. G. Dickerson of Lyons, who also, with many others, exhibited excellent garden vegetables, roots, &c. E. W. Cobb took the first premium on apples, and W. R. Smith the second; and H. F. Dickerson, on very fine Seckel and Virgalieu pears.

Handsome reeled silk was presented by D. B. Blakesley, and a large collection of domestic fabrics by several contributors. Premiums were given on miscellaneous articles of many kinds, including blankets, paintings, very fine stuffed birds, hats and caps, needle work, stockings, "children's fixens," table covers, work bags, toilet cushions, boots and shoes, shawls, wooden-ware, veils, quilts, wire screen, cabinet ware, tin ware, chairs, leather, cheese-presses, stoves, buggies, flour, poultry, clover seed, &c. Several successful competitors for premiums, in the different classes of objects, generously and patriotically returned them at once to the society, for the benefits of its funds.

The annual address was given by O. Archer, and was well adapted to awaken enthusiasm and arouse interest on this great leading pursuit of mankind.— Although, as he very correctly remarked, a man is to be known and respected by his character, industry, and talents,—and not by his profession. He stated wrongly, when he said, that by the increase of intelligence among farmers, they were *coming up* to the level of respectability found in other professions; they happened never to be below—at least since the flood—in my opinion. A very interesting and useful fact stated in the address, was, that it had been found in the eastern manufactories, that an educated and intelligent person would do much more work *with the same outlay of strength*, than an uneducated person;—how much more then, would the difference be, in the almost infinitely more multifarious operations in farming. Let no one say, then, that men are spoiled for labor by education—there are other ways enough to account for the difficulty when it exists.

J. J. T.

† There was one exhibition on the show grounds permitted and looked upon by some of the inhabitants for nearly an hour, which should have been immediately suppressed, viz: *wrestling*, among what appeared bull-dogs in human shape. The other animals on the ground were well behaved. These things must be publicly reprobated.

LIST OF PREMIUMS,

AWARDED BY THE MONROE COUNTY AGRICULTURAL SOCIETY.

HORSES.—For best Stallion, to Meigs Daily, Henrietta, 4 Vols. Transactions State Society, and \$3. 2d—to James Goodwin, Riga, Coleman's Reports, and \$2. 3d—to Daniel Bly, Henrietta, Vol. Trans. American Institute.

For best pair Matched horses, to True & Almy, Rochester, C's Rep. and \$2. [Messrs. True & Almy have returned the premium awarded them to the Treasurer, for the benefit of the Society.] 2d—to Wm. Buell, Gates, Vol. Trans. American Institute.

For best Mare with her colt, to Isaac Bolton, Brighton, C's Rep. and \$2. 2d—Lot Search, Henrietta, \$3. 3d—Peter McHardy, Rush, Vol. Amer. Institute.

For best 3 years old Colt, to S. S. Moore, Brighton, \$3. 2d—to H. S. Potter, Pittsford, \$2. 3d—to Ira Armstrong, Wheatland, Vol. Amer. Institute.

For best yearling Colt, to Samuel Smith, Henrietta, \$3. 2d—to James Hart, Irondequoit, \$2. 3d—to A. B. Buckland, Brighton, Vol. Amer. Institute.

CATTLE.

Thorough Bred.—For best Bull, to T. H. Hyatt, Rochester, for his Hereford, "Don Quixotte," \$3.—Best yearling Bull, to T. H. Hyatt, Rochester, for his Durham, "Albino," \$5. Best Cow, 3 yrs. old, Jeremiah Smith, Henrietta, \$5. 2d—to T. H. Hyatt, Rochester, Durham Cow, "Victoria," C's Rep.—3d—to Wm. Garbutt, Wheatland, for his Devon Cow, "Beauty," Vol. Trans. Best Heifer, Hereford, "Emma" 2 yrs. old, to T. H. Hyatt, Rochester, \$3. 2d—to do., Vol. Trans. Best yearling Heifer, to Wm. Garbutt, Wheatland, C's Rep. 2d—to T. H. Hyatt, Durham, "Albiness," \$2. 2d—to Wm. Garbutt, Vol. Trans. Best Heifer Calf, to T. H. Hyatt, Durham, "Lady of the Lake."—Wash. Letters.

Grade Cattle.—For best Bull, to Gideon Ramsdell, Perinton \$7. 2d—to Thomas Wiltsey, Perinton \$5. 3d—to R. H. Brown, Greece, \$3. 4th—Stephen Leggett, Henrietta, Vol. Trans. Best Bull, under 2 yrs. old, to John Ayrault, Perinton—no competition—2d premium, 3d. Best Bull Calf, to N. N. Treat, Mendon, \$2. 2d—to W. H. Groton, Vol. Trans. 3d—to Mathias Garrett, Gates, Vol. Amer. Institute. Best 3 years old Steers, trained, to Elmer Fell ws. Chili, \$5. 2d—to Daniel Rogers, Wheatland, \$3. 3d—to R. H. Brown, Greece, Vol. Trans. Best pair of Fat Cattle, to John L. Budlong, C's Rep. 2d—to John Ayrault, Perinton, Vol. Trans. Best pair of working Oxen, to Roswell Hart, Brighton, \$5. 2d—to John Ayrault, Perinton, \$3. 3d—to Stephen Leggett, Henrietta, Vol. Trans. Best milk Cow, to Ira Armstrong, Wheatland, C's Rep. 2d—to C. F. Crosman, Brighton, \$3. 3d—A. Smith, Brighton, Vol. Trans. 4th—N. Draper, Rochester, Vol. Amer. Institute. Best Heifer, to Thos. Chiselm, Greece, \$2. 2d—to Wm. Garbutt, Wheatland, Vol. Trans. 3d—to A. Smith, Brighton, Vol. Amer. Institute.

SHEEP.

Long Woolled.—For best Buck, John Barnes, Gates, C's Rep. 2d—to John Bitteridge, Riga, \$2. 3d—to James Parsons, Riga, Vol. Trans. Best 3 Ewes, to F. Cato, Chili, C's Rep. 2d—to J. A. Frost, Henrietta, \$2.

Fine Woolled.—For best Buck, to Elisha Harmen, Wheatland, (Pauler Merino, 3 years old, sheared 10½ lbs. washed wool.) C's Rep. 2d—to Geo. R. Hall, Wheatland, (Pauler Merino, 5 years old, sheared 13 lbs. washed wool.) \$3. 3d—to Alfred Fitch, Riga, Vol. Trans. Best 3 Ewes, to A. Smith Brighton, C's Rep. 2d—to James Lowry, Wheatland, \$2.—3d—to D. & H. Rogers, Wheatland, Vol. Trans.—Best 3 Lambs, to Rawson Harmon, Wheatland, C's Rep. 2d—to Jesse Harroun, Ogden, \$2. 3d—to James Lowry, Wheatland, Vol. Trans. Best fat Sheep, to J. A. Frost, Brighton, C's Rep.

SWINE.

For best Boar, to Geo. Sheffer, Wheatland, (Sheffer breed,) C's Rep. 2d—to N. Hayward, Brighton, (Leicester breed) \$2. 3d—to M. Burns, Rochester, (Berkshire breed,) Vol. Trans. For best Sow, with pigs, N. Hayward, Brighton, C's Rep. 2d—to John Williams, Rochester, \$2. Best 4 Pigs, to Wm. M. R. Booth, Gates, \$3. 2d—to Geo. Sheffer, Wheatland, Vol. Trans.

[The committee also awarded to M. Burns, Rochester, 2 Vols. Genesee Farmer for a Sow without pigs.]

DOMESTIC ARTS.

Butter.—For best 10 lbs. Butter, in rolls, to Robert Shearer, Pittsford, \$3. 2d—to John Rowe Riga, Vol. Trans. Best 20 lbs. packed in May or June, to Hollis Daggett, Brighton, \$3. 2d—to Samuel L. Seeley, Henrietta, Vol. Trans.

Honey.—For best 10 lbs. Honey, to Thomas Wiltsey, Perinton, \$3. 2d—to John Ayrault Perinton, 2 Vols. Genesee Farmer.

Sugar.—For best 19 lbs. Maple Sugar, to Alfred Fitch, Riga, \$2. 2d—to Mathias Garrett, Gates, 2 Vols. Genesee Farmer.

[The committee also awarded to Alfred Fitch, Riga, for fine Cheese, Vol. Amer. Institute.]

HORTICULTURAL PRODUCTIONS.

For best 12 varieties Apples, to Charles Merchant, Greece, \$2. 2d—to Samuel Briggs, Brighton, Vol. Trans. 3d—to John A. McGonegal, Irondequoit, 2 Vols. Genesee Farmer. Best 12 Pears, to H. N. Langworthy, Irondequoit, \$1. Best Peaches, to do., \$1. Best Quinces, to N. Draper, Rochester, \$1.—Best Seedling Apples, to Lewis Swift, Clarkson, Vol. Trans. Best sample of Grapes, (ripened in the open air.) to Z. Burr, Perinton \$2. 2d—to H. N. Langworthy, Irondequoit, Vol. Trans. 3d—to N. Hayward, Brighton, \$1. Best Muskmelon, to H. N. Langworthy, Irondequoit, \$1. For best 2 Water-mellons, to do., \$1. For best 2 squashes, to James Murray, Irondequoit, \$1. For best Egg Plant, to James Bradford, Brighton, \$1. Best Cauliflower, to Geo. Cooper, \$1. For best Beets, to C. F. Crosman, Brighton, \$1. For best Carrots, to John Bliss, \$1. For best Turnips, to James Bradford, Brighton, \$1. For best Salsify, to N. Hayward, Brighton, \$1. For best Celery, to Geo. Cooper, \$1. For best Cabbage, to John Bliss, Irondequoit, \$1. For best Onions, to do., \$1. For best Tomatoes, to John Bliss, Irondequoit, \$1. For best assortment of Dahlias, to Ellwanger & Barry, Rochester, \$1, and Volume Trans. 2d—to James M. Whitney, Rochester, \$1 and Vol. Amer. Institute. For best assortment of Cut Flowers, to Wm. King, Rochester, Vol. Trans. 2d—to Ellwanger & Barry, Rochester, \$1.

NON-ENUMERATED ARTICLES.

The committee on non-enumerated articles most respectfully report, that their labors have not been as

great as they could have wished—in other words, that not many articles were presented for their consideration. Such as were exhibited, are

One barrel extra superfine Flour, manufactured by John Williams of Rochester, from Harmon's white flint wheat—very superior, and entitled to a diploma.

Yankee Notion Cooking-Stove, by G. M. Bixby, Rochester.

Perfection Cooking Stove, by B. Wedd, Jr. The latter seems worthy of its name, and we consider it decidedly superior to the first named, and worthy of a diploma. The committee make no comparisons between this and the numberless kinds not exhibited.

Two of "Lewis' Patent Cooking Stoves" of different patterns were brought upon the ground after the committee had prepared their report and one of their number had left. They are cast by Mr. West, South Sophia St. Rochester, and present many points worthy of attention, and appear to possess many valuable qualities.

Pair of White Brazilian Turkeys, J. M. Whitney, Rochester. Very handsome, large, and said to be hardy. Vol. Trans.

Three varieties fowls, J. W. Bissell, Brighton, very large and much superior to the ordinary dung-hills. There may be others as good in the county, but their owners have not presented them—2 Vols. Genesee Farmer.

Two boxes Bar Soap, By Wm. Case, Rochester, a very superior article for the price—6cts. per pound—diploma.

Mould Tallow Candles, by Converse Dyer, extra, looking almost like sperm—price 9 cts. per pound. The committee state the price of the last two articles, because they were assured by the exhibitors that these specimens were not "got up" for the occasion, but such as they ordinarily sell.

LADIES' DEPARTMENT.

For best 10 yards home made Flannel—no competition—2d premium to Robert Shearer, Pittsford, 2 Vols. Genesee Farmer. For best 10 yards domestic full'd cloth—no competition—2d premium to R. H. Brown, Greece, 2 Vols. Genesee Farmer. For best Sewing Silk—no competition—to Mathias Garrett, Vol. Trans. [The committee also awarded to Theodore Backus, \$1 for a beautiful specimen of cotton and silk Vesting, wove by Mr. Robertson, of Rochester.]

DISCRETIONARY REMIUMS.

The committee on non-enumerated articles, respectfully report, that their funds have been so limited, they have not been able to be liberal in the awards of premiums. The skill displayed is commendable and was gratifying to the committee. They award to Mrs. Eunice Tuttle, of Henrietta, for a Hearth Rug, wrought with needle, \$1. To Mrs. A. Fitch, Riga, for Rag Carpet, \$1. To Mrs. Mary Daggett, Brighton, for a Bed Quilt, \$1. To Mrs. Abby Lister, Parma, for a Counterpane and Toilet Cover, \$1. To Miss C. Avrault, Perinton, for Blankets, Shawls, &c. \$1. To Mrs. Wm. Booth, Gates, Carpets, &c. \$1. To Miss Ann Maria Way, [13 years old] of Greece, for Worsted Work, &c., \$1. To Miss A. Boardman, Rochester, for splendid specimens of embroidery, &c., \$1. To Mrs. R. Shearer, Pittsford, for brown linen Thread, \$1. To Miss C. W. Lyon for worsted worked bag, &c. \$1. To Rufus Beckwith, Henrietta, for Kersey bagging, and a piece of striped cotton and wool cloth, for dresses, \$1.—Mrs. J. Seeley, Henrietta, presented a splendid comforter, but want of means prevented a premium.—

Mrs. T. W. Green, of Rochester, aged 74, presented specimens of needle work; the committee had not the means for a premium, but they give great credit for her industry and taste.

PREMIUMS ON FARMS.

The Committee on Farms have to regret that so little attention is paid to the calls and designs of the Society, and so little pride exhibited in making application to the committee to examine their premises and review their manner of farming, and the processes by which they regulate their agricultural operations. The committee have in various instances volunteered to call upon persons of established reputation as farmers, much to the edification and satisfaction of its members; and the good feeling, friendship and hospitality exhibited rendered it a very pleasing and desirable duty.

The objects for the bounty of the Society as defined in their instructions are, that premiums are to be granted to those farms only, which by a general system of management and real profitable improvements, with a sole view to a producing investment for farm purposes, and not to those farms which by nature required not the improving hand of industry and perseverance, nor to those who by expensive outlays in building and fancy improvements, have rendered their premises a gentleman's villa or citizen's summer residence. On these grounds the committee have made the following awards:

To Wm. Buell, of Gates, 4 Vol. Trans. and \$5. Wm. C. Cornell, Henrietta, C.'s Rep. and \$4.—Anon Harmon, Chili, 2 Vol. Trans. and \$3. Roswell Hart, Brighton, 2 Vol. Trans. and \$2. Charles Tenny, Riga, 2 Vol. Trans. and \$1. Alin Manly, Clarkson, 2 Vol. Trans.

To Martin Smith of Wheatland, the individual who with only 20 acres of land, has sustained and brought up a family of 13 children—had money on hand to assist his *poor neighbors* who had 200 acres of land; and who by his indomitable industry, good management and perseverance, has been enabled to hold on to his grain crop 3 years, waiting for a market—a diploma framed and glazed.

L. B. LANGWORTHY,	} Committee.
J. H. ROBINSON,	
ROMANTA HART,	
ELISHA HARMON,	
T. H. HYATT,	
JAS. P. FOGG,	

PREMIUMS ON IMPLEMENTS.

The Committee on Agricultural and Domestic Implements, from the short time allowed for examination, and to fix the premiums and make a report, have exercised their best judgements, without seeing them in operation. Yet they fear they have not only overlooked some articles of merit, but the advantages and valuable properties of others. As all the premiums that this committee are authorized to award are discretionary, and the funds of the Society not over-abundant, they therefore trust the owners will take the will for the deed.

A number of common, sidehill and subsoil ploughs from Worcester, Massachusetts, were entered by Messrs. B. F. Smith & Co., of the Rochester Seed Store: but one of the partners being on the committee, did not enter them for premium. They are in fact too well known and appreciated to need the committee's commendation.

To the Messrs. Pitts, for a corn and cob grinder, which this committee think is the long sought desideratum for this very important operation, and which

was exhibited in motion, a *special* premium of the fair similes of Washington's Letters.

Plough—To E. G. Whiting, for his No. 3, Wisconsin, Washington's Letters; to Benj. Wedd, for his No. 2, self-sharpening, Vol. Trans.; To J. El-yea, for his No. 3, Caledonia, Am. Inst.

Cultivators—To Langdon's corn plough cultivator, Vol. Trans.; to Bement's cultivator, Am. Inst.

Straw and Stalk Cutters—To H. A. Chase, for his double cylinder cutter, a simple, cheap and rapidly performing machine. Vol. Trans.; to Joseph C. Rich, of Penfield, for a cheap and good operating and well built machine. Am. Inst.; to Wm. S. Perkins, of Webster, for a new, ingenious and rapidly performing machine, but rather complicated, 2 Vol. Gen. Farmer.

To Messrs. J. & R. B. Houghton, of Ogden, for a very superior grain cradle, 2 vol. Gen. Far.

The same gentlemen exhibited a cheap, neat and portable Fence, without posts in the ground, which can be constructed for 63 cts. per rod. The committee wish to commend it to the public, as a very desirable improvement.

Alexander Williams, by Messrs. Stoddard & Freeman, exhibited a two horse wagon of very superior strength and workmanship. Vol. Trans.

John Rowe, of Riga, also presented a two horse farm wagon, having some new and valuable improvements worthy the attention of all who use that important article. 2 vol. Gen. Farmer.

Washing Machines.—J. C. Rich, of Penfield, a machine constructed on the principle of the fulling mill. The committee think it is constructed on a plan that will answer the desired end. It is safe in its operations, simple and durable. 1st prem. 2 vol. Gen. Farmer.

J. Parish, of Honeoye. This machine is altogether on a new and novel principle, which from its ability to apply its power to particular parts may on trial prove very valuable.

Pierpont Seymour, of Bloomfield, exhibited a Wheat and Plaster Sower, which for simplicity, ease of management and durability, the committee think nearer the desired implement than any thing yet before the public. Vol. Trans.

Lewis Swift, of Clarkson, for a Horse Hay Rake of great simplicity and durability, and combining some new properties over any other yet in use, \$2.

Doct. 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.

The prolific Mr. Rich also exhibited another hive, predicated on the same principle, but a variation of form, and the manipulations of changing and swarming.

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

Mr. John Onderdonk, of Greece, exhibited 9 kinds of seedling potatoes, which the farming committee overlooked, supposing they were exhibited as specimens of field crops. They were only three years from the seed, and some of them measured 9 inches long. Two or three of them promise to exceed any thing known, both for productiveness and for cooking, as we have proof from having eaten of them, and we would recommend them to the favorable notice of the committee on field crops.

For the Genesee Farmer.

WYOMING CO. FAIR AND SHOW.

PERRY, Oct. 9, 1845.

EDITOR GEN. FARMER—*Dear Sir*: Not knowing that any one from this County will furnish you with an account of the "Fair and Cattle Show," held in Wyoming County, last Wednesday and Thursday, I send you a few hasty lines.

It is our second attempt, and the result is certainly encouraging, for a laudable emulation is certainly excited; and an observing person, traversing this region, will see that the spirit of improvement presides with many of our Farmers, and that there is a more pleasant and profitable state of things hereabouts than there was previous to the formation of our County Society. Finer stock, better managed fields, richer crops, neater buildings, yards and fences—all are to be seen: there is more evidence of mental supremacy—of reading and research in the farmers' operations. Farmers begin to feel the pleasure, and realize the usefulness, of Agricultural Papers and Books. I wish more of them would read and pay for the "Genesee Farmer;" but the thing is coming round: Col. CHENEY, in his excellent Address, gave a very wise and timely hint upon that subject.

There was a fine display of Cattle; some good Horses, Sheep and Hogs, and a creditable array of Fruits and Garden Products—together with Domestic Manufactures. The Ladies' Department did them honor, truly.

The Plowing Match went off well—and better plowing you can no where find. In products of the Dairy, our county can't be beat by any thing in Western New York. Sugar and Honey are also produced in a fine state of excellence. Increased attention is being paid to Horticulture! Your Paper, with "Colman's Tour," is doing a good work amongst us; our people begin to feel that Science and Intelligence may be of great service in this line of business. We have a noble yeomanry in this section.

Yours truly,
D. S. C.

WAYNE AND TOMPKINS COUNTIES.—Since the preceding notices were in type, we have received a copy of the Palmyra Courier, containing the list of premiums awarded at the recent fair of the Wayne County Agricultural Society. The list gives abundant evidence that the spirit of improvement is on the advance among the enterprising Farmers of Wayne.

Also, a copy of the Ithaca Chronicle, containing the able address of D. B. STOCKHOLM, Esq., delivered before the Tompkins County Agricultural and Horticultural Society, at its recent Annual Fair.

LOOK OUT FOR YOUR POTATOES.—Yesterday we saw a heap of 70 or 80 bushels of potatoes in a field at Gen. T. Brown's, in Wheatland, which were nearly all a mass of complete rottenness. They were covered ten days since, in the usual way, about six inches deep with earth. A portion of the crop where these grew, and like them in every respect, was carried into the cellar and are now all sound.—We suppose that the loss of those in the heap arose from heat generated by too deep covering, at too early a period in the season. The covering should be light till the cold of winter demands a thicker and warmer coat. Dryness should not be disregarded.

WHEAT IN WESTERN NEW-YORK.

Wheat on the ground looks remarkably fine.—We never saw it better. Indeed there is some danger that it will get too forward, before winter sets in, so that the frost may injure if not destroy some pieces. Some of our best farmers say that they shall feed off the too luxuriant growth with sheep.

The last harvest has turned out better than was expected at the time the grain was cut. We have seen a man who has spent most of his time for the last four weeks in thrashing wheat with a machine, who says that nearly every farmer finds his yield larger than he anticipated before it was measured.

Mr. John Barber of Farmington took 1,500 bushels from 40 acres—an average of 37½ bushels. 33 acres in Pittsford, gave an average of 37 bushels. Sixteen acres in Brighton gave 38 bushels per acre.

There is great encouragement for wheat growers in Western New-York to make renewed efforts to improve the culture of this great staple. Improvement, most valuable improvement, is *within their reach*.

Mr. Taft of Greece, raised the past season *thirty-six bushels* of wheat on less than one half an acre of land. His whole farm contains but *one acre*. The other half did as well in the Summer crops. *Seventy-two bushels* per acre, is a great crop. Mr. T. is a comb maker, and wisely fed his wheat plants with the precise elements in all kernels of wheat, by manuring his soil with *horn shavings and scrapings*.

We have a mass of *facts*, on making something into wheat, which the readers of the Genesee Farmer shall have in due time.

For the Genesee Farmer.

WHEAT CROP, ITS PROSPECTS, &c.

MR. EDITOR:—In this great wheat growing region, any thing respecting our great staple is of importance to the farming community: wheat has been, and probably for a long time will be the principal, production of Western New York, and wheat and flour the principal articles of exportation: all classes are interested in its culture, from the busy, calculating tradesman, to the day laborer; all are more or less interested in any thing appertaining to the crop; therefore a few lines upon its prospects cannot be uninteresting.

For one I think the coming year will be a remarkable wheat season: my reasons are these; in the first place, the ground has been better prepared than I ever before knew it; wherever I have been this fall, I have noticed a remarkable change in the preparing of the ground for wheat; instead of the old method of getting it in, no matter in what condition, I have seen many who have adopted the proper mode of feeding the plant with its natural ingredients, such as lime, gypsum, ashes, charcoal, &c., and nearly all seem to think that wheat in order to produce, should be so cultivated as to pay the cost of production, and that this can not be done without preparing the ground in a proper manner. It has been one of the finest times for getting the seed into the ground, and having it germinate that I ever knew; it seemed as if the rains came just often enough to start the seed, but not so much as to give it a sickly growth. I have noticed that

after a dry summer we invariably have a good wheat season. I have never known this fail, and it would seem reasonable that there should be, as the ammonia of the atmosphere by collecting throughout the summer and having but few chances to descend in showers, it comes at the proper time to benefit the young and growing crop. Would it not be a good plan to sow gypsum or plaster upon our wheat at the present time, to absorb this ammonia and hold it for the use of the crop hereafter? I think that by sowing it in the fall it will not only collect the ammonia from the atmosphere, but by remaining through the winter on the surface of the ground, it will also absorb what fertilizing substances there may be upon the melting of the snow in the spring, and remain as a stimulant to vegetation the coming season. By imparting its fertilizing properties immediately and being partially dissolved by the melting of the winter snows, I think it must act with greater force than when sown in the spring; experience would seem to show the same thing, as, when plaster is sown on wheat in the spring, and clover sown, it is of more service to the clover the next year, than it is to the wheat crop. So much this time, Mr. Editor. I intended to have said more of the culture of wheat, but have not time and must reserve this, together with my own experience and experiments, to some future day.

Yours,

F.

REMARKS.—Our correspondent is taking hold of the true science of Wheat culture with commendable spirit, and we will add, for we happen to know, with signal success. We desire an account of his "experience and experiments" for our January number, if not before.

Plaster, ashes, lime and charcoal had all better be applied as a top dressing to wheat in the fall or beginning of winter, for the reasons our correspondent suggests, than in the spring. We have just spent eight days in travelling through many counties in this state, and never saw the wheat crop look much better than it now does.

TRAVELS IN NORTH AMERICA, IN 1841-2, WITH GEOLOGICAL OBSERVATIONS ON THE UNITED STATES, CANADA, AND NOVA SCOTIA. BY CHARLES LYELL, Esq., *Author of the Principles of Geology*. In two volumes.

The distinguished author of the above work has given to the public the best book of the season.—It will do much to render the study of Geology popular among a class of readers whose tastes are adverse to the sober investigations of natural science. The wonderful developments of modern Geology are so fully illustrated by maps, and clearly stated, that thousands will be induced to pursue the subject on reading this book, who would have turned away from a dry and unintelligent author with perfect disgust.

As a book of travels it is infinitely above the common level of those made by English travellers in the United States. His remarks on what he saw and heard in the New World, evince the caution and thoughtfulness of the philosopher. His praise and censure evidently flow from a mind that aims to deal justly with the government, habits, manners and customs of the American people.

Both volumes are bound in one. For sale by S. Hamilton, Buffalo street, Rochester. Price \$1 75.

For the Genesee Farmer.

STATE FAIRS AND TAVERN KEEPERS.

Much complaint is made, privately, of the exorbitance of the Utica tavern keepers, "from *great A.* down to &," in charging for dinners and crowded beds. I had one half of a bed, certainly not wide enough to hold a fat man alone, and in a small room and was charged very highly. Were there not at least 5000 regular boarders and lodgers, during the time of the fair?

This number, at two dollars a day, the least amount charged I believe, will be \$20,000. If 100,000 persons, then \$40,000. Some money, to pay for trouble. In proportion to the exorbitance of the tavern keepers, was the hospitality of the private citizens, in all cases when visitors to the fair were quartered on them.

What is the remedy? Let the tavern keepers in future, state beforehand, their prices, and a list of their names be published, then those will be shunned, who do not thus enter their names. Let the State Society see to this next winter, in fixing a price for the next fair.

A most unjust accusation was made by the editor of the Utica Liberty Press, on the Society itself for this overcharging, when it is well known that the members are as liable to this extortion as any one; and the officers of the Society, whom that paper particularly blames, are most liable, for besides giving their time gratuitously, they usually have to pay their board for several days before and after the fair, in necessary preparations.

That editor also complains bitterly that he was not allowed a "free ticket" to enter the grounds, and so staid away; he should recollect that those officers, whom he thus censures, all pay their admission yearly, fee, besides all the unpaid labor they expend; but most of them have contributed largely by liberal donations.

Three thousand dollars are yearly paid in premiums; and one to two thousand, in preparing for the fair, besides many other heavy expenses;—who then can have the face' to refuse his shilling, to enter the grounds, even though he may have advertised the fair in his paper?

FAIR PLAY.

For the Genesee Farmer.

DR. LEE.—We believe you had a peep, one day, at the fruit which was exhibited during the season, at the office of J. H. Watts, in Rochester.

The varieties, including Peaches, Apples, Pears, and Grapes, that have been presented from time to time, has surprised many. It was not known that so much good, choice, and rare fruit was already growing, in this region; and another year, when the Horticultural Society becomes formed, the members may depend upon finding work for at least one person to receive and take care, for exhibition, of what fruit will be brought.

Those who enlisted in the cause this year, have been well repaid in seeing the interest manifested, by out of town as well as city growers of fruit; and, on leaving the subject for another year, a hope exists that what has been gained for 1845 may be more than equalled in 1846. W.

MUTUAL LIFE INSURANCE.—Those that wish to make an insurance on their own lives, or the lives of their friends, will find a favorable opportunity with Mr. J. H. Watts, of Rochester, whose advertisement will be found in this number.

For the Genesee Farmer.

CHEAP, DURABLE & CONVENIENT FENCE.

One of the most important things in the agricultural world is fence. Our *all* as it were depends on it. Stone fence is best, but that we cannot all have. Monroe County suffers for durable fencing stuff as much perhaps as any section in the State. Consequently, I have adopted and would recommend, the following method, believing it to be the cheapest, most durable, convenient, and secure *Wooden* fence that can be made. Any kind of timber: even Basswood lasts well when sawed into small rails. Saw the most lasting, straight grained timber you have into pieces four feet long, two inches thick, eight inches wide at one end and four at the other, for posts. Saw pieces six inches wide two inches thick and three feet long for bed pieces. Saw the rails one and three fourth inches square, and twelve feet long. Saw a board five inches wide and twelve feet long, also a piece six inches wide and four feet long.—Make a shoulder across the wide end of the post, sawing in one half inch and six inches from the end, put the post on the centre of the bed piece (setting the bed piece up edgewise.) and nail it on with four nails. Bore six two inch holes in each post, at discretionary distances, boring the lower one through both pieces and enlarging the spaces as you go up between the rails, and put the cap, or five inch piece of board, on the top of the posts with nails, which board forms the top or seventh rail and preserves the heads of the post from rotting: the six inch piece of board is bored to correspond with the posts and put on to the centre of the rails to keep them from springing, (put on two of these if you please.) The posts should be slipped on to the end of the rails about 3 inches, and secured by a little wedge or key, drove over each, and one and a half inch pin put through about half way up the fence to attach the whole together; put the pin in loose so that the fence may be easily taken apart to move. The ends of the bed pieces should be placed on flat stones, two or three inches thick, to keep the whole steady and from rotting. Among the conveniences and advantages of this kind of fence are the following: First, you can move it at any time, so as to plow where it stands, destroying all hedges and saving the use of the ground each year, which is always a very wide cradle swath: a sort of stone boat made light and strong on which you can place four or five lengths, is the best way to move it. A man will move and adjust one hundred rods of it in a day. Secondly, it is much more durable than other fence, because no part of it touches the ground. Thirdly, you never need bars, for each length is bars of itself. Fourthly, farmers can make it in the winter, when little else can be done. Fifth, you are free from anxiety in a windy night or day, for it catches little or no wind, and consequently never blows down, and it is not liable to be pushed down by cattle. And last, though not least, comes what is nearest every mans' heart, the cost. There is in each length of twelve feet, about forty feet of lumber and fourteen 10' nails; the labor is about the same as making ordinary board fence. So it is seen at a glance that at least one third of the expense of an ordinary board fence is saved. I have ascertained, by actual weighing, that from three to three and a half miles of this fence may be carried on one of the largest class of canal boats. This would constitute a very important article of transportation on our Canals.

JOEL HOUGHTON.

Adams Basin, 1845.

For the Genesee Farmer.

FARMING IN VIRGINIA.

MR. EDITOR—A friend of mine living in Monroe County, New York, had the goodness to make me a present of three Nos. of the Genesee Farmer published by you, in which I found many deeply interesting, instructive, and some quite amusing communications. I was much pleased, also, to find that you had adopted a rule to admit into your columns articles of small calibre as well as great. There is an important consideration contained in this course. You know that many of us who are engaged in agricultural pursuits, are men of common and plain education; to all such, it is a source of pleasure to know that there is a common repository in the shape of a newspaper, where we can explain our views, and through which, we can converse with each other, though we live at the extremes of the Union. I propose, if it be agreeable or worth your notice, to give you some information in relation to southern notions and southern farming, as held in Loudon co. Virginia. I perceive that none as yet, have hailed in the Farmer from "old Loudon," which I wish you to understand is at the head of the list in the "Old Dominion."

1st. It is somewhat singular that the scriptural declaration applies to so many different conditions of human life. "As your fathers did, so do ye." The great doctrine here, which is paramount to all others, that every dollar that a thrifty man makes, ought to be invested in land, consequently, to add field to field, and farm to farm, is the great business of a prosperous man's life. A practice coeval with the existence of our country, and which I intend to show hereafter, as one of the greatest delusions or errors into which a farmer can fall. I imagine it would astonish you, could you visit us, to see what immense landholders are here; many owning from 500 to 2000 acres, worth variously from \$20 to \$60 per acre. Indeed, almost every thing goes by acres. And the showing the immense landed estates owned by such and such gentlemen, is a thing to which no small importance is attached.

The soils of our country consist of several kinds. I shall notice them briefly, according to their quality, beginning with the best first.

No. 1, Is a clay, red soil: two kinds of rock distinguish it, namely: a blue stone which we call iron rock, owing to its being so very hard, and when broken much resembles a piece of newly broken cast iron. The sub-soil contains the other, which is a very soft shelly green rock, and which the plow easily perforates, and when thrown up on the surface dissolves, and becomes the finest soil, as it pulverises immediately. A Geologist informed me that it was of itself, a good manure. Now the soil which I have just described, I consider the finest in the United States.

No. 2, Is the lime stone soil, is naturally richer, but will not stand a drought, or produce on an average with the other. The red slate is an inferior soil, and is the last.

Our manner of farming; wheat is our staple. We turn over a coat of clover in August; we plow but once; early in September; we harrow the land and lay it off into lands; about the 25th we commence sowing, and sow until the 10th of October. Corn is a heavy crop with us. We generally turn over an old sod, and the stubble of our wheat fallow for corn; plow in March and April, plant in April and

May. In the fall we sow our corn ground down in wheat; by the by, I would just remark here, that some farmers sow from 400 to 1000 bushels of wheat. From what I can learn, our manner of cultivating corn is different from yours. So soon as our corn is large enough to harrow, we commence with a stout, two horse harrow, or with a one horse harrow and go twice in a row; we thin it, and then commence with a shovel plow, and two shovellings generally makes it as clear and as mellow as a garden. We drop the plaster dry in the hill on the corn when we plant it, and then plaster around the roots when the corn is knee high. If we were to take the pains, and go to the expense that the people in the North do, from what I can see in your Agricultural papers, I do not know what would be our yield, but it certainly would be great. Our average crop on our number one soil, is from 8 to 10 barrels per acre, (5 bushels to the barrel) one hand can cultivate from 15 to 20 acres, if he have assistance in planting. I consider it far the cheapest food for cattle, hogs, or horses; infinitely cheaper than roots, and this is the opinion of all northerners who live among us.

If time would permit, I could give you a lengthy long narration on the subject of our cropping, but I promised to say something in relation to extensive land-holders, and its bad influences upon our country. I should like to tell of our advantages over you in wool growing; the great necessity there exists here for northern capitalists starting large manufacturing establishments; our fine water power; the fine climate; our splendid soil and many other things, but all these I must omit, until I see what reception this meets.

Rich men here buy up all the valuable land they can, the result is, to drive off our most industrious and hard working young men to other States, where they invest their small means in low priced lands, by which operation, the county and state lose immensely, both in physical and moral power. But this is not the only bad feature in this matter. I hold the doctrine that a man ought, if he would consult his interest or his happiness, never to own more land than he can cultivate in the best manner. Let the land holders in this county sell their lands off, retaining only 100 or 150 acres. The result would be that we should have several thousands of independent landholders more than we now have; the land would be twice as well cultivated as it now is, it would be worth much more per acre, the wealth of the State would be doubled, the independence of the people would be increased, and all kinds of stock would be improved. This county would be the garden spot of the world. But there is a species of land mania here, that sweeps every thing before it. I have known tenants and day laborers here, accumulate a few thousand dollars, lay the money out in land at \$50 per acre, as soon as they, by economy, can raise a few hundred or thousand more, immediately invest it in land, at 50 or 60 dollars per acre. In old age, you would see these same men tottering off to land sales, and be land buyers to the last, and die in an old log dwelling, without a good barn or stable, or fence on their whole estate. In the absence of all these improvements, in imagination, I turn my thoughts to the north, (although I have never had the pleasure of dwelling there,) and behold the beautiful dwellings of the farmer, the large and commodious barns, the cattle sheds the sheep sheds, the piggeries, the poultry houses, and every thing that can make man and beast comfortable, and that too

in an uncongenial clime. While we have every thing in the way of natural advantages with which a merciful Providence could bless a people, and yet we are far behind in so many things. Should I write again, I will try and be more concise and more interesting. I am awaiting an opportunity to send on the subscriptions for your able and useful paper.

Yours Respectfully, T. N. D.

Wheatland, Loudon County, Va.

For the Genesee Farmer.

VIRGINIA LANDS.

To farmers who may wish to purchase land in one of the finest climates in the world, the best soil, one of the handsomest tracts of land is now offered, which can be found in the United States, for sale, which lies 11 miles west of the county seat of Loudon County, Va. It is within one mile of the village of Hillsborough. The land must be sold to discharge the debts of the owner. I have recently travelled through several States in the Union, and have seen no situation which I consider its equal, or for which I would exchange it acre for acre. For grain growing, wool growing, and grazing cattle, it is surpassingly fine; for health it is unequalled.—Whole amount, 618 acres; will be divided to suit purchasers; improvements fine.

A TRAVELLER.

POTATOE BLIGHT.

Late foreign papers contain an interesting article on this destructive malady, which is doing vast injury and England and Germany at the present autumn, from the pen of MORREX, Professor of Agriculture and Forest Economy in the University of Liege, dated August 18, 1845. Professor M. regards the disease as the result of *fungus*, or parasite plant. He says:

This fungus is of an extreme tenuity; but pullulates or reproduces in an incredible measure. Its trunk is composed of several erect, jointed fibres, bearing at their summits one or more branches, always double, and at the ends of which appear reproductive bodies, in the form of an egg, but which do not really exceed in diameter, the one hundredth part of a millimetre, or the 393,700 part of an inch. Perhaps it will be said that this is a small affair to make such ravages, but I would ask is the itch a disease less to be feared, because the animals producing it exist only in a microscopic state?

Immediately following the formation of the yellow spot, and the development of the *botrydis* upon the potatoe leaf, the stem begins to feel the deleterious influence. Here and there the epidermis begins to turn brown, and finally black; and when the phases of the disease are carefully watched through the microscope, it will be readily perceived that it is in the bark the fatal germ exists. The morbid agent communicates its action from the bark to the inner epidermis, and although this latter does not always show the fungus itself, yet it is not the less fatally affected. To those who have any idea of vegetable physiology, these effects are easily enough explained. The sap, modified into living juices, into vegetable blood, is formed in the leaf, and descends to the stem and roots, through the bark. Here this sap, or blood if we please, becomes diseased, and carries the poison of the leaf through the fibres of the whole plant, and the stalk perishes. In fine, so soon as the black spots appear upon the stalks, the leaves dry up and wither, the plant droops, dies and falls to the earth, to disseminate a million fold, the poisonous canker.

I will endeavor to give soon the, to me, most feasible means of arresting the progress of the disease.

The infection is soon communicated to the tubercle, or potatoe proper; and if it take its course, this immediately becomes gangrened. A potatoe is not properly a root, but a branch; it follows, then, that the tubercle contains a marrow, or edible part, and a distinct bark. Between the marrow and the bark, is formed a tissue of fibres and vessels, which answers to wood. This may easily be perceived by cutting a thin piece of potatoe, and holding it between the eye and the light. Well, the infection attacks the part which received the descending sap, and which brought with it the morbid agent of the disease. Upon a diseased potatoe may be seen a series of spots of various colors, livid, brown, yellow, and sometimes gray or black, which are exhibited upon the ligneous tissue of the tubercle. By watching closely the progress of the malady in potatoes which had been attacked by it, I could follow its progress as it gradually advanced, until it reached the heart of the vegetable, and destroyed its substance. The skin of the diseased potatoe was easily detached, the body did not present that crackling resistance to the knife, but was flatulent and gave forth a faint and subsequently almost animal odor, analogous to that which escapes from freshly cut mushrooms. Animals even refuse to feed upon a vegetable which may be regarded as deleterious as the poisonous mushroom itself.

From the time when the vegetable becomes gangrened within, that is, in its *cortical* part, it requires but a few days—generally three suffice—for the *botrydis*, or fungus, to make its appearance upon the outer surface. The white efflorescence first shows itself within what are termed the eyes of the potatoe, then extends gradually, until it finally envelopes the entire tubercle. Then the potatoe is gone beyond hope.

The origin of the disease being known, it becomes the duty of every agriculturist to turn his attention to the destruction of the fungus, for it is painfully true that the smut, rust, mildew, blight and ergot, and all the class of parasitic diseases, once introduced into the crops of a country, are almost irradicable. This year the epidemic has been general; the germs exist everywhere, and millions of times will the disease be multiplied another year, if early and stringent measures are not taken for its prevention.

Prof. M. recommends the burning of the diseased vines and tubers, as the only means of destroying the *sporules* or seeds of the parasite. Lime, and solutions of green and blue vitriol, such as are used to destroy smut in wheat, are also recommended.

We are indebted to the Editor of the Buffalo National Pilot, for a translation of the article, from which we have copied the above.

ALBANY AGRICULTURAL WAREHOUSE.—We are pleased to see, by the last Cultivator, that Messrs. Comstock and Tucker, names well known—the former as Editor of the Central N. Y. Farmer, and the latter as Editor of the Cultivator—have opened an extensive Agricultural Warehouse, in the city of Albany, for the sale of Tools, Seeds, and all articles that belong to rural pursuits. Such an establishment was greatly needed at the Capital of the State, and we commend it to the attention of the Farmers of Western New York.

The tilling of the earth was the first employment given by the Supreme Ruler to the human race.

POULTRY.

The economy of poultry may be classed under three heads; first, in their natural state, which is the department of the naturalists; second in their domestic state in the country, with a full range of the farm-yard and fields in which the poultry keeper is concerned, for his profit; and third, in their artificial state, in or near towns, in pens or yards, which will chiefly engage my attention in the present article. The best and cheapest method of feeding I must leave to be detailed by those who keep poultry in large quantities.

Shelter.—Fowls should always be kept in a dry, warm, sheltered situation—a southerly aspect is to be preferred—for they enjoy and benefit greatly by the “warms in the sun,” as well as requiring protection from its scorching rays, and a secure (storm) shed for rainy weather. The roosting-house and laying-house, if separate, should communicate, that early layers may have early access to the nests, and also communicate with the storm-shed for the fowls to run in for security, if they should leave their roosts early in the morning. The nests should be numerous, either in boxes or baskets, not too deep but roomy, some situated high, some low, and as independent of each other as possible; each supplied with sweet, short, and soft straw, and a small nest-egg or two of chalk, the size of a pigeon’s egg. If the nests be too deep, they break the eggs in jumping in and out, and if the nests are not roomy, sitting hens have no room to turn easily, and consequently break eggs by not being able to get to them softly. They then eat the broken eggs, which gives them the habit of doing so at other times. They should roost warm at night, the perches high from the ground and of easy access, by means of lower ones or ladders. The more lightsome the house, the better for promoting dry air and free circulation; besides, fowls can not see at all, being quite stupid and helpless in the dark, consequently the feather tribe always retire to roost before the sun goes down. Shutters to the glazed windows are unnecessary, except for better security, or to prevent fowls from leaving their roosts too early in the morning, to disturb ticklish neighbors, otherwise they come out almost as soon as day-light begins to appear. The feeding places, if under cover, so much the better, as a precaution for wet weather, and as far as possible removed from the nests, that the hens which happen to be laying at the time, or which may be sitting, may not be disturbed and enticed off their nest and eggs at improper times. Being evidently natives of a warm country, they are scarcely yet perfectly acclimated to our variable and colder regions; although so widely diffused from time immemorial over the whole face of the globe, they have retained a peculiar susceptibility of damp and chillness, most of their diseases arising from rheum, or catarrh—catching colds. The lungs of fowls are particularly tender; the finer the species, the less is it hardy.

Cleanliness.—Fowls being cleanly by nature, thrive when regularly attended, but degenerate and sicken if neglected. In an artificial state of existence, they require to be supplied by art with what in nature they would obtain for themselves. For this purpose they should have a regular supply, in some convenient part of the shed, of sifted cinders daily to roll in and cleanse themselves, and which should be often changed. This precaution will keep them entirely free from vermin of any description.

Green Food.—This being quite as necessary for

health as corn, to supply this requirement of nature, they should have daily a good supply of sweet and fresh green vegetables. Cabbage and lettuce are the best—turnip-tops and watercresses—but on no account any sour plants, which scour them as do spinach, the cuttings from grass plats, and most sorts of garden seeds, as their instinct does not serve them to choose the wholesome from the noxious weeds, more than it does animals that happen to stray into a clover-field, or happen to receive too large a quantity into their stables. I have known them to burst. Green food with fowls is an astringent, the very reverse of what vegetables are with us. This fact will not appear so surprising, when it is recollected that one takes them raw, and the other cooked.

A plentiful supply of clean water, in daily well-cleansed vessels, and wholesome food are necessary. Frequent changes and mixtures of corn improve the appetite. Barley is decidedly their staple food in this country; Indian corn, or sometimes rice, mixed, for a change. Oats occasionally, but in too large quantity, are apt to scour. Occasionally buckwheat and hempseed, as a stimulant, mixed with the barley for a change, are very beneficial, particularly whilst moulting. One meal may be composed of boiled or steamed potatoes, well mashed up whilst hot, with a portion of barleymeal or oatmeal for a change, but which must be allowed to remain till cold. Books copying errors from one another, make a great mistake in advising food to be given hot. It is unnatural—they have no good cooks amongst them in their own state; and it is decidedly injurious to their digestive organs, except when fattening, when they are doomed soon to be killed for table. Fed twice a day at least, or three times if not too fattening; morning early, before the usual hour for laying, if possible; at noon, the noontide meal may be the potatoes, as above directed, and before sunset—not later than four o’clock—that they may go to roost by day-light, or they will go without their food. Regularity greatly tends to health, and disturbance of any sort is very hurtful. Rice occasionally boiled in a cloth, greatly increases its bulk, and they are very fond of it. Reaumur says, that great economy is derived from steeping or boiling the barley, to increase its bulk, when they will be satisfied with one third less quantity. But I cannot speak of this from my own experience, nor can I say that beneficial effects are produced by giving them much flesh, raw or boiled. But fat, as advised in books, produces scourings; spiced or salt meats, and kitchen stuffs, are certainly pernicious to their stomachs. In fattening for the table, when they are not required to live long, or show fine feather, this may not be of any consequence. Will some of your practical correspondents enlighten us? They require in pens, or small yards in towns, to be well supplied with grit, sand, and small gravel; slaked lime, and old mortar pounded is very beneficial, and serviceable in assisting to make the pen or yard dry. I will add to the above, that there is no economy in keeping poultry in towns, in small quantities, which is always exceedingly expensive, if well fed and taken care of; which, however, is compensated for, to those who wish to make certain that the eggs are quite fresh and newly laid.—All calculations of expense must be erroneous, there being so many contingent expenses. As a source of trade, much depends upon rearing the best breeds, to be early in the season, laying in a stock and store at proper times, having a ready sale for produce, and to “buy cheap, and sell dear.”—*London Gard. Jour.*

LIQUID MANURE.

It is now a pretty general belief among farmers, that there is "some good" in liquid manures; but, some how or other, we never see much preparation either for the collection or application of this, the cheapest and most valuable of all manures, and we verily believe that the subject is as yet scarcely thought of—in a way to lead to any practical result, by one *bona fide* rent-paying farmer, out of a thousand. Now, having for several years been an experimenter in this way, and sensible of the very great importance and value of liquid manures, I shall here take the liberty of throwing in my mite to the general fund, by communicating the little I have gained by experience to my fellow-farmers.

As I discard all chemical formula—the tank, watering-cart, and other *et ceteras*, from my system, and attach the fertilizing ingredients to a substance which farmers can actually work in with spades and shovels, I have more hope that my plan will be followed.

Chemists, generally, do not tell us the reason why liquid manures will not do much good when applied in a fresh state, though this is perfectly plain to all reflecting men. Liquid manure, if applied upon a pervious or gravelly soil, in a fresh state, is not retained long enough for its decomposition to take place, or for the roots to drink it up. It is put on a liquid manure, and runs off in the same state; but apply it to a soil rich in decayed or decaying vegetable matter, and on which a vigorous vegetation is going on, and it never fails of its extraordinary effects. The plan of administering liquid manures in a perfectly fresh state, is probably the best of any, were it not for the continued care and consequent expense necessary in supplying our crops with saturated water in all their stages throughout the year, and were we certain of the exact strength of the solution suited to their wants. As we, therefore, cannot apply our liquid manures on the best principles, on account of the expense, we must try the next best plan, that of decomposing them by the aid of decomposed vegetable matter; and this can happily be done, to great perfection, by reducing the vegetable matter to the state of carbon or charcoal—which we make from peat, as being trifling in expense, easily pulverized, and withal an excellent manure of itself.

We divide a shed into two compartments, one of which we make water-tight, by puddling the side walls with clay to the height, say of two feet, and separated from the other compartment by a low water-tight wall or boarding. This is my fermenting tank, which is filled half or three parts full of pulverized burnt peat, and the liquid manure from the stable, pig styes, &c., directed into it. This is mixed up with the pulverized peat and allowed to remain three or four weeks, till the decomposition seems about completed, being occasionally stirred about after the composition has become about the consistency of gruel. The whole is then ladled with a pole and bucket over the low partition into the second floor, which is also three parts filled with carbonized peat: and as the second floor is meant merely as a filter, we have it lower on one side than the other, by which means, in the course of a day or two, the carbonized peat is left comparatively dry. The water having passed off at the lower side, the first, or fermenting floor is again filled as before, and the contents of the second floor, if considered saturated enough, are then shoveled up into a corner, and allowed to drip, and further dry till used, which may be either immediate-

ly, or at the end of twenty years, as scarcely any thing will affect it, if not exposed to the continued washing of pure water, or exposed to the influence of the roots of growing plants. By being thinly spread on a grainery floor it soon becomes perfectly dry, and suited to pass through drill machines.

The mixing of the carbonized peat with the liquid manure on the first or fermenting floor, it will be observed, is for laying hold of the gaseous matters as they escape during the fermentation; perhaps other substances may effect this more effectually, but none so cheaply. I think by this plan it will be obvious to every one that a great many desiderata are at once obtained. In the first place you get free of about 956 parts out of every 1000 of the weight and bulk of manure, by the expulsion of water;—while at the same time you link all the fertilizing properties contained in it to one of the most handy vehicles—light, cleanly, and portable, and possessed of the peculiar property of holding together the most volatile substances, till gradually called forth by the exigencies of the growing plants. Lastly, you get free of the nasty tank, and the hogshhead and the watering-cart, with all its appendages, and are no more bothered with overflowing tank or over-fermenting liquid, with weather unsuited for its application. You have merely to shovel past the saturated charcoal, and shovel in a little fresh stuff, and the process goes on again of its own will; while the prepared stuffs lie ready for all crops, all seasons, and at all times.

The solid matter in the urine of the cow is estimated by very high authority, to be equal in value to its weight of South American guano.

I beg my fellow farmers clearly to understand, that I make no pretensions to this plan of applying liquid manure, being a new discovery. It is merely a modification of your old and tried plan of bottoining your dung-hills with peat; but by charring, the peat is freed of its antiseptic qualities, and thus becomes of itself a much better and speedier manure, and an admirable filter. But even peat, thoroughly dried, and perfectly pulverized, I have no doubt might answer the end indifferently well.—*Inverness Courier.—England.*

AGRICULTURAL SCHOOL.—At a late meeting at Pleasant Hill, Ohio, about eight miles from Cincinnati, a company was organized for the purpose of establishing an institution to be called the "Farmers' Collegiate Hall of Hamilton County." Already \$3,000 are subscribed towards the erection of a building which is to be commenced immediately. A board of directors was appointed, who were directed to apply to the next Legislature for a charter for the institution, which is expected to be under the charge of the Rev. Dr. Bishop, late President of the Miami University at Oxford, Ohio. Prof. Scott, who is favorably and extensively known as a gentleman of extensive scientific attainments, and great practical knowledge, is expected to be connected with it. We trust that this noble example will be followed by other counties in Ohio, and elsewhere.—*Dollar Far.*

The author of a pamphlet recently published in England, states that the soil of that country which in the year 1775 belonged to about 240,000 proprietors, in 1815 was owned by about 30,000, and that there is every reason to believe that this process of accumulation in the hands of a few has been going on with equal rapidity from 1815 to the present time.

[The following communication is from the pen of ELIUS BURRITT, the Learned Blacksmith, of Massachusetts. His "facts" are important, and presented in a striking light.]

FACTS FOR FORTY MILLIONS.

Mr. Editor—Can you make room in some corner of your paper, for a few facts which I have collected with some labor, and which, I think, seriously concern the working people of the Anglo-Saxon race?

The national debts of sixteen of the European Governments, at the closest estimate that can be made, amount to \$10,305,000,000 our currency; all incurred for the expenses of war. This sum embraces merely the *arrears*, not what has been *paid*, for carrying on war. The average of this amount is \$63,25 a head to the whole population of those 16 nations. The interest of this vast sum nearly equals a tax of *One Dollar* on every inhabitant of the globe.

Since the *Reformation* (!) Great Britain has been engaged 65 years, in the prosecution of seven wars; for which she expended, in our currency, \$8,982,120,000. It has been estimated by our Missionaries that a school of 50 heathen children, on the continent of India, would only cost \$150 per annum. Then this sum expended by a Christian nation in 65 years in carrying on war with other Christian nations, if applied to the education of the heathen, would have schooled 46,062,154 children per annum for 65 years! Allowing 5 years to each scholar, then 598,808,000 children might have been educated for the money that Great Britain drained from the sources and channels of her wealth and industry, to waste in wars, every one of which degraded her people in every quality of their condition.

From 1793 to 1815,—a period of 22 years—Great Britain, France and Austria expended \$7,330,000,000 in war. The *interest* of this sum, at 6 per cent., would have supported 30,000 missionaries among the heathen during the whole period of 22 years, in which these christian nations were engaged in doing the devil's work on each other. The aggregate amount would have given 5 years schooling to 488,666,666 pagan children on the Lancasterian plan.—The interest for *one month*, at the above rate, would build 1466 miles of railroad at \$25,000 per mile.

Consulting the best authorities I can command, I find that the aggregate amount of the expenditures of our own Government, from 1789 to March 4, 1843, is \$1,111,375,734.

Now—patriotic Americans! will you not read this reflectingly?—of this vast sum there have been expended only \$148,620,055 for *civil* purposes, embracing the Civil List, Foreign Intercourse, and the miscellaneous expenses. Then it follows that \$952,755,680 have been lavished upon preparations for war in time of peace, within a little more than half a century, by this model Republic!!! Another fact: From Jan. 1. 1836, to March 3, 1843, the war expenses of this Government were \$153,954,881!! *five millions more than all the civil expenses of the Government from 1789, to 1843!!* Another fact: From 1816 to 1834, eighteen years, our national expenses amounted to \$463,915,755; and of this sum, nearly \$400,000,000, went in one way and another for war, and only \$34,000,000 for all other objects! being \$22,000,000 a year for war, and about three millions and a half—less than one-sixth of the whole—for the peaceful operations of a government that plumes itself on its pacific policy! If we take into account all the expenses and all the losses of war to this country, it will be found to have wasted for us in sixty years

some two or three thousand millions of dollars!!

Worcester, Aug. 9, 1845.

E. B.

SAVING SEED.—It has often occurred to me that sufficient care has not been exercised in saving seed of vegetables from the finest part of the crop. If we breed live stock, of whatever kind, we invariably select the parents from the best of our flock or stud. So with regard to flowers—no one would sow seed from inferior flowers, but would select from the best specimens; and it is by following up this system, (even without more crossing than is performed by nature, and the bees,) that great improvements have been made. Thinking the same effects would accrue from a more careful selection of culinary seeds, and that a much greater degree of productiveness might be attained, about three years ago I began an experiment with long-pod beans; I carefully selected the finest and fullest pods for seed, taking none with fewer than five beans in each. Next year I had a good sprinkling of pods with six in each; these were saved for seed. The following year there were many six-seeded pods and some with seven. Following up the same plan, I find this season many more six and seven-seed pods, than of a less number, and some with eight! There are still a few plants which produce five-seeded pods, and it is worthy of remark, that the five-seeded pods have seldom a six-seeded pod upon them, but all fives; on the contrary, a six-seed plant generally has all the pods bearing six beans or more. As the seed-saving season is now coming on, perhaps these hints may induce others to adopt the plan. If the same thing were adopted with our corn-crops, by selecting a few of the largest and best filled ears, to save as seed, I have little doubt, mere productive varieties might be procured. In my younger days, I once gathered an ear of barley which had twenty-two grains on each side; surely the produce from seed of this description would yield a far better crop than such as is frequently sown.—*Selected.*

SCRAPS OF CURIOUS INFORMATION.—It is an Eastern tradition that the Prophet Mahomet, having one day washed his garment, threw it upon a plant of the mallow to dry: and when the garment was taken away, the mallow was found to have been transformed, by contact with so sacred an object, into a magnificent geranium, a plant which had never before existed. Several varieties of the geranium were introduced into England in 1534.

The expression *profane* literature owes its origin to Pope Gregory 1st, who ordered that the library of the Palatine Apollo should be committed to the flames, under the notion of confining the attention of the clergy to the Scriptures. From that time all ancient learning which was not sanctioned by the authority of the church, has been emphatically distinguished as profane, in opposition to sacred.

Mail coaches were first set up at Bristol in England in 1785, at the end of which year they became general in the kingdom. The mails had previously been conveyed by carts with a single horse, or by boys on horseback. The revenue from the Post Office in 1783 was only £146,000. From that time it increased rapidly, and at the time of the adoption of the penny system it was £2,400,000.

The first private library in England is said to have been formed about 1341 by Richard de Bury, Chancellor and High Treasurer. He purchased thirty or forty volumes of the Abbot of St. Albans for fifty lbs. weight in silver.—*Worcester Egis*



HORTICULTURAL DEPARTMENT.

BY P. BARRY.

RAPID PROGRESS OF AMERICAN HORTICULTURE.

The Report of the *Seventeenth Annual Exhibition* of the Massachusetts Horticultural Society, which we find occupying nearly thirty pages of Hovey's Magazine, shows the march of Horticulture in this country. The display of Fruits seems to have been unusually rich. Upwards of \$80 was awarded in premiums for *floral designs* alone. The "Festival" was grand. A large number of the most distinguished men of the day were present. The occasion was enlivened with Oratory, Song and Sentiment, such as it does one's heart good to read even, here in a lonely room, and at this distance of time and place.

During the evening, the President of the Society received a letter from Samuel Appleton, Esq., of which the following is an extract :

"It would afford me great pleasure to meet with a Society that has done so much, within a few years, for the improvement of Horticulture within the vicinity of Boston—Agriculture, the most useful, and Horticulture, the most pleasing, of all Arts, have fully kept pace with the rapid progress of the age, in other departments of activity, for which the community are largely indebted to the Massachusetts Horticultural Society.

"With the view of giving further aid to the Society, in their very laudable exertions, I send you one thousand dollars, to be invested as a permanent fund, the interest accruing therefrom, to be appropriated, annually, in premiums, for improvements in the arts to which the Society are devoted, in such manner as it shall direct, for producing trees good for food, and flowers pleasant to the sight."

There is a noble example for all men of wealth. A society with such patrons must succeed.

We look upon the history of this noble institution as embodying, to a great extent, the history of "American Horticulture"—and we, here in Western New York, should feel as great an interest in its permanency and success as though we were citizens of Massachusetts. Its influence has been, and will continue to be felt, advantageously, from one extremity of our country to the other.

The following scrap, from the Address of the President, affords much satisfaction and encouragement, and would be almost startling, were it not for the extraordinary progress we make in every department of industrial science :

"Sixteen years ago this day, its first exhibition was held in the Exchange Coffee House in this city, and as an illustration of the great success and prosperity that has attended the efforts of its members, I quote from the published Report of the Society.

"The number of contributors on that occasion was thirty-two.

"The baskets and dishes of Fruits less than one hundred, and the amount of premiums offered less than \$200.

"During the present anniversary, there have been

placed on our tables more than *fourteen hundred* dishes of Fruits, and the premiums offered by the Society this year exceed \$1300.

"And as a further illustration, I notice by this Report, that the contribution of Robert Manning, the great Pomologist of America, consisted of but one basket of peaches, while, at the present exhibition, the family of that lamented man have sent us 240 varieties of the pear. And in a note that I received from him but a short time previous to his decease, he stated that he had gathered into his own collection, from a point of time but a few years antecedent to the formation of this institution, nearly 2,000 varieties of fruits.

"Similar advances have been made by other members, and those whose names were not then borne on its roll, and some who had not even commenced the good work, are now among its largest contributors, presenting forty, fifty, and a hundred varieties ; and the same success and corresponding increase has been attendant on the productions of the floral and vegetable kingdom.

"Among the pleasing incidents of the present year, may be noticed the completion and occupancy of our new edifice in School Street ; but who would have predicted that, ere the present Exhibition had closed, there would still exist a demand for further and enlarged accommodations ?

"I congratulate the Society on the liberal and increasing patronage of the community—on the addition of more than 100 new members to its ranks during the last nine months—on the continued improvement in the productions exhibited—on the honorable and elevated standing our institution sustains both at home and abroad—and on the harmony and union that prevail among us.

"We have assembled to commemorate its 17th anniversary. We are met in this Temple of Liberty, whose time-honored walls have oft resounded to deeds of patriotism and benevolence, and we too have come up hither for a benevolent object. We have not come to prepare by exciting debate for the political contest, nor for the discussion of those subjects that agitate society to its very centre."

THE GARDEN AND ORCHARD IN NOVEMBER.

There is not a great deal that can be done in the Garden, this month, in our climate ; and people, generally, are so little disposed to gardening at this season, that what might be done, will be, in most cases, neglected.

The first thing to be attended to now, however, is the securing of every thing against the winter. All tender Bulbous roots, such as Gladiolus, Anaryllis, &c., and Dahlia roots, should be carefully put away, in a dry cool place, free from frost.

All tender fruit trees, and particularly those recently transplanted, and tender ornamental trees, shrubs, roses, &c., should have litter, or rough manure thrown around the roots, and the bodies sheathed in straw. Raspberry plantations should be pruned, cutting out the old weak canes and leaving three or four of the strongest in each stool ; these should be laid down and covered with two or three inches of earth—or they may be staked up and sheathed in straw : they will bear better fruit, and more of it, than if left exposed.—We mean the Antwerp, only, the native sorts being hardy enough.

Strawberry plantations, particularly young ones, should be covered with leaves or straw—as, if expo-

sed, they will be drawn out and injured, if not destroyed, by the frosts.

If the weather continues fine, transplanting of hardy trees and shrubs may be continued for a week or ten days, but no tender trees should be planted so late.

Then, when transplanting is finished, and every thing protected and secured, you may spend your leisure hours in manuring and trenching up your Garden. This will not only facilitate spring operations, but the soil, by being exposed to the frost, will become fine and friable, and weeds and insects will be more or less destroyed.

Orchards that have been seeded down and neglected, can now be manured and broken up. This is an excellent time to do it, if not already done. Don't dread the expense: it will, every cent, with double or treble interest, be refunded in one year from this date. Your next season's crop, in quantity, and more particularly in quality, will amply recompense you for your labor. The other day we travelled some 30 miles through the country, and we met with many who are going about this. People just begin to learn something about fruit culture: their eyes begin to be opened to its importance, in a pecuniary point of view, particularly.

We have not the least doubt but that there will be more orchard labor performed, during the coming season, than there has been for the last five. We rejoice to see such signs as enable us to say this—but even when all this shall be done, it will be but a trifle, compared to what ought to be. There are yet multitudes of farmers who seem to be unaware of the value of fruits and vegetables—looking upon the Orchard and Garden as rather a tax on their income, than a source of revenue, as they invariably are when properly managed; and not only a source of revenue, but a vast amount of domestic comfort and enjoyment. P. B.

AMERICAN APPLES IN ENGLAND.—We learn from the New York True Sun a circumstance showing the results of careful culture as applied to fruit, as well for home consumption as for fame abroad. Robert L. Pell, of Pelham, Westchester county, has an orchard of two thousand apple trees, all bearing Newtown Pippins. By trimming, and the application of the best manures, he has brought the fruit to an unusual size and excellence. The apples are picked and packed in barrels, without being rolled or jolted in carts, and so arrive in the very best order for shipment. Last year they were sold in London at twenty-one dollars a barrel, and the merchant to whom they were consigned, wrote that the nobility, and other people of great wealth, had actually bought them by retail at a guinea a dozen; which is some forty-five cents an apple. Mr. Pell has from three to four thousand barrels of the apples this year, which are sold as fast as they arrive in market, at six dollars a barrel, and are shipped to England. It is quite a business for one of our commission merchants to dispose of the produce of this noble plantation.

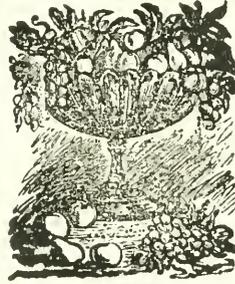
We glory in this Robert Pell,
And ever may his apples sell!
Their growth he has improved so well,
E'en Britain sounds the name of PELL.—Selected.

We notice the following among other sentiments given at the late Festival of the Massachusetts Horticultural Society:

"Our Puritan Forefathers—The children of faith as well as of fancy—they trusted their lives and fortunes in a *Mayflower*."

ADVERTISEMENTS.

MT. HOPE BOTANIC GARDEN AND NURSERY, ROCHESTER, N. Y.



THE subscribers respectfully announce to their friends and the public, that their present stock which they offer for sale the ensuing Fall of 1845 and Spring of 1846, is the finest ever grown in western New York, and unsurpassed in quality by any establishment in the country.

The collection of fruits comprises the most esteemed varieties of the Apple, Pear, Peach, Plum, Apricot, Cherry, Nectarine, Almond, Grapes, &c.

The trees are well grown, thrifty, and beautiful, and have been propagated with such care as to ensure correctness.

All are warranted genuine as represented. PEAR TREES OR QUINCE STOCKS FOR DWARFS and PARAMIDSs, can also be furnished of the finest varieties. These will bear the first or second year after transplanting, and are beautifully adapted to garden culture.

3,000 fine thrifty young trees of the famous New American Apple, the "Northern Spy," are also on hand.

STRAWBERRIES—All the fine new esteemed varieties, including Stoddard's new Alpine.

Also a large and fine collection of Ornamental Trees, Shrubs, Roses, (including a quantity of splendid *Standard or Tree Roses*, 3 to 6 feet high;) Herbaceous Plants, Bulbous Roots, Double Dahlias, &c.

Our new descriptive catalogue will be sent *gratis* to all Post PAID applications.

Trees and Plants will be packed in the best style, and shipped to any port or place that may be designated.

It is for the interest of purchasers that they forward their orders now, without delay, that they may be executed in proper season. Address ELLWANGER & BARRY.

Rochester, Sept. 1, 1845.

MACEDON NURSERY.

THE partnership formerly existing between Thomas & Smith having been dissolved, orders for Fruit Trees, and Ornamental Shrubs and herbaceous perennial Plants, will be received by the subscriber. The list of fruits cultivated for sale having undergone a thorough revision and new grounds extensively occupied, many of the varieties can be furnished only in small trees till another year; hence when orders cannot be fully supplied, the balance of remittances will in all cases be at once returned to the purchaser. J. J. THOMAS, 9mo. 1, 1845. [2m] Macedon, Wayne co., N. Y.

MACEDON NURSERY.

THE accounts of the late firm of "Thomas & Smith" Macedon, are left with the subscriber.

The business will be conducted as heretofore, upon the principle of propagating only select varieties of *proved fruit*.

A fine stock is now on hand, which will be much increased by the superior kinds recently fruited.

Several hundred fine trees of the May Bigarreau, the earliest of all good cherries. WILLIAM R. SMITH. 8 mo. 25th 1845.—2 t.

THRASHING MACHINE COVERS,

WARRANTED water proof, and not to crack, constantly on hand and made to order, by the subscriber.

Orders through the Post Office will be thankfully received and promptly attended to.

Manufacturer of awnings, bags &c. No. 5, second story Curtis' Block, Rochester. E. C. WILLIAMS.

LIFE ASSURANCE AGENCY.

THE subscriber having been appointed agent for the Worcester (Mass.) and Nautilus (New York city) Life Assurance Companies for this region of country, respectfully invites Farmers, Artizans, and those in all conditions of life, to call on him for information on the subject.

He will issue policies in the above companies on lives, from \$100 to \$5000.

A pamphlet will be furnished, giving particulars. Call on JAMES H. WATTS, *Life Assurance Agent*, Corner Buffalo and Exchange streets, Rochester, Sept. 1, '45. Over E. Watts' Hardware Store.

AN ARTICLE IN SEASON.

FRANK MILLER'S Leather Preservative and Water Proof Blacking. Every individual wearing boots and shoes, will find it greatly for their interest as well as comfort, to make use of this valuable article, especially those exposed to wet and mud, as it not only renders the leather soft and pliable, but water proof and much more durable. Each box contains sufficient for an out door laboring man, for one year, with directions for using. Price, 25 cts. per Box

Meteorological Observations.

MADE AT ROCHESTER, SEVEN MILES FROM LAKE ONTARIO, BY L. WETHERELL.

JOURNAL OF THE WEATHER FOR OCTOBER, 1845.

Days mo.	Thermometer.			Barometer.		Wind.	Observations.
	Source.	Mid-day.	One h. after sunset.	Surmise.	Evening.	Prevailing wind.	
	26	47	61	47	29.5	29.5		s w s	Cloudy—Rain—r.g. 31
27	47	63	59	.69	.70	s w	Cloudy—Fair.
28	53	63	61	.70	.60	s w	Cloudy—Rain—r.g. 08
29	61	71	73	.68	.61	s w s	Cloudy—Fair.
30	65	65	62	.40	.30	s e s	Cloudy—Rain—r.g. 43
1	52	62	49	.39	.40	s s w	Fly—Fly—r—r.g. 04
2	50	58	58	.60	.60	s w	.. ..
3	55	57	52	.63	.70	N	Fly—Rain.
4	48	71	62	.70	.50	s e s	Fair.
5	56	49	46	.40	.60	n w n	Cloudy—Rain—r.g. 72
6	46	53	49	.75	.80	N E E	Fair.
7	36	61	52	.70	.70	s w e	.. Frost.
8	51	67	56	.70	.59	s w s	Cloudy—Rain—r.g. 40
9	69	61	55	.40	.60	s w n w	.. ..
10	46	72	62	51	.40	s s e	Fair—Cloudy—Rain.
11	61	62	56	.40	.35	n w	Cloudy—Rain.
12	59	60	44	.09	.49	s w	Fly—r'n & s'w r.g. 1.31
13	40	56	45	.70	.81	s w s w	Fly—Cloudy.
14	48	49	42	.70	.80	s w n w	.. .. Rain
15	34	44	32	.99	31.00	s w n w	Fly—r'n & s'w r.g. 11
16	34	49	36	30.10	.00	w s	Cloudy—Fair.
17	31	55	38	29.91	29.93	..	.. ..
18	36	64	59	.85	.79	..	Fair.
19	53	62	46	.60	.70	..	.. ..
20	41	47	39	.80	.91	n e n	Cloudy—Rain & s'w
21	25	35	29	39.05	39.10	n w	.. Snow.
22	23	44	31	.10	.00	s w w	Fair.
23	23	55	44	29.08	29.85	s w	.. ..
24	41	61	49	.85	.90	..	Cloudy—Fair.
25	33	60	46	.90	.88	..	Fair—

Maximum (S. p. 29.) Thermom. 80 deg. (Oct. 16.) Bar. 30.10 in.

Minimum (Oct. 22.) Thermom. 23 deg. (Oct. 12.) Bar. 29 in

REMARKS.—The weather during the month has been rainy and cool; the rain gauge for Sept. 4.32 inches. The mercury in the therm. on the morning of Oct. 23, was down to 23—lower than it has been in October for five years.—First snow, Oct. 12th—Last year we had a great fall of snow Oct. 23th, 29th, and 30th.

COLEMAN'S TOUR IN EUROPE.

SUBSCRIBERS TO "COLEMAN'S TOUR IN EUROPE" are hereby notified that No. 4 is received, and ready for delivery to out-of-town subscribers who choose to call for them, instead of their being sent by Post. The condition of subscription is, that on the delivery of the 5th number, the balance of three dollars is to be paid. I am ready to receive the money now, from all who choose to pay. Subscriptions are still solicited. Price, \$5 00; or 50 cents a number. JAMES H. WATTS, Agent for Mr. Coleman.

Rochester, Nov. 1, 1845.

SANFORD'S PREMIUM STRAW CUTTER.

This Machine took the FIRST PREMIUM at the State Fair at Utica, September, 1845.

TO FARMERS AND OTHERS.

THE subscriber is now manufacturing and offers for sale, SANFORD'S PERFECT RURAL CUTTER, which has now been fully tried and proved by competent judges to be far superior to any other similar machine in the State. Some of the best farmers in this and adjacent counties have witnessed its operation, and have certified to its great value. It cuts straw or hay with great rapidity, and very fine. Its cheapness also, compared with other straw cutters, should not be forgotten.

For sale by B. F. SMITH & Co., at the Rochester Seed Store, Front Street.

WHITE BEANS.

500 BUSHELS wanted at the Rochester Seed Store, for which the highest cash price will be paid by B. F. SMITH & CO.

TIMOTHY SEED WANTED,

AT the Rochester Seed Store. B. F. SMITH & CO.

CORN SHELLERS,

FOR SALE at the Rochester Seed Store. P. F. SMITH & CO.

MONROE CO. AGRICULTURAL SOCIETY.

The Annual Meeting will be held at the Rochester Seed Store on the second Wednesday of December, (the 10th day,) at 11 o'clock, A. M.

This Meeting will award the Premiums on Field Crops, &c., and choose officers for the ensuing year. Let there be a good attendance of the Farmers of Monroe. JOHN H. ROBINSON, President.

THE MARKETS.

WHEAT is now worth not far from a dollar a bushel in this market. It is a fraction less, owing, in part, to the circumstance that our millers have as much on hand as they can grind before the close of navigation. It is deemed unsafe to pay a high price for grain the flour of which must be kept over or sent to Boston by railway. We have examined all accounts from abroad with care, not only the newspapers, but the agricultural and quarterly journals; and have come to the opinion that the changes are in favor of a price above, rather than below, a dollar a bushel the coming winter. We clip the following from the Mark Lane (London) Express of the 29th ult:

"By the official account just published, it appears that the stocks of Grain, Flour, and Pulse, under lock in the United Kingdom, were as follow, on the 5th inst.:

Wheat	44,498	Against which there	{Wheat 330,893
Barley	59,723	were on the 5th	{Barley 164,684
Oats	80,114	September, 1844,	{Oats 86,274
Rye	—	in Bond—	{Rye 2,546
Beans	48,073		{Beans 4,810
Peas	11,420		{Peas 2,962

The difference in the quantity of Wheat on hand is not very great; but it must be borne in mind, that at this period last year one of the most abundant crops gathered for years had just been secured, whereas at present a proportion of the harvest is still abroad, and that part saved is of decidedly inferior quality, besides being deficient in quantity to the acre. What might then have been considered a good stock cannot now be regarded as such, and unless the reports of the indifference of the yield are greatly exaggerated, and the failure in the Potatoe crop proves much less extensive than it is represented to be, we shall unquestionably require an extensive importation from abroad."

From the Mark Lane Express, Oct. 6.

In the northern and eastern parts of the kingdom there is still a good deal of grain in the fields; and as the weather seems to have been quite as unsettled there as with us, the conclusion of the harvest must be still further delayed. The chances of the remainder of crops in the later districts being secured in even tolerable order are, therefore, very slight.

NEW YORK, Oct. 28.

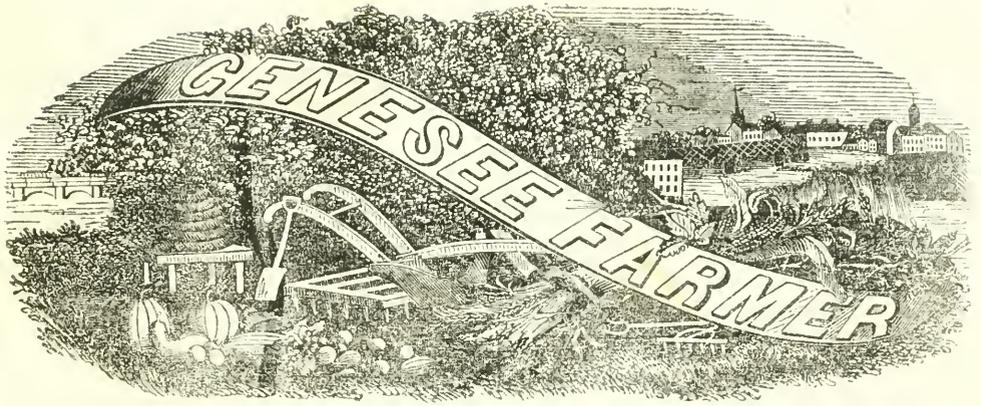
About 1000 bbls. Genesee Flour were taken this morning at \$5.62½. Holders afterwards asked \$5.75, but only a small quantity was taken at that price.

ROCHESTER PRODUCE MARKET.

Wheat	93 a 96 Hay, ton,	\$11 00	13 00	Eggs, doz.	10 12
Corn,	37 1/2 a 40 Wood, cord,	2 00	2 50	Poultry, lb.	5 6
Barley,	30 a 40 Salt, bbl,	1 13	Tallow,		
Oats,	30 a 32 Hams, lb.,	5	6 Hops,	10 11	
Flour, (ret.)	4 50 Pork, bbl,	10 00	Wool,	25 32	
Beans,	87 1/2 a 90 cwt.	3 25	3 75	Sheep Skins, 50 75	
Apples,	20 a 25 Beef,	4	3 09	3 50	Green Hides, lb. 3 7
Potatoes,	18 a 25 Lard, lb.,	8	10	Dry Hides,	6 7
Flour-ced,	6 50 a 7 50 Butter,	10	12	Calf-skins, gr's 5 6	
Timothy,	1 50 a 1 75 Cheese, cwt,	6 00	6 50		Oct. 30.

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VOL. VI.

ROCHESTER, NEW YORK. DECEMBER, 1845.

NO. 12.

THE GENESEE FARMER.

PUBLISHED MONTHLY,---AT ONLY 50 CENTS A YEAR!

Volume 7, for 1846,

ENLARGED AND IMPROVED!

24 PAGES, WITH ENGRAVINGS, IN EACH NUMBER!

PROSPECTUS :

THE undersigned, having purchased the Subscription List of this valuable and popular Journal, would announce to its Patrons and the Agricultural Public—and especially to the enterprising Farmers of Western New York—that such arrangements have been made for its future publication as will render it still more deserving the patronage of all friends of Improvement.

The favor and patronage which have been bestowed upon it during the past year, and a belief that its friends and supporters may be greatly augmented, have induced the publisher to ENLARGE, and otherwise materially improve the Farmer. *Each Number of the next Volume*, (commencing in January, 1846,) *instead of SIXTEEN, will contain TWENTY-FOUR LARGE OCTAVO PAGES,—will be printed on NEW TYPE, and GOOD PAPER,—and embellished with appropriate ENGRAVINGS.* The paper will make a handsome volume of about *three hundred pages*, suitable for binding at the expiration of the year.

Its EDITORIAL DEPARTMENT will continue under the supervision of DR. DANIEL LEE, its present talented and popular Editor. Dr. L. will be located on one of the best farms in Monroe County. The narration of his Practice, Experiments and Observations, aided by his well known Scientific Attainments, cannot fail to make the GENESEE FARMER of peculiar interest, and value, to every Practical Agriculturist. A large number of able writers will add to the usefulness and interest of its pages, by contributing the results of their experience and extended observations.

Several pages of each number will be devoted to Horticulture, and its kindred pursuits. This Department will be conducted by Mr. P. BARRY, well and favorably known as an experienced Horticulturist—and consequently make the paper very valuable to those engaged in the delightful and profitable avocation of cultivating Fruits, Flowers, &c. A careful Review of the Markets, furnishing correct information relative to the prices of staple Agricultural Products, at Home and Abroad, will be given in each issue of the Farmer.

Having had several years experience in the publishing business, (and for some two years successfully conducted an Agricultural Paper,) the proprietor has all confidence to believe that, by devoting his undivided time and attention to the publication—with Dr. LEE as Editor, and the aid of kind friends and talented contributors,—the GENESEE FARMER may be made worthy of its name, and of a patronage greater than it ever received in its palmiest days.—No reasonable expense nor effort will be spared, but every proper exertion used to make it acceptable to the Farming Community, by rendering it at once the best and the cheapest paper of its size and kind in the Union.

The TERMS of the FARMER will remain the same as at present: FIFTY CENTS A YEAR, *in advance*—5 copies for \$2; 8 copies for \$3; 13 copies for \$5. [☞ Publication Office over the ROCHESTER SEED STORE, Front street.]

All Friends and Subscribers to the FARMER, who receive a copy of this Prospectus, are requested to aid in extending its usefulness, and in advancing the cause of Agricultural Improvement, by introducing it to the notice of their neighbors, and procuring and forwarding subscriptions. We especially desire the assistance and co-operation of the Farmers and Horticulturists of Western New York, (within whose territory no other similar Journal is published,) in behalf of this enterprise. May we not confidently anticipate such an augmentation to its list of permanent supporters as will enable us to make the Farmer alike creditable to its Patrons and Conductors?

In order that the publisher may judge how large an edition will be necessary, those who wish to subscribe are requested to send in their orders as soon as convenient. ☞ Persons ordering the paper will please write plainly the name of the Post Office, County and State to which it is to be sent. Post-Masters may enclose money at our risk. Address,

D. D. T. MOORE,
Publisher Gen. Farmer,

Dec. 1, 1845.

ROCHESTER, N. Y.

☞ Editors of papers in Western New York, will render us an especial favor by publishing the above Prospectus, and directing the attention of their readers to the same. Those who do so, shall receive one or more copies of the next volume of the Farmer, without an exchange—on sending us a paper containing the Prospectus, &c.,

OUR VOLUME FOR 1846.

With this number will close the fifteenth volume of the old and new Genesee Farmer, and the sixth of the New Series. The Editor trusts that he has commenced an acquaintance with its readers, which will continue for many years, and contribute not a little to the prosperity and happiness of both parties. Hitherto, owing to other, and not very congenial pursuits, the conductor of this paper has not been able to devote that attention to its reading matter, correcting proof, &c. &c., which the best interest of the FARMER, and his own reputation, alike demanded. Hence he has deemed it due to himself, as well as to the friends of Agricultural Improvement, either to resign the Chair-Editorial to one who could devote more time and attention to its many duties, or endeavor to discharge such duties in a manner more worthy of the great Agricultural Interest of the Country. The latter alternative has been chosen. With wheat worth over a dollar a bushel, and cheese eight cents a pound, we do not believe that a well conducted agricultural journal, at fifty cents a year, need to die, in Western New York, surrounded by fifty thousand intelligent and independent farmers. These greatly need a paper that is wholly devoted to the advocacy of their interests, in all matters of a public and professional character. The fact is not to be disguised that party politics has engrossed too much of the attention of the tillers of the soil, to the neglect of what would lessen the present expense of raising 100 bushels of grain, or of making 100 pounds of pork, beef, butter and wool. It is only by diminishing the cost of producing what the farmer makes to sell, in Western New York, that he can hope to compete on advantageous terms, with the avalanche of western agricultural products, soon to meet him in every market. This saving in the cost of a bushel of wheat, to the producer, can only be realized by a knowledge of the *things* that combine to form this grain—and of the *laws* that govern the combinations of these *things*, under all ordinary circumstances.

To acquire this practical and scientific knowledge, and to scatter it broad-cast over the land, is the great ambition of my life. It was to persuade the Legislature to assist a *little*, in a common effort, to render Agricultural Labor better rewarded in the Empire State, than it then was, that the Editor occupied a seat for two sessions in one branch of that body. Although unsuccessful, the hope of success is not yet extinguished. The time will come when the claims of Honest Industry will be listened to in the capitol of New York. The rapid concentration of wealth into *few*, and *fewer* hands among us, will eventually work a cure for a disease, now in its incipient stages, which every consideration of patriotism, of justice, and of the inalienable rights of humanity, require that it should be timely and wisely removed. The laboring people of all classes, must be taught how to *keep*, as well as how to toil and *create* property. It is alike unsafe and unnecessary, to manufacture paupers, and criminals, a great deal faster than our population increases. The evils of this system will fall, one of these days, with fearful weight on the owners of the soil in New York.—Land that is visible, can no more escape taxes here than in England, where \$30,000,000 are annually expended to feed suffering men, women and children. Every child in this State should be learned some branch of productive industry, that when an adult, he shall neither beg, steal, nor starve. He should

also learn how to *keep* the entire proceeds of his muscular or mental toil, that he need never become a public pauper, and a severe tax upon the labor of others.

The *art* of creating wealth by skillful rural labor, and the *science* of keeping it after one has fairly called it into existence, will be calmly and plainly discussed in our next volume.

For particulars see the Publisher's Prospectus.

DANIEL LEE.

TO SUBSCRIBERS.

THE January number of the Farmer will be sent to all subscribers to this volume. As we are determined to do all in our power to merit support, we trust no one will discontinue the paper until it proves unworthy of his patronage—an event which, extraordinary exceptions, we *shall try*, for some years, to forefend. We confidently ask those who like the Farmer, to renew their subscriptions, and solicit their friends to become its readers and patrons. The unusually low price at which we offer the enlarged volume of the Farmer, must give it preference to many other similar publications—though we hope that every good agricultural paper may be well supported.

☞ We are now sending out a Prospectus, in circular form, for the forthcoming volume. Gentlemen, will those of you who receive a copy of such Prospectus, obtain and forward subscriptions for the Farmer? Those who may not get a circular copy, will oblige us by showing this number of the Farmer to their neighbors, and soliciting them to subscribe. For this, or any similar aid which you can consistently and conveniently render, we shall feel truly grateful.

PUBLISHER.

STATE AGRICULTURAL SCHOOL.

The Cortland Democrat has an excellent article recommending a State Agricultural School, and designates Monroe County, or Rochester, as the most suitable place for its establishment. We have only room for the concluding paragraph, which is as follows:

"We hope the next Legislature will take early action upon the subject, and adopt such measures as may be necessary to procure land, erect buildings, and establish and permanently endow an institution which will do credit to the Agricultural interest of the State.

Rochester would be a capital location for such an institution. Utica has the Lunatic Asylum; Syracuse expects, and should have the Capitol; Auburn has the Prison; Geneva the Colleges; and Rochester should be the place for an Agricultural School. The citizens of that county and city should bestir themselves in favor of the measure, and the whole agricultural interest of the State should petition the Legislature to establish the school."

What say the "citizens" of Monroe County, and of this enterprising and wealthy City, to this proposition? Such an Institution would be liberally endowed by the State, and a great ornament to the place, as well as of incalculable utility to this section of country. Will not the property holders, millers, merchants, and farmers, make a little effort in favor of a State Agricultural School?

We shall wait with some anxiety to see how much interest is felt in this important matter.

CENSUS OF HERKIMER COUNTY.

Whole population in 1845,.....	37,424
“ “ “ 1840,.....	37,477
Pounds of Cheese made the year previous,.....	8,208,796
do of Butter,.....do.....	1,484,625
do of Wool,.....	150,769
Bushels of Wheat,.....	60,700
“ Corn,.....	180,340
“ Oats,.....	690,413
“ Potatoes,.....	264,000
Value of Woollen Manufactures,.....	\$251,750
“ Cotton,.....do.....	50,550
“ Manufactured leather,.....	217,240

The greatest product of cheese in any single town, is that of Fairfield, which reaches 1,355,967 pounds.

The Cheese of Herkimer county, at 8 cents a pound—the price it was selling at when we were there—will command the handsome sum of \$656,703. That county once produced more wheat than corn. Now the latter exceeds the former, three to one.—The elements that form wheat have been pretty well consumed for the present. The things that make cheese are now in a fair way of being worked up into that product and sent abroad. Perhaps however, eight or ten million pounds of cheese can be made, and annually exported from a county, and yet the farms that produce it, lose not one pound of matter! Nothing is easier than to consume the ingredients in a soil, which unite to form any combination of vegetable or animal substances. It is not, however, always so easy to restore fertility to a land that has been robbed of its most valuable constituents. The cheese makers of England have long been ransacking the commercial world to get bones to yield phosphate of lime and ammonia to their grass intended for dairy purposes. The human skeletons of Waterloo, as well as bones from the slaughterhouses of this country, have been used for that purpose.

In 40 gallons of milk, there is one pound of bone-earth, equal 1½ lbs. of common bones. 30 lbs. of the latter is about the amount a good cow will remove from the soil in her milk alone, in a year. If her urine be lost, that will take away some 20 lbs. more. In Cheshire they apply \$15 worth of ground bones per acre, to pasture lands.

When we estimated the needless annual waste in this State, of things that make grass, grain, roots, milk, meat, wool, and the like agricultural products, in our last Report to the Legislature, at \$20,000,000, we were below the truth. If a bushel of wheat is worth a dollar, the things which will make a bushel of that grain is worth forty cents. There would be quite as much sense in the conduct of a tanner, who should let half his hides rot, and be utterly lost, as in that of a farmer who wastes his manure in any way.

CHOICE FRUIT.—We have to acknowledge the receipt of a box of superb fruit from JAMES H. WATTS, Esq., of Rochester, including several varieties of pears, apples and quinces. Accompanying the above was a new kind of potatoe—at least they were new to us—which were a little better than others that we have been able to find in Buffalo market. Their name is unknown to us.

MR. CLINTON'S ADDRESS BEFORE THE BUFFALO HORTICULTURAL SOCIETY.—This admirable Address, which we had the pleasure of listening to, a copy of which has been furnished at our request, did not come to hand in season for this number. It will be given in our next.

AGRICULTURE IN PARISH SCHOOLS IN SCOTLAND.

Great success has attended the introduction of the study of Agricultural Chemistry into 74 public schools in Scotland. Public examinations of pupils, in both practical and scientific agriculture have been had, at one of which the Marquis of Queensbury presided. These have elicited the warmest commendations from all present. Prof. Johnson is employed to instruct 300 teachers of common schools and qualify them to teach classes in this all important study. A small apparatus has been made expressly for the use of school masters to demonstrate all the important principles laid down in Johnston's Catechism.

The editor of this paper, since his course of lectures in behalf the State Ag. Society have closed, has been engaged in getting up an apparatus for the precise purpose, which he is now happy to learn is already in use in Scotland. What a pity it is that while we have no Marquises, Earls, Dukes nor Lords, in this State, to foster agricultural science and learning, poor, humble plebians must work for nothing, and find themselves!

But we rejoice in the belief that a brighter day is beginning to dawn on the noble profession of Agriculture in New York. Its rise is slow, but certain in the end. A day's work with the plow, will ere long be worth a days work at the bar, in the court house, or elsewhere. Place science in the head that directs all rural pursuits, and the honest toil devoted thereto will command a double reward.

COMMON SCHOOLS IN CORTLAND CO.

It gives us pleasure to notice that the Board of Supervisors of Cortland county, although a majority of them are politically opposed to Col. H. S. Randall, passed, unanimously, a vote of thanks to that gentlemen for his distinguished services for several years, as County Superintendent of Common Schools.

We admire the public spirit of the people of that county. Their common schools are said to be among the best in the state. Cortland Academy is about to take the lead in first giving a regular course of instruction on Agricultural Chemistry and Geology. We know some things of Mr. S. B. Woolworth, its able and scientific principal, and have no doubt that he will give full satisfaction to all that may attend his course of Lectures.

AN AGRICULTURAL COLLEGE NEAR THE CITY OF NEW YORK.—The Farmers Club of the American Institute intend to petition the next Legislature for the establishment near this city of an Agricultural College and Experimental Farm, which the Institute proposes to superintend the direction of. The petitioners say:—"We respectfully ask that an experiment may now be tried in this great State, of all these staples which can be found suitable to our own location; so that New York city, the emporium of commerce, may by her thousand ships and roads, concentrate the first College and Trial Farm for vegetable productions."

TO CORRESPONDENTS.—We have several communications on file for publication, which have been necessarily crowded out of this number. They will receive attention next month—or as soon as they can be seasonably published.

WINTERING STOCK.

The most important matter in distinguishing any domestic animal, is to know that a warm and comfortable shelter is equivalent to *one third of the food* which the creature must have to keep him in condition, if unprotected from cold, snow, rains and winds. Place a five pail kettle of hot water out in a cold, naked barn-yard, and it will cool, and freeze in half, if not in one fourth of the time required to bring about similar results in a warm stable. Now, if you had to keep up the temperature of the water in such a kettle to 98 degrees—the blood heat of cattle—night and day for the next six months, by burning hay, straw, conestalks and oats, would you place the five pails of liquid to be warmed, out doors in the cold, where the keen air and strong winds would make the heat radiate into the surrounding space with a double or treble force?—or would you put the kettle in an apartment where the fuel could be used to the best advantage?

Nothing is more certain than the fact, that the entire heat of all animals is produced by the burning of their food—the lungs acting as an ever moving bellows for that very purpose. If these facts were duly considered, and the loss prevented which is now sustained in this state, the saving would be at least four millions of dollars a winter.

If you have the least idea that you will need any fodder for your stock next winter, be careful to save everything in the shape of either liquid or solid fodder that escapes from your domestic animals this winter. Do you know what the word comfort means when applied to an animal? If you do, then that is the condition in which he can be cheapest kept.

FAC SIMILES of Washington's Letters to Sir John Sinclair, on Agriculture and other interesting topics.

A beautiful quarto volume has recently been published by Franklin Knight of Washington City, containing the correspondence of the FATHER OF HIS COUNTRY on the subject of Agriculture, which he deemed one of the most important to the American people. As a practical Farmer, Washington had no equals in his day in this country, and few even at the present day. These letters, however, are valuable, not because they afford instruction in the art of farming, but on account of the moral effect, which they cannot fail of having, on public sentiment in regard to the *pursuit* of agriculture. Here, he comes before us as the practical Farmer. He delights in this employment far more than in marshalling of armies, or wielding the sceptre of government. He beholds in agriculture the wealth and prosperity of this great Republic, and he would promote it by the concentrated wisdom of the nation. Half a century has rolled round, and now we just begin to open our eyes to the importance of those measures which Washington presented as necessary and essential in improving the various branches of agriculture.

NEW ORLEANS COMMERCIAL TIMES.—We have received several of the first numbers of this paper. On the tripod J. B. Tharpe sits as Editor, T. Arfleck as Agricultural Editor, and J. Hawkins as Assistant Editor. This is an able Editorial force, and they must make a good paper. Its mechanical execution is excellent. It says nothing of political matters, so far, and seems devoted to business concerns. Mr. ARFLECK has been favorably known for several years past, as an able agricultural writer—and we doubt not his department in the Times will be well sustained.

DESTROYING ALDERS AND OTHER BUSHES.—I noticed in your August number, the article on "Killing Alders;" and your invitation to others for facts on that subject.

Mr. Jefferson somewhere suggests the importance and utility of perpetuating the experience of old men; and agriculturists depend so much upon *facts* for what they do, that I am induced to state my own experience on this subject.

In the town of Salem, Washington co., N. Y., where I have resided for more than forty years, I have been in the habit yearly of cutting all kinds of brush that sprout in open and cleared fields. This has been done in the months either of July or August, in the old of the moon, when the sign is in the heart; and when it has been done on the day the moon changed, but *before* the change, and the sign being in the heart, it has never failed, to my recollection, to destroy the brush.—*John Crary, in Alb. Cult.*

We had the pleasure of taking the hand of "Honest John Crary," at the late annual fair of Washington county, held at Salem. He is an excellent farmer, and deserves honorable mention for his long continued, and valuable services in promoting the cause of agricultural improvement. Judge Savage, Bernard Blair, and a score of other gentlemen, in Salem, many of whom have been tied to other professions and pursuits than that of agriculture, deserve the thanks of farmers for the assistance which they are rendering the hard working tillers of the earth. We wish the leading men in Western New York, the merchants, lawyers, physicians, and the public press generally, would take a deeper interest in the advancement of Agriculture. Politics seem to swallow up all the public attention and regards of these men. This is the general rule, while we are happy to know of some commendable exceptions.

SOAKED CORN FOR HORSES.—One of the most successful and judicious farmers in the vicinage of Baltimore, effects a saving of from one-third to one-half his corn, by soaking it thoroughly before feeding. His method is this: Two casks are placed in his cellar, where there is no danger from frost, and filled to the chime with *ears* of corn. He then pours on water till the vessels are filled. When well soaked, the corn is fed to the horses, and when the contents of one cask are consumed, it is again filled, and the horses fed from the other.—*Maine Cult.*

The above food would be much more nutritious if it were cooked, instead of being merely soaked; although soaking is better than feeding dry.

ESSAY ON GUANO; describing its properties, and the best methods of its application, in Agriculture and Horticulture: with the value of importations from different localities; founded on actual analysis, and on personal experiments upon numerous kinds of trees, vegetables, flowers, and insects, in this climate. By I. E. TESCHEMACHER, of Boston, Mass.

This is the title of a neat pamphlet of 50 pages, which has been politely furnished us by its publisher, A. D. PHELPS, of Boston. It is an able Essay, containing much practical information relative to the value and application of Guano as a Manure. For this work Mr. TESCHEMACHER is entitled to the thanks of the Agriculturists and Horticulturists of the country—to whom we commend it as worthy of attention.

For the Genesee Farmer.

CROPS IN CENTRAL NEW YORK.

EDITOR GEN. FARMER—As your space is small, I restrict myself to a simple detail of experiments and results, in vegetable growth and culture this season, in this vicinity.

The best piece of corn I have seen this year, grown with the least labor, 70 bushels to the acre, was raised by Judge Clarke in a drained swamp, two miles north of this place; the sub-soil is a hard compound of fine light grey sand and clay, which will not effervesce with sharp vinegar; the surface soil is two feet deep, a porous, rooty mass of black vegetable mould, in which the eye can hardly detect a trace of inorganic matter. The looseness of this mould seemed to enable it to absorb the atmospheric gases, by capillary attraction; a result produced on a heavy surface, only by frequent workings.

Ebenezer Bartlett's corn, which promised so much in July, failed to ear well, partly owing to excessive drought, but mainly to its being planted too close to succeed in a drought. Had the suckers and half the stalks been cut out before the corn began to silk, he thinks, and so do I, the yield might have been doubled. Mr. Bartlett says that where he had applied common salt to his flax crops, the balls contained from four to eight more seeds, than those, which received no part of the solution. Mr. B. took the premium at our last year's fair, for the best farm in the county; he is one of those rare farmers, over whose skull traditionary prejudice has formed no crust!

I have this season for the first time, so far mastered the worms, as to grow perfect flat turnips in my garden, as a second crop, after the corn was cut up. They were sowed 20th August, but did not come up until a fortnight after; some of the turnips are five inches over, and still growing, this 18th Nov. The drought of the season has undoubtedly done much to destroy worms, and other insects; but I attribute my success mainly, to a liberal application of a compost of salt, ashes, plaster, and chamberlie. In default of plaster, use a little sulphur.

I am sorry to say that the potatoe rot, has lately made its appearance among potatoes, which when dug, appeared sound.

The magic effect of Draining. A neighbor has a clay garden which has sufficient inclination to carry off water; still, in spite of a large admixture of coarse manure, the surface would bake and crack open in dry weather. Last spring he cut two deep ditches on each side the garden, forty feet a part. The result is that the mechanical structure of the soil appears to be changed, from a heavy tenacious clay, to a light and porous loam, on which the drought of this season had no injurious effect.

In the face of all the croaking of our farmers, about the effects of the drought, the fact is indisputable, that our crops of grain, and flax seed, are at least one fourth greater than they ever were before, in any one season.

It is refreshing now and then to hear an intelligent practical farmer, bear witness to the value of agricultural papers. Many farmers object to them, because some of the articles are not to their taste. This is quite as sensible an excuse, as that of the landlord, who stopped going to church, because one of the wardens, who was also a supervisor, would not grant him a license. A man who has this year grown a heavy crop of plump wheat, when

other wheat in the vicinity was more or less shrunken, told me, that he attributed his success entirely to composting the manure applied to his wheat with swamp muck, plaster, lime, ashes, salt, &c.—Some farmers have commenced burning their refuse wood into charcoal for manure. Such an experiment five years ago, would have been ridiculed, as labor lost. S. W.

Waterloo, Seneca Co., Nov. 18, 1845.

For The Genesee Farmer.

TO THE FARMERS OF WYOMING.

MR. EDITOR—Permit me to address a few lines to my brother Farmers of Wyoming County, through the medium of your useful journal.

Fellow Laborers! The Summer's toil is past, and our Winter's leisure is at hand! The labor of the day is generally over at six o'clock P. M., which affords us at least three hours each day, for mental improvement; and it would certainly be wise in us to spend a portion of our leisure, in acquiring knowledge relative to our own pursuit.

The Publisher of the *Genesee Farmer* intends increasing its pages on the first of January, and yet afford it at fifty cents per annum. It certainly is one of the cheapest journals now published. Being exclusively devoted to the farming interest, it is the duty, as well as advantage of each farmer, to give it his support; and the cost is so trifling it cannot possibly be felt by any of us.

For variety of soil and productions, our county is not second in the State. In industry and enterprize our farmers are not deficient—and I hope we shall soon prove that we are not behind in agricultural knowledge. But to effect this, we must become agricultural readers, and the first of January is the time to commence. Let each one of us, then, become a subscriber to the *GENESEE FARMER*, at least—and as many other journals as we think proper to support. I feel confident, (*yes, and proud to think*) that the Editor will be able to say that he has more farmer subscribers from Wyoming, than any other county in the State. Let as many of us as have leisure, take an interest in procuring subscribers. Much can be done in this way: a few words of encouragement can frequently effect much in a good cause.

But if any of us are successful, and procure a few extra names, do not let us demean ourselves so far as to become six-penny shavers. It is certainly small business, for a farmer who pretends to be public-spirited, and a friend and patron of agricultural journals, and improvement, to tax the Publisher, because he forwards a few of his neighbors names, as subscribers. Whatever number you may procure, forward the 50 cents for each: it is certainly a small enough sum. It is my intention to forward fifty names for the ensuing volume, and for each one I will send the fifty cents.

And when you get the papers, read them; and let us form Farmers' Clubs, and meet at least monthly, to discuss their contents, and prepare something to be published in the next number—if nothing better, let it be the proceedings of the Club. But when we find any thing in the journal, which we think croneous, do not find fault, endeavor to pick flaws, or point out errors in others communications. Give your own views, and the reasons therefor, as correctly as you can; but let others alone. Fault finding is a poor business, and never does any good.

Yours truly, A BROTHER FARMER.

Wyoming, Nov. 26, 1845.

For the Genesee Farmer.

TO THE READERS OF THE GEN. FARMER.

A few days since, I received a copy of the Prospect for volume VII of this truly valuable journal, stating that "the Farmer is to be considerably enlarged and improved," while the *terms* are to remain the same as heretofore. The idea strikes me as a good one, especially for the patrons of the paper—and hence I wish to say a few words concerning it to you, my brother farmers and horticulturists. Having been a constant reader of the Farmer, for several years, I shall express my sentiments without "fear, favor or the hope of reward."

In the first place, then, allow me to state that I like the arrangements for the ensuing year, for the following, among other good and prominent reasons:

1st. There is to be no change in the editorial supervision of the Farmer, DR. LEE having concluded to devote his attention and talents to this department. No one who has read the paper during the past twelve months, (or perused his other writings upon the subject of agriculture, among which may be mentioned his popular Reports as Chairman of the Com. on Agriculture in the Assembly,) can doubt his ability to make it what it should be—a *correct and able*, and consequently **USEFUL** journal.

2d. The paper is to be enlarged *one-third*—remaining in the same *form* and *size of pages*, as at present, (which is a good one for binding and preservation,)—at the old price of *only FIFTY CENTS a year!* Every one can at once see the advantages of this course, without explanation—and if it does not add at least *five thousand* to the list of subscribers in Western New York, then the farmers of this favored section are unworthy of a publication to advocate and promote their best interest.

3d. The enlargement of the paper will afford more reading, not only upon the practice and science of Agriculture, but in the Horticultural Department—which department, I am pleased to learn, is to be continued under the supervision of an experienced and practical Horticulturist. This department should commend the paper alike to the Farmer, Mechanic and Merchant—to all who cultivate Fruits, Flowers, or Vegetables, whether in town or country.

4th. The new proprietor is an experienced publisher, and is to devote his undivided time and attention to the publication of the paper. This is right, and cannot but prove advantageous to the patrons of the Farmer. The former proprietors of the paper are deserving of much credit, but could not pay that attention to its publication which they would, had it been their chief business.

These, friends and fellow patrons, are some of the reasons why I like the arrangements for Volume VII of the GENESEE FARMER, and mean to give it my hearty support. Do you concur with me in these reasons? If *aye*, let us give "a long pull, a strong pull, and a pull all together," and see if we cannot augment the Farmer subscription list, until it comes up to its old number, *twenty thousand*. This will enable both Editor and Publisher to furnish us a paper worth, every year, five times its subscription price. The farmers of Western New York alone, are abundantly able, (and many are willing,) to do this. We are now getting from \$1 to \$1.25 per bushel for wheat—and many other products of the Farm, Orchard and Garden, are bringing prices in like proportion. Such being the fact, where is the farmer so *poor* as to be unable to pay the meagre

sum of 50 cents a year for a volume of *three hundred pages*, designed to promote his interest? Echo answers, *where?*—for surely this deponent don't know. If there are none, let each and all of us renew our subscriptions—and also induce our friends and neighbors to subscribe. The postage on the paper is but a trifle, at the farthest distance from publication—and nothing to those residing within thirty miles of Rochester. Those who now take the Farmer, need not to be told of its value—and those who *won't take it* will never know—but I venture the prophecy, that whoever subscribes for the ensuing year, will never repent the act.

A WESTERN NEW YORK FARMER.

Monroe County, Nov. 25, 1845.

For the Genesee Farmer.

INQUIRY.

MR. EDITOR:—In the last number of your paper, I noticed an article from Mr. Joel Houghton, under the caption of "Cheap, Durable, and Convenient Fence," which strikes me as being quite an improvement in the art of fence-making; especially in these days, when fencing materials are becoming so very scarce in many sections of our State. Having a desire to try the experiment, and thus profit by the experience of others. I have found from the descriptions given, and the directions for making the same, that there are some points rather obscure.—After very minutely describing the length, thickness, and width of the posts, bed-piece, rails, cap-piece, &c., and showing how it should be put together, he says: "Bore six two inch holes in each post." Now one point of information wanted is, whether said holes are to be morticed or not? Another point is, whether the end of the rails should be halved or sharpened, so as to have the ends of two rails pass through the same hole in the post? Another point is, what is meant by the one and a half inch pin? which he says should be put through about half way up the fence, to attach the whole together. What is it to be put through?

Will the editor, or his correspondent, have the goodness to give the necessary information in the next number of the Farmer?

Respectfully yours,

ISAAC BELL.

Weedsport, Cayuga Co., Nov. 20, 1845.

Will MR. HOUGHTON send us an answer to the above inquiries, for publication in our next number?—EDITOR.

AGRICULTURE IN FRANCE.—France has of late years pursued a wise, judicious, and liberal policy in regard to her agriculture. In 1838, there were in that country 123 Agricultural Societies, and 303 Agricultural Committees. Scarcely a movement which could contribute essentially to her husbandry, has been neglected. Pecuniary encouragement to a very great extent is afforded, and agents are sent into other countries, at the expense of the French Agricultural Society, in order to examine their systems of farming, with a view to the more perfect practice of the art at home. In 1803, there were scarcely ten organized Societies in the kingdom. They are now, however, rapidly increasing. How much better would it be for the interests of this country, if Government should expend some of its surplus money in encouraging this great branch of industry, instead of squandering it in the way it does.

From the Rochester Democrat.

GENESSEE AGRICULTURAL COLLEGE.

There are many good and weighty reasons, why an Institution, capable of teaching in the most thorough and practical manner, both the Art and the Science of Agriculture, should be established in Western New York. Three-fourths of its population for several generations to come, must live by cultivating the earth. On the success of the rural labor of this larger portion of the community, the prosperity of the minor portion is directly, and inseparably, dependent. In discussing this subject, I desire to call public attention to the fact, that the whole population of Western New York, have a common interest, in the present and enduring productiveness of its soil.

It is a sad and momentous mistake, to suppose that none but *farmers* are to be affected by the results which must follow their unconscious *using up* of the things in this region, which form Wheat, Corn and Potatoes, and then emigrating West to become the powerful competitors of all that stay behind. I ask the thinking, calculating merchants and mechanics of Rochester, Buffalo, Canandaigua, Geneva, Lockport, Batavia, LeRoy and Genesee, whether their interests will be promoted by the emigration of one-third of the Agricultural population of Western New York, and by the circumstance, that the remaining two thirds will have to give twice as much work for their annual crops, as they need to give? If I mistake not, Livingston county has lost some two thousand and three hundred of its inhabitants, more than their natural increase, in the short space of five years. Genesee, Chautauque, and portions of Erie, Monroe and Ontario, have fared but little better. During the last 17 years, there has been grown annually, in Western New York, an average of six million bushels of wheat, at a low estimate. This gives an aggregate product of 102,000,000 bushels. To form this invaluable seed, certain earthy substances are always used by nature, which are seldom, if ever, abundant in any soil. These constituents of wheat, have been so far consumed in the sixteen western counties of the State, that the present annual crop, according to the judgment of all the wheat growers, as taken at the late census, does not exceed thirteen bushels per acre!

Practically, the misfortune is this: the farmers of Western New York have literally worked up into the *seeds* of this bread-bearing plant, about one-half of the particular things in the soil that make good wheat flour; and they do not know what it is that they have taken from the earth, and sent down the Erie Canal in the form of wheat and flour: nor from what source they can renovate their fields, and double their annual harvest, at the least expense. This important information can only be communicated to the masses, through the agency of scientific research, in connection with practical wheat culture, on a scale, equal to that of most practical farmers. The study of science alone will not answer. SCIENCE and PRACTICE must go together.

It may be said that to be adequate to the wants of the farming interest of so large a district, agricultural science should be taught in all our academies and common schools—that an agricultural college will be an exclusive, aristocratic affair, which will confer its advantages on a favored few.

To this I would reply by saying, that I concede the great importance of having the science of rural

economy, taught in our academies and schools.—But before this can be well or properly done, teachers must be qualified—instructed somewhere for that purpose. Tell me *where*, and *how* they shall be prepared for the task? What I have designated by the word 'College,' you may name 'Institute,' 'Teacher's Institute,' 'School,' or whatever else will suit you, or the public, better.—Names are nothing. Let the young men but know the THINGS in the soil, in air and water, that form all cultivated plants; and understand the unerring LAWS of the Creator, by which these *things* are ever governed, whether in a solid mineral, in a liquid, in a gaseous or an organized form, as living plants and animals, and I will be satisfied. Believe it or not, the time has come when this knowledge is indispensable to retain our rural population.

Is it asking too much, to request that the young men, who will soon have to cultivate the high priced, and partially exhausted farms in Western New York, shall be informed *what it is they must have*, to make 100 lbs of wool, beef, pork, butter, cheese, wheat, corn, oats, peas, beans, potatoes and hay? Will any man say, that all these great staples can be formed out of *nothing*? or out of all things alike? I assert without the fear of contradiction, that full fifty per cent of the labor, now annually expended in the production of these things, is utterly lost to the world, by its misapplication. No man will risk his reputation on the assertion, that no improvements can be made in the present processes, for transforming crude EARTH, AIR and WATER, into *good bread, meat, milk and wool*. It may be fearlessly asserted, that all improvements in all arts, and all progress in all sciences, originate in the Intellects of men, and never in their hands. It is only by the wise and full development of the former, that you can obtain the highest productive powers of the latter. Infinite wisdom has made it not less for our *interest* as mere working, eating and drinking animals, than our *duty* as rational and moral beings, to *improve* in the highest degree, those faculties which must make all other improvements for our physical as well as intellectual comfort.

Once fairly organized, there is no doubt but the Legislature will deal as liberally in endowing an Institution for making skillful and scientific farmers, as it has for educating young men to practice successfully medicine, or any other profession. If the object be deemed of sufficient importance to call forth a little effort on the part of the citizens of Monroe county, the complete success of the undertaking, will reward their exertions.

AGRICOLA.

DOGS AND SHEEP.—A few nights ago, we learn sixty-three choice ewes, selected for breeders on account of the fineness of their wool, owned by our friend Capt. John A. Holton, of Franklin county, were killed by dogs.

The destruction of sheep by dogs has long been a sore evil to the farmers of Kentucky. From the best information we have—and we have devoted much inquiry to the point—we calculate that there are annually about 10,000 sheep destroyed by dogs in the State of Kentucky. The destruction of 100 sheep in each county would give this grievous total. We know one excellent farmer, in another county, who alone has lost 600 sheep in years past, killed by dogs.—*Frankfort (Ky.) Commonwealth.*

THE POTATOE DISEASE.

Our files of foreign papers are nearly filled with accounts and speculations, relating to the potatoe blight, or disease. The following correspondence between Lord Portman, President of the Royal Agricultural Society, and William Herapath, Esq., an eminent analytical chemist of Bristol, taken from the Bristol Mercury of September 20th, contains the most useful suggestion of any articles which have met our eye:

"Bryanston, Sept. 13, 1845.

"Sir,—I observe in the news papers that you have directed your attention to the potatoe disease, and have advised as to the use of the starch, &c. As I am specially bound, during this year of my holding the office of President of the Royal Agricultural Society of England, to promote inquiry and to notify observations on subjects relative to the produce of the soil, I trouble you with this letter, and ask if any method has occurred to you by which the potatoe may be preserved for the planting of 1846? I have found that potatoes apparently sound and free from the disease, though in a field or garden which has been partially diseased, have, after being stored away, shown signs of the disease and have rotted off; and I fear that the greatest quantity of the potatoes will thus perish, and so continue the distress of the poor into another season. I have directed some potatoes to be stored in slaked lime, in the hope that it may preserve them, but have, of course, yet had no time to judge of the effect. I therefore ask for your opinion, as one of our most eminent chemists, upon this point, and would ask leave to make known your reply, if you are able to offer an opinion sufficiently explicit to be useful.

"I remain your obedient servant,

"PORTMAN.

"Wm. Herapath, Esq."

"TO LORD PORTMAN, PRESIDENT OF THE AGRICULTURAL SOCIETY.

"Bristol, Sept. 17, 1845.

"My Lord,—In reply to your letter of the 13th inst., I must say that I do not think it would be either safe or prudent to depend upon the infected potatoes of the present season as seed for the next year; as, in all instances, I have found the diseased parts to extend when the potatoes are kept in a damp situation; I should therefore expect that if any diseased seed was kept so dry as not to rot before setting time, yet upon being planted and left in the damp soil, the rotting process would then begin, and the hopes of the husbandman be disappointed. I have no doubt that some potatoes, apparently sound, have (as stated by your lordship) been found to be affected after stowing away; but I do not consider this to have been an origination of it, but merely that which was unnoticed when dug has become apparent after storing. When a potatoe is first affected, the diseased parts are scarcely visible; but upon keeping it in a dry place, the spots soon become dark, and consequently more apparent, but the spots do not extend: if, however, the tuber has been kept in a damp place, the spots not only extend rapidly over the surface, but penetrate into the interior, and in a short time it will be completely rotten. As far as the slaked lime, which you have used in your potatoe stores, has a tendency to prevent the tubers from touching each other, or, by its power of absorbing water, of keeping them dry,

it will answer a good end; but it must not be expected to have any chemical effect upon the diseased parts or their juices. Anything which, like dry sawdust or sand, would prevent contact, would prevent the propagation from one tuber to another; and any substance capable of absorbing the moisture of the air in which the potatoe is stored, would prevent the extension of the disease in each diseased root. Our best microscopists and cryptogamists are divided in opinion as to whether the cause of the calamity is a fungus or not. After all the examination I have given to the subject, and a careful review of all the evidence brought before me on the two sides, I believe that it is; and I am daily confirmed in the opinion originally expressed, that the only advantageous way of treating the diseased potatoes is to obtain from them, by rasping and washing, the starch which they contain—by which process all their nutriment can be retained; and if it is well dried it will keep for any length of time. The operations can be performed in the cottage or manufactory alike, as no apparatus beyond a tin rasp (a nutmeg grater,) a tub, and clean water are required; and I have ascertained that however far the disease might have extended, even if the root is rotten, yet the starch can be separated, and in a state fit to be eaten, if it shall be well washed, as all the bad parts come away with the water, while the great weight of the starch carries it to the bottom of the vessel. If it is required that the fecula should have all the qualities of the best foreign arrow-root, it is only necessary to wash it last in water containing a little chlorine, when it has unrivalled colour and quality, and this I can speak of practically, having made many tons of the article. I will only add, that an opinion has been circulated that the disease is owing to the introduction of guano as a manure; this I feel no hesitation in contradicting, as I have seen it in situations where no guano has been used, and where every other variety of manure has been resorted to.

"I am your lordship's most obedient servant,

"WILLIAM HERAPATH."

Particular care should be taken to keep the tubers dry and in the dark. The following is a concise account of the potatoe crop in Holland which we think will be read with interest:

"The governor of the province of North Holland and the agricultural committee of Groningen have just published official reports respecting the murrain amongst the potatoes. In the circular of the above functionary, it is stated that potatoes when they begin to be inflamed and are only slightly infected, should be carefully spread out, and dried in a dark place; this (it is said) will harden the germ of the disease, and arrest its progress. It is recommended not to throw away the potatoes which are more deeply injured, but to extract the nutritious portions from them. The inhabitants of North Holland are also recommended by the governor to try to raise winter potatoes in gardens and on sandy soils, to plant them a foot deep in September or October, and to cover the ground with straw or leaves as soon as the frosty weather sets in. The official report of the Groningen Agricultural Committee is a much more lengthy and important one, and enters at once into the causes and character of the disease, and proposes some remedies. The malady is partly ascribed in the report to the heavy rains of the summer of 1844, and to the wet weather which prevailed just at the time the tubercle seeds were form-

ed, and partly to the carelessness of the agriculturists in keeping the potatoes intended for planting perfectly dry. It is thought too that the excessive cold of last March proved very injurious. The more direct causes are thus enumerated:—1. The too rapid growth of the plants this year. 2. The excessive heat which prevailed in the first part of the summer of the present year, being, on the 13th of June, 87 deg. of Fahrenheit; on the 3rd of July, 87½ deg.; and on the 7th of the same month 91½ deg. On these days several persons fell dead in the fields. 3. The rain which fell at intervals, and which subjected the plants, as it were, to the action of warm water. 4. The cold and moist temperature which succeeded, from the 15th of July to the end of August: and, 5, the existence in several places, on July 21 and 22, of an extraordinary fog, which emitted a disagreeable odour. The agricultural committee attach much importance to this miasma; for they hasten to state that the malady almost immediately afterwards was manifested, and they add that they are not by any means disposed to place this fog amongst the improbable causes (*onw aarschijnlijkheden*) of the complaint in question. In the province of Groningen it was clearly ascertained that the infection proceeded from the leaves and the stalk to the root, and that it was displayed by small stains and by the existence of a species of mushroom placed by some writers under the head, *Fusisporum solani*. No traces of these parasites were discovered in the stalks or the tubercles—a fact which is put forth as a proof that the disease was first propagated from the leaves, and consequently that it differs essentially from those murrains which originate in the roots. “We maintain,” observe the committee, “that this disease has probably existed before, more or less, but that is one which hitherto has not been described by naturalists (*maar eene bijde nat onkundigen nog onbeschrevene ziekte*.) To prevent the return of the disease the following remedies are suggested:—Leave the potatoes in the ground until the weather becomes very dry, and then spread them out in the field. Be very careful not to plant potatoes infected with the disease. Keep those intended for sowing very dry, and give the preference to potatoes produced on sandy soils. Burn at once the rotten potatoes. Avoid as much as possible planting potatoes in places where they grew this year, and which ought, moreover, to be well covered with lime as soon as the crop is removed.

We copy the following from the London Times:

SIR,—Having had my attention called, during a short visit in Kent, to the destructive changes at present taking place in the potato crop, I beg to offer a few observations on the actual state of the tuber, in the hope that they may be of service to some of your readers, as tending to the preservation of so important an article of food.

The real cause of the destructive changes at present taking place appears to be the unripeness of the tuber, and the consequent imperfection of elaboration of its juices. When examined with the microscope, the cells of the potato are found to be not more than half filled with starch-cells, many of which are incomplete, the remaining portion of the cell being occupied by water. Hence the actual condition of the potato may be stated as follows:—1st, deficiency of starch; 2nd, imperfection in the tissue of the cell walls; and 3rd, excess of water, to which may possibly be added, imperfectly elaborated starch. As

a consequence of the imperfection of the tissue of the cell walls, and its state of maceration in a superabundance of water, it falls speedily into decay, the change beginning at the surface and proceeding inwards, and being indicated by a brown discolouration of the cells. The starch cells, which are at first unaffected, are soon enclosed in the decayed cellular tissue, and be coming involved in the decay, are thereby destroyed. Taking this view of the state of the potato, two modes suggest themselves of preventing the loss which must necessarily result from the recurrence of the above describe changes. The first is that recommended more than a week since in your journal by Mr. Herapath, viz., of separating the starch by reducing the potato to a state of pulp, and collecting the washed precipitate. When it is recollected that the starch embodies the whole of the nutritive part of the potato, the importance of this plan will at once be perceived. But practically, there exists a great obstacle to the prosecution of the plan in the inconvenience of employing it on a small scale.

The second mode, that which I am now about to suggest, seems to me to be calculated to meet the exigencies of the case, at the same time that it is free from the objection stated above; it is, to dry the potatoes in an oven or kiln at a moderate temperature, and thus drive off the excess of water which they contain, the water being a chief agent in the decomposing process.

With regard to the statements of the potato being a cause of disease to man and animal, I beg to remark that, so far as my investigations have gone, these are unfounded. In preparing the potato for table the discoloured parts should, of course, be cut away; the potatoes should be boiled in two waters, and salt should be mingled with both. The instances which have been reported of pigs being destroyed by eating them are referable to the quantity, and not to the quality of the potato, and would as certainly occur with the best potatoes, taken in excess, as with those of inferior quality.

I have the honour to be, sir,

Your obedient servant,

ERASMUS WILSON, F.R.S.

Upper Charlotte-st, Fitzroy-square, Sept. 23.

POTATOE DISEASE.—The Halifax *Morning Post* says “a gentleman returned to town from the eastward, informs us that the following process, pursued by J. J. MARSHALL, Esq., of Guysboro’, in dealing with the crop of the present season, which turned out partially infected, had proved altogether successful—the potatoes were spread, to the depth of three or four feet over the surface of a barn floor, and then covered with light dry earth, to the depth of several inches; in the course of a few days indications of dampness appeared on the surface, which was immediately sprinkled with quick-lime: in a day or two, the earth was again perfectly dry, the sweating of the vegetable had ceased, and when moved presented every indication of soundness. The process is simple, and worth a trial.

COLMAN'S TOUR IN EUROPE.

SUBSCRIBERS TO “COLMAN'S TOUR IN EUROPE” are hereby notified that No. 4 is received, and ready for delivery to out-of-town Subscribers who choose to call for them, instead of their being sent by Post. The condition of subscription is, that on the delivery of the 5th number, the balance of three dollars is to be paid. I am ready to receive the money now, from all who choose to pay. Subscriptions are still solicited. Price, \$5 00; or 50 cents a number.

JAMES H. WATTS,

Rochester, Nov. 1, 1845.

Agent for Mr. Colman.



HORTICULTURAL DEPARTMENT.

BY P. BARRY.

CLOSE OF THE YEAR.—OUR PROGRESS AND FUTURE PROSPECTS.

With this number we close up 1845, a year which may justly be remembered as an epoch in the history of Horticulture. We cannot look back, and survey the progress we have made, without surprise and satisfaction, or without indulging high hopes for the future. To those less familiar with what has transpired in these respects than we are, it may possibly appear that we are over sanguine. But it is not so. The increase of new books on the various branches of Horticulture, and the unwonted and unexpected patronage they have received—the increase of nursery establishments—the formation of Societies far and wide—the unusual richness of exhibitions, and the general and individual interest every where manifested on the introduction and culture of new and rare fruits, as well as trees, shrubs, and plants of ornament, fully justify all we have said. And as an humble but earnest worker in the cause, we heartily rejoice that it is so.

During the past year, we have been feebly endeavoring, with very limited space and facilities, to establish a Horticultural Department in this paper.—We are well aware that all we have done is but a trifle; but great things are made up of trifles, and if we have done but a *little* to promote taste and diffuse information, we rest satisfied for the present.

It gives us pleasure to say to our readers, that they may expect more from us in future. Our pages are to be increased in number, and, we hope, improved.

We expect to be enabled to present, now and again, drawings of valuable and new fruits, and more comprehensive and satisfactory details on every branch of our subject.

In order to be able to do this, we must have an increase of patronage. And we would most earnestly call upon every one of our readers who feels an interest in the improvement or embellishment of his or her country, to lend a helping hand, not only by way of extending the circulation of the paper, but in furnishing any valuable information they may possess, for the public good. A Horticultural Society is about to be established for the county of Monroe from which we anticipate great assistance in our work, as well as the most beneficial results to the whole community.

P. BARRY.

THE WEATHER—TRANSPLANTING, &c.

Up to the present moment, Nov. 24, when winter, with its frost and snow, seems to have fairly set in upon us, we have had a beautiful autumn. The weather has been dry, clear, and warm, with just frost enough to bring the foliage from the trees, without obstructing for a moment the business of the season. Let no man be heard complaining that his work is unfinished, or that winter caught him unawares. The most abundant opportunities have been offered to all, to close up their labors, and prepare for winter.

Throughout our section of the country, there has been unusual activity in the department of tree planting. The same spirit of improvement that we had the pleasure of recording last spring, seems not to have abated, but on the contrary, to have made a thrifty summers' growth. More trees have been planted since the middle of October last, throughout this section, than there were in any seven autumns preceding. But this is not all. There is a carefulness and discrimination exercised now, quite unusual here. People begin to believe it necessary, not only to have fruit, but to have good fruit, and hence they begin to consult standard works, and carefully prepared catalogues, to aid them in making their selections.

This we hail as a favorable "sign of the times," in regard to fruit culture. When people are willing to exercise their intellects, and avail themselves of the aid of science in the improvement of their gardens and orchards, real improvement will unquestionably be effected. Hitherto it has not been so. As a general thing, farmers desirous of planting an orchard, were satisfied with a bundle of trees thrown down at their door, provided they were "large enough to be out of the way of cattle." No particular inquiry was made about the kinds—all were thrown together promiscuously, without mark or label.—Even when an orchard was to be improved by grafting, it was generally entrusted to some irresponsible, peddling grafter. This system has almost had its day, and we are glad of it. Farmers and their sons should do their own grafting, and procure their scions themselves, from the most correct and responsible sources. They would then know something of what they were doing, and what they might expect.

No other department of rural industry yields so large a profit as fruit culture, considering the amount of capital invested, and labor required; and none we are confident, contributes more to the comforts and enjoyments of life. Then why not bestow on it as much attention proportionally, as you do on your wheat and corn crops?

While we thus note the increase of taste for the culture of fine fruits, we can also speak well of the increased attention given to the culture of ornamental trees and plants. The finest shade trees, and flowering shrubs, and the splendid new costly roses, even, have been much called for—so that while our gardens and orchards are enriched with the rarest and most valuable fruits, our dooryards, shrubberies, and pleasure grounds are embellished with Nature's most beautiful productions. This, as a friend remarked to us the other day, betokens a good state of morals among our people. What a difference between such a spirit, and that of the speculative period of 1836, or the political manias of 1840 and '44! We have all reason to rejoice and be thankful for the change.

SEEDLING FRUITS.

We have on hand several notices of fine seedling fruits, which we intend to present when we find sufficient leisure, perhaps in the next number. Among them are a fine autumn apple from A. B. Rapalje, Esq. of Farmington, Ontario Co. An excellent autumn sweet apple from Chs. Gohun, Esq., of Liv. Co., and the magnificent pear, known here in Rochester as "Swan's Onondaga Seedling," raised, or introduced, by the father of L. B. Swan Esq., of our city.

SCIONS OF FRUIT TREES.—CAUTION!

The desire which at present exists very generally, to procure scions of new and rare kinds of fruit, will undoubtedly lead to fraud and imposition; and we would now caution those who intend to procure grafts during the ensuing winter or spring, to be careful who they trust to. There is no business but what is infested with quacks and impostors, ready to take advantage of every occasion to make money, honestly or not, as it may happen.

Either cut your scions from the tree yourselves, or procure them from persons of character and responsibility, in whom you can rely. Do not be influenced by a few shillings extra cost—that would be but a poor recompense if you should happen to be deceived. The first inducement which the quack offers you in any business is *cheapness*. He appeals to your pockets, and his appeals are too often not impotent.

TREE PLANTING.

In No. 3, of that splendid periodical the "Farmer's Library and Monthly Journal of Agriculture," which every Farmer in the land should read, even if it does cost \$5 per year, we find a beautiful letter from the Rev. Jno. O. Choules on "*The opportunities and power of the Clergy to improve the public taste for Agriculture and Horticulture.*"

We would be glad to copy the entire letter, for we admire every syllable of it, but must content ourself with the following extract:

"For my own part, I would rather get the population of a village all out to plant trees, and beautify the walks and avenues of the hamlet, than convene them to argue upon abstract notions of no possible practical utility. We may learn a great deal that is good from the example of men who went before us. If we dislike the faith, at all events we may admire the taste, of the Churchmen of other days, whose abbeys and cloisters all testify to a sound taste, and whose noble avenues and orchards proclaim good husbandry.

"I wish I could set hundreds of men planting trees who seem to delight in worse labors. I do love trees, and I love the men who planted the Elms of New-Haven, Newark, and those of the sweet village I live in. Why does not every man plant out a tree—many trees? In Providence there are some noble Elms which I saw planted only twenty years ago! A man *may see* the result of his labors, and his children would be proud to point out the trees, "the old ancestral trees," of his forefather's planting.—Men may rail at the world as much as they please, but *it is a beautiful one*, and if we are only cheerful and active in it, it will become yet more beautiful. Nearly all the beauty of a residence, a village, a country town, arises from its trees: and not only should every man carefully adorn his own habitat, but men should club together to beautify their vicinage. The strong attachment felt by men in England to homesteads arises in no small degree from the pains which have been taken to adorn and enrich them by a previous generation."

TAKING A HINT.

It is very surprising to see how slow men are to take a hint. The frost destroys about half the bloom on fruit trees; every body prognosticates the loss of fruit; instead of that, the *half* that remains is

larger, fairer, and higher-flavored than usual; and the trees instead of being exhausted, are ready for another crop the next year. Why don't the owner *take the hint* and thin out his fruit every bearing year? But no, the next season sees his orchard overloaded, fruit small, and not well formed; yet he always *boasts* of that first mentioned crop without profiting by the lesson it teaches.

We heard a man saying, "the best crop of celery I ever saw, was raised by old John _____, on a spot of ground where the wash from the barn-yard ran into it after every hard shower." Did he take the hint, and convey such liquid manure to his trenches in the garden? Not at all; he bragged about that wonderful crop of celery, but would not take the hint.

We knew a case where a farmer subsoiled a field and raised crops in consequence which were the admiration of the neighborhood; and for years the field showed the advantages of deep handling. But we could not learn that a single farmer in the neighborhood took the hint. The man who acted thus wisely, sold his farm and his successor pursued the old way of surface-scratching.

A stanch farmer complained to us of his soil as too loose and light; we mentioned ashes as worth trying; "well, now you mention it, I believe it will do good. I bought a part of my farm from a man who was a wonderful fellow to save up ashes, and around his cabin it lay in heaps. I took away the house and ordered the ashes to be scattered, and to this day I notice that when the plow runs along through that spot the ground turns up moist and close-grained." It is strange that he never took the hint! There are thousands of bushels of ashes lying not far from his farm about an old soap and candle factory with which he might have dressed his whole farm.

A farmer gets a splendid crop of corn or grain from off a grass or clover lay. Does he take the hint? Does he adopt the system which shall allow him every year just such a sward to put his grain on! No, he hates book-farming, and scientific farming, and "this notion of rotation;" and jogs on the old way.

A few years ago our farmers got roundly into debt—and they have worried and sweat under it, till some of them have grown greyer, and added not a few wrinkles to their faces. Do they take the hint?—Are they not pitching into debt again?

Because, this year, the wheat crop has been very large and fine, and the price low, not half as much will be put in this fall as was last fall. Those who are wise, foreseeing this fact and sowing largely will, if the season favors wheat, reap a handsome profit.

Auctioneers tell us that a "wink is as good as a word." We give both, and hope our readers will *take the hint.*—*Indiana Farmer and Gardener.*

THE PLUM.—Mr. Downing in his valuable work on Fruit and Fruit trees, says that the plum tree "only bears its finest and most abundant crops, in heavy loams, or in soils in which there is a considerable mixture of clay.

In sandy soils, the tree blossoms and sets plentiful crops, but they are rarely perfected, falling a prey to the curculio—an insect that harbors in a light soil and seems to find it difficult to penetrate or live in a heavy one. It is also undoubtedly true that a heavy soil is naturally the most favorable one for the plum."

Meteorological Observations.

MADE AT ROCHESTER, SEVEN MILES FROM LAKE ONTARIO BY L. WETHERELL. JOURNAL OF THE WEATHER FOR NOVEMBER, 1845.

Days mo.	Thermometer.			Barometer.		Wind.	Observations.
	Sunrise.	Mid-day.	One h. after sunset.	Sunrise.	Evening.		
26	42	67	50	29.90	29.90	sw	Fair—very fine
27	46	70	50	.90	.85	sw	"
28	44	71	52	.85	.80	sw	"
29	45	67	61	.80	.80	sw	"
30	55	76	49	.55	.65	s w s	Cloudy—rain.
31	45	67	63	.60	.40	s w s	" rain—fair, r, g, 13
1	54	67	51	.40	.38	s w s	Fair—cloudy.
2	39	43	42	.30	.25	NE	Cloudy—rain, r, g. 48.
3	42	55	47	.05	.15	E	"
4	35	47	42	.30	.35	sw	"
5	36	47	40	.30	.30	sw	" rain.
6	42	45	42	.30	.45	sw	"
7	39	45	40	.55	.40	sw	"
8	40	45	35	.30	.35	NE	" " snow
9	32	32	36	.35	.20	sw	" " " r-g. 106
10	34	42	37	.35	.38	NW	"
11	39	41	37	.40	.60	NWN	"
12	34	45	39	.65	.68	NW	"
13	35	55	47	.65	.40	NW	Fair.
14	45	52	46	.40	.45	sw	Cloudy—rain.
15	37	44	35	.56	.56	NW	" fair.
16	49	54	47	.40	.43	sw	"
17	43	54	52	.48	.51	ws w	Cloudy—rain.
18	52	62	59	.51	.37	sw s	" fair, r, g. 28.
19	45	47	46	.33	.36	w	"
20	45	52	43	.20	.12	w	" rain.
21	46	44	38	.23	.42	NW	" snow.
22	33	39	38	.55	.26	s w	" r, g. 23.
23	42	34	30	.12	.50	w	" snow.
24	24	32	27	.07	30.07	NW	"
25	26	42	39	30.02	.08	NW	"

Maximum, (Oct 29th) ther. 76 deg., do barom. (Nov. 25) 30.08 in. Minimum, (Nov. 24) Ther. 24 deg., do barom. (Nov. 3) 29.05 in. Range for the month, 62 deg. Range do barom. 1.03.

REMARKS.—The Autumn has been uncommonly fine, for this region, more like the New-England Autumns, than any that I have before observed here. Nov. 27—very cold—Ther. 10 at sunrise. Very little snow—Canal closed.

ARNOLD'S STRAW CUTTER.

THE subscriber is manufacturing in the stone building, corner of Child's Basin—rear of S. Garbut's Grocery, No. 17 Buffalo-st, Rochester—a very superior, low-priced, Straw Cutter; and he invites Farmers and others, who need such a Machine, to give him a call. Numerous testimonials might be given, but the Machine shows for itself. The knife is made of excellent material, and warranted. It is hung on a lever, is circular shaped, has a beautiful drawing stroke, and a great purchase is obtained.

Price at the Shop, for a single Machine, \$3.50. To Farmers, or neighborhood clubs, or those who buy to sell again—six Machines for \$18.

Orders from abroad, promptly attended to. ERASTUS ARNOLD.

WHITE BEANS.

500 BUSHELS wanted at the Rochester Seed Store, for which the highest cash price will be paid by B. F. SMITH & CO.

THRASHING MACHINE COVERS,

WARRANTED water proof, and not to crack, constantly on hand and made to order, by the subscriber.

Orders through the Post Office will be thankfully received and promptly attended to.

Manufacturer of awnings, bags &c. No. 5, second story Curtis' Block, Rochester. E. C. WILLIAMS.

AN ARTICLE IN SEASON.

FRANK MILLER'S Leather Preservative and Water Proof Blacking. Every individual wearing boots and shoes, will find it greatly for their interest as well as comfort, to make use of this valuable article, especially those exposed to wet and mud, as it not only renders the leather soft and pliable, but water proof and much more durable. Each box contains sufficient for an out door laboring man, for one year, with directions for using.

MONROE CO. AGRICULTURAL SOCIETY.

The Annual Meeting will be held at the Rochester Seed Store on the second Wednesday of December, (the 10th day,) at 11 o'clock, A. M.

This Meeting will award the Premiums on Field Crops, &c, and choose officers for the ensuing year. Let there be a good attendance of the Farmers of Monroe. JOHN H. ROBINSON, President.

MARKETS.

ROCHESTER, Nov. 29, 1845.

Canal navigation has closed, and business has assumed its winter garb. The trade of the fall has been unusually prosperous. The unexpected advance in the price of bread stuffs, owing to the failure of the crops in Europe, has given an impulse to all branches of trade. Other kinds of produce, the whole season, has brought satisfactory prices, and Farmers have realized larger profits on their pork, butter, cheese, and lard, than for several years past.

The amount of money put in circulation by operators in this city, for wheat alone, so far during the month of November, will exceed \$250,000. The receipts of that article by canal, were 251,200 bushels.

BREADSTUFFS.—Business closes up with flour at about \$5.62½ and wheat steady at 125c. The supplies by wagon and railroad are light. Markets east appear to be declining, and will probably remain unsettled till the arrival of the next steamer from England, which is due on the 4th of December.

ROCHESTER PRODUCE MARKET.

Wheat.	120 a 125	Hay, ton,	\$11 00	13 00	Eggs, doz.	12 14
Corn,	40 a 50	Wood, cord,	2 00	3 00	Poultry, lb.	5 6
Barley,	30 40	Salt, bbl.,	1 13	Tallow,	6 7	
Oats,	32 35	Hams, lb.,	5 6	Hops,	14 16	
Flour, (rect.)	5 50	Pork, bbl.	10 00	Wool,	25 35	
Beans,	87 1 00	" cwt.	4 50	5 00	Sheep Skins,	50 77
Apples,	25 50	Beef, "	3 00	3 50	Green H's, lb.	3 7
Potatoes,	18 25	Lard, lb.,	8 10	Dry Hides,	6 7	
Cloverseed,	6 50	7 50	Butter,	10 12	Cal's kids, gr'n.	5 6
Timothy,	1 50	1 75	Cheese, cwt.	6 00	6 50	Dec. 1.

LIFE ASSURANCE AGENCY.

THE subscriber having been appointed agent for the Worcester (Mass.) and Nautilus (New York city) Life Assurance Companies for this region of country, respectfully invites Farmers, Artizans, and those in all conditions of life, to call on him for information on the subject.

He will issue policies in the above companies on lives, from \$100 to \$5000.

A pamphlet will be furnished, giving particulars. Call on JAMES H. WATTS, Life Assurance Agent, Corner Buffalo and Exchange streets, Rochester, Sept. 1, '45. Over E. Watts' Hardware Store.

BAGS! BAGS!! BAGS!!!

THE Subscriber has a large lot of Grain Bags, made of cotton and linen, manufactured in Boston, such as Farmers will be pleased with as regards quality and price. For sale at his office, over E. Watts' Hardware Store, corner Buffalo and Exchange streets. JAMES H. WATTS.

Rochester, Dec. 1, 1845.

CLOVER SEED! CLOVER SEED!

50 BUSHELS, just received at the Rochester Seed Store, Front st. (dl) B. F. SMITH & CO.

CORN SHELLERS,

FOR SALE at the Rochester Seed Store. B. F. SMITH & CO.

TIMOTHY SEED WANTED,

AT the Rochester Seed Store. B. F. SMITH & CO.

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THE

G E N E S E E F A R M E R :

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 THE HORTICULTURAL DEPARTMENT.

VOLUME VII—1846.

ROCHESTER, N. Y.

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

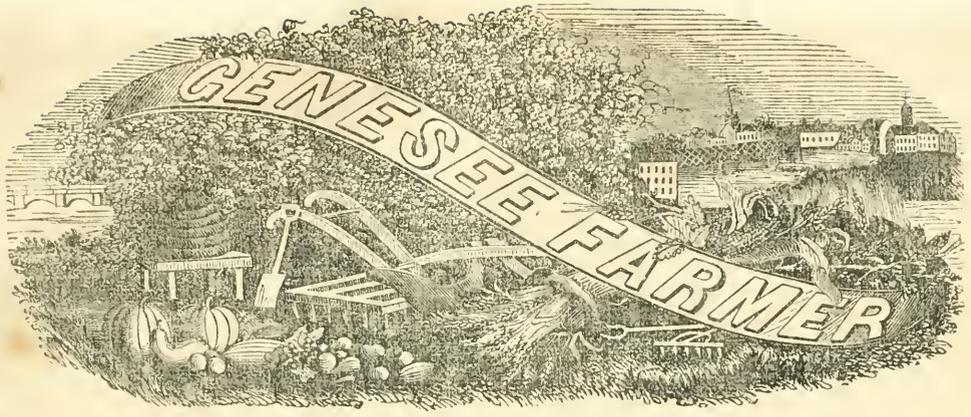
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Vol. VII.

ROCHESTER, N. Y., JANUARY, 1846.

No. 1.

THE GENESEE FARMER:

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

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE, EDITOR.

F. BAERY, 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. [P] All subscriptions to commence with the first number of the volume.

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.

Western New York Agricultural School.

THE undersigned is happy to announce to the farmers of Western New York that he has made arrangements with Gen. RAWSON HARMON, by which that gentleman and the EDITOR of this paper will be united in a joint effort to teach both the Practice and the Science of Agriculture. The SCHOOL will be opened for the reception of pupils on the first of May next, at the residence of Gen. H. in Wheatland, Monroe County, N. Y., to whom, or to the undersigned at Buffalo any communication relating to the subject, can be addressed.

The farm contains 200 acres of improved land, which is under excellent cultivation. Gen. H. has now sown over *fifty* distinct varieties of Winter Wheat, all of which will be subjected to accurate scientific experiments by the writer of this, during the coming season. It is believed that great and valuable improvements can be made in the culture and development of this bread-bearing plant. It remains, however, to be demonstrated, that one third of the labor usually expended in growing a bushel of this grain is wholly lost to the farmer, and the world, by its misdirection, or unwise application. We now use too much of some things, and too little of others. The culture of Spring Wheat, Corn, Barley, Peas, Beans, Oats, Clover, Potatoes and other roots, on strict scientific principles, with a view to *lessen* the cost of their production, will

receive particular attention. *Where* the things come from that make these great staples, and *what they are*, will be carefully studied.

Great pains will be taken to ascertain what animals furnish the most profitable *living machinery* for changing grass, grain, roots, straw, &c. into milk, butter, cheese, beef, pork, mutton, fat and wool. To impart a thorough knowledge of the Organic Structure of all this machinery, and of the office or function performed by each Organ, there will be minute dissections of all domestic animals. A MUSEUM illustrative of the Anatomy and Physiology of all the living things which the farmer labors to produce, and keep in a healthy condition will also be formed. Lectures will be given in these departments of natural science, and no pains will be spared to render their study both interesting and truly useful. Work in a Chemical Laboratory for the analysis of Soils, Manures, Fertilisers, and all Vegetable and Animal substances, will form an important department in the school. Lectures will be given in this branch of science with the view to prepare Teachers of Academies and Common Schools to introduce the study of Agricultural Chemistry into these seminaries of learning. A suitable Text Book, and a cheap Apparatus for the use of school teachers and private gentlemen have long been in a course of preparation by the undersigned. Agricultural Geology will also be taught. A full course of study and practice will occupy four years; during which the pupil will be required to keep in his own hand writing a journal of his studies and progress, and an accurate debit and credit account of all farm operations. He will be charged for his board and tuition, washing &c., and credited at a fair price for whatever service he may render on the farm. But we can not promise *work* and *pay* for all that may offer. The object of the proprietors of this school will be to turn the labor of young men to the best possible account, and to give them the full benefit of their skill and industry.

The price of board, washing, lodging, lights, and fire-wood, will be from \$1 50 to \$2 00 per week. Tuition from \$8 to \$12 per quarter.—

This will include instructions by Gen. H., as well as the Editor's lecture fees.

Gen. HARMON'S farm is regarded as admirably adapted to the establishment of such an institution. He turns off some 1500 bushels of superior seed Wheat, every year, beside considerable Suck Corn, and between 45 and 50 fine wool-ed bucks. As a breeder of Sheep, he has few equals in the country. His facilities for soiling, or for keeping up sheep, cows and swine, can be estimated by practical farmers when they are informed that his basement rooms, walled in with stone laid in lime mortar, cover an area of 8916 square feet—or more than the whole basement surface of *seven* 30 by 40 feet barns.

The late census returns show that Monroe County grows more Wheat than any other in the State, and more bushels per acre: and that *Wheat-land* produces more, per acre, than any other town in the County.

There is a beautiful natural pond, or lake, partly on the farm, the outlet of which is sufficient to drive a flouring mill. The shores of this sheet of water are covered with shells and shell mark, which are admirably adapted to bring up the land, with a few other fertilizers, to a high state of productiveness.

Horticulture and Fruit Culture will not be neglected at this school.

Pupils should have a good Common School Education before they enter the Institution. If it shall be found desirable, competent tutors will be employed to teach the Languages and Mathematics. Assistants, if necessary, will also be engaged to aid in teaching Geology, Chemistry, Botany, Comparative Anatomy, Physiology, and Meteorology. It is contemplated to have but few students; and to pay particular attention to their attainments, morals and habits. But should the Legislature ever deem it worth while to aid a little in making scientific farmers as well as scientific doctors, it is hoped that under a charter and board of Trustees, this may become a State Agricultural School.

To express our present views in brief, we copy a resolution adopted unanimously by the State Agricultural Society, which was offered, some years since, by the undersigned:

“Resolved, That this Society regards the establishment of an Agricultural Institute and Pattern Farm in this State, where shall be taught, *thoroughly* and *alike*, the SCIENCE, the PRACTICE and the PROFITS of good husbandry, as an object of great importance to the Productive Agriculture of New York.”

DANIEL LEE.

WHAT THE FARMER CANNOT AFFORD TO DO WITHOUT.—It is an agricultural journal. The moment he drops that, he may expect to fall behindhand, at least in the knowledge of the age and all good improvements in agriculture. Can the farmer afford to do this? No, he cannot.

Teach One Another.

THERE is no class in the community that so much neglect to instruct each other as do the cultivators of the earth. It is true that their condition in life does not bring them into social contact to the same extent enjoyed by mechanics and artisans, who mostly reside in cities and villages. The latter can more easily establish and keep up their Mechanic's Associations, Libraries, and other contrivances for mutual improvement. They can step into a public lecture room one or two evenings each week, and hear the principles of the mechanical arts discussed by the ablest in their ranks, with little trouble, and signal advantage. Can those that follow the noble pursuit of Agriculture do nothing in the way of teaching one another? Can not 20 or 30 farmers be found in every town in the State who are willing to unite their efforts to advance the cause of Rural Industry, by establishing an Agricultural Club for that purpose? Will a few hours once a month, or even once a week, devoted to collecting and diffusing knowledge on agricultural topics, be time wasted, because *all are too wise* to learn any thing from others? For what purpose was the power of speech, the gift of reason, and the love of social intercourse conferred on man by his Maker? Suppose God had restricted the knowledge of each human being to his own personal experience in the world, what now would be the condition of our race? What riches can compare with those of the Intellect, where the very effort to give away what one possesses, increases the treasure of the giver! A man may add ten fold to his own knowledge, while laboring to impart wisdom to thousands of others. Teach one another, and you will form habits of close observation, and become familiar with the operations of Nature, in the production of plants and animals. Their multiplication and improvement will be studied and understood. Let each member of the Club pay fifty cents or a dollar, as an initiatory fee; and something more quarterly, to build up a Library of standard works in the various departments of Agricultural Literature.

Should not a Nation of Farmers develop intellect enough to have a literature of their own? What other pursuit in civilized life, is so admirably adapted to foster clear and just thinking, pure and noble impulses? Where can be found a field so broad, so rich, so inviting, so lovely in every aspect, for the display of varied learning and profound scientific attainments, as is now presented in the Agriculture of this extended Republic? Blind is the intellect, and contracted the ambition that now rejects all the advantages of a good agricultural education, for the cares, the struggles, the contentions, and probable failure, which will attend the young man that forces himself into the profession of Law or Medicine. We would not speak disrespectfully of any pursuit or class in the community. But we know

thousands of generous youth are mistaking their true interest and calling, by turning their backs on the noblest of all professions. A mistaken public opinion leads them on to increase the present lamentable excess of those who are trying to live by their wits. All this is wrong; and although the evil will eventually cure itself, yet thousands of worthy and most estimable young men will suffer to the end of their lives, for the folly of the times. These ambitious sons of farmers and mechanics should be gratified with a good education. They should have every advantage of learning, every facility for the acquisition of science, that the country can afford. They are the ones to develop an Agricultural Literature in America, which shall confer incalculable benefits on the human family. Rural Labor must be redeemed from the protracted and excessive toil of dull ignorance. If man is to be elevated in this republic to that exalted destiny which his Creator has placed within his reach, and bade him to attain, he must ennoble the skillful culture of the fruits of his mother earth.— This can only be done by the common effort of the agriculturists themselves. If *they* will not lend a helping hand, then will they be justly doomed to the task of giving two or three days work for one, as hewers of wood and drawers of water for others all their days. It was a wise maxim of Dr. Franklin, which held that "God helps those that help themselves." Let us then, one and all, place a willing shoulder to the wheel. One generous lift will put the car of agricultural improvement on the right track. While the rest of the community travel at their ease, drawn by steam, controlled by science, we shall look *rather simple* to insist on walking at a snail's pace, and carrying a heavy knapsack, because our fathers did so forty years ago!

A little agricultural enterprise will make far greater improvement in tillage, wool growing, and the dairy business, than any yet witnessed in the construction of rail-roads and canals. These are necessarily local in their benefits, while the advantages of science can be extended to the fire side of every log cabin in the State. Even a fifty cent journal, devoted to the record of all the discoveries of the age in Agriculture and Horticulture, if taken by every farmer, can do much to improve both the soil and its cultivators. We solicit a report of the proceedings of Town Clubs; and hope to hear of the formation of hundreds during the present winter. Remember that strength—all subduing strength—lies concentrated in *union*. No one man can build a canal, or a rail-road. All great works must command the united labor of thousands to give them success. Think of the hundreds of thousands of political papers and pamphlets circulated to elect a President! What is the labor of *one* man in such an effort? Tell us candidly, are party politics every thing, and agriculture nothing, that we should

give millions for the advancement of the former, and treat the latter with utter indifference?

Farmers, is this right? Is it just toward the most important interest of the Nation? You know it is not. Then **TEACH ONE ANOTHER**, and all unite in making the **GENESEE FARMER** what it should be, the most extensively circulated paper in the Union. A copy should be placed in every Common School Library in the State. Why not? Is its reading unworthy of the perusal of the rising generation? Who will refuse to aid in elevating the Mind that must ever fix the common level of a profession that has the highest claim to our best regards? If it were possible for us to accomplish this object *alone*, we would not ask for the co-operation of others.— But, kind reader, without your assistance our best efforts will be labor spent for naught.— Nothing truly important, affecting the community at large, can be consummated, where the people are sovereign, without their countenance and support.

Insects Injurious to Vegetation.

DR. ASA FRENCH of Salem, Washington Co., in this state, is writing a series of valuable Essays on the "Insects Injurious to Vegetables," which are published in the Quarterly Journal of Agriculture. We have received from the Author, No. 3, on the "Wheat Fly," which we have read with much interest. Fortunately, as yet Western New York has suffered but little from the insects, whose ravages have been so destructive in the eastern portion of the state. But we may not long be so highly favored in this regard; and it is well to learn what we can from the sad experience of our eastern brethren, as to the best methods of abating the evil. Our Wheat crop is too important, not to take especial pains to secure it from the depredations of these minute, but fearful destroyers, if possible. The farming community are greatly indebted to Dr. French for his careful researches in this matter; and we shall endeavor to furnish our readers with a faithful epitome of his writings on entomology, so far as they appear to be more useful to agriculturists than any equal amount of other reading.

The author has well illustrated with Colored Engravings, the insects, larvae, &c., which he describes.

WEEVIL.—We received from Gen. HARMON, some three months ago, about a gill of a new variety of wheat which was imported from Spain the past season, from which have emerged fine dark brown weevils. The insects are now feeding, when not torpid, on the grain. The wheat has been kept in a glass vial, and stoppered with paper.

We suppose this insect to be the *Circulio granaria* of LINN; *Calandra granaria* of Dr HARRIS.

From the N. Y. Journal of Commerce.

The Northwest.

THE census of Illinois, as far as returns have been received, shows a very rapid increase in population since 1849. The increase in that State will exceed 200,000 in five years. In fact, the increase in population will equal that of the State of New York within the same time. Judging from the returns already made, Illinois now contains over 700,000 inhabitants. The returns from the General Land Office show that over 300,000 acres of government lands have been sold in Illinois within the last eighteen months; and the probability is that a much greater amount has been sold to actual settlers by non-resident land holders.

These facts show that a very prosperous period is dawning upon the hitherto darkened fortunes of Illinois. Her canal is advancing rapidly to completion. Immigration, as shown by the returns of the census, is pouring in upon her. The crop has been an abundant one. Her farmers are getting good prices for their produce. The new apportionment to be made this winter, will give to the Northern part of the State—the debt paying part—the entire control of the legislature; and aided by the abundant yield from her very rich and productive soil, Illinois in a short time will be enabled to pay the last dollar of her public debt. Indeed, if her affairs are administered with common prudence, she will soon be one of the richest and most prosperous States in the Union. The returns of the census of New York show that the Agricultural districts of the old States are decreasing in population, while the returns from Illinois show a very rapid increase. The same change which supervened on the completion of the Erie Canal, between the North River counties and the Genesee Valley, must soon take place between the Atlantic and the Western States. The decrease in population, in the last five years, in the counties of Genesee, Ontario, Cayuga, and Oneida, in this State—all grain growing counties—proves that this change is already taking place. Nor is it a matter of wonder, when we compare the prices of land, and the facilities for cultivation offered in the two sections. In this State, land that will grow wheat is worth from \$40 to \$60 per acre—in Illinois it can be bought for \$1 25. In this State the land requires very careful tillage and expensive manuring; in Illinois the soil is so rich that it is cultivated for many years without the least manuring, and being free from stones and stumps, it is cultivated with the greatest ease, one ploughing being sufficient for any crop, while here, in some cases, three ploughings are required. Connected by the Erie Canal and the great chain of Western lakes with the Eastern market, the cost of transportation from Illinois to New York is but trifling; and with such great odds in their favor, the Western States must soon become the great source of supply of grain for the Eastern markets. That miraculous change which characterised the growth of Western N. Y. after 1825, will soon be in progress, with augmented activity, in the North Western States.

REMARKS ON THE ABOVE.

ILLINOIS is only one of five States, beside two Territories, whose vast surplus of agricultural products, is soon to come down from the prolific and almost boundless West, to compete with the farmers of this state, in all their markets. What have we to do whose fortunes are indissolubly linked with the cultivation of the soil of New York, to secure to our labor a fair compensation?

When returning plenty shall again shut us out from the markets of Great Britain and the Continent, this question will press itself with much force upon the consideration of the farmers of this state. By what process shall we be able to keep up the price of our farms, and the value of rural industry among us? A bushel of wheat can be brought, on an average, from Ohio, Michigan, Indiana, Illinois, and Wisconsin, not to name Western Pennsylvania and Iowa, to Buffalo, for *three cents*. It will cost but little more to take a cargo through the Welland Canal to Rochester and Oswego, than to stop it at the out-

let of Lake Erie. Other agricultural products will come down upon us with equal facility. With 200,000,000 acres of choice Government Land still in market at \$1,25 per acre, while improvements in lake craft, in canals and railroads, are constantly diminishing the cost of transportation, what is the remedy by which we are to escape a ruinous competition? This question is more easily asked than answered.

We can discover no remedy but that which the SCIENCE of Agriculture will confer upon us. We have all confidence in the truth of the remark that *science* is capable of giving us at least three blades of grass, and three bushels of wheat, with the same land and labor that now yield us but two of either. This will give a nett gain of fifty per cent.

According to the late census, there were harvested in Chautauque County 269,169 bushels of wheat from 23,496 acres. This gives an average of a small fraction over 11 bushels per acre. 12,246 acres planted in Corn gave 458,320 bushels—a fraction over 37 bushels per acre. These figures are worthy of note; 1st, because they show that three bushels of corn are grown in that county, on less land than one of wheat. 2dly. Because they indicate the practicability of doubling the average product of both crops. Let us first consider that of Wheat.

It is obvious that these 23,469 acres had enough of all the ingredients in the soil that form wheat, to make the product of 269,169 bushels harvested, or 11 per acre. The remark is based alike on experience, and the researches of science that, the plants which bore this grain had within their reach, nine-tenths of all the materials necessary to have given an average crop of 22 bushels per acre. To supply the lacking one tenth, will cost less than half of the value of the *gain*—making the nett gain of 50 per cent. on the present crop. We insist on the correctness of the statement that it is cheaper to add 11 bushels to an acre, by 50 per cent., which has already been cultivated and sown, so as to grow 11 bushels, than it is to be at the expense of buying or renting, plowing, harrowing and seeding *two* acres to obtain 22 bushels of this bread forming grain. In the one case the outlay for interest on land, for seed, and tillage, is twice as large as in the other. In nine cases out of ten where the farmer can reap 11 bushels from an acre, he has produced straw enough to have yielded him 22 bushels of wheat. In truth, it is only one-tenth of the substances that will form 11 bushels of seed, which he lacks. Supply this deficiency, and it will be found that nature is quite as willing to bear 22, as 11 bushels or 44, as either, on an acre. But, what are the precise *things* that go to form the seeds of this plant, which the soil of Chautauque, and of many other counties, lacks to a greater or less extent? This is a very important question; and one that

we have long tried to solve. It is intimately connected with geology, and in a way of which we can not now speak. In the course of the coming volume however, we shall have much to say on the soils of this State, in connection with the character of the rocks and drift out of which these soils have been formed.

The reason why a pound of solid manure made from timothy hay, clover, cornstalks, oat or wheat straw, will not make, under any circumstances, a pound of wheat, is simply the fact that none of those vegetable substances contain the elementary bodies in *due proportion* which are necessary to form this grain. Hence it is that a soil may grow fair crops of hay, oats, corn, and wheat straw, and only 11 bushels of wheat per acre. Such a soil, with the aid of rain, dew, and other atmospheric agencies, may, and usually does contain, as we have already stated, nine-tenths of all the things found in seed wheat. In 100 lbs. of this grain there are $2\frac{2}{10}$ lbs. of incombustible earthy matter. In 100 lbs. of this, there are 95 lbs. of the phosphates of potash, of magnesia and of lime, in the proportions, according to Boussingault, page 366, of 47 phosphoric acid; potash 29.5; magnesia 15.9; lime 2.9. It has 1 per cent. of sulphuric acid, and 1.3 of silica. It is the *phosphoric acid* which is lacking. Of this substance an acre of wheat must have 12 lbs. to give 20 bushels of seed, beside $5\frac{1}{2}$ lbs. in the straw. So that one must have about 11 lbs. to obtain 11 bushels, while $17\frac{1}{2}$ lbs. will give 20 bushels. Potash is also generally deficient in most soils. Hence when lands are first cleared, they yield more and better grain than after their alkaline earths have been carried away in crops; or have been leached out of the surface soil by excessive tillage. The *source* from whence the farmer can supply himself with phosphoric acid at the least expense, we must leave for the subject of another article. At present, we must notice one other ingredient in kernels of wheat, of which there is a deficiency in most soils, to make a great crop of this *flesh-forming* seed.

In its simplest form, this substance is called nitrogen, or azote. It is the essential element in common hartshorn, or liquid ammonia. In 100 lbs. of marketable wheat, there are from 11 to 12 lbs. of water, which may be evaporated by heating the seed in a vacuum. In 100 lbs. of dry grain there are 2.29 lbs. of azote. The elements of dry wheat are:

Carbon,	46.10
Hydrogen,	5.80
Oxygen,	43.40
Azote,	2.29
Ash,	2.41
Total,	100.00

It will be seen that the earthy portion and azote together, form a fraction less than 5 per cent. Give to the growing plants 4 per cent. of *carbon* in vegetable mold, and your wheat crop

will have the *ten* per cent of the lacking ingredients, of which we spoke. From a variety of circumstances, which we cannot now enumerate, we regard the application of ammonia or azote, and of the other organic elements of wheat, as of less importance than the supply of the earthy elements of both the straw and seed of this grain. When we have demonstrated, as we soon shall, that with 10 lbs. of the *right things*, we can make 100 lbs. of wheat, corn and other plants—deriving 90 per cent. from the atmosphere—shall we not have proved that very few acres are really needed on which to change air and water into bread?

Remember that, in 100 lbs. of wheat straw, there are but 7 lbs. of matter which does not exist in the atmosphere; and in 100 lbs. of wheat, there are but 2.29 lbs. of incombustible earth. The 43.40 lbs. of oxygen, and 5.80 lbs. of hydrogen, making together $49\frac{2}{10}$ lbs. in 100 of dry wheat, are nothing more nor less than so much *water* in a solid form. The $46\frac{1}{10}$ lbs. of carbon is the precise thing that makes the black charcoal where wheat, coffee or any other vegetable substance is *chared* or burned, under particular circumstances. Now mark, that the burning of volcanoes and other fires deep in the earth; the combustion of wood and coal on its surface; the fermenting and rotting of vegetable and animal matter the world over; and the ceaseless respiration of all animals, are constantly throwing into the ever moving atmosphere an immeasurable quantity of *carbon* in the shape of carbonic acid. Plants, by the chemical action of light, heat, electricity and moisture, are able to decompose this gas; and with the elements of water alone, to form starch, gum, woody fibre and oil or fat. The presence of earthy minerals in plants, are, however, quite indispensable to transform water and carbon into starch in wheat, potatoes and other vegetables. And especially are the phosphates required to change water, carbon and *nitrogen* into gluten and legumin, or the *things* in clover, wheat and peas, that make lean meat, bread, and cheese.

TO CORRESPONDENTS.—Several communications intended for this number are unavoidably laid over till the next.

Dr. HARRIS of Harvard University, is informed that we shall be happy to aid him in procuring the insects, and their larvae, so soon as practicable. Extracts from his valuable work, and his letter, will appear in the February number.

CARROTS.—Mr. C. F. CROSMAN, of Brighton, has raised the past season 410 bushels of Carrots on one-fourth of an acre. This is at the rate of 1640 bushels per acre. Mr. C. has also grown something like 1000 bushels of beets on one acre of land. He is extensively engaged in the seed growing business, producing several thousand dollars worth, annually.

The Culture of Indian Corn.

The long evenings in winter are quite appropriate for young farmers, (and old ones too, if they are willing) to learn how to grow corn to the best possible advantage. There are but few cultivated plants,—we know of none grown in this state—which draw more largely from the atmosphere and water for their nourishment. Corn plants, however, have some earthy substances, which must be drawn exclusively from the soil.

In 100 lbs. of corn (maize) Dr. DANA, who is one of the best analytical chemists in the Union, finds 1.31—100 lbs. of ash, or incumcombustible mineral matter, which is made up as follows :

Potash,	0.290
Soda,	0.250
Lime,	0.035
Magnesia,	0.122
Oxide of Iron,	a trace
Silica, (flint sand,)	0.431
Sulphuric acid,	0.047
Phosphoric acid,	0.224
Chlorine,	1.003

1.31.2

In Southern corn, Professor Shepard of Charleston, S. C., finds only nine-tenths of a pound of ash in 100 lbs. of the grain.

Organically considered as an article of food, Dr. DANA thus divides this superior fat-forming seed :

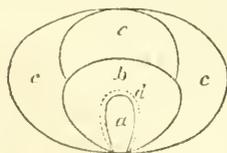
Starch, Oil, Sugar and Zeine,	77.09
Nitrogenous matter, (Albumen,)	12.60
Water,	9.30
Salts,	1.31

100.00

The starch, oil, sugar and zeine, form fat alone; and are burnt to keep all gramineous animals warm. These organized substances are made up of water—oxygen and hydrogen—and carbon exclusively. The flesh-forming organized matter in corn has all the simple elements found in starch, oil, and sugar, with the addition of *nitrogen*, forming an elastic gluey substance called gluten, albumen, casiene, &c.

The following diagram and extract from the Editor's Report, to the Legislature at its last session, will serve to explain this subject more fully:

The organized arrangement of the phosphate of lime and magnesia, in an embryo corn plant, and the locality of the salts of iron, zeine and starch, are worth knowing. The following diagram illustrates the section of a grain of corn :



- a. The cotyledon or embryo.
 b. Starch.
 c, c. Oil—zeine—sugar.
 d. Salts of iron.

In the cotyledon or germ, is deposited the phosphates which form the bones of animals, and also most of the glutinous substance which is indispensable in the formation of lean meat, tendon,

tissue, and the jelly found in bones. Hence, when the mouse eats out the chit or kernel of corn, he gets the raw material to make muscle, bone, and brain : and by taking into its stomach the *iron* in the dotted line *d*, this little animal, as well as the ox and man, obtain the substance which gives color to the blood, and with oxygen, the vital heat of the system.

The iron in venous blood, is in a state of protoxide.* This fluid is loaded with carbon, if not carbonic acid. From these causes venous blood is much darker colored than arterial blood. In the latter the iron is a proxide,* imparting to the blood a light vermilion hue. The fact has been demonstrated, that the air expelled from the lungs of a warm blooded animal contains 100 times more carbonic acid than the air taken into these organs. As the arteries leading from the heart penetrate every part of the living frame, they convey vital gas—oxygen, condensed in the peroxide of iron—to every portion of the system. This oxygen, while the blood is passing through the tissues from the arteries into the veins, combines with that portion of carbon which has performed its office in nourishing the body, and carries it, in the form of carbonic acid, through the veins, heart and lungs, into the ever moving atmosphere.

In thus burning the waste carbon in the system, oxygen gives out just as much heat to the surrounding matter as it would, provided an equal quantity of vital gas had burnt an equal amount of fuel in a stove.

Every body knows that active exercise will warm him in cold weather—that a horse driven forty miles a day will breathe oftener, evolve more heat and consume more food, or fuel, than he will when standing quietly in a warm stable. The waste oxygen and hydrogen will escape from the lungs of the animal, if quiet, in the form of vapor; in perspiration also, if driven hard. This sweat will carry with it some nitrogen and saline matter, which sometimes crystallizes on a horse by the evaporation to dryness of the liquid that escapes through his skin. But most of the valuable salts taken from the earth in the food of animals, escapes by the kidneys and bowels.

As the demand for carbon to form fat, muscle, cellular tissue, bone, brain, hair and wool, as well as to keep up a continuous heat of 93° night and day, is very great, it will be seen why *starch* is so abundant, not only in corn, as above indicated, but in all plants used as food for man or beast. Starch contains a large amount of carbon.

* "Protoxide" means the first oxide of iron, i. e., one part of oxygen gas united to one of metallic iron, as is witnessed in the scale that falls off from a heated bar, when hammered on an anvil in a blacksmith's shop. The "Per-oxide" is the red rust of iron, having a larger portion of oxygen combined with the metal.

↑ *Opener*,—green vitriol—sulphate of iron—is a compound formed by the union of sulphuric acid (oil of vitriol) and the oxide of iron,

It is well known that if a bin of corn be moistened, it will heat and grow or rot. In the process of sprouting, a seed first imbibes some portion of the vital gas that surrounds it, which uniting with the carbon in the starch, forms carbonic acid and evolves heat. When starch thus loses one portion of its carbon, it is changed into a kind of *sugar*, making as is well known, sweet bread from wheat a little grown. If a grain of wheat be surrounded by a little waxy clay, only a half inch in diameter, it will not sprout, because oxygen gas cannot penetrate the compact earth. By sowing the grain in wet weather, so that the harrow covers the seed with mud, thousands of bushels are lost.

It is a matter of great practical importance to know how to develop a large, vigorous growth of roots. On a poor soil this can only be done by the aid of science. Deep plowing and a thorough pulverising of the soil are indispensable to accomplish this object.

The Fattening of Animals.

THE art of fattening domestic animals is less studied and understood, in this country, than almost any other branch of Agriculture. Our farmers will find it much to their interest to devote more attention to the whole operation of transforming grain, roots, hay and grass into *flesh* and *fat*, to the very best advantage. There is reason to expect that well fattened cattle, sheep and swine, for many years to come, raised and fitted for the shambles in Western New York, will pay a living profit to send by rail-road to Albany and Boston Markets. To make money, however, at the business, one must be a master of the art of selecting and keeping the best animals of each kind. Skill in this matter must be acquired mainly by experience and close observation. Much however can be gained by studying the carefully recorded results of the experience of others. These have led to the establishment of a few general principles in feeding, some of which we will name:

An animal while growing in size, is less inclined to take on fat than he will be after his bones, tendons and muscles have come to maturity. Yet, a young animal will extract more nourishment from his food, and elaborate more *flesh* from a given quantity of it, than an old animal, or one that is in the meridian of life. In France, where the science of fattening animals has been cultivated with great care, and accuracy of detail, it is found that fat beef can be cheapest made from cows and bullocks at the ages of 7 and 8 years. The delay in time, cost of keep, and interest on capital, are serious objections to these ages. Where cows give milk, and oxen work, and thus both pay their way, the system indicated may be rendered quite profitable.

The celebrated English breeder, Robert Bakewell, succeeded after many years of troublesome

experiments in creating a race of neat cattle and sheep, which were remarkable for their disposition to take on fat. The fundamental principles established by him, after all his experience, are these: that smallness of bone, fineness of skin and a roundness of body, are the surest indications in cattle to form a good deal of fat for the provender consumed.

The most striking features of the *Dishley Breed*, so much a favorite with Backwell, were:

- 1st. The animal low on his legs.
- 2d. The backbone straight.
- 3d. The carcass rounding and almost cylindrical.
- 4th. The chest deep and large.

All experience confirms the clear deductions of physiology in regard to the importance of so tending and rearing all domestic animals, as to have them of a gentle, meek and quiet disposition. Such animals, are better milkers, and better to take on and *keep* on both flesh and fat, than others of a wild, running nature.

Boussingault remarks that "in fattening animals in winter, which in some countries is done almost exclusively on hay, an ox weighing 740 lbs., and consuming 40 lbs. of hay a day, will increase in weight about 2 pounds daily. This would be gaining only one pound of beef, live weight, for 20 lbs. of hay. In the Rhenish provinces M. Moll states that they allow 11 lbs. of hay to every 100 lbs of dead weight of the animal daily, and expect a gain equal to one-third of its weight in three or four months.

Mr. Stephenson at Alsace, in France, fed 18 bullocks 119 days, in three separate lots of six beasts each, on white turnips, beans, linseed cake, oats and potatoes. One lot consumed 49.7 lbs. of hay each, and gained just 2 lbs. per diem, or 247.5 in all. At the time these animals were put up, their average weight was 1115 lbs., second lot weighed at the beginning of the experiment, an average of 1016 lbs.; consumed of hay per diem, 34.3 lbs.—gain in weight 1.9 lbs., or in all 231.6 lbs.

Third lot weighed at first an average of 794 lbs. each, consumed of hay 16 lbs. per diem. a day; and gained 0.9 of a pound, or 112.6 lbs. in 119 days.

An ox has been fattened on clover cut in blossom, and fed directly, consuming 100 lbs. daily, and gaining 2 lbs. in live weight. When looseness of the bowels is induced, a part of the green clover is cured and then fed, of course not omitting a fair seasoning of salt. Clover is better for milch cows than timothy grass, as many carefully conducted experiments have proved.

The blood of a fattened ox, weighing on his feet 1496 lbs., was 7.4 per cent. of the whole weight, or 110 lbs. The offal varies from 15 to 20 per cent of the live weight—that is, counting hide and tallow as equal in value to the four quarters,

M. Dubois, an extensive feeder, has realized

as the mean of many experiments, 16.9 lbs gain in live weight for every 220 lbs. of hay consumed. From this we deduct 2.4 lbs. for offal, leaving the nett gain of 14.5 lbs. of beef for every 220 lbs of hay. This at 25 cents per 100 lbs., or \$5 a ton, makes 14½ lbs. beef to cost 55 cents, or nearly 4 cents a pound.

It is important to know that, in all these French and Rhenish experiments, oats, turnips, oil cake and the like, are reduced to their supposed equivalents in hay, as a kind of provender currency. According to the best judgment of the editor of this paper, these equivalents are far from being true and reliable in practice. In short, we do not credit the statement that it requires 20 lbs. of good hay or its equivalent in roots and meal to make one pound of live weight in a healthy bullock. If it, does then no man can make beef at less than \$6 per 100 lbs., and live by it.

In Europe, the practice is general to keep animals, while fattening, in dark stables and well bedded, that they may sleep much of their time. Perfect regularity should be observed in the times of feeding, as cattle will expect their allowance, and fret if it be not before them. Nothing, which is left after a beast is through eating, should be allowed to remain in his feeding trough. No pains should be spared to save under shelter, and free from waste, all the liquid and solid manure of domestic animals, and especially that of fattening cattle and swine. One important object in feeding animals for the butcher should ever be to enrich one's land by the aid of the manure it furnishes. In France, Belgium, and Holland, the land to fatten a beast on, is estimated by the square yard. All its food is carried to the stable, and the manure taken back again with the utmost care. Both the urine and dung are diluted with water to about four or five times their natural bulk, and applied by a watering cart to the fields.

By this system, three times the quantity of food can be grown on a given area of land that will be where stock are allowed to run over it and trample down the tender grass, and drop their excretions in a concentrated form, and on a very small surface. As these excretions contain the precise things which form grass, a moments reflection will convince any one of the importance of applying them, not in *heaps*, nor in a form so concentrated as to *kill*, like the the urine of a domestic animal, growing plants. Hence the great importance of diluting urine and spreading it with the dung evenly over the whole surface. All that have tried soiling cattle, and especially cows, giving milk, speak favorably of the results.

We firmly disbelieve in farmers that will not improve; in farms that grow poor every year; in starved cattle; in farmer's boys turning into erks and merchants; in farmer's daughters unwilling to work; and in all farmers who are hamed of their avocation.

Mineral Elements of Plants.

WE make the following lengthened extracts from a late communication of Prof. LIEBIG to the first number of the "Agricultural Magazine," a work recently started in London, a copy of which was sent to the Editor of the Cultivator by Mr. HORSFORD. The readers of our paper for the last two years, will see in this article a confirmation of the importance of the principles which we have so often urged on the attention of farmers: to wit, that they must supply their crops with the *alkalies* potash and soda; and the *phosphates* of lime and magnesia, as well as gypsum and substances rich in ammonia, nitrogen or azote. It may be well to remark that the words azote and nitrogen mean the same thing, and that ammonia and hartshorn are compounds of azote and hydrogen.

MR. LIEBIG attaches undue importance to the urine and dung of swine. He says: "If it were possible to provide our fields with the dung of swine in sufficient quantity, we would replace by it, in a soil which contains *silica* (flint sand,) and *lime*, all the remaining elements of plants—we have in it not only alkaline phosphates, the principal elements of seeds; but also alkaline carbonates, which are required by the leaves, stalks and roots. This purpose can not be attained by human excrements or guano alone, but perfectly so from stable manure from its containing alkaline carbonates."

Liebig seems to have entirely overlooked the material fact that the excretions of swine and all other animals necessarily varies according to the variation in in their food. Thus, swine feeding in the same pasture with neat cattle and sheep, and eating the same grass, must certainly void the same minerals which the grass furnishes.—It is absurd to suppose that 100 lbs. of clover will furnish a different set of elementary bodies in the dung and urine of the cow, the pig, the sheep, and the horse. Again it is equally unphilosophical to contend that the excretions of swine fed on hasty pudding and milk, will vary essentially from those of man living on similar food.

Nearly all the distinguished Chemists of Europe talk about stable and barnyard manure as something of a uniform, homogenous character. The same mistaken idea runs through all their analyses of the dung and urine of different animals. As though a bushel of potatoes on passing through the alimentary canal of a cow, a horse, a sheep or a man, will furnish nothing but phosphate salts to one, carbonate salts to another, and something different from both to the third!

The following may be regarded as the essential constituents of a powerful manure applicable to all sorts of soils:—

Earthy Phosphates.—The most important of these is *Phosphate of Lime*, which occurs in nature as a mineral called *apatite*. It is the principal element in the bones, which, it may be observed, have been found most efficacious if calcined, consequently deprived of their animal matter.

The rapidity of the effects of phosphate of lime on the growth of plants depends upon its greater or less solubility. Its amount of glue (gelatine) diminishes this solubility if the soil is rich in vegetable matters, which furnish carbonic acid by their decomposition, and which acid is required for rendering the phosphate of lime soluble in water and introducing it into the organism of the plants. In the calcined state the bones act sufficiently quickly; but in those soils in which this cause of solubility is wanting, their action is slower. In my work I had recommended the addition of a certain quantity of sulphuric acid, both in order to render the bones more soluble and to change the neutral phosphate of the bones into gypsum, and into a phosphate which contains more acid (superphosphate of lime.) I have been informed that this advice has been most extensively adopted, that the superphosphate of lime has been found to be a most efficacious manure, and that it forms already a most important article of commerce. A second earthy phosphate, not less important, is the *Phosphate of Magnesia*, which it is well known enters in a still larger proportion than the *phosphate of lime* into the composition of the grain.

The *Alkaline Phosphates*, although not originally found in nature, are important elements of the seeds of grain, of peas, beans, &c. A rational farmer must provide them in sufficient quantities to those plants which require them for their development, from knowing that human excrements increase the produce in grain in a far greater proportion because they contain alkaline phosphates, than the animal excrements, in which they do not exist.

The *Alkalies* (potash and soda) must be constituents of every rationally composed manure, because by them the original fertile condition of the field is preserved. A soil which contains the *alkalies* in too small a quantity, is perhaps, fertile for grain; but is not necessarily so for turnips or potatoes, which require a great quantity of alkali. By supplying an alkaline manure, fallows, or the cultivation of those plants which are grown during the time of fallowing, becomes less necessary.

Sulphate of Potash is a constituent of all plants, although in small quantity, as well as *common salt* and *chloride of Potassium* which are found in milk in rather a large proportion. The *salts of lime*, especially *gypsum*, are important nourishment for the leguminous plants. *Silica* is never wanting in all sorts of soils—it is a constituent of all rocks, by the decomposition of which all productive soils are formed, and the cerealia find it every where in sufficient quantity, and in a form capable of being taken up by the plants, if the *alkalies* are provided wherever they are present in too small quantity.

Salts of Ammonia.—It can be regarded as certain, that the azote of the plants is derived, either from the ammonia of the atmosphere, or from the manure which is provided in the shape of animal fluid and solid excrements, and that azotic compounds exercise an effect on the growth of plants, only in so far as they give up their azote in the form of ammonia during their decomposition and decay. We may, therefore, profitably replace all the azotic substances with compounds of ammonia.

Decaying vegetable matters, which contain carbon, are useful to the fields in so far as they provide a source of carbonic acid; but they are not quite indispensable in manure, if the latter be rationally combined, as the atmospheric air is an inexhaustible source of carbonic acid from which the plants draw their carbon, if in the manure, the mineral substances are provided which are necessary for the assimilation of the carbonic acid. These are the substances which together give fertility to the soil; but although each of them may, under certain circumstances, (*viz.*, where the soil is defective in it, or where it is not indifferent to the plant to take up one instead of the other, as, for instance, may be the case with soda instead of potash,) increase the fertility, no one of them can be regarded as manure, according to the common meaning of the word, for the simple reason, that only *all of them in certain proportions*, will fulfil the purpose for which the common manure is applied. This purpose is the restoration, or an increase of the original fertility, and by manure we must replace all the elements of the plants which have been taken away in harvest, or which are contained in the plants which we are desirous to cultivate.

What, then, are the constituent elements of the soil which we remove by the straw, seeds, tuberculous roots, stalks, &c., of our plants of culture? It is obvious that we must know these first, in order to restore them in sufficient quantities. To this we answer, by giving the ana-

lysis of the ashes of plants and their seeds. Hundred weights of the ashes of the following plants contain

	Straw of				Ashes of
	Beans.	Peas.	Potatoes.	Clover. Hay	
Alkaline Carbonates,-----	29.33	12.43	4.34	31.63	3.0
Carbonate of Lime,-----	39.50	47.81	43.63	41.61	6.9
Phosphate of Lime,-----	6.43	5.15	5.73	11.80	40.8
Phosphate of Magnesia,-----	6.66	4.37	7.82	0.91	—
Sulphate of Potash or Soda,-----	12.40	10.15	—	2.23	8.84
Magnesia,-----	—	—	—	—	21.3
Chloride of Sodium or Potassium,-----	0.23	4.63	2.3	2.27	3.06
Phosphate of Iron,-----	—	—	—	—	12.7
Phosphate of Alumina, &c. }	—	—	—	—	—

In these analysis *Silica* has not been taken into account, as it is found in all soils, and need not be supplied. One hundred weight of the ashes of potatoes, and the seeds of the following plants, contains

	Potatoes.	Wheat.	Beans (Vicia faba.)
Alkaline Phosphates,-----	15.75	52.93	63.59
Phos. of Lime & Magnesia,-----	9.00	33.02	23.46
Phosphate of Iron,-----	—	0.67	—
Sulphate of Potash,-----	15.07	—	1.34
Carbonate of Potash & Soda,-----	51.70	—	—

What is wanting in the 100 of the above analyses is sand, coal, or loss. From these researches it appears, that for stalks and leaves we require other elements than for seeds. The former contain no alkaline phosphates, but they require for their development and growth a rich supply of alkaline carbonates and sulphates. On the other hand the carbonates are entirely wanting in the seeds, but the latter are very rich in phosphates. It is sufficiently obvious that a rational farmer must supply *both*, as well as all the others. If he supplies only phosphates, and does not restore the alkaline carbonates, his soil will become gradually barren—it will be exhausted in those necessary elements for the development of stalks and seeds, without which no formation of seed can be expected. If he supplies the alkalies, lime, and sulphates alone, in a given time he will get no more grain. All constituent elements of the manure, if they are supplied *alone*, have that great defect, that by them the soil is impoverished in other equally important elements. *No one* of itself can maintain the fertility. Keeping this in view, we may easily judge of the comparative value of artificial and natural manures, and all the various *arcana* which have been praised as *panaceas* for exhausted soils.

It is not less easy to understand why the farmers have such different opinions on the relative value of the constituents of manures—why one whose farm is rich in phosphates, produces an uncommon fertility by the application of nitrate of soda, or the supply of alkalies, while another does not see any favorable effect at all—why bones (phosphates of lime) produce in many fields wonders, and are not of the slightest benefit to others, which are deficient in alkalies or alkaline salts. From the composition of animal manures, it results with certainty, that by applying the latter, (solid and fluid excrements of men and animals) we supply to the soil not one but all the elements which have been taken away in the harvest. Fertility is perfectly restored to the field by a corresponding supply of this manure, and it may be increased by it to a certain limit. This will be the more intelligible, if we compare the mineral elements of the urine of horses and cattle with the mineral elements of herbs, straw, roots, &c., of our cultivated plants. It will be found that in their quality they are perfectly identical.

	Urine of a Horse.	Of Another.	Of Oxen.
Carbonate of Lime,-----	12.50	31.00	1.07
“ of Magnesia,-----	9.46	13.07	6.93
“ of Potash,-----	46.09	40.33	77.23
“ of Soda,-----	10.33	—	—
Sulphate of Potash,-----	13.04	9.02	13.30
Chloride of Sodium,-----	0.55	—	0.39

These salts in the urine of horses amount to nearly 4 per cent.; in that of oxen to 2½ per cent. of their weights. If we compare the composition of these different sorts of urine with the composition of the straw of peas, beans, and potatoes, of clover and hay, it will at once be obvious, that in stable dung we replace by the urine, the alkaline carbonates which we have removed in harvest. What in this urine, is wanting in phosphates and carbonate of lime and phosphate of magnesia, forms the principal constituent elements of the solid excrements of animals; *both together* (solid excrements and urine) restore the field to its original composition, and thus a new generation of cultivated plants meet with the

mineral ingredients necessary for their development. If we farther compare the guano and the feces of men with the composition of the animal urine, the analysis shows (rf. my book on agriculture) that both are entirely defective in *alkaline carbonates*—they contain phosphates and sulphates as well as chloride of sodium; but no free alkali—they contain phosphate of lime and phosphate of magnesia, in short their elements are in *quality* identical with the important mineral elements of the seeds of wheat, peas; beans, (rf. the analysis.) The urine of swine is in its composition intermediate between the urine of man and horses.

Analysis of the urine of swine.

Carbonate of Potash,	12.1	} The solid Excrements of Swine contain principally phosphate of lime.
Phosphate of Soda,	19.0	
Sulphate of Soda,	7.0	
Chloride of Sodium,	53.1	
“ of Potassium,		
Phosphate of Lime,	8.8	
“ of Magnesia,		
Traces of Iron,		

What the practical results of a knowledge of the composition of these manures are, is clear. If it were possible to provide our fields with the dung of swine in sufficient quantity, we would replace by it, in a soil which contains *silica and lime*, all the remaining elements of the plants—the field might be made fertile for all kinds of plants—we have in it not only alkaline phosphates, the principal elements of the seeds, but also alkaline carbonates, which are required by the leaves, stalks, and roots. This purpose cannot be attained, however, by manuring with guano or human excrements alone, but perfectly so by stable manure, from its containing alkaline carbonates. If I have said that stable manure contains the mineral elements of the nurture of the plants, exactly in a state and condition in which they are furnished by nature—that a field manured by it resembles the primitive state of America and Hungary, this assertion will not be found exaggerated. It is certain that stable dung contains no alkaline phosphates, but nature does not furnish to the plants these elements even in the most fertile soil, although we find them in large quantity in all the seeds of wild plants. It is obvious notwithstanding their absence from the soil, that the phosphates are formed in the organism of the plants, and that they originate from the phosphate of lime and magnesia and the supplied alkalis, by an exchange of the elements of both. The alkalis are necessary for forming *alkaline phosphates*, which cannot originate in the phosphate of lime alone. Both together are present in stable dung. In human excrements, and in guano, the alkaline carbonates are entirely wanting. The practice of the farmer, in some places, of supplying to the field not pure guano, but a mixture of it with gypsum, shows clearly that the phosphates of alkaline bases are really formed in the organism of the plants from the phosphate of lime and magnesia, because this mixture (guano and gypsum) contains less phosphate of potash or soda than the guano itself; or, in certain proportions of gypsum, no alkaline phosphates at all; the soluble phosphates in the guano decomposing the gypsum into phosphate of lime and magnesia, and into sulphate of potash. I am far from asserting that we should not provide the fields with alkaline phosphates; the excellent effect of the guano, and of the human excrements, is too well known to question it, and we perceive, from this fact, that plants are in this respect like domestic animals which with a normal food, are healthy and strong, but do not fatten. On the contrary, we know that if we prepare the food of these animals artificially, so as to render it more easily digested and assimilated, they are enabled to consume, in a given time, a greater quantity of it by which all their parts increase in weight. The same happens with plants if we give them their nourishment in a state most appropriated for assimilation; their capability to attract the other elements from the atmosphere increases and their development is accelerated. If we recollect that the favorable effect of guano upon our fields depends on its amount of *ammoniacal salts*, of *alkaline phosphates*, and the *other mineral constituents* of the seeds, but that it is defective in *alkalis*, the principal elements of the *herbs, straw, and roots*, it is easily understood why the opinions of farmers, on the value of guano as a manure are so very different. On a soil, which is defective in alkalis, its effect is small; on a soil rich in them, it increases the produce in a remarkable degree; but, as I have already observed, the continued application of guano must gradually diminish the fertility of our fields for a number of plants, because the elements of those

organs, of the leaves, stalks, roots, &c., without which the plants cannot be developed and cannot produce seeds, are taken off in the harvest without any restoration of them. I think it, therefore, certain, that the stable dung can replace the guano to a certain degree, but not *vice versa*. A rational agriculturalist, in using guano, cannot dispense with stable dung.

A covering for those places in which stable dung is preserved, in order to shelter it from the effect of the rain, has been regarded in Germany as essential for preserving its manuring power. In consequence of the experience, that the soluble elements of stable dung are the most efficacious, it has in some cases, been drawn out with water, and it has been found advantageous to carry *only this fluid* to the fields, I need only refer to the foregoing analyses of the urine of animals in order to see upon *which elements* of it this effect depends.

The reason why, in certain years, the influence of the best and most plentiful manuring is scarcely perceptible, is, that during the moist and rainy springs and summers, the *phosphates and other salts with alkaline bases*, as also the *soluble ammoniacal salts* are entirely or partly removed. A great amount of rain and moisture removes in the greatest quantity, the very substances which are most indispensable to the plants at the time that they begin to form and mature seeds. The system of draining, which, of late has been so extensively followed in England, brings the land into the state of a great filter, through which the soluble alkalis are *drawn off*, in consequence of the percolation of rain; and it must, therefore, become more deficient in its *soluble* efficacious elements.

Attentive farmers must have observed that after a certain time the quality of the grain on land laid dry according to this principle, deteriorates; that the produce of grain bears no due proportion to the produce of straw.

What is more evident, sir, after these remarks, than that intelligent farmers must strive to give to the soil the manuring substances in such a state, as to render possible their acting favorably on the plants during the whole time of their growth. Art must find out the means of reducing the solubility of the manuring substances to a certain limit, in a word of bringing them into the same state, in which they exist in a most fertile virgin soil, and in which they can be best assimilated by the plants.

I am, sir, your obedient servant,
Giessen, 1845. DR. JUSTUS LIEBIG.

PRODUCTION OF THE PRECIOUS METALS IN RUSSIA.—We learn from Hunt's Merchants' Magazine for November, that the aggregate value of the precious metals produced in the Russian empire during the last thirty years, is 1,169,187,000 francs. Since 1813, the production of gold has increased more than ten-fold, while that of silver has made but little progress. From 1826 to 1844, coin was struck from platina to the value of 13,000,000 francs. From 1664 to 1844, 180 years, gold coin for the value of 191,508,401, silver coin for the value of 344,638,092, and platina coin for the value of 3,468,572, had been struck in Russia. Value altogether, in francs, 2,158,460,000. Value in pounds sterling, 84,314,853.—There was struck, besides, copper coins to the value of more than 50,000,000 silver rubles.

AMERICAN ICE IN THE EAST INDIES.—The Ice Trade is one of considerable magnitude. The quantity shipped from Boston last year, is said to have been 55,000 tons, delivered on board at cost of \$250 per ton, while the product of sales is put down at \$3,575,000. A building 40 feet high, 178 feet wide, and 198 feet long, enclosing more than three-quarters of an acre, and capable of holding 30,000 tons of ice, has been erected at Calcutta. What a monster Ice House!

Agricultural and Commercial Statistics.

WE are very partial to the study of Statistics; and hope the day is not distant when plain facts, simple truth, and genuine knowledge, will take the place of *romance* in the public mind, and of *fiction* in the politics and legislation of the country. Fairy tales will do for the amusement of children. But after all, the clouds, moon-beams and mysticisms of twilight intellects, can never successfully compete with the sober statistics of patient, calculating reason. It was the source of great mortification to us that our Tables for showing at a glance, first, the whole number of acres of land cultivated in this state; secondly, the number in *meadow* and *pasture*; thirdly, the acres sown and planted in grain, roots, &c., should have been so mutilated in the Senate as wholly to omit the columns relating to meadows, tons of hay, and grazing lands. In this regard our late Census returns are sadly defective. It is some satisfaction, however, to know that the Agricultural Statistics are more comprehensive, and particular, than any which either the State or United States Government has before made. We shall compile for the present volume of the Farmer a valuable synopsis of the Agricultural products of every county in the State, so soon as the matter is arranged at the Comptroller's Office. We shall also show that, from some cause, we are driving our native born citizens out of the state, by tens of thousands, and supplying their places by immigrants from Europe.

We have on hand a mass of statistics relating to our whole exports to all nations since the organization of our National Government, from which we shall condense a birds-eye view of our foreign trade. It is a curious *fact*, and one that signally marks our *good living*, that, of the 459,000,000 lbs. of Coffee grown on this planet, the people of this country actually consume about *one-third part*, or 149,711,820 lbs. ! It is hoped that the following Table will be found interesting:

Articles that arrived at Tide Water on the Hudson in 1841 and 1844 :

	1841.	1844.
Furs, lbs.....	1,133,909	832,290
Boards, M. feet.....	177,720,349	232,434,700
Shingles, M.....	46,335	78,125
Timber, cubic feet.....	1,023,576	921,932
Staves, lbs.....	110,542,339	97,533,900
Wood, cords.....	21,493	16,559
Ashes, bbls.....	13,093	89,616
Pork, bbls.....	115,159	63,645
Beef, bbls.....	13,113	59,999
Cheese, lbs.....	11,171,081	26,674,500
Butter and Lard, lbs.....	16,157,653	22,596,390
Wool, lbs.....	3,617,075	7,672,340
Flour, bbls.....	1,647,492	2,222,214
Wheat, bush.....	731,055	1,262,249
Rye, bush.....	3,070	62,239
Corn, bush.....	119,762	17,361
Barley, bush.....	121,010	318,472
Other grain.....	663,375	1,166,524
Bran, bush.....	566,013	4,177,489
Peas and Beans, bush.....	39,299	21,176
Potatoes, bush.....	32,397	18,263
Dried Fruit, lbs.....	493,697	1,299,496
Cotton, lbs.....	193,342	79,693
Tobacco, lbs.....	650,730	322,930

Clover Seed, lbs.....	3,571,334	1,591,399
Flax, lbs.....	956,233	3,114,899
Hops, lbs.....	203,096	1,319,794
Spirits, gall.....	2,022,777	1,194,317
Leather, lbs.....	1,855,999	3,969,099
Furniture, lbs.....	1,538,727	2,177,199
Lard, lbs.....	259,172	41,399
Pig Iron, lbs.....	4,937,423	6,422,699
Iron Ware, lbs.....	399,777	941,999
Woolens, lbs.....	424,329	867,299
Cottons, lbs.....	1,093,613	1,581,699
Salt, bbls.....	43,197	175,013
Stone Lime, lbs.....	25,723,735	50,139,399
Gypsum, lbs.....	129,772	1,891,699
Coal, lbs.....	16,069,871	13,189,799
Sundries, lbs.....	31,979,135	51,722,199
Merchandise, lbs.....	399,999	492,399
Do. going from tide water,		
Tons.....	132,611	135,616

The above Table discloses many facts worthy of note. It will be seen that, in three years, *Ashes* (pot and pearl,) have increased from 43,093 bbls. to 80,646, or about 100 per cent. This is interesting, as it marks the rapid clearing of land in the West. The increase has been regularly progressive; being 43,093 lbs. in 1841, —44,824 in 1842,—77,739 in 1843, and 80,646 in 1844. Of the latter, about one half came from the Western States (being the increase.) 32,209 bbls. arrived last season, 1844, at the port of Buffalo.

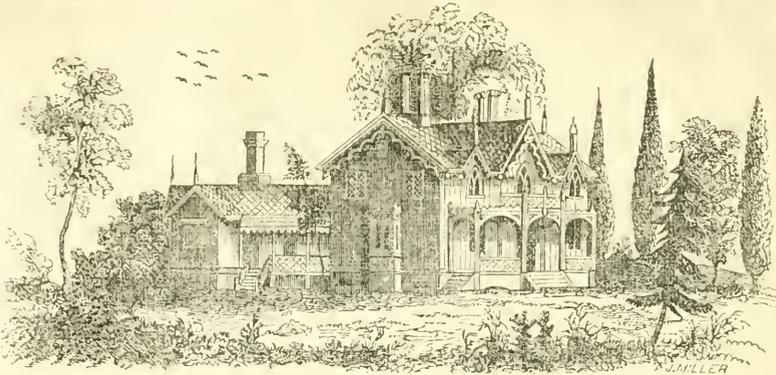
Cheese arriving at tide water has increased from 14,171,081, to 27,674,500 lbs.

Butter and Lard increased largely in three years; being 16,157,653 lbs. in 1841, and 22,596,390 in 1844.

Note the increase in *flour, wool, dried fruit, flax, leather, pig iron, woolen* and *cotton goods, stone lime and gypsum*; and also the *decrease in spirits*, (whiskey,) which shows a happy falling off, of nearly one half, or over 800,000 gallons.

In our next number we shall give tables showing the price of Flour in the city of New York for the last 23 years,—the imports of Agricultural and Forest products into this State at Buffalo, Black Rock, Oswego, and Whitehall, for the years named above; and, if made up at the Controller's Office, the total movement on all the Canals in this State, for the remarkable year just closed.

KEEPING YOUR PIGS IN WINTER.—There is both negligence and mistake in the way of wintering pigs. I am not talking to those whose manner of keeping stock is, to let stock take care of themselves, but to farmers who *mean to be careful*. Hogs should be *sorted*. The little ones will, otherwise, be cheated at the trough, and overlaid and smothered in the sleeping heap.—There should not be too many in one enclosure; especially young pigs should not sleep in crowds, for, although they sleep warmer, they will suffer on that very account. Lying in piles, they get sweaty; the skin is much more sensitive to the cold, and coming out in the morning, reeking and smoking, the keen air pierces them. In this way, young pigs die off in the winter by being too warm at night.—*Indiana Farmer.*



ELM-WOOD COTTAGE.

THE RESIDENCE OF THOMAS H. HYATT, Esq., NEAR ROCHESTER, N. Y.

Elm-Wood Cottage.

THE proprietor of this beautiful Cottage Residence promised us a description to accompany the above engraving—but we did not receive it in time for this number. It will be given in our next.

Preservation of Potatoes.

THERE is reason to believe that, if potatoes are covered some three feet in depth, so as to wholly exclude the air and keep the tubers at a uniform temperature below that at which their germs will grow in the least, they may, like the seeds and germs of other plants, be kept years, quite free from decomposition. We wish to impress on the minds of our agricultural friends this important fact, that when a vegetable is surrounded with a low temperature, having the air wholly excluded, it will last, for ages, like logs deep under ground, like the seeds of white and red clover, and the germs of peas and found enclosed in the coverings of mummies 3,000 years old. To prevent the pressure of too much earth a deep cellar or hole might be dug in dry earth, seven feet deep, and half filled with potatoes, having a frame of scantling with cross pieces, so that slabs or boards might rest on them close to the potatoes, but not in contact with them. Over this earth could be packed hard for three feet in thickness.

We make these suggestions, because we have often seen very fine *new* potatoes in the Buffalo market, in June and the first of July, which had been placed in such pits so soon in autumn as they were ripe, and there kept till the middle of the next summer, precisely as they were when buried. Garden vegetables may be preserved in a similar manner. We shall recur to this subject, that my young readers may know *why it is* that the germs of plants, like those of white clover and wheat, may be buried in the earth for indefinite ages, and then grow, by the joint assistance of light, warmth, moisture, and probably electricity.

TWO NEW FACTS RELATIVE TO THE POTATOE DISEASE.—We are informed by Mr. T. C. PETERS, of Darien, that he has lost by rot something like 1000 bushels of potatoes this season, and has observed the important fact that a field of potatoes, whose stems and leaves were evidently affected with the blight, had had its tubers *preserved* from all injury by the action of a frost that killed the potatoe tops dead. This crop grew on a low piece of ground, and subject to frost. Another field hard by, similarly affected, escaped the frost, and most of the potatoes rotted in the hill. His early potatoes all escaped the malady.

The other fact is this: Mr. PEARCE, of Hamburg, who is an excellent and observing farmer, saw that his potatoe vines were affected, and pulled several hills to examine the roots. They were sound, and left separated from the stems or tops. By this separation these hills wholly escaped the rot, while the potatoes in all the adjoining hills were rotten at the time of harvest.

Speaking of Mr. P's. potatoe crop, reminds us, (as we examined his field last summer for the potatoe insect, which was described in the August number of this paper,)—that we have neglected to inform our readers that said insects, when fully developed, proved to be large white millers.

Cortland Agricultural Society.

MR. EDITOR:—Our County Agricultural Society held its Annual Meeting on the 4th instant.—The meeting was large and spirited. The following gentlemen were elected officers for the ensuing year:

HENRY S. RANDALL, of Cortlandville, *President*.

THOMAS HARROP,	} <i>Vice Presidents.</i>
CHARLES McKNIGHT,	
SQUIRE JONES,	
HIRAM HOPKINS,	

AMOS RICE, *Treasurer*.

JAMES M. LEACH, Cortlandville, *Rec. Secretary*.

PARIS BARBER, Homer, *Cor. Secretary*.

WILLIAM F. BARTLET, *Marshal*.

EXECUTIVE BOARD—Henry Stephens, David Matthews, Haniel Thompson, Andrew Dickson, O. M. Shedd, Henry Brewer, Oren Bowen, Martin Sanders, Morris Miller.

Yours,
H. S. R.

Monroe Co. Agricultural Society.

At the Annual Meeting of the Monroe County Agricultural Society, held pursuant to adjournment, at the Office of the GENESEE FARMER, in Rochester, on the 10th day of December, 1845, the following named gentlemen were elected officers for 1846:

- JOHN H. ROBINSON, *President.*
- ELISHA HARMON, ' } *Vice Presidents.*
- CALEB K. HOBBIE, ' }
- FRED. P. ROOT, ' }
- JAMES P. FOGG, *Treasurer.*
- JAMES H. WATTS, *Rec. Secretary.*
- JOSIAH W. BISSELL, *Cor. Secretary.*

TOWN COMMITTEES.

- Wheatland*—Jirah Blackmer, Wm. Garbutt, Geo. Sheffer.
- Chili*—Wm. Pixley, Jacob Strawn, John K. Ballentine.
- Riga*—Charles Tenny, John Rowe, Dennis Church.
- Ogden*—Jesse Harroun, Dr. Smith, Marcus Adams.
- Sweden*—J. W. Spencer, Jacob Sutphen, Asa Rowe.
- Clarkson*—Henry Martin, Adin Manley, Isaac Allen.
- Purina*—Isaac Chase, Roswell Atchinson, J. M. Webster.
- Greece*—Geo. C. Latta, Robt. H. Brown, Hall Colby.
- Brighton*—Romanta Hart, S. P. Gould, N. Hayward.
- Henrietta*—Wm. C. Cornell, Elihu Kirby, S. Leggett.
- Rush*—Thomas Wright, John Rowe, John Birdsall.
- Mendon*—A. Cole, Benj. Eckler, Benj. Birdsall, Jr.
- Pittsford*—Erastus Williams, H. Newcomb, H. S. Potter.
- Penfield*—Elias Beach, S. Miller, D. E. Lewis.
- Perinton*—Gideon Ramsdell, Z. Burr, John Ayrault.
- Webster*—Dr. O. Reynolds, B. Woodhull, J. VanAlstyne.
- Irondequoit*—H. N. Langworthy, J. Lyon, J. McGonegal.
- Rochester*—B. F. Smith, L. B. Langworthy, Amos Sawyer, Patrick Barry, James M. Whitney, Wm. Kidd, James P. Fogg, T. H. Hyatt, John Haywood.

On motion of James P. Fogg,
Resolved That the thanks of the Society be tendered to WM. BULL of GATES, ANAN HARMON of CHILI, ELLWANGER & BARRY of Rochester, and to H. M. TRUE of Rochester, for their donations to the Society, for the purpose of increasing its funds, of the premiums that had been awarded them at the last Fair.

Resolved, That this Society has heard with great pleasure the announcement that Dr. LEE has consented to deliver in the city of Rochester, the ensuing winter, a course of *free Public Lectures*, on the science of Agriculture, and we would recommend all interested in Agricultural improvements to attend; believing as we do that the information thus given to the community by a well known and competent Lecturer, will be not only highly interesting, but beneficial and permanent.

Resolved, That the Treasurer of this Society be authorized to appropriate the sum of *Twenty Dollars* to assist in defraying the necessary expenses of these Lectures.

Resolved, That all premiums not claimed in 3 months after the awards of the committees be considered as donations to the Society.

On motion of T. H. Hyatt,
Resolved, That we approve of the plan of establishing a *State Agricultural School*, under the patronage of the State, and that we concur with the suggestions of the *Cortland Democrat*, that Rochester (or vicinity,) would be a suitable location for such an institution; and that, as a society, and as individuals, we will use our best exertions to aid in its establishment.

Resolved, That a copy of these Resolutions be sent to the Representatives in the Assembly for this county, and to the Senators of the 8th District; and that they be requested to use their exertions to procure the passage of a law for the establishment of such Institution as that contained in the foregoing resolution.

The Treasurer made the following Report:

1845.	Amount of Cash on hand, Dec. 30 1844, ..	\$46 37
Oct. 3.	Amount received from 202 members,	202 00
" 10.	" " " " the State,	194 00
		\$442 37
Nov. 8.	Paid receipts from No. 81 to 156, inclusive, ..	308 25
Oct. 3.	Paid expenses of Society,	65 61
	Cash on hand,	68 31
		\$442 37

JAMES P. FOGG, *Treasurer.*

REPORT OF COMMITTEE ON FIELD CROPS.

Your Committee have examined the few certificates that have been presented of Field Crops, for premiums—regretting, at the same time that so lean a competition should be presented before them; there being no competitors for Wheat, Barley, or Oats, prominent grains in our field productions.

The only ones may be found in the following three competitors for Corn:

The first premium awarded to Mr. SAMUEL SMITH, of Henrietta, for his acre of Corn, amounting to *eighty and one-fourth* bushels per acre—Colman's Reports and \$3.

The second premium to Mr. JOHN MCGONEGAL, of Irondequoit, for his acre of Corn, amounting to *seventy-seven and 53-75ths* bushels to the acre—Volume Transactions and \$3.

The third premium to Mr. CALEB K. HOBBIE, of Irondequoit, for his acre of Corn, amounting to *fifty-five* bushels per acre—Volume Transactions and \$2.

A special premium was awarded (there being no competition,) to Mr. ALFRED FITCH, of Riga, for his crop of Mangel Wurtzel, 533 and 40-60th bushels on half an acre—\$3.

Also, a special premium to Mr. HENRY LIVINGSTON, of Irondequoit, for his crop of Potatoes, containing 230 and 1-4th bushels per acre—no competition—\$3.

- CALEB K. HOBBIE, } *Committee.*
- JIRAH BLACKMER, }
- NATHANIEL HAYWARD. }

The Society awarded to J. ONDERDONK, of Greece, for nine varieties of Seedling Potatoes, exhibited at the County Fair,—Volume Transactions and \$2.

To MATATHIAS GARRIETT, of Gates, for four varieties of Seedling Potatoes, (exhibited at same time,)—\$3.

To H. N. LANGWORTHY, of Irondequoit, for several varieties of Seedling Potatoes—shown at same time—\$3.

To JAMES HART, Irondequoit, for best two year old Colt,

\$3.00

To Mr. STOTTLE, Chili, 2d best,

\$2.00

To ROBERT MARTIN, 3d best,

Vol. Trans.

To J. C. RICH, Penfield, \$1 and Vol. Trans., for Honey—

looked by Com. at the Fair.

To MARTIN SMITH, Wheatland, Vol. Transactions, instead of Diploma.

On motion, it was
Resolved, That WM. C. BLOSS, M. L. ANGLE, and THOS. H. HYATT be Delegates from Monroe County Agricultural Society to the Annual Meeting of the State Agricultural Society, to be holden in Albany on the 21st of January next.

On motion, the Society adjourned to the *Second Tuesday in February*, 1846, at 10 o'clock, A. M.

JOHN H. ROBINSON, *President.*

JAMES H. WATTS, *Rec. Secretary.*

Acknowledgments.

THE Publisher of the Farmer is greatly indebted to the conductors of the Press, in Rochester, Buffalo, Geneva, Seneca Falls, Dansville, and many other sections of Western New York, for publishing the Prospectus for Volume VII—and also for their very friendly and complimentary notices of this publication.

We are also under great obligations to those who have procured and forwarded subscriptions for the new volume of the Farmer. The augmentation of our subscription list, during the past month, has far exceeded our most sanguine expectations. In some instances, we have received lists of over twenty new subscribers, forwarded us by persons who had not previously taken the Farmer—while we are indebted to numerous old patrons for similar favors. Many of those who have ordered from five to twenty-five copies, have generously sent us the full amount of fifty cents for each copy—refusing to retain the per centage offered in our published terms.

[] The Reader will notice that we commence the New Year and Volume in an *entire new dress*. All our type, &c., are new and of the best kind. The publisher is a practical printer, and personally attends to the publication of the Farmer, and its patrons are assured that he will use all proper exertions to have it correctly and promptly issued on the first of each month.

We request the friends of this journal to use a little effort to increase its circulation in their respective neighborhoods. They can thus essentially aid in sustaining the GENESEE FARMER, at its present enlarged size and low price.

WE commend the sound and liberal views of the dignity of Agriculture, and the importance of learning and *reading*, to the practical farmer, which are set forth below by a distinguished and successful "Plow-holder."—[Ed.]

For the Genesee Farmer.

To the Farmers of Western New York.

FELLOW CULTIVATORS:—The time has at last arrived when the tilling of the soil is considered to be the most important pursuit for social man, and its cultivators are acknowledged to be entitled to the first rank in civilized society. And it will depend much upon us, and our sons, whether we prove ourselves deserving of the dignified station which we ought to occupy; or whether the fond hopes of the future exalted state of society shall be blasted, and prove nothing but a visionary dream.

Our avocation is more complicated, and requires more perseverance, knowledge and skill, to become master of it, than any other human pursuit; yet it has too generally been considered the easiest of all callings to acquire. But it is cheering to know, that that fatal delusion is fast vanishing, and that the tillers of the clay are beginning to realize that it is necessary for them to have knowledge—to possess skill—to be industrious and economical—to enable them to be successful in their laudable pursuit. Our profession consists of two parts, very distinct and different from each other, but both equally essential for the farmer to know, if he wishes to be deserving of the honorable appellation of being a FARMER. The one is the operative or practical part, which is more multifarious, and requires more experience and skill, to be master of it, than any of the mechanical arts.

The farmer has to lead and to drive the team—to hold the plough—to use the axe, the hoe, the fork and rake—to swing the scythe and cradle—to load, mow, and thresh the grain—to plant and sow, and numerous other things, all and each one of which require much time, perseverance and toil, to become master of them. Yet it is necessary that they should all be learned to a degree of perfection, to be a good practical operator—which makes it so necessary for each one who intends to be a farmer, to commence in early life. And much will depend upon the judgment and skill of the instructor, as to the proficiency that the pupil will make.

When boys first commence work, too much care and pains cannot be taken to teach them the right way to handle their tools, and learn to do their work well. It is a very common practice, and a very injurious one, to stimulate boys (to be what is called smart,) to pass quickly over their business. First learn them to do things *right*, and *well*, and then to be *expeditious*. When boys acquire careless and slovenly habits, in performing their work, it is very difficult to break them of it.

The second part, which is known as the theoretical, or scientific part of Agriculture, viz:—the knowledge which directs us in all our various operations, and enables us to judge what it is best for us to do, and how to do it so as to secure the greatest amount of products from their labor, which is called the *skill* of the farmer, but correctly speaking, it is his *scientific knowledge*. It is equally necessary for him to learn this as it is to understand the operative part, and it is very much to be regretted that this essential part of farmer's instructions has heretofore been so much neglected.

No human pursuit—no scientific profession—is so complicated and intricate, nor requires the extent of knowledge and expansion of mind, as the knowledge of the cultivation of the earth, and its productions. Yet this is the knowledge necessary for the farmer to know; but the question may be asked, "how are we to acquire this knowledge?" Youth is the time to learn, but there are not any of us too old to improve.

There are various means of acquiring agricultural knowledge. First by experimenting on, and carefully observing the productions of the soil, the growth of Plants and Animals, their wants and necessities—the food best adapted to supply their wants—and the adaptation of the various soils to produce said food. But this knowledge, which is so very necessary for every farmer to acquire, would be very limited if confined to each individual alone; his life would be far spent before he could know much.

Secondly, knowledge can be obtained by interchanging ideas with each other. This is useful. It gives each individual the benefit of his neighbors knowledge and experience, and by comparing views with each other, it enables us to correct the errors which all are liable to fall into. But when this source is very limited; few of our leisure hours can be spent in conversation, and when they are it is frequently too hurried to be remembered.

Thirdly, reading is a valuable and extensive source for obtaining agricultural knowledge, and especially when it is united with the two former—all leisure hours can thus be employed without bodily exercise; and your memories can be refreshed at leisure.

But I am aware that many of you believe that no useful agricultural knowledge can be acquired from Books and Journals, which is a very great mistake. What are Books and Journals, but the opinions of men put on paper? and what can they lose in value for being printed, because you find things in print which you do not approve, or views different from your own? That is no reason why you should condemn them and cease to read. You and your neighbors frequently disagree relative to your most intimate pursuits, but you do not therefore condemn discussions and cease to converse. Yet the one would be

equally as consistent as the other. Reading is necessary for every one who wishes to obtain general knowledge on any subject, and especially on agriculture. No farmer ought to be without an Agricultural Journal; but if you have no taste for such reading, nor think it of any value to yourselves, do not deny your sons and their associates the useful gratification. Endeavor to stimulate them to obtain knowledge relative to their own pursuits, by reading. Supply them with books and journals, and encourage them to read them. Value not the trifling expense, for rest assured that you cannot bestow on them a greater boon; for without it, they never can have comprehensive views, nor extensive knowledge.

The GENESEE FARMER, is purely a Farmers Journal, and ought to be patronised by us all. Were every farmer in Western New York to become a subscriber, and occasionally a contributor, what a splendid volume of useful information would it annually make! Try it, fellow plowholders, and let the coming year prove that *we*, as well as others, can obtain knowledge by *reading*.

Yours most respectfully,

A PLOW-HOLDER.

Monroe Co., Nov. 24, 1845.

BALDWIN'S UNIVERSAL PRONOUNCING GAZETTEER.—Here is a book, Edited by THOS. BALDWIN and others, Philadelphia, which fills an important hiatus in our Lexicography. All our Dictionaries, I believe, are deficient in giving the pronunciation of the proper names of towns, cities, &c. How often do we hear a man from the west speak of Purr-dy-skin, Terry-hut, Batton-Rowg, Cally-furny, &c. &c. With the aid of this Gazetteer, at a cost of a few shillings, every man can speak and write the proper names of most places, in every part of the Globe.

Every Common School in the United States, should have one or more of these pronouncing Gazetteers. How often do we form a favorable opinion of the intelligence of a stranger, or a fellow traveller, merely from his correct pronunciation of proper names, and *vice versa*.

But if a correct naming of places is so important, how much more so is a knowledge of their geographical position, statistics &c.,—a very graphical notice of which is given in this Gazetteer. In point of literary importance, it is second only to the Dictionary. It should be present in every family in which books are read. Published by Lindlay & Blackistan, Philadelphia, 1845. *

TO EXTRACT GREASE FROM CARPETS.—The New York Tribune gives the following mode of extracting grease from carpets: Cover the spot with whiting till saturated—then remove the whiting and apply another coat. Continue to apply it till the grease is extracted. Three applications will generally be sufficient.

For the Genesee Farmer.

Letter from S. W., of Seneca Co.

E. H. BARTLETT, of Romulus, near Seneca Lake, planted the past spring an acre of Corn for fodder, 18 inches apart one way, 12 inches the other, three kernels to the hill. He got five tons of well cured fodder, and 54 bushels of ears of corn. The land had been previously planted, but had never received any organic manure; it was a clay loam, interspersed with quartz and limestone pebbles.

Five tons stalks, worth this year \$7 per ton,.....	\$35 00
54 bushel ears of Corn, 25 cents per bushels,.....	13 50

\$43 50

Deduct expenses, one bushel seed, plowing land, hoeing twice, cutting up, husking, stacking stalks, and use of land,.....	17 40
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Profits,..... \$31 10

Mr. B. also grew forty bushels good spring wheat to the acre, this season. It was of the Labrador variety, sown very early in the spring.

The stalks and corn blades from the acre above noticed, leaving the corn to go as extra profit, will winter stock enough, if stabled at night, and yarded during the day, to make manure sufficient to keep an acre of ground fertile. This same acre, had it remained in meadow, would hardly have produced, this dry season, one ton of hay: had it been kept in pasture, a single cow would have starved on it. Tilled as it was, the humus in the soil united its hydrogen with the ammonia and carbonic acid, generated at the expense of the atmosphere, and evolved by the worked surface, now formed a vegetable structure of five tons of slender stalks, and corn blades, and fifty-four bushels of ears of Corn.

Often the past summer in passing a drought stricken pasture, have I asked in vain for that *oasis* in the desert of famished herbage, a green acre of roots, or Indian Corn planted for fodder. This should not be, in our warm dry climate and calcareous soil, and a summer without a drought, is considered a phenomenon. The closed surface of manures, and pastures, has no inherent power to retain the dews of heaven, or to make available to any great extent, the fructifying gasses therein contained.

Strange as it may seem, many of our best Seneca County farmers, for the want of a single acre or two, thus appropriated, are now seen ignobly competing with the poor villagers, in the purchase of Shorts, short of nutriment as they are, when manufactured at our sharp grinding Merchant mills. Yet without this accessory, much of our farm stock would be "*on the list*," as the Virginians say, before the coming spring.

Waterloo, Dec. 17, 1845.

S. W.

A GOOD WIFE.—Andrew Johnson a member of the House of Representatives from Tennessee, was taught by his wife to *read* after his marriage! He is a sailor by trade, and is said to be an estimable and intelligent man.

For the Genesee Farmer.

The Potatoe Disease.

DR. LEE—*Dear Sir*: The writer of an article copied into your December number says, "Be very careful not to plant potatoes infected with the disease. Avoid planting potatoes in places where they grew this year." The following facts illustrate the respective value of these two directions. Upon a farm I have in Bradford Co. Pa., there grew in 1844 three fields of potatoes. They were planted before I came into possession—but I believe the seed was all sound, and from the same stock. One field was new land, very high, and dry. The other two were older land, lower and moister. Every potatoe grown in the first field was sound. In the others some were diseased. The next season, 1845, one of the lower fields was again planted, using seed from the high ground. The summer was drier than in 1844, and the produce was all sound; as was also that on some adjacent green-sward planted with the same seed. Farther to prosecute the experiment, I had some infected seed planted on a part of the green-sward, and there the crop was more than half lost. There was no communication of the disease, though the sound and diseased hills were but three feet apart.

In my professional rides over the mountains and valleys of Bradford and Chemung counties, I have observed the farmers in the valleys suffering so much the more from this scourge, that I have often advised them to procure seed from their highland neighbors.

The inferences from my observations are, that the disease is not contagious,—that it is perpetuated by infected seed, and not through contamination of the soil—and that low, moist localities are most obnoxious to its influence.

SUMNER RHOADES, M. D.

Blossom's Hotel, Rochester, Dec. 1845.

For the Genesee Farmer.

Sanford's Straw Cutter.

MR. EDITOR:—I see that B. F. SMITH & CO. advertise for sale "Sanford's Premium Straw Cutter." I purchased one of these machines of Mr. CHASE, at our Fair, and I am perfectly satisfied with its performance as a "Straw Cutter." But what I want to say particularly, is that it is most admirably adapted to *another* purpose, and that is cutting *Sausage Meat*. I first cut about a hundred weight for myself, and then lent it to my neighbors. They all pronounce it first rate. The meat is as fine as if it had been grated, and perfectly mixed. A hundred pounds may easily be cut in thirty minutes.

It wants no adjusting or fixing in any way, but to elevate the hind end, so that the meat will drop into the dish on the floor. Cut the meat into slices and drop it into the middle, forward of the little board under which the straw passes. The meat will pass round and round the cylinders,

working towards each end as it accumulates, until it falls off more perfectly cut than by any other process I ever tried. Please satisfy yourself by the experiment. I think it a very valuable recommendation to the machine.

Truly yours,

M. ADAMS.

Adams' Basin, Dec. 1845.

For the Genesee Farmer.

How to Destroy Lice on Cattle.

MR. EDITOR—A number of years since I had a lot of calves that I found were very lousy.—I had previously tried mercurial ointment, washing in tobacco, and other remedies. I had frequently heard it said that bulls were never lousy, and could assign no other reason than that of pawing in the sand, and throwing it over their bodies. I took my wheel-barrow full of sand, and sprinkled it over the entire body of the calves; and about a week after repeated the same. A few days after, I made a thorough search, and could find no lice at all.

My neighbors and myself have tried this remedy several times since the above experiment was made, and find it to answer the purpose.

Euclid, Ohio, 1845.

M. LINLEY.

The Exports of Ohio for 1845.

The Cincinnati Chronicle says;—"We have before us the shipments from Cleveland, Ohio, and Cincinnati, for the year 1845, to the last week. As the season is nearly closed, we can give a tolerably accurate view of the exports of 1845, from this great agricultural State.

It must be remembered, that in estimating the exports of a year, commencing the first of January, we do not get precisely one season's production, but only one season's *transportation*. The production belongs to both the last and the present season.

The shipments of the surplus of flour this year will be very nearly as follows, reducing the wheat to its equivalent in flour:

Cleveland,	450,000 barrels.
Cincinnati,	150,000 "
Toledo,	100,000 "
Milan, Sandusky, &c.	150,000 "
Marietta, &c.	40,000 "
Portsmouth, &c.	30,000 "
Total,	930,000 barrels.

The other articles we estimate in money, thus:

Flour, in all 930,000 barrels,	4,000,000
Pork, in all,	3,500,000
Cattle and beef,	500,000
Wool, (2,000,000 lbs.,)	500,000
Cheese, (5,000,000 lbs.,)	300,000
Manufactures,	3,000,000

Total,

\$11,800,000

We think these results are under-estimated, and that there are miscellaneous articles enough to make the net surplus in value twelve millions of dollars. The flour product is two millions of dollars less than it would have been had the two last harvests of wheat been good ones."

From the American Agriculturist.

A New Fact.

It is generally believed that the eggs of weevil, deposited in grains of wheat, are hatched out in the same season before winter, or if not hatched out *then*, that they perish and do no injury to the grain. This may be the case with the white weevil, but it is not true of the black. In the fall of 1843, two years ago, I received from Virginia a shot bag filled with *Conner* wheat—an early ripening variety much valued by some farmers in that State. It was a fair, sound, beautiful sample of grain. I had just sown, before its reception, a small quantity of the same variety, and determined to keep this to sow the next year, fearing some accident to the seeded crop. The shot-bag of wheat was carefully put away in a clothes press, so carefully that it did not again come to light till about ten days ago. On opening the bag, a number of black weevil were seen, which had come out. Others were in the act of coming out of the grain; and on cutting open grains which appeared sound, the insect was found in the grain. Do not the eggs of insects remain dormant like seeds of plants, till the proper conjuncture of circumstances for their active existence takes place? This may not be for years, or may happen the same year.

The black weevil also hatched out of grain here of the *present year's harvest*, for one of my neighbors culled from his field a small sack of wheat he thought might be a valuable kind, cleaned it out, and suspended it by a rope in an upper room of a house. When he took it down to sow a few weeks ago, he found great numbers of black weevil hatched out since harvest in his sock of selected wheat. The conclusion at which I arrive is, that no season favorable to the active life of these insects has occurred here in 1843, or 1844; but that this season being favorable, not only those deposited this year, but those also remaining dormant in the grain deposited in previous years, have been excited into active existence.

Great injury has been done in this state by these insects this year, and much of the wheat cleaned out has been destroyed by black weevil; and in cases where it was got out of the straw and left in the chaff, it has been injured by the white weevil—a circumstance causing astonishment, as leaving it in the chaff has been thought a sure preventive of injury by them. The wheat left in the stacks till this time is generally injured, and in some stacks utterly destroyed by the white weevil. Can any of your correspondents tell us how to avoid these injuries to the grain after it is made?

JOHN LEWIS.

Llangollen, Ky., Oct. 18, 1845.

THE village of Ravenna, on the Ohio Canal, shipped during the past year, seven hundred and thirty tons of cheese.

PROFESSOR LIEBIG'S OPINIONS ON THE POTATO DISEASE.—The researches I have undertaken upon the sound and diseased potatoes of the present year have disclosed to me the remarkable fact that they contain in the sap a considerable quantity of vegetable casein (cheese,) precipitable by acids. This constituent I did not observe in my previous researches. It would thus appear that, from the influence of the weather, or, generally speaking, from atmospheric causes, a part of the vegetable albumen which prevails in the potato has become converted into vegetable casein. The great instability of this last substance is well known, hence the facility with which the potato containing it undergoes putrefaction. Any injury to health from the use of these potatoes is out of the question, and nowhere in Germany has such an effect been observed. In the diseased potato no *solamin* can be discovered. It may be of some use to call attention to the fact, that diseased potatoes may easily, and at little expense, be preserved for a length of time, and afterwards employed in various ways, by cutting them into slices, of about a quarter of an inch thick, and immersing them in water, containing from two to three per cent, of sulphuric acid. After twenty-four or thirty-six hours, the acid liquor may be drawn off, and all remains of it washed away by steeping in successive portions of fresh water. Treated in this manner, the potatoes are easily dried. The pieces are white and of little weight, and can be ground to flour and baked into bread along with the flour of wheat. I think it probable that the diseased potatoes, after being sliced and kept for some time in contact with weak sulphuric acid, so as to be penetrated by the acid, may be preserved in that state in pits. But further experiments are necessary to determine this. It is certain, however, that dilute sulphuric acid stops the progress of putrefaction.

Giessen, Nov. 5.

TO KILL MOSS ON ROOFS.—A gentleman in Hadley states that the moss which sometimes attaches to the roof on the north side of buildings, causing a premature decay of the shingles, may be completely removed by a little dry white lead sprinkled near the top of the roof just before a rain. The rain washes it down among the moss, and, as he believes, is poisonous to it, as the moss dies and the roof is cleared. He was first led to make the trial of it from observing that while a considerable quantity of the moss grew upon a particular roof, the part opposite the chimney, which had been painted white, was entirely free from it.—*Amherst Express*.

THE "Cow Tree," in South America, produces milk, from which the people obtain regular supplies.

The *Nepenthus* of India furnishes water in its leaves, which not only have *pitchers*, but *covers* to them.

HORTICULTURAL DEPARTMENT.

BY P. BARRY.

Remarks on the Culture of the Pear, with Figures and Descriptions of Three Fine Varieties.

AN American Author says: "The Pear is undeniably the favorite fruit of modern times and modern cultivators." This is no doubt correct, as far as relates to places where Horticulture has attained a somewhat advanced state—where taste has been cultivated and knowledge acquired on the subject of fruit culture. But, in large portions of our country, it is very far from being the case: even in our region, Western New York, where we claim to have made some advancement, not one out of an hundred of our Agriculturists, who are all fruit growers to a greater or less extent, has scarcely attempted the cultivation of the Pear. This we know to be the case, in many of the gardens in Rochester and immediate vicinity. In some village gardens, and now and again a Farmer's garden throughout the country, we find some of the good old varieties of Pears.

But amongst the mass of those who cultivate our wonderfully fertile soil, the culture of the Pear, either for domestic use or for sale, is utterly neglected. The astonishing improvements which this fruit has undergone within the last half century—the degree of perfection it has attained—the thousand delicious varieties that long years of skilful, patient laborious culture and experiment has produced—combining every desirable quality—ripening at every season, and adapted to the gratification of every taste—appear to be comparatively unknown, or at least shamefully unappreciated. We submit this matter to every cultivator of the soil, who desires to multiply the comforts and enjoyments of his own family—to improve and enrich *his* portion of the earth—to play properly his part in the great work of *universal progress* that has become, in fact, the watchword and spirit of the times.

"But," say our rigid economists, "we have no time to devote to the cultivation of fine fruits. The trees cost so much, and besides, we don't know much about planting or cultivating, and if we buy trees they will die," &c. &c. These are the objections urged by hundreds of the enlightened cultivators of America; men from whom we would not expect such mistaken views of economy—such impotent reasoning.

The experience of every man who has planted a fruit tree—a Pear tree, as we now write of that—and taken proper care of it until it arrives at a bearing state, will go to show it one of the most profitable investments, all things considered, he ever made on his farm. We know single Pear trees in abundance that produce annually, without a shilling's worth of labor, more than the

actual profits of three of the best acres of land in the rich valley of the Genesee.

Pears always command instant sale, in all the principal markets of our country.—\$5 per bushel is not an uncommon price, and \$2 is about the lowest for Pears of even ordinary quality; and yet you cannot spare time to cultivate them, or afford to purchase the trees! But then we don't know *how* to cultivate. We hold it to be unpardonable for any man in these days, and particularly in this country, to plead ignorance of any branch of his own profession at least. Does not your country abound with sources of information? Look at your splendid School District Libraries—your unprecedentedly heappercodical publications, teeming with information, scientific and practical, on every point connected with rural industry. See your cheap books offered for sale at your very doors. For the small sum of \$1.75 you can purchase Downing's "Fruit and Fruit Trees of America," a work which furnishes all the essential information on Fruit culture in this country—presenting to you the very essence of accumulated experience and improvements of centuries. You have the "GENESEE FARMER" for 50 cents per volume, of 300 large octavo pages. The "CULTIVATOR" for \$1 per year; one of its thousand articles alone is worth the money; and numerous other works of equal merit and cheapness that we might mention, affording to every man, old and young, in the land, the means of knowledge—and yet men are not ashamed to plead ignorance! But many are so eager, so impatient for a return from what they invest, that they cannot bear the idea of waiting a few years for a tree to arrive at productiveness. The Pear tree, in particular, is considered as requiring half a lifetime to attain this state, and hence it is out of the question to cultivate it. This opinion has obtained in consequence of the tardiness of seedling or natural trees, and most of the old kinds which alone have been cultivated. We wish to abolish this false and pernicious opinion. A large proportion of the new varieties of Pears will bear about as soon as an Apple. In 1840 and '41, we planted in our grounds upwards of fifty varieties, all of which have already produced fruit. Many have borne the third year after planting. A system of *root pruning*, an account of which we gave in the March number of our last volume, is now practised with perfect success upon tardy bearing sorts—of this we will speak at more length hereafter. Where early productiveness is chiefly desired, trees can be had in the nurseries grafted, or inoculated on Quince stocks, that will bear the second year after planting—almost certainly.

These possess another very desirable quality of making beautiful compact low trees or bushes, branched from top to bottom. The fruit is easily gathered from them and is not liable to be

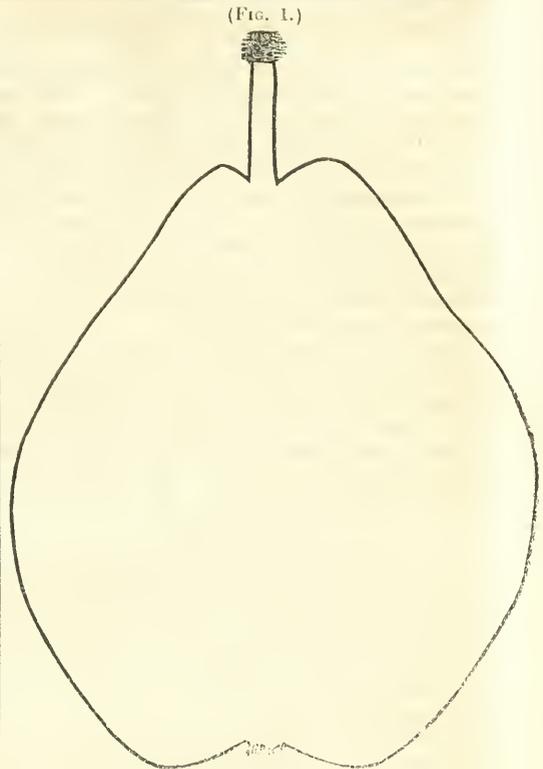
blown off; besides, many of the finest new kinds are found to be improved in quality when grown in this way. This is the most popular method now practised in France and Belgium, countries where the Pear culture has attained the highest degree of perfection. Large quantities of these trees have been sold from the Mount Hope Nurseries at Rochester, during the past two years, and have borne in many of our city gardens the past season. In the garden of AARON ERICKSON, Esq., which we may say here is one of the most complete in our city, we saw one of these, last autumn, which was the most remarkable object of the kind we remember to have seen. It was a small tree 4½ feet high but thinly branched, of the "Doyenne d'ete," or summer Doyenne, very similar to our Virgalieu, with 42 large, well ripened, beautiful fruits. This tree was planted the year previous, and was only three years old from the bud. We will speak more of this method at some future time, and only mention it now to show the falsity of the idea that it requires half a lifetime to get pears into bearing. No man should entertain it for a moment. We intended to add, at this time, a few practical suggestions on soil, situation, mode of culture, &c., for the pear, but we have already extended our remarks to such a length as to compel us to defer this part to a future occasion. Below we give outline figures with correct descriptions, of three most valuable varieties, which we can recommend to every lover of delicious fruit.

Swan's Orange Pear. (Fig. 1.)

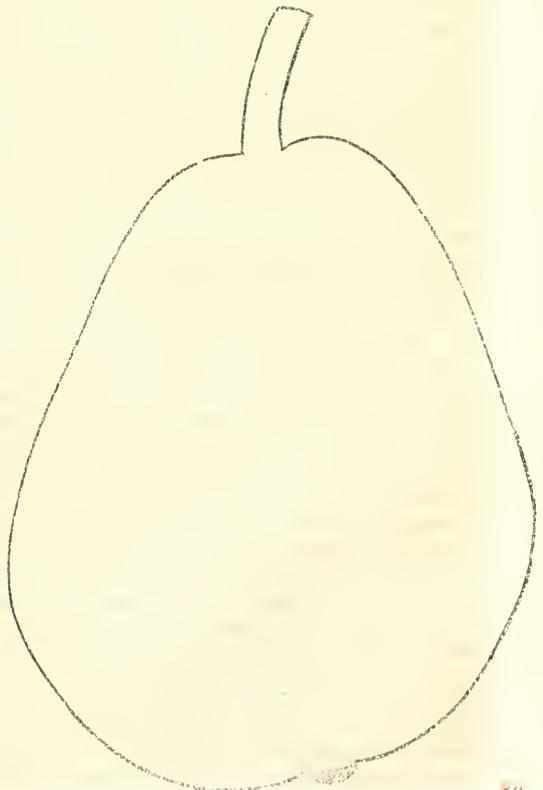
This is a magnificent Pear from the garden of JOSEPH SWAN, Esq., of Onondaga, father of L. B. SWAN, Esq., of Rochester, from whom we received the specimen, of which the above is an outline. It was introduced in Rochester a few years ago, by Mr. SWAN, as a seedling fruit, and was then named "Swan's Orange," which name we adopt. Since that time it has been cultivated by Mr. H. N. LANGWORTHY, and exhibited by him at our Fruit Shows, as "Swan's Onondaga Seedling." Its large size, productiveness, beauty, and unsurpassed richness of flavor and delicacy of texture, rank it among the very best Autumn Pears we have ever seen—excelling even, in the opinion of competent judges, our famous and invaluable White Doyenne, or Virgalieu. We have strong doubts of its being a seedling, from the fact that the elder Mr. SWAN, the past summer, when at our place, said he was uncertain about it, and that his tree may possibly have been grafted.

But be that as it may, the fruit is highly valuable, and deserves the most extensive cultivation. The name given here will do very well until we are able to identify it with some known variety—provided it should prove not to be a seedling.

Fruit—large, averaging 3 inches in length, and 2 5-8 in diameter at the thickest part. *Form*



(FIG. 2.)



—obtusely-pyriform, inclining to oval, resembling the *Beurre Diel*, but tapering more to the eye. *Stalk*—nearly an inch long, of medium thickness, and set in a moderate cavity. *Calyx, or Eye*—small, closed and set in a regular and rather shallow basin. *Skin* smooth and glossy, very thin, melts with the flesh in the mouth; of a beautiful clear yellow, approaching to orange at maturity, sprinkled thickly with brown dots, and tinged on the sunny side with a light red. *Flesh* white, uncommonly juicy and melting, flavor exquisite. *Core*, quite small; *Seeds*, generally plump and perfect.

The tree is hardy, and a vigorous, upright grower, judging from the specimen on Mr. LANGWORTHY'S place, and those in our own nursery. The cultivators of Western New York cannot enrich their gardens or orchards with a more valuable variety than this. We recommend it with the fullest confidence.

William's Pear. (Fig. 2.)

THIS is a new Pear, which we imported from France in the spring of 1844. We find it very highly spoken of in the French and Belgian Catalogues. It bore with us the last season, and we have put it down among the first class of Autumn Pears.

The above outline was taken from a medium sized specimen, and as the trees were transplanted the same season, 1845, in the spring, the fruit is undoubtedly below the usual size. It was grown on a quince stock, to which it seems well adapted. Its size, beauty, productiveness, and delicious flavor, will make it a general favorite.

Fruit—large, regularly formed, oblong obovate. *Skin* smooth, bright yellow when at maturity, with a fine red cheek, splinkled with small russety dots. *Stalk*—about $\frac{3}{4}$ of an inch long, very stout, set in a slight depression. *Calyx*, small, closed in a very shallow basin. *Flesh*—white, fine grained, buttery, melting, with a high agreeable flavor. Ripens, September and Oct.

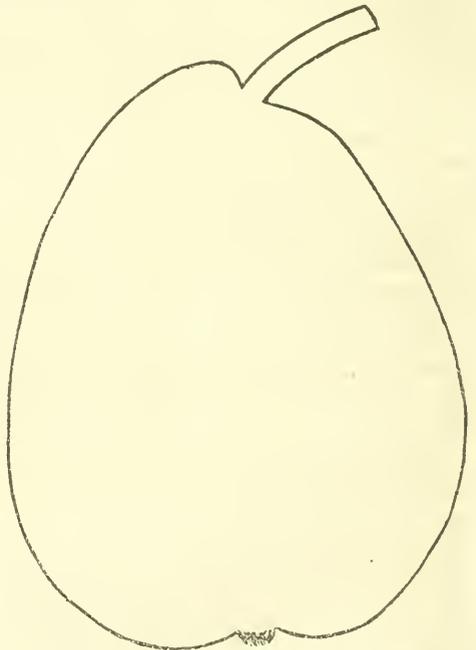
White Doyenne, or Virgalieu. (Fig. 3.)

WE give an outline of this fruit, not because it is new or unknown, but on the contrary, because it is one of the oldest and most universal favorites in the whole catalogue of Pears—the very standard of excellence, in our region particularly. If you tell a man in this part of the country, that such and such a Pear is as good as a Virgalieu, *enough said*. If you tell him it is better, ten to one if he believes you, except your character for veracity is well established. We may safely say that there is no other portion of the United States where the fine qualities of this fruit attains a more perfect development than in Western New York. In the vicinity of New York, on Long Island, and large portions of the country bordering on the Atlantic, it has long since ceased to flourish. Various causes have

been assigned for this. Mr. DOWNING says that it has arisen from having been propagated from a diseased stock until it has become liable to crack, and that it is only necessary to renew the stock, from a healthy source. This may be so. We can tell our eastern friends that they can get a healthy article here, at any rate. We may add that, with us, as well as in France and Belgium, this variety is proved to succeed equally well as dwarfs or standards—either on Pear or Quince stock. We had a little tree, about $3\frac{1}{2}$ feet high, that produced 21 beautiful perfect fruit the past season. It was on a quince stalk, 3d year from the bud. As a first step in acquiring a knowledge of the Pear, we recommend an acquaintance with this world renowned variety.

Fruit—large, regularly shaped, obovate to oblong-obv. *Skin*, smooth—pale yellow, thickly dotted with brown specks, and generally a red cheek. *Stalk*— $\frac{3}{4}$ to 1 inch long, sometimes much curved, set in a small depression. *Calyx*, small, and very slightly sunk. *Flesh* white, buttery melting, with abundance of rich, high flavored juice. Begins to ripen in September, and is sold in our markets at 3 cents each, through the whole of October and November.

(Fig. 3.)



PRODUCTIVE APPLE-TREE.—The Germantown (Pa.) Telegraph states, that there is an apple-tree near that place, which has repeatedly borne over a hundred bushels of apples at one crop.

THERE are 140 different species of oak in the world—70 of which are found in America and 30 in Europe. The oak will live 600 years.

LILLIES are natives of North America, China, Germany and Liberia.

For the Genesee Farmer.

Protection of Trees from Field Mice.

It has for some time past been a desideratum with farmers, and the lovers of fruit in general, to discover a remedy which shall be effectual in protecting fruit trees from the ravages of the field mouse. The following has been tried for a number of years, and with invariable success:—To one quart tar, add two ounces of Scotch snuff—mix them together well, and apply to the trunks of your trees. The extent of the application should be regulated by the depth of snow to which the trees will be exposed.

Yours truly, G. L. ROSE.

Geneva, November, 1845.

REMARKS.—We find in Downing's "Fruit and Fruit Trees," and in Ellwanger & Barry's Nursery Catalogue, a recommendation of "Coal tar from the Gas Works," to be applied with a brush to the trunk of the trees, about the commencement of winter. Where this cannot be had, Mr. Downing suggests, as an excellent substitute, a mixture of soot and milk of the consistency of paint, brushed over the trunk of the tree on a dry day. The careful orchardist however will not fail to remove long grass, weeds, heaps of rubbish, &c., from around his garden and orchard, as the first and most effectual guard against these depredators. Where this is ineffectual, then the other remedies should be applied.—[Ed.]

THE BRITISH AMERICAN CULTIVATOR.—We have just received the December number of this paper, being the close of the fourth volume. We are glad to find, as well for its own sake as that of the great cause it advocates, that it is about entering on the New Year with increased energy and renewed purposes of improvement. The Proprietors state that "the work is placed upon a sound footing, and the second volume, (new series,) will be conducted with a greater amount of spirit and ability than were embodied in the entire four volumes now before the public."

W. G. EDMUNDSON, Esq., the Editor, is practically engaged in Agriculture, on an extensive farm at Newmarket, and is an enthusiastic promoter of improvement. We have no doubt, judging from the course marked out, that the forthcoming volume for 1846, will be creditable alike to the Editor and Proprietors, and Farmers of Canada, whose interests it is intended to promote.

We hope for the benefit of all their increased efforts will be fully appreciated and sustained.

P. B.

LOOK TO YOUR FRUIT CELLARS, &c.—Fruit, we understand, is not keeping so well as usual this season; hence it will be necessary to examine frequently that which is stored away, and pick out those that are decayed and that show symptoms of decay. Stored vegetables should also be examined now and again, as some por-

tions will be found in a state of decay, which, if not timely removed, may destroy the whole stock on hand. In dry, temperate days, air should be admitted into these store rooms and cellars.

A CURIOSITY.—A few years since, we mentioned a curious case which we saw in the orchard of Mr. Isaac Pratt, Prattville, Chelsea. On a Russet apple tree, that had been grafted low in the stock, when small, there was a limb about an inch in diameter, some distance up in the top, that bore Greening apples, both as to appearance and quality. We lately visited the same. Both kinds may be seen at our office.

On another Russet tree, grafted in the same manner, and at the same time, we saw on different limbs sweet apples, which were in form, color and quality, and time of ripening, distinct from the Russets. While they were hard, flat, rough, dark colored, and green, the sweet apples were soft, long, smooth, light colored, and ripe.—*Boston Cultivator.*

FAREWELL TO THE FLOWERS.

BY MRS. L. H. SIGOURNEY.

Go to your peaceful rest,
Friends of a brighter hour,
Jewels on youthful beauty's breast,
Lights of the hall and bower!
Well have you done your part
Fair children of the sky,
We'll keep your memory in our heart
When low in dust ye lie.

Your gladness in our joy,
Your smile beside our way,
Your gentle service round the bed
Of sickness and decay;
Your rainbow on the clouds,
Your sympathy in pain,
We'll keep the memory of your deeds
Until we meet again.

Rest—from the blush of love,—
Rest—from the blight of care,
From the sweet nursing of your buds,
And from the nipping air,
Rest—from the fever thirst
Of summer's noontide heat,
From coiling worm and riling hand;
That vexed your lone retreat.

If e'er ye thrilled with pride,
When the admirer knelt,
Or on the lowly look'd with scorn,
Which man for man hath felt,
If through your bosom pure
Hath aught like evil flowed,
(Since folly may with angels dwell,)
Rest from that painful load.

But not with grief or fear
Bow down the drooping head:
See—in the chamber of your birth
Your dying couch is spread.
Go, strong in faith, ye flowers,
Strong in your guileless trust,
With the returning birds to rise
Above imprisoning dust.

Hear we a whisper low
From withering leaf and bell?
"Our life hath been a dream of love—
In garden or in dell!
Yet wintry sleep we hail,
And till the trumpet shall swell
That wakes us on the vernal morn,
Sweet friends, a sweet farewell!"

Fruit Stealing.

WE would recommend the following extract from the excellent address of DAVID THOMAS, before the Horticultural Society of Aurora, to the attention of parents, teachers, school superintendents, and all who are engaged, less or more, in the education and training of the youth of our country. We know that during the past summer, sons of some of our most respectable citizens were detected stealing fruit, and would have been incarcerated in prison with other criminals, but for respect to the feelings of their parents. One, we learned, had to pay \$10 for a pocket-full of Huling's Superb Plums, and was glad to get off at that. The matter is timely and truthfully presented by Mr. THOMAS, as follows:

"It is remarkable that so many of our countrymen scarcely consider it a crime to plunder an orchard or garden. There may be not one man in ten, or even in twenty, who is really a marauder, but a greater number connive at such doings. Are there not parents who have never taught their children, that to rob a neighbor's fruit, is stealing? Are there not parents who lift up their voices in prayer, and yet allow their boys to prowl round the neighborhood, when they ought to be at meeting, or at church? If this is so, it is a sorrowful case. But there are folks who would not have it believed for the world, that their sons would break into a desk, corn crib, or hen roost, and yet would utter no reproof for their feloniously destroying what the owner had long watched with interest, and which neither hens, corn, nor money could have bought.

This laxity of morals is a shame to us as a people, and seems almost peculiarly American,—for foreigners, unless they enter some school of depravity after landing on our shores, are generally free from this vice. If we enquire into its cause, we should probably find that a maxim—not of common law but rabble law—has exerted a powerful influence. The maxim is, that "Every body has a legal right to eat as much fruit as he wants, wherever he can find it;" and doubtless many of them firmly—not honestly—believe in its force; for no honest man or boy can, stealthily take the product of another's land or labor. It is to be regretted indeed that some members of the bar—I do not say gentlemen—in their advocacy of certain culprits, have endeavored to press such notions on the jury; but there is a statute, which they have seen proper to overlook, containing the following words: "Every person who shall wilfully commit any trespass by maliciously severing from the freehold any produce thereof, or any thing attached thereto, shall upon conviction, be punished by imprisonment in a county jail, not exceeding six months; or by a fine not exceeding \$150; or by both such fine and imprisonment."

In some neighborhoods, societies have been formed, for the detection of such marauders; and have been completely successful in breaking them down, as at Salem in Massachusetts; but though I entirely approve of such combinations, may not something be done in a different way? Can no voice be raised in our schools, against this besetting sin? In Noah Webster's Elementary Spelling Book, he says, "It is no more right to steal apples or watermelons from another's garden or orchard, than it is to steal money from his desk. Besides it is the meanness of all low tricks to creep into a man's enclosure to take his property." Such lessons as this, should be read in schools, at least once a week, and enforced by all the eloquence of the teacher.

That such lessons may prove eminently useful in promoting the cause of virtue, the following extract from an Edinburgh periodical, will clearly exhibit: "When the Spitalfields school was first established, it was found that the children were habitual pilferers. They constantly attended the markets, and levied heavy contributions on the fruit sellers. The master of that school however, succeeded so well in subduing this propensity, that though both flowers and fruit were within their reach, in the open space appropriated for their amusements, they scrupulously abstained from picking a single currant, or plucking a single leaf."

This subject is a very important one. Without blending morality with literature, education is vain. It may paint

the sepulchre, but not purify it; and while the state is indifferent on this point, she will have to give the last wish in her prisons, erected at enormous expense."

CHINESE HORTICULTURE.—Fletcher Webster, Esq., in a late lecture in New York, stated the following remarkable fact. Mr. W. having resided in China, is of course, good authority:

"The Chinese have the art of dwarfing trees, and will raise a pear or apple tree, perfect in all its parts, and yet not exceeding a foot in height. And what is still more strange, they will produce from these dwarfs at pleasure, fruit either of the usual size, or of a size proportioned to the diminished growth of the tree."

MARBLE CEMENT.—An improved cement is attracting attention among builders. It is formed of plaster of Paris, (Sulphate of Lime) and Alum. Common *boiled* plaster is steeped in a solution of alum, and recalcined, when it is fit for use. This cement is incapable of enduring the weather, and is principally esteemed for the beautiful stucco which it forms, and which, from its great hardness and brilliancy of surface, bears a very near resemblance to marble. It may be colored by simply imparting the desired hue to the water used in mixing it. It is susceptible of a very high polish, and is extensively used for interior decorations wherever its existence and the knowledge of its composition are known.

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



THE subscribers respectfully announce to their friends and the public, that their present stock which they offer for sale the ensuing Fall of 1845 and Spring of 1846, is the finest ever grown in Western N. York, and unsurpassed in quality by any establishment in the country.

The collection of fruits comprises the most esteemed varieties of the Apple, Pear, Peach, Plum, Apricot, Cherry, Nectarine, Almond, Grapes, &c.

The trees are well grown, thrifty, and beautiful, and have been propagated with such care as to ensure correctness.

All are warranted genuine as represented.

PEAR TREES ON QUINCE STOCKS FOR DWARES and PYRAMIDS, can also be furnished of the finest varieties. These will bear the first or second year after transplanting, and are beautifully adapted to garden culture.

3,000 fine thrifty young trees of the famous New American Apple: the "Northern Spy," are also on hand.

STRAWBERRIES—All the fine new esteemed varieties, including Stoddard's new Alpine.

Also a large and fine collection of Ornamental Trees, Shrubs, Roses, (including a quantity of splendid *Standard or Tree Roses*, 3 to 6 feet high; Herbacuous Plants, Bulbous Roots, Double Dahlias, &c.

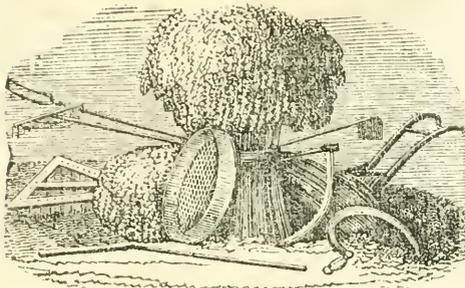
Our new descriptive catalogue will be sent *gratis* to all post paid applications.

Trees and plants will be packed in the best style, and shipped to any port or place that may be designated.

It is for the interest of purchasers that they forward their orders now, without delay, that they may be executed in proper season. Address

ELLWANGER & BARRY.

Rochester, Sept. 1, 1845.



**ROCHESTER SEED STORE,
AND
WARE-HOUSE FOR FARMING TOOLS.**

DISSOLUTION.—The co-partnership heretofore existing under the firm of B. F. SMITH & Co. is this day dissolved by mutual consent. All accounts will be settled by JAMES P. FOGG, who will continue the SEED and TOOL business, at the old stand on his own account.

January 1, 1845. B. F. SMITH.
JAMES P. FOGG.

The subscriber having purchased the interest of Mr. B. F. Smith, in the SEED and IMPLEMENT 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 seedsman 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; while those varieties of foreign growth, which experience has shown are the best, such as Cabbage, Cauliflowers, Broccoli, all the varieties of Garden and Field Turnip, Scarlet Short-Top Raddish, Scarlet and White Turnip-Raddish, Dwarf and Early Peas, with Twenty choice varieties of FLOWER SEEDS, have been imported by the subscriber from the long established house of R. WRENCH & SONS, of London.

FIELD SEEDS.

RED and WHITE CLOVER, TIMOTHY, BARLEY, Seed-Corn, Italian and Siberian Spring Wheat; Early June Potatoes, Marrowfat and other Field Peas, Rye-Grass, Orchard-Grass, Lucerne, &c. &c.

VEGETABLE GARDEN SEEDS.

A choice and select variety of PEAS, BEANS, CABBAGE, CAULIFLOWER, CELERY, BEETS, CUCUMBERS, MELONS, RADDISH, SQUASH, Herb-seeds, &c.

FLOWER SEEDS.

The collection of Annual and Perennial FLOWER SEEDS, contains many new and choice varieties.

AGRICULTURAL & HORTICULTURAL TOOLS.

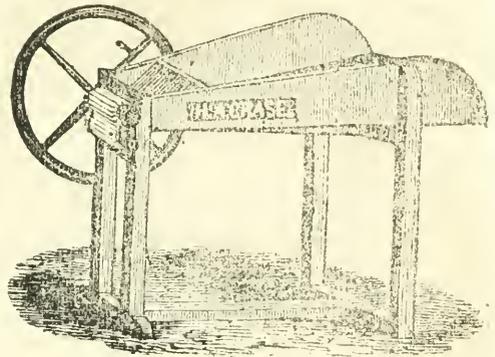
At the Ware-Room, adjoining the Seed Store, may be found an extensive and complete assortment of Agricultural and Horticultural Implements, embracing almost every tool used in the cultivation of the Farm and Garden.

SUPERIOR PLOWS.

The celebrated MASSACHUSETTS PLOWS, of three sizes, several hundred of these Plows, have been sold in Rochester, and vicinity, and have given entire satisfaction. Also, Deleno's Diamond Plow—Sub-Soil and Side-Hill Plows—The Gang-Plows—Two Horse CULTIVATORS, for working summer-fallows, and getting in wheat. Corn Cultivators, Root-Cutters, Corn-Planters, Drill-Barrows, Hoes, Shovels, Scythes and Snaths, Garden-Rakes, Corn-Shellers, STRAW CUTTERS, &c. &c.

Rochester, January 1, 1846. JAMES P. FOGG.

TO FARMERS AND OTHERS.



GENTLEMEN—I am now manufacturing and offering for sale, SANFORD'S PATENT STRAW CUTTER, in the City of Rochester.

Said machine was patented two years ago, and has this year for the first time made its appearance among you; and for cheapness, durability, and amount of work, I say it cannot be beat. It took the first premium at the State Fair, and at the Fairs of Onondaga, Wayne and Monroe Counties. I now ask you to examine it, try it, and then buy it, if you please.

For sale at Blossom's HOTEL; and AMSDEN & Co's. STORE, Main Street, Rochester. H. A. CHASE.
Rochester, Nov. 1845.

RECOMMENDATIONS.

I recently witnessed the operation of "Sanford's Perfect Straw Cutter," sold by H. A. CHASE, of the American Temperance House, Syracuse, and most cordially recommended said Machine to all persons wishing to cut straw, hay, or stalks, for food to be given horses or cattle. Simple in its construction, least liable to get out of order by use, and for ease to the operator, and despatch with which the work is done, it cannot be surpassed, if equaled, by any machine constructed for the same purpose that I have ever seen. Its operation is only to be seen to be admired, and the machine and its principle approved.

SQUIRE M. BROWN,

Elbridge, July 21, 1845. Prest. Va. Co. Ag. Society.

MR. CHASE'S STRAW CUTTER.—The undersigned, officers of the Wayne County Agricultural Society, would express their commendation of the machine exhibited at our Annual Fair, by Mr. H. A. CHASE, of Syracuse, called "Sanford's Perfect Straw Cutter." We believe it is the best machine of the kind ever invented, and that its superiority and usefulness need only to be known to secure for it general adoption by our farming friends. Simple and substantial in its construction, and efficient in its operation, it performs its work in the highest degree of perfection, and is easily kept in repair. It cuts and mashes the straw, hay or stocks, in a manner termed by English husbandmen *chaffing*. Its low price brings it within the acquisition of every farmer, and we feel that it cannot be too highly recommended to the agricultural portion of our fellow citizens.

C. S. BUTTON, Newark, Tre'st.

D. KENYON, } Vice Presidents.

J. A. MILLER, }

SAMUEL E. HUDSON, } Ex. Com.

T. HEMINWAY, }

W. P. NOTTINGHAM, Treasurer.

Palmyra, Oct. 2, 1845.

CORTLAND VILLAGE, Nov. 19, 1845.—Mr. H. A. CHASE.—The Machine arrived safely, a couple of weeks since, and I have subjected it to a most thorough trial. You remember though we gave it the first premium at Union, I stated some objections to some of its details. I find I was mistaken. It cuts easier and faster, I think, than any machine with which I am acquainted. It takes one of my men but a few minutes to cut feed for six horses for a day.

Yours respectfully, HENRY S. RANDALL.

[* Mr. RANDALL was Chairman of the Awarding Committee on this class of Improvements, at the State Fair, Utica.]

MARKET INTELLIGENCE.

ROCHESTER, Dec. 30, 1845.

Below we give the prices in our own and some of the Eastern and Western Markets. The Eastern markets are unsettled, and there is but little business doing in Rochester. We have only room for a brief synopsis, this month, but shall give more full reports hereafter—including extracts from foreign papers.

Rochester Produce Market.

Wheat,.....	1,00	a 1,06	Pork, bbl,.....	10,00
Corn,.....	33	33	Pork, cwt,.....	4,00 4,75
Barley,.....	20	50	Beef, cwt,.....	2,50 3,00
Oats,.....	32	35	Lard, lb,.....	8 10
Flour,.....	5,25	5,50	Butter, lb,.....	13 14
Beans,.....		88	Cheese, lb,.....	6 7
Apples,.....	25	50	Eggs, doz,.....	12 13
Potatoes,.....		31	Poultry,.....	5 6
Clover Seed,.....	6,00	6,50	Tallow,.....	6 7
Timothy,.....	1,30	2,00	Wool,.....	
Hay, ton,.....	12,00	13,00	Sheep Skins,.....	63 75
Wood, cord,.....	2,00	3,00	Green Hides, lb	3 7
Salt, bbl,.....		1,13	Dry ".....	6 7
Hams, lb,.....	5	6	Calf Skins,.....	5 6

NEW YORK, Dec. 26.

Flour and Meal.—The market is very firm to-day at \$5,56½ a 5,62½, with a fair demand for home use and the East, and a good inquiry for shipment at 5,50. The sales are 2000 to 3000 bbls. Genesee for the East at 5,62½ and 1000 to 1500 do. for export at 5,56½. The report of sales at 6,56½ in our second edition of yesterday was, of course, a typographical error. Large engagements of freight for Liverpool were made at 3s. sterling. We note sales of 500 bbls. round hoop Ohio at 4,50. Western Ship Stuffs 17 a 18c. per bush.

Provisions.—Pork remains very dull, and the transactions are limited. The market is nominally at \$10,37½ a 10,50 for Prime, and 13,12½ a 13,25 for Mess, Dutches Co. Mess 13,50. In Beef we hear of 100 bbls country mess at 7,75, and 200 tcs. prime mess for England at 14. We quote beef 7,75 a 8,50 and 5 a 5,50 for country and city. Cheese is 7 a 7½c., and not active. Western dairy butter 14 a 18c., and in fair demand; Ohio 11½ a 12½c. The stock is good both for butter and cheese.

Wool.—The market is quiet for all kinds of Wool. Nothing doing of importance from first hands. Manufacturers take from the trade only for immediate use. Holders of foreign, are firm at former prices. Cordova has advanced. Nothing doing in fleece for shipping.

Amer. Saxony, fleece	38 a 40	Superfine pulled,	29 a 31
Amer. full bl'd merino	36 38	No. 1, pulled,	26 27
Amer. ½ ¾ do merino	30 34	No. 2, pulled,	20 21
Amer. native & ¼ me'o	23 30		

BUFFALO, Dec. 30, 1845.

We hear of no change in the state of the market. Dulness is its prevailing feature, and a general indisposition on all sides to operate. Holders of flour are holding on at \$5, while it sells at 5,50 a 5,62 1-2 in New York; and buyers are holding off at 4,50, and are not inclined to go above that figure. There is therefore nothing doing, except in small parcels for the city trade.—*Pilot.*

CHICAGO, Dec. 17.

Wheat taken in yesterday, 4,701 bush. at 86 a 88c., a very few samples bringing 90c. This morning we quote prices at from 86 to 88c., the latter price, however, being only paid for best samples.

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

THE Annual Meeting of the New York State Agricultural Society, will commence its Session in the City of Albany, on the third Wednesday (21st) of January, and continue two days.

The meetings for business will be held at the State Geological Rooms, commencing at 10 o'clock, A. M. on Wednesday.

A Public Meeting will be held at the Assembly Chamber of the Capitol on Wednesday Evening, where there will be a Public Discussion of subjects interesting to Agriculturists. And on Thursday evening the Annual Address will be delivered by the President of the Society.

Farmers and the Public generally are invited to be present.

L. TUCKER, *Rec. Secretary.*

To Subscribers and Others.

In order that its friends and former subscribers may have an opportunity of judging relative to the contents, size, appearance, &c. of the issues of our new volume, we send this number of the FARMER to all subscribers for 1845, and many others who are friendly to the publication. Those who receive the number are requested to peruse and examine—and if they consider it worthy of support, forward their own subscriptions, and as many of their neighbors and friends as convenient.

Former subscribers, who do not wish to continue the paper—we hope, by the way, that these will prove to be "few and far between"—are requested to return it promptly, (with the name of person, and post office where sent,) directed to "Genesee Farmer."

THE GENESEE FARMER.

VOLUME VII, FOR 1846.

THE undersigned, having purchased the Subscription list of this valuable and popular Journal, would announce to its Patrons and the Agricultural Public, that such arrangements have been made for its future publication as will render it still more deserving the patronage of all friends of Improvement.

Each Number of the next Volume, (commencing in January, 1846, instead of SIXTEEN, will contain TWENTY-FOUR LARGE OCTAVO PAGES,—will be printed on NEW TYPE, and GOOD PAPER,—and embellished with appropriate ENGRAVINGS. The paper will make a handsome volume of about three hundred pages, suitable for binding at the expiration of the year. No reasonable expense or effort will be spared, but every proper exertion used to make it acceptable to the Farming community, by rendering it at once the cheapest and best paper of its size and kind in the Union.

ITS EDITORIAL DEPARTMENT will continue under the supervision of DR. DANIEL LEE, its present talented and popular Editor. Its HORTICULTURAL DEPARTMENT will be conducted by P. BARRY, Esq., an experienced and practical Horticulturist.

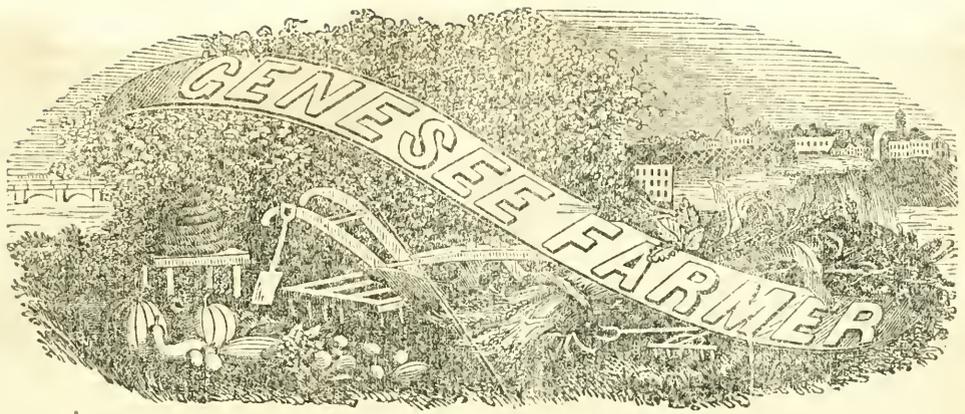
TERMS, same as heretofore—FIFTY CENTS A YEAR, in advance; 5 copies for \$2; 8 copies for \$3.

Now is the time to subscribe! and those who wish to do so, are requested to send in their orders as soon as convenient. Persons ordering the paper will please write plainly the name of the Post Office, County and State to which it is to be sent—and also state whether they have the January number. Post Masters, and other friends of Agricultural Journals, are requested to obtain and forward subscriptions for the Farmer. Post Masters may enclose money at our risk. Address D. D. T. MOORE, December, 1845. Rochester, N. Y.

Editors will greatly oblige us by copying the above Prospectus; and to those who do so, 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, at 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 over the Rochester Seed Store, (2d story,) Front street, nearly opposite the Market.

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.

Conversations on Agriculture between a Father and Son.

PLOWING.

We spent an evening not long since in company with a very intelligent practical and scientific farmer, who was discussing with his son the subject of *plowing*, which incidentally brought under review a variety of topics of great interest in the art of cultivating the soil. The son advocated the propriety of turning the earth raised by the plow, directly bottom upwards, so as to present a smooth and even surface when the work is done. It was urged that this method had the merit of killing all grass and weeds better than any other that can be adopted. The father thought differently, and drew with a pencil on a piece of paper, the following diagram in illustration of his views:



The father said that the above oblong blocks are intended to represent furrows 7 inches deep and 14 wide, lapping the edge of the one turned by the plow, on to that of the next furrow only two inches. By this process you expose to the

decomposing and mellowing influence of the air, with its oxygen and carbonic acid, 50 inches of surface, to every inch in length of each furrow.

Son—I don't understand how that can happen, seeing that the furrow is only 14 inches wide.—Will you explain?

Father—Certainly. As each furrow laps but two inches on the upturned surface of the preceding one, it is plain that 12 inches of each sod will be exposed to the air. Then you have 7 inches more at the end of the furrow, being the depth to which the plow was driven, making 19 inches on the upper side. On the under side, you have 7 inches at the other end of the furrow, 12 on that which has been turned over, and 12 inches more on the bottom from which the sod or earth has been lifted. This gives a surface of 31 inches below, and altogether, a surface of 50 inches. If you do not count the laps anything, (and they are only two inches,) then, by plowing after my plan, you get three surfaces of 14 inches each, beside two of 7 inches each at the ends of the furrow, in the place of *one surface only*, of 14 inches, when you turn each furrow upside down.

S.—I concede that you get about three times as much surface exposed to the atmosphere by your system, as is attainable by mine. Nevertheless, you must admit, that on dry gravelly soils it is important to keep the earth as compact as possible. Under such circumstances, is not my plan better than yours?

F.—On loose sandy, or gravelly soils, the portion of earth raised by the plow will not hold together in the manner I have indicated. If it has turf and compactness enough to lie up at the angle, and in the manner I have spoken of, it will be better to have it so than otherwise. If the ground is too loose and porous at the time of seeding, the roller can be, and should be, applied.

S.—I see that you understand the subject of plowing much better than I do; and I should be happy to learn what the mere drawing of a plow through a field many times, and thus breaking

up its soil, *adds to it, or takes away from it*, so that crops should grow in the one case, and not in the other?

F.—This question strikes at the root of the art of culture, and can only be answered by calling to our assistance the light of modern science. That the thorough stirring of the soil to a considerable depth, either with plow, harrow, cultivator, spade, or hoe, is extremely beneficial to all cultivated plants, is a fact, which was settled thousands of years ago, and has ever since been verified, by all practice and experience.—Whether the earth be stirred with the naked fingers, with a clam-shell, a wooden stick, or an iron plow, of the most approved pattern, nothing is added to the soil directly by its cultivation. The important results that follow, are all purely chemical changes in the combinations of matter, a knowledge of which is of incalculable value to the practical farmer.

S.—What are the *changes* in the ingredients of the surface of the earth, which supply plants with much *additional food*, when the soil is well pulverized by the skilful use of rural implements?

F.—As a key to these mutations, you must ever bear in mind these two facts:

First—That no *undissolved*, earthy substance can enter the minute pores in the roots of plants to nourish them. All such solid food must be dissolved in water to be available. *Secondly*—that, when earthy substances like common salt, the salts of lime, potash, silica, &c., are dissolved, no mere filter like the soil, or a barrel of wood ashes put up to leach, can prevent *salt water* from running away from the roots of plants, and thus at once, depriving them of their proper nourishment, and robbing the soil of its fertilizing elements.

S.—Let me fully understand what you mean. Do you say that, all solid matter in the earth must be dissolved in water before it can pass through the very small tubes in plants; and when solids are dissolved, they are prone to pass with water deep into the subsoil, and into ditches, brooks, and ultimately into the ocean?

F.—Yes. The water that falls from the clouds in rain and snow, and passes no more than 12 or 15 inches into the surface of the earth, and then runs into creeks and rivers, takes with it in solution, some of the earthy salts used by cultivated plants in organising their living tissues. If a field be plowed and harrowed repeatedly, at short intervals, and nothing allowed to grow upon it, its cultivation will impoverish it, by increasing the solution, and the washing away of the mineral elements of all crops.

S.—What evidence have you that soluble salts like those in the dung and urine of animals, guano, and other fertilisers, pass with rain water through the surface soil, deep into the earth, and into brooks and ditches?

F.—Common salt applied to land at the rate

of only three bushels per acre has been found in the water of ditches after a rain, that fell soon after the salt was sown, and harrowed in with seed wheat. Any soluble salt placed on a barrel filled with leached ashes, or soil, and then dissolved with water, will pass through the earth, and come out at the bottom like ley. Coloring matter, like that in the liquid, which flows from dung heaps, may be separated by a good filter; but the salt in brine cannot.

S.—What practical inference do you draw from the several facts which you have stated.

F.—First: That all soluble minerals like salt, ashes, lime, guano and stable manure, should be fed to living, hungry plants only in small and repeated doses, and as close to their mouths (spongioles in their roots,) as possible. Care must be taken not to have fertilizers too strong and concentrated. Secondly: That a sound judgment must be exercised in not commencing too soon to plow, harrow and otherwise stir the soil for a future wheat, corn, or other crop. To understand this important point in practical agriculture, one must be familiar with agricultural chemistry, the composition of soils, and the action of oxygen, carbonic acid, rains, frost, light, and heat, as modified by tillage, on the various substances that form all cultivated plants.

S.—What salts are most likely to be lacking in ordinary soils, which are needed to aid in forming the grain and root crops grown in the state of New York?

F.—They are the soluble salts of potash, soda, magnesia, and lime, being sulphates, phosphates, carbonates, silicates, and chlorides of those bases.

S.—What artificial compound will cheaply supply these mineral substances?

F.—Unleached wood ashes, lime, salt, plaster, and bones. Plants that have long tap roots like clover, aided by a little gypsum, lime, and wood ashes, together with deep plowing, can do much to fertilize a poor soil, by drawing many important minerals from a greater depth in the soil than the roots of wheat can penetrate. Of course such minerals in clover must be buried near the surface of the ground if they are to feed cereal plants.

CLEARING SWAMPS AND MARSHES.—The winter is decidedly the best time to clear the brush and timber from the swamps and marshes, in order to let the sun in to dry up the water, and prepare the way for ditching, much of which may also be done now to advantage. Labor is cheap and plenty at this season of the year, and it is the duty of every one, who is able, to give employment to the needy, and get rid of those unsightly rookeries which are of no other use than to harbor the blackbirds that pull up the corn. These swamps are usually the richest land on the farm, and will pay the greatest interest of any when drained and cropped.

Culture of Indian Corn.

NO. II.

As a general rule, subject however to some exceptions, we believe that about 60 bushels of corn can be grown per acre, at a cheaper rate per bushel than either a larger or smaller quantity. If we were under the necessity of buying the land and raising 300 bushels per annum of this grain for 20 years, we should use for that purpose five acres, no more nor less, as a matter of simple economy. With good culture, our land should be fertile enough to yield 30 bushels per acre without manure of any kind. In that case it would be our study to solve the important problem how to add 30 bushels more per acre to our annual crop, at the least possible expense. To do this, we should commence by applying to our five acre lot, all the mineral elements which Nature uses to form corn plants, so far as to yield 45 bushels of grain per acre; calculating that about one-third of these minerals when dissolved, and ready to enter the roots of corn, would pass deep into the earth, or run off with the water, beyond the reach of the plants. Certain it is, that soft water falling from the clouds, becomes hard on leaching through the soil, and when evaporated, leaves in a white deposit, the same salts, or minerals found in the ash of corn plants and other vegetables.

Let us now inquire, what amount of earthy minerals are necessary to form not merely 45 bushels of corn, but the *straw*, or stems, leaves and cobs that must also be grown as a part of the crop? It is good corn that will give one pound of seed to three of straw. To make 45 bushels, at 56 lbs. per bushel, will require 2520 lbs. of something. Multiply this sum by three, to get the weight of stalks, cobs, &c., and you have it at 7560 lbs. On drying these products thoroughly as chemists dry plants for analysis, seed corn will lose 10 per cent. of water, and well cured stalks 25 per cent. Subtract the loss by evaporation, and there will remain 5,670 lbs. of dry straw, and 2,268 lbs. of grain.

We stated in our last number, that Dr. Dana found 1.31 per cent, ash in corn; and that Prof. Shepard gives only 0.9 per cent. M. Theodore de Saussure finds as the average of his analysis of this grain 1 per cent., which, as a sum between those stated by the two American chemists, we shall adopt. This will give 22.68 lbs. ash in 45 bushels of corn. Although Saussure gives a much larger quantity of ash in the straw of maize than Dr. Sprengel, still, there is reason (which we will not now stop to consider) to believe, that the analysis of the former chemist are more trustworthy than those of the latter. In 1000 lbs. of dry maize straw, de Saussure finds 84 lbs of incombustible ash, which gives in 5670 lbs. corn stalks, 476.28 lbs. If we add the minerals found in the seed of this plant to those contained in its stems, leaves and cobs, the two will

make within small fraction, just 500 lbs. to 45 bushels. According to Saussure, 51 per cent of the ash of corn is the phosphates of lime, magnesia, potash, and soda. The other 49 per cent. is made up of sulphates and chlorides of the above named bases, 1 per cent. of silica, and a trace of iron.

In the ash obtained by burning maize straw, Saussure finds 14.70 per cent. phosphates; 4 per cent. sulphates and chlorides; 18 per cent. silica; 1 per cent carbonate of lime; and the notable quantity of 59 per cent. carbonate of potash (pearlash,) beside traces of iron and alumina.

Let us now sum up our mineral elements.

In the corn there are of phosphates.....	11.50 lbs.
“ straw 14.70 per cent., “	66.70 “
Straw and seed carbonate potash.....	295.00 “
“ “ sulphates and chlorides,...	30.00 “
“ “ oxide of iron, lime, alumina, ..	6.80 “
Silica,.....	90.00 “
	500,00 lbs.

It is worthy of remark, that the 90 lbs. of silica, (flint sand,) is truly a mineral acid, and combined, in the stems of corn and other plants with potash, soda, and lime. No part, probably, of the 295 lbs. potash exists in corn as a *carbonate*, but as a *neutral salt*, made so by the union of some vegetable acid, which is changed into carbonic acid, by the combustion of the plant. Some may be disposed to doubt as to the fact of there being so much pearlash in corn stalks and cobs. Those that are old enough to remember when saleratus was unknown, and pearlash was so scarce, that *cobash* had to be used as a substitute, will find less difficulty in believing the chemist. Does the reader inquire how many pounds of good hard wood ashes he must apply *in the hill and on it*, per acre, to yield 295 lbs of potash to the crop? 100 lbs. of ashes put up in a leach tub and washed (lixivated or leached) will lose from 10 to 20 per cent. of their weight by solution. Good beech, maple, hickory, elm, and oak ashes placed in the soil, will probably yield in the course of three summer months 40 per cent. of their weight of soluble salts. According to this estimate, 1250 lbs. will furnish an acre of corn plants with 500 lbs. of the salts of potash, soda, magnesia, &c. But will 1250 lbs. of beech or oak ash, yield 78 lbs. of the *phosphates* of those alkaline bases? This is an important inquiry.

According to Dr. Sprengel, 100 lbs. of the ash of red beech contains 5.62 per cent. of phosphoric acid. If we allow this acid to be combined with bases in corn stalks, in the same proportion as exists in the bones of animals, (51½ base to 48½ acid,) then 100 lbs. of red beechash, contain, within a fraction, 12 lbs. of the phosphates required by corn plants. This would give 150 lbs. in 1250 of beech ash. Allowing only 40 per cent of these 150 lbs. of phosphates (bone earth) to be available, the corn plants would ge:

only 60 lbs., while they would require 78 for their development. The additional 18 lbs. of phosphates will be supplied in stable manure at a pretty cheap rate. 100 lbs. of bones, either ground or dissolved in a weak solution of sulphuric acid, will also supply the lacking phosphorus. Leached ashes will answer the purpose.

We should apply one half of the 1250 lbs. ashes in the hill at the time of planting, taking care to mix them with the earth, and the balance on the hill after the second hoeing. The first rain that fell would take the alkalis down among the roots of the plant just at the time and place most needed. Without going into all the minutia, let us assume that we have grown and harvested, by cutting at the roots, 60 bushels of corn per acre. Can we not raise our second and third crops, cheaper than we did the first? If you will allow us to save all the manure made from the corn stalks and cobs, we will raise the second, and all subsequent crops much cheaper, and you may carry the corn to England in any shape you please. But before we consider the best method of saving manure, we must investigate at some length in another article, the source from which corn, wheat and other cereals, derive their organized elements.

When you half give away, or waste your house ashes, please remember, practical farmer, that without *potash*, you can raise neither corn nor potatoes, nor wheat, nor grass, nor any other good crop.

Agricultural and Commercial Statistics.

NO. II.

PRICE of Flour in New York for 23 years, as the record has been kept by Mr. Heywood, Esq., President of the Buffalo Board of Trade, on the first Wednesday in January and July of each year.

Year.	January.	July.
1823	\$6,62½	\$7,25
1824	6,25	5,87½
1825	5,25	5,25
1826	5,25	4,75
1827	5,12½	4,50
1828	5,25	4,62½
1829	8,37½	5,87½
1830	5,12½	4,87½
1831	5,75	5,37½
1832	6,37½	5,75
1833	6,00	5,87½
1834	5,50	4,87½
1835	5,12½	6,62½
1836	7,25	7,12½
1837	10,12½	9,75
1838	8,75	7,25
1839	8,87½	6,31½
1840	5,87½	4,62½
1841	4,93½	5,37½
1842	5,87½	5,93½
1843	4,56½	5,62½
1844	4,62½	4,31½
1845	4,63	4,62½

Flour, Pork, Live Hogs, Lard and Bacon, Butter and Cheese, exported from the United States in 24 years :

Years.	Flour.	Pork, Hogs, Lard, Bacon.	Butter & Cheese.
1821	\$4,293,043	\$1,354,116	\$190,287
1822	5,103,482	1,359,839	221,041
1823	4,962,573	1,291,322	192,778
1824	5,759,176	1,489,051	204,205
1825	4,212,127	1,832,679	247,787
1826	4,121,466	1,892,429	207,765
1827	4,434,881	1,555,696	184,049
1828	4,283,669	1,495,839	176,354
1829	5,000,023	1,493,629	176,205
1830	6,132,129	1,315,215	142,370
1831	10,461,728	1,501,644	264,796
1832	4,974,121	1,923,196	290,829
1833	5,642,602	2,151,583	258,452
1834	4,569,379	1,796,001	190,099
1835	4,394,777	1,776,332	164,809
1836	3,572,599	1,333,344	114,033
1837	2,987,209	1,299,796	96,176
1838	3,693,299	1,312,346	148,191
1839	6,925,170	1,177,230	127,550
1840	10,143,615	1,894,894	210,749
1841	7,759,646	2,621,537	594,815
1842	7,375,356	2,629,403	338,185
1843, 9 mo.	3,763,073	2,120,029	598,968
1844	6,759,488	3,236,479	758,829

Statement of the value of all the property which cleared from, and came to the Hudson on the Canals in the years 1844 and 1845 :

	1844.	1845.
Arrived	\$34,640,446	\$15,452,301
Cleared	53,142,407	55,453,998
Excess in 1845 over 1844	\$87,782,849	\$100,906,298
		\$13,123,449

Statement of all the property which came to Hudson river on the Canals, in 1845, with the quantity and estimated value of each article, in Albany and Troy :

THE FOREST.		
Furs and peltry	709,749 lbs.	\$873,435
Boards and scantling	237,924,666 ft.	4,044,720
Shingles	72,120 M.	234,390
Timber	2,492,668 ft.	418,534
Staves	139,754,800 lbs.	628,898
Wood	17,696 cords.	86,258
Ashes	69,668 brls.	1,393,360
Total value,		\$7,759,596

AGRICULTURE.		
Pork	45,153 brls.	\$571,637
Beef	67,699 "	507,743
Bacon	1,631,700 lbs.	118,299
Cheese	27,542,861 "	1,921,000
Butter	21,825,455 "	3,055,564
Lard	3,064,800 "	243,184
Wool	9,504,039 "	2,946,252
Hides	293,009 "	36,627
Flour	2,517,250 brls.	14,021,081
Wheat	1,620,033 bush.	1,941,869
Rye	157,438 "	111,002
Corn	35,803 "	21,479
Barley	1,137,917 "	671,371
Other grains	1,294,609 "	491,951
Bran and ship stuffs	1,067,665 "	160,150
Peas and Beans	66,175 "	70,145
Potatoes	145,569 "	58,076
Dried fruit	360,966 "	32,477
Cotton	66,800 lbs.	5,177
Tobacco	670,900 "	80,508
Clover and grass seed	3,161,200 "	221,284
Flax seed	8,303,960 "	166,079
Hops	874,200 "	157,356
Total value,		\$27,612,291

MANUFACTURES.		
Domestic spirits	1,588,601 gall.	\$444,809
Leather	15,333,925 lbs.	2,765,508

Furniture	2,561,624	"	256,162
Bar and pig lead	223,500	"	3,940
Pig iron	3,931,213	"	140,516
Iron ware	4,665,393	"	186,615
Domestic woolens	1,497,529	lbs.	1,999,929
" cottons	1,879,446	"	532,623
Salt	172,968	brls.	147,923

Total value,			\$6,432,259
Merchandise	595,703	lbs	88,497

OTHER ARTICLES.

Stone, lime and clay	55,344,593	lbs.	\$33,916
Gypsum	12,263,800	"	27,656
Mineral coal	47,798,300	"	119,496
Sundries	33,237,259	"	3,329,190

Total value,			\$3,559,658
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AGGREGATES.

Forest	607,930	tons.	\$7,759,596
Agriculture	417,627	"	27,612,291
Manufactures	49,315	"	6,432,259
Merchandise	253	"	38,497
Other articles	99,321	"	3,559,658

Total,	1,204,943		45,452,301
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Statement of property cleared from the Hudson river on all the Canals in 1844 and 1845, value of such property, Tolls and number of Boats cleared :

	1844.	1845.
Boats cleared	19,393	20,049
Tons	298,699	224,013
Value	\$53,142,403	\$55,453,998
Tolls	632,063	727,482

Vegetable Food coming from other States into New York, showing an increase of 300 per cent. in six years :

	Buffalo and Black Rock.	Oswego.	Whitehall.	Total.
	Tons.	Tons.	Tons.	Tons.
1838,	53,997	10,255	3,460	72,622
1839,	72,234	16,107	3,918	92,300
1840,	111,533	16,395	3,574	131,332
1841,	138,036	19,762	2,921	159,719
1842,	145,095	24,188	3,376	172,650
1843,	166,327	28,925	4,538	199,840
1844,	165,761	43,123	6,457	220,346

The total arrivals at tide-water in 1844 were 331,859 tons, showing that the arrivals from without the State at the three places above named, are equal to two-thirds of the whole that reach Tide-Water.

The Farmer's Club.

At a meeting of the Farmer's Club of Yates County, held in the village of Penn-Yan on the 2d day of Jan. 1846, the following resolutions after being discussed, were unanimously adopted.

Resolved, That we believe the Farmers of Western New York, as well as the State at large, would be greatly benefited, if the Rail Road Companies between Albany and Buffalo, were authorized or compelled to transport, free from toll, live Stock and fresh provisions, including the products of the dairy, during both summer and winter; and that we also believe, that said companies should be compelled to transport the same at reasonable rates.

Therefore, Resolved, That our Senator and member of Assembly be requested to call the attention of the Legislature, to this important subject at the present session.

Resolved, That the names of the Officers of the Club, be appended to these resolutions, and they be sent to our Representatives.

A. BIGELOW, Sec'y.

REMARKS.—We entirely concur with our Yates county friends in the opinions above ex-

pressed, although we have little hope that the Legislature will abate the tolls on the articles named. If every town west of Utica had an efficient Farmer's Club to petition the law-making power, the object could be attained at once.— But so long as the tillers of the soil will not act together, nor associate to advance their common interests, they can expect nothing truly beneficial and important from the isolated efforts of a few public spirited farmers. The whole framework of civilized society with all its advantages, is but a system of organization—of united effort to accomplish certain purpose. It is passing strange that American agriculturists should be so unwilling to form, and maintain Agricultural Associations. If a farmer in Western New York, a tax paying citizen, wishes to send 1000 lbs. of oats, potatoes, or apples by canal to tide-water, he is compelled to pay just four times as much toll per mile as the man in Ohio or Pennsylvania, who sends 1000 lbs of mineral coal through the canal. It is thus that New York improvements, paid for in part by a direct tax, can be used by the citizens of their States for transporting their cheap, weighty articles, like coal, lead, and salt, while the State will not permit Western New York farmers to send any of their coarse agricultural staples through the same channels. The State authorities are not to blame for this condition of things. The farmers as a body have not asked for the privilege of using the canals and rail-roads of the State for sending potatoes, oats, hay, fat animals, and the like, to market, on the lowest practicable terms. Surely, if a thing is not worth asking for, it is hardly worth any one while to force it upon others.

It is from no feeling of selfishness that we assert, that the farmers of Western New York greatly need a Journal, devoted to their especial interests, and wholly independent of all political parties, which shall discuss some other things beside the mere details of agriculture. If men will not look after their own public, well as private interests, in matters of legislation, have they a right to expect others to be more careful of their prosperity, in this selfish world than they themselves are? We are anxious, in the co-operation of all who are willing to be building up the farmers of our own empire, without doing the least injury to any other in the community. Who does not know when the tillers of the earth prosper, all our classes participate, in an equal degree?

FINE PICKLE FOR MEAT.—Brown sugar, ba salt, common salt, each five pounds; sulphate, potash one lb.; pimento. (bruised) five ounces; black pepper, (bruised) three ounces; nutmegs, (rasped) one ounce; boiling water five gallons. Mix. This not only imparts a fine red color to the meat, but also gives it a most delicious flavor.

To Correspondents.

THE views of our correspondent at Pavilion Centre, in regard to the influence of the Moon on the circulating fluids in plants, and his idea of "valves" in their sap vessels, are ingenious, but not according to the received notions of physiologists at this time. Irrespective of the "Moon" and "valves," his practice of plowing up Canada Thistles, once a month, most thoroughly, is worthy of general adoption.

OUR Brunswick (Ohio,) Correspondent is informed that, for low moist land, the "White Flat Norfolk" Turnip is regarded as the best; for high dry ground the Globed-shaped Red Turnip, sown in July, one pound of seed per acre. To be had at the Rochester Seed Store.

DR. LEE—*Sr*: The Farmer's Club of Yates County, lately formed, have directed me, as their Secretary, to write you their request, that you would, by letter give a catalogue of those books, which, in your mind, are best calculated to instruct them.

We dislike to consume your time for our special benefit, but knowing that you have been critically and ardently engaged in the study of Agriculture, we preferred to write you. We wish to get up a library sufficiently extensive for 50 or 100 farmers, and such a one as will be most beneficial to them. By giving such catalogue you will gratify, and be of great service to the members of the Club.

JEMAS BIGELOW, *Sec'y.*
Penn Yan, N. Y. Dec. 30, 1845.

ANSWER.

WE have received a number of Letters similar in purpose to the above, and as we like to kill several birds with one shot, we reply to all through the Farmer.

The best works extant, of a general and comprehensive character, are Boussingault's Rural Economy,—Johnston's Lectures on Agricultural Chemistry,—Von Thaer's Principles of Agriculture, (published in the Farmers Library, Wiley & McClrath,—Liebig's Writings,—Practical Agriculture,—Stephen's Book of Farm,—and Ludon's Encyclopedia of Agriculture and Gardening. On special subjects:—Morell's American Shepherd,—Downing's Works,—Dr. Harris' Entomology,—Hitchcock's Geology,—Sement's Poulterer's Companion,—all the Agricultural Periodicals published in this State,—the London Farmer's Magazine,—and the Transaction of the Highland Agricultural Society, (Scotland.)

Ludon's is an expensive work, although one of sterling value. There are some errors in the Tables of the analysis of Wheat in Johnston's Chemistry, as copied from Dr. Sprengel, which have misled the Editors of the American Quarterly Journal of Agriculture and Science, and

some others. These errors we shall take an early opportunity to point out. Notwithstanding a few signal defects, the Lectures of Professor Johnston can be studied with great benefit by every practical tiller of the earth.

There is one Book, that we have not named, which is of more importance than all the others, It is the Volume of Nature—a work written by the Creator, and published in all the languages spoken by the race of beings that both *see* and *feel* their just accountability to the God that made them. Although this Volume can not be placed in your little libraries, nor can it be purchased by the combined wealth of a thousand worlds, yet all may study it with infinite profit. While we pay a respectful deference to the opinions of men, as published in books, we should ever have an eye, and a thought keenly perceptive of Nature's process for changing crumbling rocks, air and water into good bread, milk, meat, and material for clothing. The science of Agriculture should be studied for its benign influence on the moral faculties of man. The mind that habitually contemplates the infinite wisdom and goodness displayed in the mineral, vegetable and animal kingdoms, can hardly let itself down to the practice of vice, the indulgence of avarice, or to the rule of any groveling passion.

Sincerely do we hope that these worthy examples will be followed by others. We want to see a little more intellectual, and *professional* pride among practical farmers. Two thirds of the electors in New York, and perhaps three-quarters, are agriculturalists. What proportion think you, of this class, will be chosen to amend the Constitution next April? Who among the opponents of "book farming" and "book knowledge" will be honored with a seat in the Convention?

For the Genesee Farmer.

MR. EDITOR:—I wish to remind you of the promise you gave me, in relation to the time of sowing salt, and the quantity to be sown.—Are beans a profitable field crop?—and what kinds are the best? Can they be procured in your city, and what price? G. D.

REMARKS.—Beans are a profitable crop. The small white variety sell at the highest price per bushel, although they do not yield so largely as some other kinds. Beans are worth in the market, as brought in, \$1 per bushel. Retailled from shops at \$1.25.

In regard to the use of salt as a fertilizer, from 3 to 5 bushels may be sown. Unlike gypsum, ashes, and barn-yard manure, salt will *all* dissolve at once, and hence will last in the soil but a short time. We prefer to apply 1½ bushels early in the spring, as soon as the snow is off, and an equal quantity in four weeks thereafter, sown broad cast like plaster, with which we should mix it. We have a little apprehension

that some of the particles of salt might fall on the centre of wheat plants, lodge, and when dissolved injure this tender vegetable. One could easily scatter a few handfuls, in the usual way of sowing, wait a few days, and then satisfy himself whether it would do to sow salt over a larger surface. We have never heard of any injury, but in all experiments, due care should be used to avoid loss in any way.

The fertilizers which promise the greatest benefit to the practical farmers of this State are *salt*, gypsum, lime, wood ashes, and charcoal. To render salt and gypsum more available, the duty should be taken off from salt and the canal tolls reduced to a mere nominal sum on both salt and plaster. The State should charge just duty enough on salt to pay for inspection and superintendence. The idea of deriving a public revenue by a direct tax on the salt eaten by a poor man's cow, is precisely of a piece with a direct tax on her milk, eaten by his children. The rich man, worth \$100,000, uses perhaps 20 lbs. of salt a year; while the comparatively poor farmer, with 30 head of cattle and 100 sheep, will consume forty times as much. If the State needs the \$200,000 which it gets—more or less—from salt duties, there is a fair way to collect the money by an equitable tax on the whole property of its inhabitants.

For the Genesee Farmer.

MR. EDITOR:—In these times of temperance reform the question is frequently asked, "if you stop distilling, what will you do with your coarse grain?" In answer to this, I would say you had better feed it out to your stock of various kinds. I believe it would be more profitable for our farmers so to do, than to take it to the stills at the highest market price; and surely more farmer-like. As it was a few years ago with apples, most of our farmers would cart their apples to the distillery, and get 3 or 4 cents per bushel, or a gallon for 6 bushels—and thought they were doing pretty well; but people have found out lately that apples are worth at least one shilling a bushel to feed out to any thing, and all kinds of stock or poultry will fatten on them without the trouble of gathering them. So you see we were paying 75 cents per gallon for the *critter*, of no value, besides gathering them, &c. I fed most of my coarse grain to my stock, and what I gave my sheep was worth one dollar per bushel in the increase of fleece and carcass; and for my oats and apples my poultry gave me more than fifty cents per bushel. I was not like two of my neighbor farmers, who, when the distiller offered up fifty cents for corn a year ago, took their crops to him at that price and then lost more in value of their stock for the want of it than they got for all their grain. Such farmers, Mr. Editor, I think do not work it in the most profitable way; and I should like to read your opinion

on this subject in the next number of the Farmer.

REMARKS.—We have long been aware of the fact, that apples can be profitably grown to feed, not only animals of the genus *homo*, but those domesticated for the use of man. With regard to selling grain for the manufacture of whiskey, or alcohol, for consumption in the arts, it is purely a moral question, which each person must decide according to his own conscience.

A Small Farm with a Great Farmer.

WE copy the following paragraph from the Report of the Committee on Farms, made for the year 1845, as introductory to a short note from a public benefactor—a man who has practically demonstrated the way to be rich in rural comforts, and independent, with a large family, on 20 acres of land:

"To Martin Smith of Wheatland, the individual who with only 20 acres of land, has sustained and brought up a family of 13 children—had money on hand to assist his *poor neighbors* who had 200 acres of land; and who by his indomitable industry, good management and perseverance, has been enabled to hold on to his grain crop 3 years, waiting for a market—a diploma framed and glazed.

L. B. LANGWORTHY,	} Committee."
J. H. ROBINSON,	
ROMANTA HART,	
ELISHA HARMON,	
T. H. HYATT,	
JAS. P. FOGG,	

For the Genesee Farmer.

MR. EDITOR:—I have long since felt it my duty to express my warmest thanks to Mr. WILLIAM GARRETT, for the very high compliments he has paid our Family, through the GENESEE FARMER, as being a family of industrious habits, and trying to get a living as we are commanded by a high authority—that is, by the sweat of the brow.

We are again under renewed obligations to the same gentleman for his inviting, and accompanying the Committee on Farms to our house, and for the excuses we hope he made, for the slovenly appearance of our place. Our thanks are also due to the other gentlemen of the Committee, for their call and their friendly feelings. I believe their visit did me more good than all the tonics I had taken for many a day, for they were all warm hearted and friendly. They noticed some things that were not as they should be, in a very pleasant and friendly way, and we hope we shall be able to put them to rights, by and by. My warm thanks are due to the Committee for their complimenting us so warmly for good management, and for helping our neighbors, (which, by the by, was no benefit to us, though we did our duty,) and for the unmerited premium the Committee has seen fit to give us, we shall accept of it, with many thanks, and much pleasure. We shall keep it safe, and in some conspicuous place, to remind us of our friends that we have seen. Although we have not had the pleasure of a personal acquaintance, should it please an all wise Providence to restore to me

my health again, so that I may again have the pleasure of tilling the soil, I shall strive to deserve my next premium.

In noticing the many volumes that are distributed among Farmers, we have every reason to believe that light and knowledge are increasing, and we feel anxious for a share of it. I once heard a man ask another if he did not know enough about Farming without taking that paper, (pointing to the Genesee Farmer,) he held in his hand. He replied that he did not, and said a good deal more about the want of knowledge. This was some ten years ago, I should think, and I am sorry to say that the man that knew enough, I fear does not know as much now, for he has lost in property pretty seriously. We do not believe this was because he did not take that paper, but because he learned the trade too soon. As for the man that took the paper, we believe he takes it yet, and has held his own very well.

MARTIN SMITH.

Wheatland, Dec. 24, 1845.

The West is Coming.

To give our readers some idea of the increase of business on the Upper Lakes, growing out of the surplus products of the West, we copy from the Buffalo Commercial Advertiser its list of new craft constructed and placed in commission in the year 1845.

Number, tonnage and estimated cost of new vessels built in 1845, from this city westward to Chicago :

Name.	Class.	Tons.	Where built.	Cost.
Niagara,	ste'r,	1075	Buffalo,	\$95,000
Oregon,	"	781	Newport, Mich.,	55,000
Boston,	"	775	Detroit,	55,000
Superior,	"	567	Perrysburgh, O.,	45,000
Troy,	"	547	Maumee City, O.,	40,000
London,	"	456	Chippewa, C. W.,	46,000
Helen Strong,	"	253	Monroe, Mich.,	22,000
John Owen,	"	250	Truago,	20,000
Romeo,	"	180	Detroit,	12,000
Enterprise,	"	100	Green Bay, W. T.,	8,000
Empire, 2d,	"	100	Grand Rapids, Mich.,	8,000
Algolah,	"	100	St. Joseph river,	8,000
Pilot,	"	80	Union City,	5,000
Princeton,	prop'r,	456	Perrysburgh, O.,	40,000
Oregon,	"	313	Cleveland, O.,	18,000
Phoenix,	"	305	"	22,000
Detroit,	"	290	Detroit, Mich.,	15,000
Odd Fellow,	brig,	225	Cleveland, O.,	9,000
Enterprise,	"	207	Grand Rapids, Mich.,	8,000
Wing-and-Wing,	schr,	228	Cleveland, O.,	9,000
Magnolia,	"	200	Charleston, O.,	8,000
Scotland,	"	200	Perrysburgh, O.,	8,000
J. Y. Scammon,	"	194	Chicago, Ill.,	8,000
Napoleon,	"	195	Sault Ste. Marie,	8,000
Freeman,	"	190	Charleston, O.,	7,500
Eagle,	"	180	Sandusky, O.,	7,000
Ponesteel,	"	150	Milwaukie, W. T.,	6,000
Sheppardson,	"	130	"	5,000
Rockwell,	"	120	"	5,000
E. Henderson,	"	110	"	4,500
Rainbow,	"	117	Sheboygan,	4,000
C. Howard,	"	103	Huron, O.,	4,000
J. Irwin,	"	101	Cleveland, O.,	4,000
Avenger,	"	73	Cottersville, Mich.,	3,000
Flying Dutchman,	"	74	Madison, O.,	3,000
Cadet,	"	72	Cleveland, O.,	3,500
W. A. Adair,	"	61	"	3,000
Elbe,	"	57	"	3,000
Planet,	"	25	"	3,000
Albany,	"	148	Raised and re-rigged,	2,500

Pilot,	"	50	Milwaukie, W. T.,	2,500
Mary Anno,	"	50	"	1,000
Marinda,	"	60	Lexington, Mich.,	3,000
Sparrow,	"	50	China,	2,500
Big B.	"	60	Eighteen mile creek,	2,500
Hurd Times,	"	45	"	1,500
Friendship,	sloop,	45	Sheboygan, W. T.,	2,000
Buffalo,	"	30	New Buffalo, Mich.,	1,000
Total, 48 vessels,		10,207		\$659,000

If we mistake not, the following additional particulars, in relation to this year's business, which is just beginning to develop itself, will be read with interest by Western New York Farmers:

ESTIMATED COST OF TWO BOATS.

	Niagara. 1,075 tons.	Boston or Oregon, 780 tons.
Hull,	\$30,000	\$22,000
Engine,	32,000	14,000
Fixtures,	5,000	2,000
Joiners,	8,000	6,000
Painting,	3,500	2,500
Upholstery,	3,000	2,000
Furniture,	4,000	2,000
Ancors, chains, cables, boats, sails, blocks, cutlery, lamps, cooking utensils, table linen, &c., &c.,	9,500	4,500
Total,	\$95,000	\$55,000

Of some sixty steamers now owned on the lake, there are required for the several lines, when the consolidation exists, about thirty boats. There are also used, at the same time, some ten more small boats, between intermediate ports, for towing, &c., to which we also add the London and four others, belonging to and owned in Canada. There are also fourteen propellers, and ten more to be added on the opening of navigation in the spring, with fifty brigs and two hundred and seventy schooners known to be in commission, giving the annexed summary of lake tonnage :

	Tons.	Value.
Steamers,	60	\$1,500,000
Propellers,	23	6,000
Brigs,	59	11,000
Schooners,	270	42,000
Total,	400	80,000

In this we enumerate the seven Oswego Propellers, and such sail craft belonging to lake Ontario only as we know participates in the business of the upper lakes.

ON THE STOCKS.—The desire to invest further capital in vessels is seen in the number of new craft now on the stocks at various places throughout the whole range of the lakes. At this early day, we hear of the following to be rapidly pushed toward completion :

At this port, a steamer of 750 tons, for Mr. REED, the iron steamer Dallas, of 370 tons, for government, and three propellers of large size.

At Chippewa, C. W., a large steamer.

At Enclid, O., a brig of 299 tons.

At Conneaut, O., a brig of 300 tons.

At Cleveland, O., a steamer of 700 tons, three propellers of 350 tons each, a brig of 230 tons, a schooner of 230 tons, and another of 70 tons—all to be out early.

At Charleston, O., a steamer of 800 tons, a propeller of 350 tons, and a schooner of 200 tons. An Oswego house has an interest in the propeller.

At Maumee City, O., two propellers of 350 tons each.

At Truago, Mich., a large steamer of 225 feet keel, for Capt. WHITAKER.

At Detroit, a large steamer, for Mr. NEWBURY, another for Capt. GAGER, and a third, of the largest class, for Capt. RANDALL.

At Palmer, Mich., a propeller for Capt. ESTERBROOKS.

At Newport, Mich., a steamer for the Messrs. WARDS, and the frame of another but smaller boat for the same firm, to run between Detroit and Fort Huron.

At Godrich, C. W., or vicinity, a propeller.

At Milwaukee, a barque and brig, of large tonnage, 300 each. One of these vessels is nearly planked up already, and will be down with a cargo of wheat as soon as the straits are navigable.

At Depere, W. T., a large sized schooner and a yacht of 70 tons.

At Chicago, a large brig or schooner, for Capt. PARKER, late of the Indiana.

At St. Catharines, C. W., a brig, and at the mouth of the Genesee river, a propeller, for a Rochester company.

Making, in all, ten steamers, twelve propellers, and twelve sail vessels—thirty-four in all.

As yet there is not one acre in one hundred of the tillable land in the new states and territories which is under cultivation. In view of these facts, can there be any doubt that we are to have powerful competitors in growing grain, wool, beef and pork; and hence should study every possible means of lessening the cost of producing crops in Western New York? Let those that have sons, who wish to prosper in the world by profits to accrue from rural labor, see to it, that their knowledge of the science of agriculture shall be such, as to make every day's work on the farm, *tell to the very best advantage*. It is the waste of labor, and the needless loss of its fruits, which operate so disastrously on thousands of honest men, as to keep them poor all their days. It is a sad mistake for any laboring man to neglect the science of keeping property.

COMMON SCHOOL LIBRARIES.—These Libraries do not, as a general thing, contain a fair proportion of books on rural affairs. It is true, the agricultural literature of this country can not boast of having achieved much; nevertheless, there are a few very valuable works which ought to be in every Common School Library in the State. The "American Shepherd," by L. A. MORELL; and Mr. DOWNING'S "Fruits and Fruit Trees of America," and Landscape Gardening, have elicited high commendation, and discuss, in a fitting manner, subjects that should be studied by all. The authors are both New Yorkers, and we know no better way to enlist the best talent in the State in the service of its great agricultural interest, than to take a decent notice of those that really do confer on the farming community a substantial benefit. "The American Poulterer's Companion," by C. N. BEMENT, should not be overlooked in this connection.

KEEPING PORK.—A correspondent of the Albany Cultivator states that his mode of salting pork is as follows. He cuts and packs the same day it is killed, using Turk's Island or rock salt. He scalds and skins the brine till perfectly pure; then boils and pours it upon the meat boiling hot. This mode is affirmed to take away the tough and stringy qualities of the meat, to render it brittle, and improve its flavor.

The best fertilizer of any soil is a spirit of industry, enterprize and intelligence—without this, lime, bones, guano, or other manure, will be of little use.

For the Genesee Farmer.

Notes From S. W.

DR. LEE:—One of our best Pennsylvania German farmers, who has bought some half a dozen farms, with the products of a single farm (in wheat and clover seed,) complained to me the other day, that in spite of the green crop of clover, plowed into his wheat fallows, the wheat heads grew shorter and more shrunken every year. He said that for a long time he had resisted the vulgar notion that plaster, "wore out the land," but that he now "*began to believe it.*" What, said I, will you now give a bad name to a substantive manure, which for the last twenty years has enabled you to grow rich on wheat and clover, because its services can no longer make up for the *indiscriminate waste* of every other inorganic constituent of the soil?

When I hear a farmer say that plaster does his land no good, I can readily conceive that the previous crops of plastered clover, turned into the soil, have already fixed as much sulphate of lime therein as the crops need; and that a further application is money and labor lost. When I learn that his wood ashes have been sold to the pedlar, that he keeps but little farm stock, sells or wastes his straw, and takes no pains to make or save organic manures, so far from feeling a sympathy with him in his condemnation of plaster, I am only led to marvel that this simple mineral has so long, by virtue of its two-fold operation, rendered available both the inorganic treasures of the earth and the organic constituents of the air, for the benefit of vegetable structure. I have often suspected that it was almost solely to the exhaustion of the phosphates in the soil, that we should attribute the deterioration in our wheat crops. The Pampas of South America and the battle fields of Europe have been gleaned of the bones of beasts and men, to furnish phosphate of lime to the wheat fields of England.—Animal bones contain about half their weight in this precious substance, without which no wheat can be grown: yet, until the present season, I believe, not a single bushel of crushed or calcined bones, has ever been applied to the soil in wheat growing Seneca. No attention has been paid to the saving of urine, poudrette, or other manures, rich in phosphates. With us, plaster and a green crop of clover is expected to do all.—When this fails, the great miasmatic west is looked to, as the Elysian Atlantis, where a regular system of borrowing every thing and returning not even seven per cent., may be carried on, until long suffering nature cries, hold!!

THE VALUE OF INDIAN CORN.

It is undoubtedly in the path of agricultural wisdom, to follow England in the growth and cultivation of wheat. But that same Providence which has given England the cereals, turnips, and grasses, to flourish in a cool, moist climate,

and moderately fertile soil, has also given us, to make up for our hot, dry summer, and scanty herbage, the *omni* precious Indian corn. The potato rot in Ireland could hardly produce a greater famine there, than a total failure of the Indian corn crop in America. As the potato in Ireland, is the *tartilla* of Central and South America—the corn bread and hoe cake south of the Potomac, and in the great west. Destroy the corn crop of the South, and you strike at the life of man and beast there.

As more than 77 per cent. of the grain of Indian corn is a fat forming element, and the whole bulk of the stalks and leaves are a nutritious fodder for cattle, I can hardly conceive the possibility that there is a farmer in Seneca county so obtuse to his own interests—so dead to the great lessons which nature teaches him—as to neglect, in our climate, the culture of Indian corn. Corn is a gross feeder, no matter how gross the manure, if well worked into the soil, the crop revels in its decomposition. Not so with wheat; crude manure often enfeebles the stalk by a forced growth, and diminishes the grain. Yet the wheat fallow is always well tilled, and in season, while the field of Indian corn is generally neglected. It is the Cinderella in our family agriculture. 'Tis true that on the great bottoms of the western rivers corn may be grown comparatively without labor; but on our compact soils every farmer can, by the aid of crude manures, or vegetable matter, so far ameliorate a few acres, as to get the maximum yield, at a very little more expense than on the unhealthy western bottoms. As to a bad corn season, in our climate, I have often heard it complained of, but it certainly has never existed in fact, for the last twenty years, in this county! In our gardens, at least, corn laughs at a drought, and surplus water is never known there.

MULDER, LIEBIG, AND PETZOLDT.

SOME of the disciples of Mulder demur stoutly to the doctrine of Liebig, that the atmosphere, alone, can furnish ammonia sufficient for the nutrition of plants. In proof of it, they quote Liebig, to prove that a pound of rain-water contains but one-fourth of a grain of ammonia; hence, say they, the minute quantity in the air above a field of grain must be far from sufficient to supply nitrogen to the growing plants.

I would ask, are not the nightly dews much richer in nitrogen, in the form of ammonia, than rain-water? Mulder's theory, that ammonia in the soil serves as a medium to fix the oxygen of the air into putrifying substances, proves no more against the aerial nutrition of plants, than does Petzholdt's theory, that the importance of the ammonia, and carbonic acid, from decomposing matter in the soil, is "nothing compared to the value of the inorganic product, fixed in the same soil by the same matter, when thoroughly decomposed."

I take it that the one theory may be reconciled with the other, well enough for every practical farming purpose, since both writers advise the husbanding of manures, with a view to the saving of all their constituents, organic and inorganic. I, myself, cannot but feel that Petzholdt goes a little too far.

But apropos of dew: at New Utrecht, on Long Island, last fall, I asked a farmer how he was enabled to grow his fine crop of Indian corn? "I hoe it early in the morning," said he, "before the dew is off." The only reason this man could give for so wise a practice, was that his father did so before him. I felt no wish to substitute philosophy in the mind of this simple man, for that faith in tradition which has done him such a service!

S. W.

Waterloo, Jan. 9, 1846.

Circular.

CIVIL SECRETARY'S OFFICE, }
MONTREAL, DEC. 27, 1845. }

ED. GENESEE FARMER—*Sir*: Her Britannic Majesty's Government, being desirous of obtaining authentic information relative to the disease which this year has attacked the Potato crop in Ireland, and other parts of the United Kingdom, and which is understood to have first made its appearance in North America, I am directed by His Excellency the Administrator of the Government of this Province, to request that you will, as soon as may be consistent with the object in view, return to me answers to the following queries.

1st. Were the Potatoes in your country generally attacked by a disease which destroyed or impaired the substance of the root, in either of the years 1843, 4, or 5?

2d. Did the Potatoes which were sound, when dug up, remain sound, and were any means of avoiding the corruption of the root, after it had been taken out of the ground, found effectual?

3d. Was it found that Potatoes and other Vegetables or Grains planted in ground where diseased Potatoes had been grown, were attacked by the same disease?

4th. Were any means of preventing the recurrence of the Potato disease in successive years found effectual?

I have the honor to be, Sir,

Your most obedient, humble serv't,

J. M. HIGGINSON.

WILL not some of our readers answer the above inquiries?—Ed.

ONONDAGA CUT STONE.—We observe that Mr. Robbins, 100 Buffalo st. is agent, in this city, for this stone—which is quite equal, if not superior, to any other in market. Many prefer it to the Lockport stone. They can be brought here by railroad during the winter—a fact which enables the agent to meet all orders promptly.—*Dem.*

For the Genesee Farmer.

Yates County Farmer's Club.

ED. GEN. FARMER—*My Dear Sir:* The friends of Agriculture have formed in this county a Farmer's Club.

The plan is to hold semi-monthly meetings, for dissertations, conversation, &c. At our meetings we have a short lecture, on some subject chosen by the speaker himself—after which the subject thus treated of, is made the subject of conversation—all the members who desire participating therein. It is not a debate or discussion, but a familiar conversation, in which all reserve is thrown aside, and yet in which the utmost decorum and gentlemanly conduct is observed. For instance: at the last meeting one of the members, (having two weeks previously announced his subject,) read a dissertation on the properties and uses of Vegetable Mould.—After this, the Club spent an hour or more in talking the subject over, and in giving the result of experience in cultivating different kinds of soil, as well those in which humus, or vegetable mould, was predominant as those where it was not. Many interesting facts were elicited and much valuable information gained.

After this, another lecturer was appointed—his subject announced—and the Club adjourned at about 9 o'clock, having spent the evening to the apparent satisfaction of all present.

At a previous meeting, the Club took up the subject of Rail-road transportation of produce, and came to the conclusion, and thus resolved, to ask the Legislature, at its present session, to pass an Act compelling the Rail-road Companies between Buffalo and Albany to carry *live stock, fresh provisions, and the products of the dairy, at all seasons of the year, at reasonable rates,* and that the State relinquish all toll to itself on these articles, when thus transported on the Rail-roads.

The interests of Western New York were thought intimately connected with this subject.—But I am making this article too long. I designed merely to call the attention of yourself and readers to the organization of the Club and its plan, hoping that the farmers in other counties might see the advantages of such Clubs, and follow the example of the Farmers of Yates county.

I have thought I would attempt a kind of condensed report of the conversation at the meetings of our Club, for publication. I am satisfied it would be very interesting and highly useful.—Perhaps I will try my hand.

I am yours truly, D. A. OGDEN.

Penn Yan, Jan. 13, 1846.

PEARLS are found in rough oyster-shells.—How strange! Why were they not placed in a cologne bottle?

To love our neighbor as ourself would soon convert the world into a paradise.

Cisterns.

MANY farmers might conveniently, and with great advantage, furnish themselves economically with an extensive and permanent supply of water, when otherwise deficient, by constructing cisterns. Where they have compact clay land, no further preparation is necessary for ordinary use for stock, than to excavate to a sufficient size; and to keep up the banks on every side, place two frames of single joice around it near the top and bottom, between which and the banks heavy boards or plank may be set in an upright position, reaching from top to bottom. The earth keeps them in place on one side, and the joice prevents them falling in. They require to be only tight enough to prevent the clay from washing in. No appreciable quantity of water will escape from the sides or bottom.—We have had such an one for years without repairs or any material wasting of water. This should be made near the buildings; and the rains, carefully conducted, by the eaves-troughs and pipes from an extensive range, will afford an ample supply. For household purposes, one should be made with more care and expense, and so constructed as to afford pure filtered water at all times. These may be formed in various ways, and of different materials, stone, brick, or even wood; though the two former are preferable. They should be permanently divided into two apartments, one to receive the water, and another to be used as a reservoir to contain such as is ready for use. Alternate layers of gravel, sand, and charcoal at the bottom of the first, and sand and gravel in the last, are sufficient; the water being allowed to escape from the bottom of the former into the latter, through the several layers mentioned, will be rendered perfectly free from all impurities, and furnishes the purest water in the world. Some who are particularly choice in preparing their water, make use of filtering stones, but this is not essential to securing a choice article. Occasional cleaning may be necessary, and the substitution of new material will at all times keep them sweet.—*Am. Agriculturist.*

SAVE YOUR ASHES—NOT SELL THEM.—Those that have good house ashes are informed that over one half of all earthy matter in potatoes is pure *potash*, from the lack of which most farmers lose from 50 to 100 bushels per acre every year. Suppose one has available potash enough to produce 140 bushels of this valuable crop per acre, and enough of every thing else that Nature uses to form potatoes to make 300 bushels. There the absence of this indispensable alkali will occasion a loss of 160 bushels. And yet in one ton of good potatoes there is but 12 lbs. of potash.—As we have stated in another article, 59 per cent. of the ash of corn stalks is carbonate of potash (pearlash.) Save the *alkalies* and give them to your hungry crops.



ELM-WOOD COTTAGE, NEAR ROCHESTER, N. Y. (FIG. 4.)

Rural Architecture.

ILLUSTRATED BY PLANS OF ELMWOOD COTTAGE.

EDITOR GEN. FARMER:—Agreeably to request, I send you herewith the drawings, plans, &c., of a Rural Gothic Cottage which I built at "Elmwood,"—(the title with which my little Rural Home Farm, on Genesee-st., Rochester, hath been dignified,) the last year. After making up my mind to build, my first aim was to get up and adopt that style of cottage whose expression should most nearly and appropriately correspond with that of the site upon which I was to build. My next object was to combine simple elegance, an apt expression of purpose, and utility and convenience of arrangement, with economy of expenditure.—Now far I have been successful in these particulars, I leave it for good judges to decide; as for myself, I see nothing, as yet, that I could wish to alter.

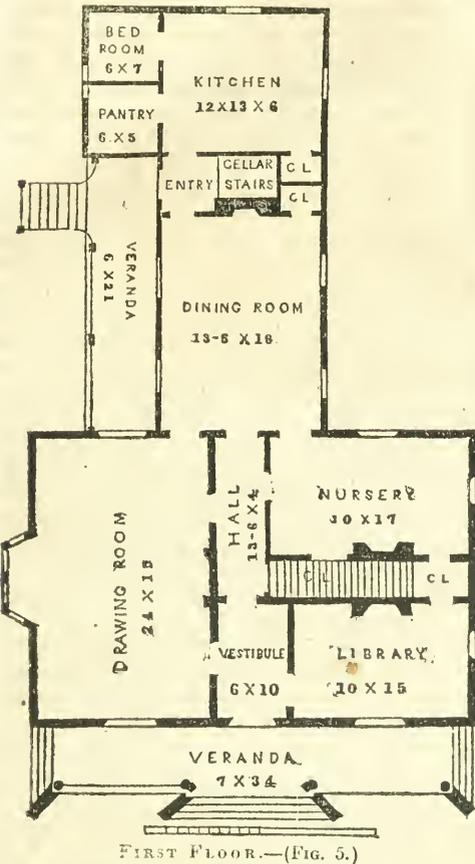
For several years I have taken a deep and lively interest in the study of Rural Architecture, and the modes of beautifying the homes of our rural population. And although in my researches and studies on these subjects, I have consulted London, and most of the standard writers, yet I have derived more interest and profit from Downing's admirable works on those subjects, than from all the others together; and I would here acknowledge my indebtedness to his suggestions and illustrations, for much of the merit of the cottage plan which I here present; and likewise to the skill and taste of MERWIN AUSTIN, Esq., the accomplished architect, who has with such facility taken my own crude notions and suggestions, and brought therefrom such perfect symmetry of proportions, beauty of form, and elegance of expression, as the plans which he has drawn with so much taste and accuracy, most conclusively show. The spirited pencil drawing was sketched by Mr. Cleveland, an artist of promising abilities.

This cottage fronts the east—the view here given of the elevation, fig. 4, is from the south-east. It stands upon an eminence, about one hundred feet from the street, and has, as will be seen, large, fine, branching elms, and a number of towering poplars, in the back ground and at the right, which add not a little to the picturesque effect of the cottage itself. The site was chosen thus near the public road, because the ground was the highest and best suited for the purpose, and because of the fine large elms and other trees and shrubbery, which have, (the former, at least,) the advantage of a growth of some fifty years. It commands beautiful and picturesque landscape views in nearly every direction—including a fine view of a large portion of the city of Rochester, in the suburbs of which Elmwood is situated, a short distance west of, but in full view of the Genesee river and Blount Hope.

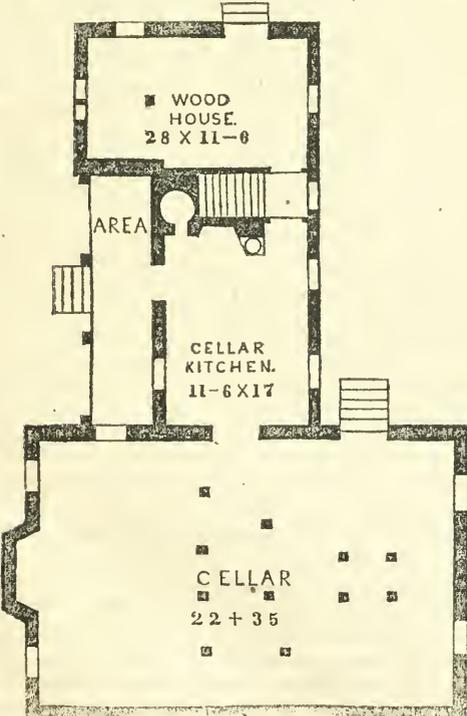
The general contour or outward expression of the cottage, I think, in admirable keeping with the rural objects around it. I cannot better describe it than in the beautiful language of Downing, in speaking of a similar style of cottage. "It belongs to the class of neatly decorated, rural Gothic edifices, in which the carved verge boards and prominent clustered chimney tops and irregular outlines. There is something indicating a certain license of architectural

imagination, not to be precisely measured by the rule and square, or the strictly utilitarian view. Now a cottage of this class must not in any case, be erected on a bare plain, as in such a place all its picturesqueness would seem out of keeping, unmeaning and absurd. But let it be partially hidden, or half concealed by clustering foliage, assimilated, as it were, with nature, by the interlacing and intertwining branches and boughs around it, and of which its ornaments are in some degree a repetition, and we shall feel it to be in perfect unison with its situation. Whoever has seen one of these cottages, with its rich gables breaking out from among the intricate of tall stems and shadowy foliage, will readily confess that he has rarely beheld anything more harmonious and delightful, than the charming effect thereby produced. Some one has truly remarked, that the architecture of our dwellings is most appropriate, when it embodies and breaths forth a *home expression*, a character to which we think the rural Gothic, with its quaint, independent, comfortable, and extended air, seems fully to lay claim."

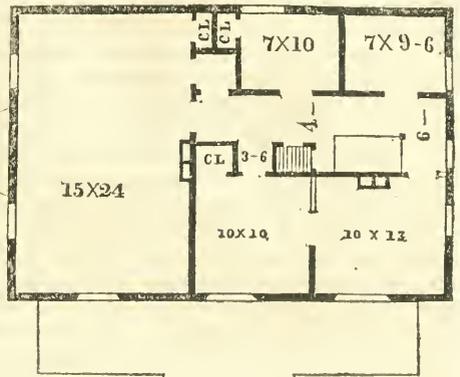
But as to details.—The main building is 36 feet front, by 25 feet deep, with a rear addition one story high above the basement, and 34 feet deep by 29 feet wide, (including the side veranda,) with a wash kitchen and wood-house underneath, opening out nearly on a level with the ground, owing to the slope of the back-ground. The height of the first story in the main building is ten feet in the clear; second story, eight feet, excepting where the pitch of the roof reduces it to about six feet, only in the room from which the front gable projects, which is full height. The front veranda is about 7 by 34 feet, with steps in front and at either end, and lattice balusters between. The vestibule is lighted by glazed panels in the front door; and light is thrown into the back hall through the glazed door between it and the vestibule, and through a like door between the hall and dining-room. The drawing-room or parlor is 15 by 24 feet in the clear, besides the bay-window, which is 2 1-2 feet by 3, making the drawing-room 17 1-2 feet wide across the centre; this room, and also the vestibule, are neatly cornciced, and the latter has a handsome rosette, in the centre of the ceiling, from which is suspended a hall lamp. The pleasant bay-window is designed to look out upon a pretty flower-garden on the south of the house, and the view from the rear window will be most charming by converting a portion of the rear veranda (upon which it looks,) into a conservatory for plants; it will also make the view through the windows of the dining or living room, into it, very pleasing and agreeable. The neat, pleasant little library (19 by 11 feet,) is my favorite room, and may be used for a reception or sitting room, when not needed for more secluded purposes; it has connected with it a convenient closet or recess for books or other uses. The nursery, (10 by 17 feet,) is also a convenient room, in a quiet retired portion of the house, with a large closet opening into it, under the stairs. The chamber stairs pass up between the library and nursery, with a door at the foot, and one between the hall and vestibule, so that the stairs can be made secluded for private use or accessible for more public purposes, as circumstances or convenience may require—and will answer for both front and back stairs. The doors, and all of the wood-work in the first story of the main part, and in the



FIRST FLOOR.—(FIG. 5.)



BASEMENT.—(FIG. 6.)



CHAMBERS.—(FIG. 7.)

dining-room, are painted with two good coats and then oak-grained and varnished; the window sash are grained in like manner; the balance of inside wood-work including chambers, &c., painted three good coats. The dining or living-room (13 1-2 by 16 feet,) is connected by doors with the parlor, nursery, and hall, at one end, with a china closet at the other, and opens into an entry, from which you pass out doors, into the kitchen, or down cellar. The kitchen (12 by 13 1-2 feet,) is separated from the dining-room by two doors, in order to prevent the steam and unpleasant odors of the cooking operations from penetrating other portions of the house. The kitchen has connected with it, a china closet, pantry, and servant's bed-room.—The chamber over the front part, it will be seen, contains six very pretty bed-rooms, with suitable closets, steps to the attic, &c. All the inside walls and ceilings plastered with handsome hard-finish, and the casings, doors, &c., finished in the appropriate gothic style.

The outside is covered with sheathing of pine boards, one inch thick and ten inches wide, tongue-and-grooved together, and nailed vertically to the frame, and the joints covered by strips or battens, three inches wide. In speaking of this kind of covering, Mr. Downing says:—"We suggest this mode as a variation, as it makes a very warm and dry house, and the effect is good." The outside is painted four coats, of a mellow shade, and sanded two coats with best lake sand. The cluster chimney-tops are constructed of bricks cut into shape for the purpose. The glass in the windows are cut diamonding. The large gothic window in the front gable opens down to the floor, through which you pass out of the chamber on to the balcony over the porch to the front door.

I have been thus minute in giving the details, so that any one can judge of the style of finish and convenience of arrangement which may be obtained at a comparative small price. The whole expense does not exceed \$2,300. I contracted to have every thing furnished and finished complete for something less than that sum.

Yours with respect,

THOMAS H. HYATT.

Elm-wood, Jan., 1846.

In connection with the foregoing description of *Elmwood Cottage*, we give below the conclusion of a Report made by a Committee of the State Agricultural Society (to whom the plans and elevations of Elmwood were presented,) at its recent annual meeting in Albany:

The public mind cannot be too strongly imbued with the principle that good taste is perfectly compatible with strict economy. And the Committee would therefore recommend that premiums be offered for single plans, as well as for series of plans of buildings suited to the condition of our rural population.

The Committee recommend the adoption of the following resolution:

Resolved, That the thanks of the Society be presented to Mr. HYATT, for his acceptable present.

All which is respectfully submitted.

J. B. NOTT,
GEO. GENEES,
E. P. PRENTICE, } Committee.

Albany, Jan. 22, 1846.

Potato Flour.

At the October sitting of the Academy of Sciences in Paris, a letter was read from M. Clerget, giving an account of his discovery of the mode of Making Potatoe Flour of such a quality as to be in every respect fit for panification. M. Clerget's letter was accompanied with several samples of his productions in the different stages of the process. Among them are two specimens of the flour, of nearly a yellow color, which represent, we understand, the potato in its natural state, divested, however, of the essential oil, and useful for various purposes of domestic economy, although not so fit for panification as the flour obtained in an advanced stage of the process. There are three samples of pure white flour; one in powder, the other two granulated, in which state the flour will remain good for several years, if kept in a dry place. M. Clerget states that when this flour is mixed with that from wheat, in the proportion of cent per cent., and made into bread in the ordinary way, it is exceedingly wholesome and nutritious, and cannot, by the taste, be distinguished from pure wheaten bread. This we can believe, for we have eaten bread made in the same proportions of wheaten flour and potatoes boiled and reduced to a pulp, and found it even more agreeable than that made from the flour of wheat exclusively. Bread thus made, however, is not agreeable when it has been kept two or three days, whereas, according to M. Clerget's statement, that which is made from an admixture of his flour with that of wheat, in equal proportions, is much better when stale than pure wheaten bread. He estimates the saving by this mixture at from 40 to 50 per cent., but this appears to us to be an error, for the potato flour cannot be sold to the public with a reasonable profit to the manufacturer at less than two sous per pound. Taking wheaten flour at four sous, two pounds of bread made of the mixed flour would cost six sous instead of eight, which does not give a saving of 40 to 50 per cent., although it certainly does effect a very important saving. We need not observe that the mixed bread contains less gluten than that of wheat only, but we are by no means certain that an excess of gluten is favorable to nutrition. M. Clerget is of opinion that if gluten be added, which is practicable in various ways, very good bread may be made with two-thirds potato and one-third wheat flour, and in this case the saving would be enormous. He informs us also, that if the potato flour made by his process be mixed with the flour of rye, which by itself is difficult of panification and digestion, a very nutritious and agreeable bread is made. This is a valuable part of his discovery; for in France nearly two-thirds of the rural population are compelled to exist on rye bread, as being so much cheaper than that of wheat. By the ad-

mixture of potato flour, there would be a saving of outlay, and a gain in nutrition. It was stated at the Academy, that a company had been formed at Paris, for the manufacture of potato flour by M. Clerget's process, and that the same progress towards carrying it out upon a large scale had been made in London.

WHEN we consider that Agriculture is the great business of the nation—that its successful prosecution depends upon a knowledge, in its followers, of the principles of natural science—and that *our* agriculture stands in special need of this auxiliary aid—we cannot withhold our surprise and regret, that we have not long since established professional schools, in which our youth might be taught, simultaneously, the principles and practice of their future business of life—on which, more than on any other branch of industry, the fortunes of our country, moral, political, and national, essentially depend, and by which, under the blessing of Providence, we virtually “live, move, and have our being.”—*Buel*.

WINTER DAIRY.—If farmers, who have easy access to market, were to raise larger quantities of carrots, and other roots for their milk stock, with a view to a winter dairy, I am confident they would obtain a profitable return for their labor. With a sufficiency of such food, and a pint of Indian meal to each cow per day, cows that “come in” in the autumn, (which they should do for a winter dairy,) will give a rich supply of milk all winter, and the cream, under the management of a skilful dairy-woman, will produce butter of fine appearance and flavor.—Fresh made butter, of this character, will always secure a quick sale, and a higher price than the best quality laid down in June or September.—*Stone's Address*.

FOR WOUNDS IN HORSES.—While writing, I will give you the following recipe for a preparation to cure wounds in horses. I have never seen it published, and if it is new to you, perhaps it may be of service:

Take one gill of turpentine, two gills of whiskey and one egg. Beat the egg well, and mix the three together. It should be applied with a feather or swab, twice a day. It keeps a wound healthy, and prevents its healing too rapidly.—For its efficacy I can vouch.—*Cor. Alb. Cult.*

THE DROUGHT.—We learn from the interior the most discouraging accounts of the drought. Many of our merchants, in the interior, have advanced largely to the farmers during the past season, on their wheat crops, and there has not been sufficient water since the harvest to flour it. If old winter shuts up the streams without rain, an incalculable amount of inconveniences, to say the least, will follow. In this town, the wells on the hills are mostly dry.—*Milwaukee Sentinel*.

The Art of Painting.

COMPOUNDING COLORS.—White is considered as not only a principal color in painting, but the base or foundation of all light colored paints.—White lead is the principal white in use, though a more delicate white, called *flake white*, is used in ornamental work. Several common colors, known as lead color, slate color, &c., are produced by mixing lamp black with white lead in different proportions. A small quantity of Prussian blue, finely ground and added to white lead, constitutes the common sky blue. Minute quantities of blue and yellow added to white, produce the delicate pearl color, so much in vogue for parlors and halls. Straw color is produced by the addition of a little chrome yellow to white: and pea green by the addition of Paris green. A beautiful light purple, or peach blossom color is produced, by adding to white lead, small quantities of ultramarine blue, and drop lake. It is needless to specify the exact proportions of the ingredients in these compounds; the only rule being to add the coloring ingredients in minute quantities, till the required color is produced. The most common color for floors, is composed of white lead and yellow ochre, in about equal quantities by weight, with the addition of one ounce of red lead to each pound of the mixture. In painting carriages or ships a great variety of compound colors are used, a few of which may be here noticed. The best black is composed of lamp black and Prussian blue. A dark green consists of a mixture of chrome green and Prussian blue. A brilliant plum color is produced by a mixture of lamp black and vermillion. Olive color is produced by mixing lamp black and chrome yellow. A brilliant orange color is produced by mixing chrome yellow and orange lead—(a pigment similar to red lead, but more refined.) A stone brown is composed of lamp black, yellow ochre and Venetian red, equal parts; the addition of white to this compound reduces this color to a drab, or a light stone color. A mixture of lamp black with Venetian red, constitutes the chocolate color. A bright rose color, which is much used in ornamenting, is composed of white lead and drop lake. As a general rule, the colors should be mixed with oil and ground separately, before being compounded, or mixed together; but should not be diluted any more than is required for grinding, until the color is perfected.—*Scientific American*.

ADVANTAGES OF WHITE PAINT OVER BLACK.—Black being a color that absorbs nearly all the sun's rays, any object painted black becomes much hotter when it is exposed to the sun than if it had been painted white, or some light color. A decisive instance of the truth of this fact occurred in the case of H. M. ship *Excellent*, of 98 guns. This ship was moored east and west, by bow and stern moorings, consequently the

starboard side was always exposed to the sun, both in summer and winter; in this situation her sides were painted in the usual manner of a ship of war, black and white, the greater part being black; this latter portion, on the starboard side, it was found impossible to keep tight; for as soon as one leak was stopped another broke out. At length it was suggested that painting her a lighter color might be of service; this was done; the leaks ceased, and they did not afterwards reappear. This occurred in an eastern port, but the injurious effect of black paint must be much greater in tropical climes, where the rays of the sun are much more powerful.—*Boston Cult*.

A NEW MATERIAL FOR ROOFING.—We learn from the Philadelphia Ledger, through the communication of a 'Mechanic,' that a new method for roofing houses has been invented by two gentlemen of that State, which is more durable than shingles, slate, or tin, as brilliant as glass, fire proof and water proof, red, blue, green, or any other color that may be desired; a non-conductor of electricity, a reflector of heat, cheaper than tin, lighter than slate; being vitrified, it is almost indestructible by time or weather, and so easily put on that the largest roof can be covered in a single day, if desired. It requires very little descent; a roof covered with this material may be made as flat as any tin roof without the least danger of leaking. Nothing short of actual violence will injure it. Should it come into general use, our cities will outshine the Kremlin of Moscow. When a house with a slate roof is on fire, the slates fly so that firemen are in great danger should they come near it, but this article, having passed through the fire in the process of manufacture, is not liable to this objection; its durability is such that it will last as long as the house.

WORKING ABOUT RIGHT.—The progress of improvement cannot fail to equalize the conditions of mankind, whatever its opponents may say to the contrary. The English farmers now complain that they cannot hire laborers so cheap as formerly, and the consequence must be a reduction of their produce, while the facilities of carrying their produce to market are still increasing. The rich landlords begin to find themselves more dependent on the laboring classes, than they have been hitherto willing to admit.—*Scientific American*.

A NEW FEATURE IN CATTLE SHOWS.—At the recent Agricultural Fair in Burlington, (Vt.) a Mr. L. Chase presented for premium three pretty female children, two and a half years old, born at a birth. The committee on Household Manufactures awarded him \$14—which was voluntarily contributed by the old bachelors present, who said they considered him a legitimate object of charity.

For the Genesee Farmer.

Oneida County Ag. Society.

EDITOR GEN. FARMER:—Our Agricultural Society held its Annual Meeting, on the 8th inst., at Trenton. Considering the day, which was stormy, there was a large attendance. The following Gentlemen were elected Officers for the year 1846:

DOLPHUS SKINNER, of Deerfield, *President*.

VICE PRESIDENTS:

SQUIRE M. MASON, of New Hartford;
HENRY RHODES, Trenton;
DAVID UTLEY, Weston;
CALVARY WETMORE, Vctor:
HORATIO SEYMOUR, Utica;
DAVID GRAY, Marcy;
ELI B. LUCAS, Kirkland;
JOHN J. KNOX, Augusta;
HENRY B. BARTLETT, Paris;
PLIMENT MATTOON, Vienna.

Cor. Secretary—JOHN P. BURGESS, of Utica.

Rec. Secretary—BENJ. N. HUNTINGTON, of Rome.

Treasurer—WILLIAM BRISTOL, of Utica.

Managers—ISRAEL DENIO, jr., of Rome; LUCIUS WARNER, Vctor; CHAUNCEY C. COOK, Kirkland; LEWIS BENEDECT, Vernon; LEWIS EAMES, Lee.

Premiums were awarded on 66 bushels, 56 54-60 bushels, and 41 9½-60 bushels Winter Wheat per acre: 34 bushels, and 28 40-60 bushels Spring Wheat, per acre: 89 bushels, 79 bushels and 48 lbs., and 75 bushels 12 lbs. per acre of Indian Corn: 63 bushels 27 lbs., and 63 bushels 9 lbs., per acre of Barley. Premiums on Root Crops, &c., were awarded at the same meeting. B. N. II.

Rome, Jan., 1846.

For the Genesee Farmer.

Inquiry.

EDITOR GEN. FARMER:—Can you, or any of your correspondents, give the manner of raising Sun-Flower Seed—the average crop per acre—the weight per bushel—and also the amount of oil that is usually obtained per bushel?

By answering these inquiries, in the next number, you will much oblige the undersigned, and perhaps many other subscribers.

Yours, &c. AMOS P. GRANGER.

Syracuse, Jan. 24, 1846.

REMARKS.—The above was received during the absence of the Editor, and just as our paper was being put to press. Will some correspondent who is acquainted with the subject, favor us with an answer to the inquiries of Mr. G., in time for our March number?

BOUQUETS.—The New York Herald states that between \$500 and \$1000 were expended for bouquets at a private *soiree* recently given by a resident in Park place in that city.

We are glad to hear this. A large portion of the superabundant wealth of "Gotham" must be spent upon luxuries, and certainly none so innocent or so beautiful as flowers.

There is yet hope for the New Yorkers.

State Agricultural Society.

THE Albany Journal of the 21st ult., says:—"The following persons were this evening elected officers of this Society for the ensuing year:

JAMES M. SHERWOOD, Auburn, *President*.

Vice Presidents.

1st Dis.—R. H. LUDLOW,	5th Dis.—R. JONES.
2d " A. BOCKEE,	6th " J. R. SPEED,
3d " E. P. PRENTICE,	7th " H. S. RANDALL,
4th " T. J. MARVIN,	8th " L. F. ALLEN.

LUTHER TUCKER, *Recording Secretary*.

J. B. NOTT, *Corresponding Secretary*.

J. MCD. MCINTYRE, *Treasurer*.

HOR. ALFRED CONKLING, AMI DOUBLEDAY, GEORGE VAIL, AMEROSE STEVENS, JOHN MILLER, *Executive Committee*.

The Committee recommended Auburn as the place for holding the next Annual Fair.

The Executive Committee are yet to pass upon this recommendation, but it will doubtless be carried out."

THE subjoined article was intended for the Horticultural Department, but overlooked until after that portion of our paper was arranged:

Grapes.

ON the last day of December, we saw beautiful Isabella Grapes sold in this city, by H. N. LANGWORTHY, Esq. of Irondequoit. They were as fresh, in appearance and flavor, as when picked from the vine—and, we think, even better. They were sold readily at one shilling per lb.

Every farmer can raise the hardy native grapes as easily as he can tomatoes, if he will but go about it. It is a great luxury to have grapes, and particularly of one's own raising, at this season of the year. We should like to see every garden in the country enriched with grape vines.—We will endeavor to give an article on the subject, in a future number.

MR. LANGWORTHY is a tasteful and experienced Horticulturist, in the fruit and vegetable departments particularly—and we would be glad to have him communicate some of his experience through our pages. P. B.

For the Genesee Farmer.

Apples.

WE have never known better specimens of apples in our market, than during the fall and winter of 1845. The labor bestowed in grafting and cultivating good fruit, for the last five years, is beginning to develop itself—and the time is not far distant when poor, common apples, as well as other poor fruit, will not be found amongst the fruit growers of Monroe County. The Northern Spy is justly a favorite; it keeps well and has blended just sweet and sour enough to make the best apple we ever saw.

The Red Canada is next best with us; and the Swaar, Spitzenberg, Yellow Belle Flower, York Pippin, and Holly Apple. Who, we ask, wants better fruit? We have them all, and are there-with content—for this time, at least. W.

HORTICULTURAL DEPARTMENT.

BY P. BARRY.

Further Remarks on the Culture of the Pear.

IN our last number, we presented a few general remarks on the Culture of the Pear, by way of stimulating Farmers and Fruit Growers to bestow that degree of attention on the subject which its importance justly claims from them.

We now offer a few practical suggestions that may be found servicable to some who may lack both experience and suitable books of reference on these subjects. The Pear is a noble fruit. We deem its culture of great importance to every land-holder in this country; and we shall therefore exercise diligently, our humble efforts, in commending it to general attention, and in diffusing the most essential information connected with it.

Soil.—The Culture of the Pear need not be confined to any *one*, or even *two* particular kinds of soil. We have seen it grow and flourish on a great variety of soils. Cold, wet, as well as dry, sandy locations, are two extremes that should always be avoided. Where a choice of soils is attainable, a deep loam, with a dry subsoil, is, as a general thing to be preferred. All sorts of Pears will not flourish equally well on the same soil. The habits of the tree and the character of the fruit, of many kinds, require peculiar locations and qualities of soil to perfect them—some requiring a colder, others a warmer, some deeper, others lighter soil. The experience of Pear growers in this country is as yet too limited to make such discriminations to any extent worthy of explicit confidence.

There may be cases, but they are very rare, and only when persons possess but a small garden or limited plot of ground, where none but moist cold soil can be had. The remedy here is to plant the tree nearly or quite on the surface of the ground, and raise the earth in the form of a hillock around it. This method is frequently resorted to where the subsoil is bad or unsuitable.

Choice of Trees and Culture.—Trees intended for standards, or orchard culture, should be propagated on seedling Pear stocks, and should not, to succeed well, be more than two years old from the inoculation, and about five to seven feet high.

The roots of the Pear, as is well known, are but sparingly furnished with fibres, except they have been frequently transplanted. Hence the necessity of transplanting them while young.

Pear trees of large size may be successfully moved if proper care has been previously taken to produce an abundance of fibrous roots—by pruning or shortening the large feeders or woody roots—by a method we shall presently allude to.

This transplanting large trees, however, is only necessary in this country where a tree happens to be in the way, or in an unsuitable place, or under some peculiar circumstances. Standard trees in orchard culture may be planted twenty-five to thirty feet apart.

The Pear is one of the most durable fruit trees we cultivate. A Pear orchard will live and produce abundantly, with little care, through three or four generations of men. The most remarkable Pear tree we have heard of, on this continent, not for its age however, is said to be in Vincennes, Illinois. We remember seeing an account of it communicated through "Hovey's Magazine," a few years ago, and it is mentioned in "Downing's Fruit and Fruit Trees." It is said to be about 40 years old: in 1834 it yielded 184 bushels of Pears, and in 1840 it yielded 140 bushels.

The old *Stuveysant Pear*, now standing in the upper part of the City of New York, is said to be upwards of 200 years old. So when a man has planted a Pear tree he has made a permanent improvement—one that will not only endure while he lives, but ages after him.

Such a Pear tree as the one just alluded to at Vincennes, would be quite a respectable legacy in this part of the country, equal to an annuity of at least \$200 per annum.

ROOT PRUNING is a comparatively new, but entirely successful method of arresting the luxuriant growth of fruit trees, and inducing fruitfulness. It is particularly applicable to the Pear, many varieties of which, if left to their natural course, would not bear for a great number of years. Mr. Rivers, a distinguished English Nurseryman, has practised this operation extensively and with perfect success. In the fall of the year, November, he digs a trench around the trees, a foot and a half deep,—(the distance from the tree should be proportioned to its size,)—and cuts off the ends of the large roots with a sharp spade. This he practices annually, supplying manure abundantly at the ends of the roots. This he says facilitates the thinning and gathering of the fruit, makes the gardener independent of the natural soil, and renders trees of fifteen or twenty years growth as easily removed as a piece of furniture. In the March number of the 6th volume of this paper we spoke of this operation, and gave a figure of a root pruned Pear tree, as grown by Mr. Rivers in the pyramidal form. We recommend the matter to persons who have unproductive fruit trees, but would suggest great caution—better to err in pruning too little at first than too much.

GRAFTING OR BUDDING ON THE QUINCE is a process resorted to for the purpose of dwarfing the growth and causing early fruitfulness. Its advantages are bringing it into popular favor in this country. Many of the finest gardens in America, in the vicinity of Boston, are well

stocked with trees of this kind. It is practised extensively in France and Belgium, where immense quantities of trees are thus grown. It requires, however, considerable experience to propagate in this way successfully. As many kinds, such particularly as are naturally hard and gritty, will not do well on the Quince, while others, for instance the "Duchess d'Angouleme," and many others of similar character are much improved by it. Trees grown in this way are peculiarly adapted for small gardens, they may be planted eight feet apart, thus enabling the proprietor of limited grounds to enjoy a great variety of sorts. Besides the fruit is easily gathered and is not exposed to the severity of high winds, so frequently destructive to crops of large fruit particularly. But the great object is their early and increased fertility. The author of the "New England Fruit Book" says:—"In the spring of 1840, we inserted a graft of the "Cabot" (Pear) into a dwarf stock, which was but one inch through at the butt, and in the fall of 1841 it bore from twelve to fifteen Pears." During the past season we have had a large number of trees bear abundantly only three years from the bud.

In propagating on the quince, budding is much preferable to grafting. Stocks should be chosen about as thick as a man's finger, and the bud should be inserted as low as possible, low or lower than the surface of the ground.

In transplanting the trees to the place where they are intended to bear, they should be set so that the point of union between the Pear and Quince should be at least an inch below the surface. The soil for Pears on Quince stocks should be deep and somewhat moist. The most advantageous, convenient and beautiful form to grow these trees in, is the conical, or as the French term it "*quenouille*." It is produced by allowing the trees to branch from the bottom and grow up in the form of a cone or pyramid. Where they are not naturally disposed to throw out side branches, they should be cut back in order to effect that object. The regular form of the tree must be preserved by thinning out superfluous branches and cutting back those of irregular growth.

The following figure represents a tree grown in this manner. Another consideration of some consequence in connection with this mode, is, the trees are easily transplanted. The quince, unlike the Pear, forms large masses of fibrous roots. We have removed trees of this kind, the past season, when in full bloom, that produced a fine crop of matured fruit. This could hardly be done with any other tree, and to some would appear almost incredible. One objection is frequently urged against these trees, which is, that they are short lived. They will not of course endure as long as the Pear would on its natural stock, but if placed on suitable soil, and carefully

attended to, they will endure at least one life time. But this objection is of little account when we consider how easily they are replaced. We have before us a letter from one of the most distinguished Amateur Horticulturists of America, who says, in speaking of the Pear,—"There are great advantages to be derived by placing the Pear on the quince, and when well managed, they attain a good old age.—I have trees of Glout Morceau, that bear me a barrel of fruit each, and promise many years to come. This variety succeeded remarkably well on the quince."

Those who desire more comprehensive and explicit information respecting culture, and the names and qualities of varieties, must purchase a standard work on the subject. The descriptive catalogues of many nurseries are to be had gratis, and will afford considerable aid in making selections. We shall, now and again, present figures and descriptions of *first rate* sorts. The BARTLETT, figured below, is a magnificent fruit.

Bartlett or William's Bonchretien Pear. (Fig. 5.)

In the eastern states, particularly around Boston, the Bartlett is as popular as the Virgalieu is with us—indeed, it is there considered almost perfection itself. It is always difficult to find good trees of this variety in the Nurseries, so great is the demand for them. This is not strange, considering its many valuable qualities.

It is very large, beautiful in appearance, and delicious. The trees bear very young. Last summer we had beautiful specimens from grafts only two years old, but they were set in a large tree. It is not extensively cultivated in this section yet, but we hope it will be. We saw, last season, very fine specimens that were raised in the garden of CHAS. M. LEE, Esq., of this city. It is an English variety, but is said to ripen better here than in England. It was imported to this country some 40 or 50 years ago.

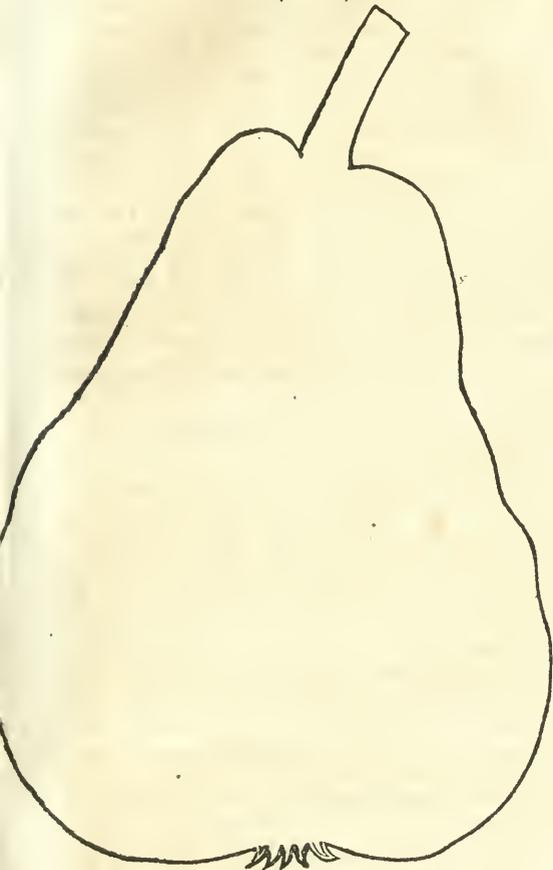
Fruit—irregularly pyramidal in form, very large— $3\frac{1}{2}$ to $4\frac{1}{2}$ inches in length, and 3 to $3\frac{1}{2}$ in diameter at the widest part. *Skin*—smooth, pale green, becoming clear yellow when fully mature—generally spotted and sprinkled with a light russet, with a tinge of blush on the sunny side. *Stalk*—about an inch long, very stout and fleshy, inserted in a very shallow cavity.—



Fig. 4. A Pear Tree, trained in the Conical form.

Calyx—large and open; basin very shallow, scarcely sunk at all; segment quite large.—*Flesh*—white, fine grained and melting—juice very abundant, highly perfumed and delicious. August and September.

(FIG. 5.)



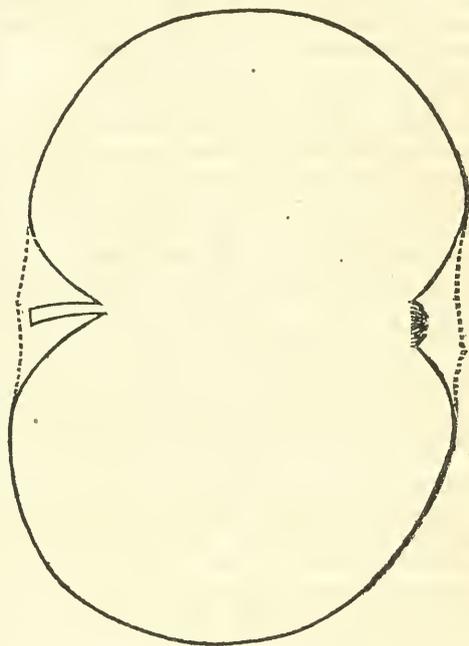
Laquier Apple. (Fig. 6.)

THREE or four years ago, we first saw the Laquier, in Perrinton, at the house of GIDEON RAMSDALL, Esq., who has a very extensive orchard, and many fine varieties. Since that time we have propagated it pretty extensively. A short time ago, a few specimens of it were presented us by H. FELLOWS, Esq., of Penfield. From one of these we took the above outline drawing. Mr. FELLOWS seems to be familiar with the history of its introduction to Western New York. He informed us that it was brought from Lancaster, Pa., by Col. ANTIS of Canandaigua, in the early settlement of the country, some 40 or 50 years ago. It was, at that time, a popular fruit among the Dutch inhabitants of Pennsylvania. It is a very handsome, high flavored fine Apple, and should have a place in every good collection.

Fruit—medium size, flattish and considerably furrowed. *Skin*—smooth and glossy, mostly

covered with a clear red. *Stalk*—short and rather slender, inserted in a rather deep cavity. *Calyx*—closed in a deep, wrinkled basin. *Flesh*—white, crisp, and very juicy. *Flavor*—high and pleasant. It is in eating from November to May.

(FIG. 6.)



A Horticultural Society.

WE understand that a few gentlemen recently held a meeting in this city, to take some preliminary steps towards the organization of a Horticultural Society. We were not present, in consequence of the time appointed for the meeting being changed, and we were not apprized of the change until within a few minutes of the stated hour—and then we happened to be engaged.

We do not exactly know what was done, but have been informed that committees were appointed to call a general meeting of the friends of Horticulture some time this or next month, and to prepare a constitution and other matters for that meeting to act upon. We wish the movement every success. A Horticultural Society in our region, if properly organized and managed, as we trust the proposed one will be, must be productive of vast benefits to the whole community. Farmers, merchants, mechanics—all will derive advantages from its influence, and we hope all will come forward promptly and interest themselves in its establishment and future success.

It might be deemed presumptuous in us to offer any suggestions thus in advance, as there are, among those who have embarked as leaders in the matter, older and wiser heads, by far, than ours. But the wise heads do not always rule—

more frequently the *cunning*, and it is against this that we would respectfully urge great vigilance to be directed.

We could refer to similar societies that have been split to atoms by designing, selfish spirits, being allowed to insinuate themselves into the management and control of their affairs. We trust that no such persons will be found in this society; but it would be strange indeed if there would not, and it will only be acting a prudent part to guard against them in time. There is a great deal in beginning *right*. No structure can or will be durable, that is not based on a sound and firm foundation. Neither can any society long exist, or accomplish its purposes, with any radical error or defect in its organization.

These suggestions bring to our mind an excellent article we saw in "Hovey's Magazine" for Nov. last, on the "Management of Horticultural Exhibitions," by Dr. W. W. VALK, of Flushing, L. I., a gentleman who has a splendid Horticultural establishment, and whom we know to be an honest, high-minded, enthusiastic promoter of Horticultural Improvement. In the course of his communication he lays down the following rules, which, in his opinion, should regulate all societies. We present them now, believing that they may be suggestive of some important ideas to our committees:—

First.—Competition should be invited in offering inducements for the production of such subjects as will materially add to the attractions of an exhibition, and further the *advancement* of the science.

Second.—Independent of their attractiveness, all subjects should be in season, or, with those who have the conveniences, capable of being forced out of season.

Third.—The number or quantity required should be consistent with the means usually at the command of all ordinary establishments; that is, for the sake of the exhibition and for competition, as large as can be produced conveniently,—not larger.

Fourth.—The quantity or number should be arbitrary in all cases, that all should be equal in their respective classes.

Fifth.—Those properties or qualities which the society estimates the highest, in every article exhibited, should be distinctly made known, so that exhibitors may clearly understand what they have to aim at in the cultivation of their productions.

Sixth.—There should not be permitted any competition in two classes with the same articles, or subjects of the same genera.

Seventh.—Dealers or nurserymen should not be allowed to exhibit in the same classes with amateurs, nor amateurs with professed gardeners. Each should compete separately.

Eighth.—The premiums for nurserymen should only be large enough to indicate the superiority of one over another, because they *already* have an interest in showing their productions.

Ninth.—The premiums should be large or small, according to the known difficulties of cultivation, or preparation for exhibition.

Tenth.—The premiums should be numerous or otherwise, this point being regulated by the presumed number of competitors who are able to exhibit.

P. S. Since writing the above, a call for the general meeting we alluded to has been handed in. We regret to see that an earlier hour was not fixed upon, so as to give our Horticultural friends in the country an opportunity of being present. We hope, notwithstanding, that as many as can possibly will attend.

FLORICULTURE.—The Rose.

ONE of the most prominent features in the progress of Floriculture, now, and for the past year or so, is the unusual attention bestowed on the *culture of the Rose*, and the production and diffusion of new varieties. Many of these are splendid almost beyond conception. Those known as Bourbons and Hybrid Perpetuals, particularly, are great favorites. The French florists have produced immense numbers of new varieties, of both these classes, and our nurserymen in this country have been prompt in importing them, so that they are within the reach of every one who has the taste to cultivate, and the means to purchase. Both classes mentioned above are hardy, and, by judicious management, produce flowers abundantly from June till November.

Among the Bourbons the *Souvenir Malmaison* ranks first. It is a magnificent cupped flower, of a delicate blush, and like all of its class, blooms in clusters. Price, in the catalogues, \$1.50.

Among the Perpetuals generally known, *La Reine* stands first. It is a superb cupped flower, rose color, very fragrant; when properly cultivated blooms the whole season. Price, in the catalogues, \$1.00. Many of the new perpetuals are priced at \$2.00 and 2.50. During the past season, we paid \$2.00 cash for small plants of both the above. The *Noisette* is another beautiful class of Roses, not quite so hardy as those just mentioned, but sufficiently so, many of them, to endure our winters with slight protection, and where they will not stand out with safety. It is very easy to take them up in October, latter part, and pot them or put them in boxes, and place them away in a cellar for the winter.

This class includes some of the most remarkable of the new and beautiful productions of the day. The celebrated *Chromatella* or *Cloth of Gold*—deep yellow, unique and splendid—considered one of the finest roses in the world.—*Saffraire*—saffron color, quite remarkable. It is a fine grower, and the flowers are large and double. Among the class called Austrian Briars, (*Rosa lutea*.) is the *Persian Yellow*. It is as perfectly hardy as the common single yellow—very double, and of a rich deep yellow. It is one of the most rare and popular of all the newly introduced roses. Price, in the catalogues, \$1.50 to \$2.00.

In ornamental gardening, *climbing Roses* are essential and beautiful objects, for covering walls, trellis work, arbors, &c. Among these the *Prairie Roses*, a magnificent class originated in our own country, stand pre-eminent. The old favorite, the *Single Michigan Rose*, is the parent of this beautiful class. We believe there are now some 18 or 20 varieties produced, named, and cultivated. *The Queen of the Prairies*, one of the first, is superior still to any of them we

have seen. The *Baltimore Belle* and *Perpetual Pink* stand next, and those who cannot afford the whole collection should procure these at least.

This is really an invaluable class. They are hardy, of strong rapid growth, large rich foliage, and the flowers are produced in immense clusters of 10 to 20 flowers and upwards in a single cluster or corymb. Besides, their blooming season is ten days to a fortnight after the June Roses are gone—which is a very desirable point. See article on the culture of this class in another place.

Acknowledgements.

Our thanks are due to our friend Mr. WILLIAM DALZELL, of Irondequoit, for beautiful samples of several varieties of Apples. Among them are Talman's Sweeting and Holland Pippin, the largest and finest we have ever seen.—We measured some of the latter that were 12 inches in circumference, and as perfect, in form and color, as they possibly could be. Mr. DALZELL'S orchard is on the very shore of Lake Ontario. Some years ago, before it came into his possession, it was much neglected; but is now, under his careful and judicious management, in a healthy and productive state. The location for fruit growing is unsurpassed: the peach can be grown in great perfection. We hope Mr. D. will avail himself fully of his advantageous position.

We are also indebted to H. FELLOWS, Esq., of Penfield, for samples of several fine varieties—among them are Laquier, Cabashea, Black Detroit, Rhode Island Greening, Esopus Spitzemburg, Peck's Pleasant—supposed to be—resembles it strongly, and if not, it is quite as good—and what he calls "Glostenbury Seek-no-further"—a reddish, streaked, conical shaped apple, slightly furrowed—form somewhat similar to an Esopus Spitzemburg. The flavor is rich and agreeable, and it keeps well till April. It is larger, and, we think, superior to our common and well known Seek-no-further. Mr. FELLOWS is an intelligent and enterprising fruit grower: he has an excellent apple orchard as well as other fine fruits, Pears, &c., and is now actively engaged in correcting the names of his varieties and enlarging and improving his collection.—We hope his example will have a good influence.

JAMES W. SIBLEY, Esq., of this city, has presented us with fine specimens of Vandervere and Hubbardson nonsuch Apples—both first rate orchard fruits, and worthy of extensive cultivation. We are indebted to Mr. SIBLEY for many favors of a like kind, during the past season.—He is an enthusiastic lover of fine fruits. We wish he could find it convenient to retire from mercantile business, and devote himself wholly to a pursuit that seems so congenial to his tastes.

READER, how many subscribers will you obtain for the current volume of the Farmer?

From Hovey's Magazine for Dec.

On the Cultivation of Prairie Roses.

ALL details of experiments carefully made, are instructive; and they are interesting in proportion to their successful results. Few persons, comparatively, are aware of the great beauty of the hybrid Michigan roses, or of the facility of their cultivation. They delight in an eastern exposure, on a light, rich, well-worked soil, with an abundance of most nutritious diet. I cannot better recommend their culture than by giving you the results of an experiment of my own, with a single plant of the "Queen of the Prairies."

Early in the spring of 1844, I purchased at auction a slight sprig of that variety, potted and in bloom. As, however, upon examination, it proved to be covered with red spiders, I then plunged the pot in an out-of-the-way corner of my garden as of no value. In May of that year, I cut it to the ground, washed it carefully, and transplanted the root to a warm border, where it has since remained. That season it made two shoots, some seven or eight feet high and of great strength. During the winter these were laid down and slightly covered.

Last spring, those two shoots, shortened to six feet, threw out, through their whole length, lateral branches, from twelve to fifteen inches long. At the end of each lateral there was a cluster of blossoms of great size and beauty, giving me, on the whole plant, over forty clusters. They commenced opening in June, were all very large and perfect, continued a long time, and were greatly admired.

Early last spring, the plant threw up two strong, vigorous shoots, which have continued their growth, with the utmost luxuriance, to the present time. They now measure over twenty feet in height, and are of corresponding size and strength.

After the blossoms had all matured, I layered the old shoots, and all new ones except the above two, carefully slitting the old wood on the under side, below each lateral, which I retained.—These have thrown out an abundance of roots.

In addition, therefore, to the original plant, with its two shoots of, to me, surprising growth and vigor, I have now some twenty-five smaller plants for distribution among my friends. This is the second year's product of a plant which has paid its way many times over in its beauty and its highly ornamental character.

CHARLES ROBINSON.

New Haven, Nov., 1845.

We trust the experiment of our correspondent, Mr. Robinson, will induce every one to cultivate the Prairie roses; not only the Queen, but the others, of which there are now fifteen or twenty, and some which are fully equal, if not superior to the former. Everybody who owns a foot of ground should plant at least one of the Prairie roses, and more if they have room.—Ed.

NEW SEED and IMPLEMENT WAREHOUSE.



GENESEE SEED STORE & 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 of 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.

RAPALJE & BRIGGS.

Rochester, Feb. 1, 1846.

ROCHESTER WOOLEN MACHINE MANUFACTORY.

B. F. SMITH,

Selye Buildings, Mill-Street, Rochester, N. Y.

The proprietor of the above establishment having had the experience of seven years' connection with the firm of *Goulding and Smith*, Worcester, Mass., and having every facility for procuring all improvements in the various articles of WOOLEN MACHINERY, used in the manufacturing districts, flatters himself that he will be able to supply the demands for this kind of Machinery, to the entire satisfaction of those who may favor him with their patronage.

He will manufacture to order, CARDING MACHINES, for manufacturing and custom work; *Jacks, Broad and Narrow Looms, Picking Machines, Gigs, Nappers and Brushes*, &c.

He will also furnish to order, MACHINE CARDS, SHEARING MACHINES, (broad and narrow,) *Reeds and Harnesses, Shuttles and Pickers, Comb Plate and Card Cleaners, Picker String and Lace Leather, and Manufacturers' Findings*.

Grain Bags.—The subscriber has a large lot of Grain and Flour Bags on hand, for sale at reduced prices.

Now is the time for all to supply themselves, as they must be sold. To be had at E. Watts' Hardware Store.

JAMES H. WATTS.

Rochester, Feb. 1, 1846.

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

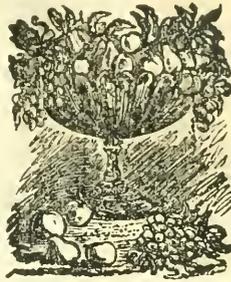
RAPALJE & BRIGGS.

No. 10, Front-st.

Clover and Timothy Seed—For sale at the Genesee Seed Store, No. 10 Front-st., Rochester.

Feb. 1, 1846.

RAPALJE & BRIGGS.

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

THE subscribers respectfully announce to their friends and the public, that their present stock which they offer for sale the ensuing Fall of 1845 and Spring of 1846, is the finest ever grown in Western N. York, and unsurpassed in quality by any establishment in the country.

The collection of fruits comprises the most esteemed varieties of the Apple, Pear, Peach, Plum, Apricot, Cherry, Nectarine, Almond, Grapes, &c.

The trees are well grown, thrifty, and beautiful, and have been propagated with such care as to ensure correctness. All are warranted genuine as represented.

PEAR TREES on QUINCE STOCKS for DWARFS and PYRAMIDS, can also be furnished of the finest varieties. These will bear the first or second year after transplanting, and are beautifully adapted to garden culture.

3,000 fine thrifty young trees of the famous New American Apple; the "Northern Spy," are also on hand.

STRAWBERRIES—All the fine new esteemed varieties, including Stoddard's new Alpine.

Also a large and fine collection of Ornamental Trees, Shrubs, Roses, (including a quantity of splendid *Standard or Tree Roses*, 3 to 6 feet high; Herbaceous Plants, Bulbous Roots, Double Dahlias, &c.

Our new descriptive catalogue will be sent gratis to all POST PAID applications.

Trees and Plants will be packed in the best style, and shipped to any port or place that may be designated.

It is for the interest of purchasers that they forward their orders now, without delay, that they may be executed in proper season. Address

ELLWANGER & BARRY.

Rochester, Sept. 1, 1845.

FARMERS, CURE YOUR HORSES!

GEO. W. MERCHANT'S CELEBRATED

GARGLING OIL.

AN Invaluable Remedy for Horses, Cattle and other domestic animals, in the cure of the following diseases:

<i>Fresh Wounds,</i>	<i>Fistula, Stifast,</i>
<i>Galls of all kinds,</i>	<i>Strains, Lameness,</i>
<i>Sprains, Bruises,</i>	<i>Sand Cracks,</i>
<i>Cracked Heels,</i>	<i>Foundered Feet,</i>
<i>Ringbone, Windgalls,</i>	<i>Scratches or Grease,</i>
<i>Poll Evil, Cullus,</i>	<i>Mange,</i>
<i>Spavins, Sweeney,</i>	<i>Horn Distemper.</i>

Also a valuable Embrocation for diseases of the Human Flesh.

Since the virtues of the Gargling Oil have become so extensively and favorably known to the farmers of the United States and Canada, as a curative oil in diseases of animals, and as a consequence, its demand becoming great—there has not been wanting those whose cupidity has suggested to them that if they could concoct something as nearly resembling in appearance as they could GUESS, with any thing for a name, they might urge it upon unsuspecting customers as a substitute for the true Gargling Oil. The proprietor would therefore CAUTION those who purchase to be sure the name of G. W. Merchant is blown on the side of the bottle. All others are an ATTEMPT at imitation, and are therefore an imposition.

For testimonials, synopsis of diseases, and mode of treatment, see pamphlet which accompanies each bottle.

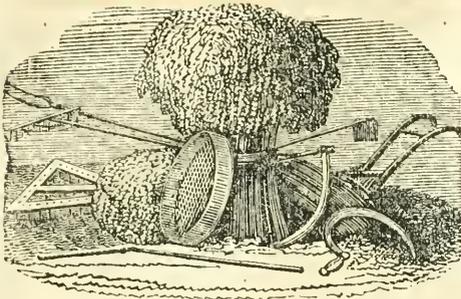
Sold at the ROCHESTER SEED STORE, and by Druggists and Store-keepers in the United States and Canada.

Corn Shellers!—A first rate article, price \$10, for sale at No. 10, Front-st.

RAPALJE & BRIGGS.

Wanted, at the Genesee Seed Store, 500 bushels Timothy and Clover Seed, for which the highest cash price will be paid by the subscribers.

RAPALJE & BRIGGS.



**ROCHESTER SEED STORE,
AND
WARE-HOUSE FOR FARMING TOOLS.**

DISSOLUTION.—The co-partnership heretofore existing under the firm of B. F. SMITH & Co. is this day dissolved by mutual consent. All accounts will be settled by JAMES P. FOGG, who will continue the SEED and TOOL business, at the old stand on his own account.

B. F. SMITH.
JAMES P. FOGG.

January 1, 1845.

The subscriber having purchased the interest of Mr. B. F. Smith, in the SEED and IMPLEMENT 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 seedsman 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; while those varieties of foreign growth, which experience has shown are the best, such as Cabbage, Cauliflowers, Brocoli, all the varieties of Garden and Field Turnip, Scarlet Short-Top Raddish, Scarlet and White Turnip-Raddish, Dwarf and Early Peas, with Twenty choice varieties of FLOWER SEEDS, have been imported by the subscriber from the long established house of R. WRENCH & SONS, of London.

FIELD SEEDS.

RED and WHITE CLOVER, TIMOTHY, BARLEY, Seed-Corn, Italian and Siberian Spring Wheat; Early June Potatoes, Marrowfat and other Field Peas, Rye-Grass, Orchard-Grass, Lucerne, &c. &c.

VEGETABLE GARDEN SEEDS.

A choice and select variety of PEAS, BEANS, CABBAGE, CAULIFLOWER, CELERY, BEETS, CUCUMBERS, MELONS, RADDISH, SQUASH, Herb-seeds, &c.

FLOWER SEEDS.

The collection of Annual and Perennial FLOWER SEEDS, contains many new and choice varieties.

AGRICULTURAL & HORTICULTURAL TOOLS.

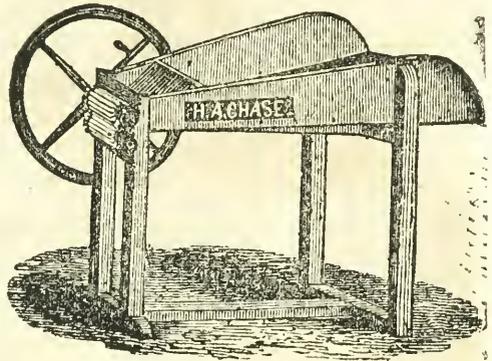
At the Ware-Room, adjoining the Seed Store, may be found an extensive and complete assortment of Agricultural and Horticultural Implements, embracing almost every tool used in the cultivation of the Farm and Garden.

SUPERIOR PLOWS.

The celebrated MASSACHUSETTS PLOWS, of three sizes, several hundred of these Plows, have been sold in Rochester, and vicinity, and have given entire satisfaction. Also, Deleno's Dimond Plow—Sub-Soil and Side-Hill Plows—The Gang-Plows—Two Horse CULTIVATORS, for working summer-fallows, and getting in wheat. Corn Cultivators, Root-Cutters, Corn-Planters, Drill-Barrows, Hoes, Shovels, Scythes and Snaths, Garden-Rakes, Corn-Shellers, STRAW CUTTERS, &c. &c.

Rochester, January 1, 1846. JAMES P. FOGG.

TO FARMERS AND OTHERS.



GENTLEMEN—I am now manufacturing and offering for sale, SANFORD'S PATENT STRAW CUTTER, in the City of Rochester.

Said machine was patented two years ago, and has this year for the first time made its appearance among you; and for cheapness, durability, and amount of work, I say it cannot be beat. It took the first premium at the State Fair, and at the Fairs of Onondaga, Wayne and Monroe Counties.

I now ask you to examine it, try it, and then buy it, if you please.

For sale at the GENESEE SEED STORE, No. 10 Front St., Rochester.

H. A. CHASE.

Rochester, Nov. 1845.

RECOMMENDATIONS.

I recently witnessed the operation of "Sanford's Perfect Straw Cutter," sold by H. A. CHASE, of the American Temperance House, Syracuse, and most cordially recommended said Machine to all persons wishing to cut straw, hay, or stalks, for food to be given horses or cattle. Simple in its construction, least liable to get out of order by use, and for ease to the operator, and despatch with which the work is done, it cannot be surpassed, if equalled, by any machine constructed for the same purpose that I have ever seen. Its operation is only to be seen to be admired, and the machine and its principle approved.

SQUIRE M. BROWN,

Elbridge, July 21, 1845. Prest. On. Co. Ag. Society.

MR. CHASE'S STRAW CUTTER.—The undersigned, officers of the Wayne County Agricultural Society, would express their commendation of the machine exhibited at our Annual Fair, by Mr. H. A. CHASE, of Syracuse, called "Sanford's Perfect Straw Cutter." We believe it is the best machine of the kind ever invented, and that its superiority and usefulness need only to be known to secure for it general adoption by our farming friends. Simple and substantial in its construction, and efficient in its operation, it performs its work in the highest degree of perfection, and is easily kept in repair. It cuts and mashes the straw, hay or stocks, in a manner termed by English husbandmen *chaffing*. Its low price brings it within the acquisition of every farmer, and we feel that it cannot be too highly recommended to the agricultural portion of our fellow citizens.

C. S. BUTTON, Newark, Pre'st.

D. KENYON, } Vice Presidents.

J. A. MILLER, }

SAMUEL E. HUDSON, } Ex. Com.

T. HEMINWAY, }

W. P. NOTTINGHAM, Treasurer.

Palmyra, Oct. 2, 1845.

CORTLAND VILLAGE, NOV. 19, 1845.—Mr. H. A. CHASE.—The Machine arrived safely, a couple of weeks since, and I have subjected it to a most thorough trial. You remember though we gave it the first premium at Utica,* I stated some objections to some of its details. I find I was mistaken. It cuts easier and faster, I think, than any machine with which I am acquainted. It takes one of my men but a few minutes to cut feed for six horses for a day.

Yours respectfully, HENRY S. RANDALL.

[*Mr. RANDALL was Chairman of the Awarding Committee on this class of Improvements, at the State Fair, Utica.

MARKET INTELLIGENCE.

ROCHESTER, Jan. 30, 1846.

THE weather is unfavorable for trade, and there is nothing doing in our Market. No Wheat in market, and no transactions in Flour.

Our foreign exchanges (received by the Hibernia, the last arrival,) contain no definite or important intelligence from the English Markets.

Rochester Produce Market.

(CORRECTED FOR THE GENESEE FARMER.)

Wheat,.....	1,00	a 1,06	Pork, bbl,.....	10,00
Corn,.....	50	50	Pork, cwt,.....	4,00 4,50
Barley,.....	30	50	Beef, cwt,.....	2,50 3,50
Oats,.....	32	35	Lard, lb,.....	7 7½
Flour,.....	5,25	5,59	Butter, lb,.....	12
Beans,.....	31	38	Cheese, lb,.....	6 7
Apples,.....	25	59	Eggs, doz,.....	12
Potatoes,.....	31	37	Poultry,.....	7
Clover Seed,.....	6,50	7,00	Tallow,.....	6 7
Timothy,.....	1,75	2,00	Wool,.....	33
Hay, ton,.....	11,00	12,00	Sheep Skins,.....	75 83
Wood, cord,.....	2,00	3,00	Green Hides, lb	3 7
Salt, bbl,.....	1,25	1,25	Dry ".....	6 7
Hams, lb,.....	5	6	Calf Skins,.....	5 6

NEW YORK, Jan. 27.

Flour and Meal.—There is not much doing for home use and the market is quoted at \$5,62½ for Genesee. For shipment there is some inquiry at 5,59, and some shippers have been in market and taken about 3,000 bbls. Genesee and Michigan at \$3,56½ for England. There is also some inquiry for France, and we believe a small sale was made.

Grain.—In wheat there is nothing doing. Corn is in considerable supply, and the sales are large including 15,000 bush. new Southern, part on private terms and part at 63½ a 64 ets. for distilling; 5000 do. South Jersey at 67½ ets. for export, and 7000 do Jersey at 68 cents.—*Tribune.*

ALBANY, Jan. 28.

Flour is sold at \$5,75 a \$5,87½ on Eastern orders. The receipts of produce continue as free as ever, and we have no change to notice in prices, except in Rye, which has declined and sells at 63½ a 69 cents.—*Citizen.*

BOSTON, Jan. 27.

Flour.—Market is more depressed and some sales of Michigan and Genesee have been made at lower rates. The transactions in Corn have been for yellow flat 68 a 70 cents, and white 67 a 69 cents; but few buyers at these rates.—*Courier.*

Western Markets.

BUFFALO, Jan. 30.

We are constrained to renew this morning the almost stereotype phrase of "nothing doing," in relation to the state of our produce market yesterday, as it expresses the actual condition of trade, as well as a volume of comment. The sales of produce and provisions are confined to the requirements of the retail trade, without material change in prices.—*Courier.*

DETROIT, Jan. 24.

There was a little improvement in the market yesterday. A few loads of flour of choice brands were sold as high as \$4,59, though the greater portion in the market went at \$4,37 a \$4,40. Wheat is in demand at 89 cents. Pork remains at \$4,25 a \$4,50.—*Adv.*

CHICAGO, Jan. 20.

Wheat came forward yesterday 2,143 bush., which was taken at a market range of from 77 to 80 cents.

Flour.—There is considerable coming from the country, which is taken at \$4,59 a \$4,62½. City mills, superfine, \$4,37. The receipts of wheat for the week ending on the 17th, were 21,317 bush.—*Journal.*

Horticultural Society.

THE friends of Horticulture are requested to meet at the COURT HOUSE, in the City of Rochester, on Friday evening, Feb. 29th, at 7 o'clock, to form a HORTICULTURAL SOCIETY, should it then be deemed expedient.

- | | |
|-------------------|--------------|
| MOSES CHAPIN, | Wm. PITKIN, |
| L. B. LANGWORTHY, | Wm. KIDD, |
| H. E. ROCHESTER, | ISAAC HILLS, |
| J. H. WATTS, | L. B. SWAN, |
| J. W. BISSELL. | |

To the Friends of the Gen. Farmer.

THE Publisher gratefully acknowledges his indebtedness to numerous Post-Masters and other prominent and influential friends of this Journal, for the large number of subscriptions received during the past month. If those who have already so generously set the ball in motion will continue their aid, and others assist in the good cause, our subscription list will soon be such that we can and will give our patrons a journal worth more than many of the dollar papers devoted to the same subject. [] Send on your orders, gentlemen—remembering that a large list is what will enable us to give you "the best and cheapest" Agricultural paper in the Union." (For terms, &c., see Prospectus.)

The Genesee Farmer.

VOLUME VII, FOR 1846.

THE undersigned, having purchased the Subscription list of this valuable and popular Journal, would announce to its Patrons and the Agricultural Public, that such arrangements have been made for its future publication as will render it still more deserving the patronage of all friends of Improvement.

Each Number of the next Volume, (commencing in JANUARY, 1846, instead of SIXTEEN, will contain TWENTY-FOUR LARGE OCTAVO PAGES,—will be printed on NEW TYPE, and GOOD PAPER,—and embellished with appropriate ENGRAVINGS. The paper will make a handsome volume of about three hundred pages, suitable for binding at the expiration of the year. No reasonable expense or effort will be spared, but every proper exertion used to make it acceptable to the Farming community, by rendering it at once the cheapest and best paper of its size and kind in the Union.

Its EDITORIAL DEPARTMENT will continue under the supervision of DR. DANIEL LEE, its present talented and popular Editor. Its HORTICULTURAL DEPARTMENT will be conducted by P. BARRY, Esq, an experienced and practical Horticulturist.

TERMS, same as heretofore—FIFTY CENTS A YEAR, in advance; 5 copies for \$2; 3 copies for \$3.

Now is the time to subscribe! and those who wish to do so, are requested to send in their orders as soon as convenient. Persons ordering the paper will please write plainly the name of the Post Office, County and State to which it is to be sent—and also state whether they have the January number. Post Masters, and other friends of Agricultural Journals, are requested to obtain and forward subscriptions for the Farmer. Post Masters may enclose money at our risk. Address D. D. T. MOORE,

December, 1845. Rochester, N. Y.

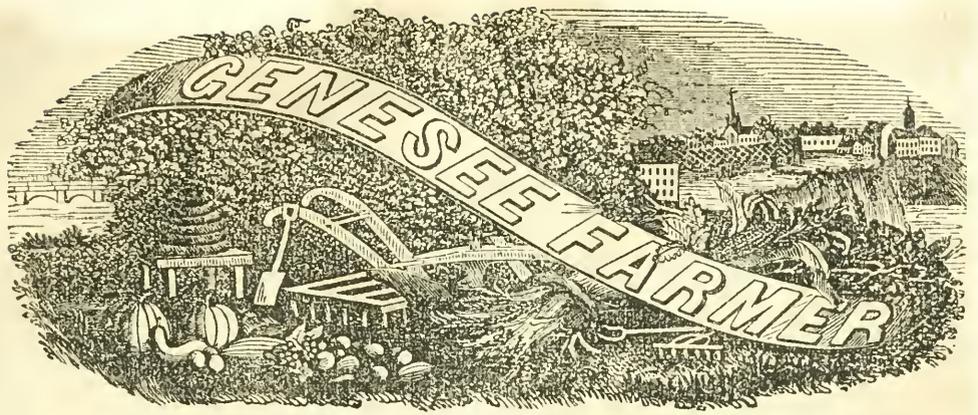
[] Editors will greatly oblige us by copying the above Prospectus; and to those who do so, we will send one or more copies of the Farmer, without an exchange.

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THE GENESEE FARMER:

Issued the first of each month, at 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 over the Rochester Seed Store, (2d story,) Front street, nearly opposite the Market.

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.

British Corn Laws.

Most of our readers will have learned through other channels the late important news from England, before this paper reaches them. We entertain scarcely a doubt on the point of Sir Robert Peel's strength in both houses of Parliament to carry triumphantly his great measure of reducing duties on bread stuffs, pulse and provisions, as well as on cotton, and many articles of foreign manufacture. How far the new Tariff will benefit the farming interest of the U. States is a question which time alone can solve. It is altogether probable that our maize or corn will be quite extensively consumed to fatten cattle, swine and sheep, and as food for horses and poultry. It will also be used in the place of barley, to make ardent spirits, of which a vast quantity is made in the United Kingdom. The duty on maize is not wholly to be removed, as is stated in many papers, but to be 1s. per quarter, or two and three-quarter cents per bushel. The like duty will remain on corn meal, buckwheat, and buckwheat flour. We do not think that the reduction to be made on wheat flour, and wheat, is sufficient to affect materially shipments to British ports. After three years the duty on these great staples is to be reduced to one shilling per quarter. The duty on tallow will soon be reduced one-half, or from 10s. per cwt., to 5s. The

duty on butter will be cut down from 20s. per cwt. to 10s. On cheese the reduction is from 10s. per cwt. to 5s. All salted and fresh meats are to be free, except hams. The duty on these is 7s. per cwt.

The European Times, published at Liverpool, makes complaint that American Pork and Beef are badly packed, cured and fattened for the English market. Those interested in the Provision trade with England, should look well to this matter. Since the tolls on corn have been reduced one-half on New York Canals, to take effect on the opening of navigation, i. e. from 4 mills per 1000 lbs. per mile, to 2 mills, we think that corn will be a good crop to grow in the western part of this state, either for export or to make into pork. One should have a good machine for dropping and covering the seed by horse power, and perform nearly all the after culture by cultivators and shovel plows—not forgetting to put ashes around the hills, or to scatter them broadcast. The growing of good winter apples in Western New York for English consumption, will be a grand business.

Western New York Agricultural School.

As the number of pupils that can be accommodated the coming season at the Institution above named, is small, those that desire their sons to attend should lose no time in sending in their names. A few young men, who are familiar with farm work, and desirous of learning how to analyze soils, will be received on very favorable terms. Our purpose is to furnish work to all we can, and allow fair wages for the labor performed. It is obvious that we can not fix a definite price for services, the value of which we can only know by a fair trial. We should be happy to make the four or five hour's labor performed each day by the pupil meet all his current expenses; but it is not probable that we shall be able so to do.

SEVERAL interesting articles prepared for this paper, (including the Premium List of the Monroe Co. Ag. Society, for 1846,) are necessarily deferred until next month.

A Leaf torn from an Unpublished Book.

CLOVER.

THERE are 7.7 lbs. of ash in 100 lbs. of dry clover. If this crop be taken from a field for a number of years, without making restitution, it will be found quite exhausting, notwithstanding the power of clover to draw its organic nourishment from the atmosphere. An acre of stout clover, when perfectly dry, has been known to weigh 3693 lbs., containing 284 lbs. of ash. This is some 80 lbs. more than is removed from an acre in a fair crop of wheat. It is useful to study the mineral elements of this plant in connection with those of wheat. In 284 lbs. of the ash of clover there are of

Phosphoric Acid,.....	13.00 lbs.
Sulphuric Acid,.....	7.00
Chlorine,.....	7.00
Lime,.....	70.00
Magnesia,.....	13.00
Potash and Soda,.....	77.00
Silica,.....	15.00
Oxide of Iron and Alumina,.....	00.90
Carbonic Acid,.....	71.00—233.9 lbs.

Throwing out of the account the 71 lbs. of carbonic acid, we have 213 lbs. of earthy matter. An acre of wheat needs, to form both seed and straw, 17 lbs. of phosphoric acid. An acre of good clover will furnish 18 lbs. That quantity of wheat needs 2 lbs. of sulphuric acid. An acre of clover will supply 7 lbs. The former needs 1 lb. of chlorine—a substance that forms 60 per cent. in common salt. Clover will furnish 7 lbs. Wheat (an acre) needs 16 lbs. of lime. Clover will supply 70 lbs. Wheat needs 13 lbs. of magnesia. Clover will supply 18 lbs. Wheat needs 24 lbs. of potash and soda; (and an excess.) Clover will furnish 77 lbs. Wheat needs 121 lbs. of silica; of which Clover can furnish only 15 lbs. Except silica, or sand, it will be seen that an acre of good clover yields all the several minerals needed by a crop of wheat; and some of the most valuable ones, in large excess. In its organic elements, the supply is not less abundant.

	Carbon.	Oxygen.	Hydrogen.	Nitrogen.
Clover has in 3693 lbs.	1750	1396	135	73
Wheat crop 3124	1437	1262	171	32

It is particularly worthy of note that Clover yields more than twice as much nitrogen as both the wheat and straw require. It is proper to state that to make 3693 lbs. of perfectly dry clover, one must have 4675 lbs. of common clover hay. But in plowing in clover for wheat, we gain all the stubble and roots, in addition to what the scythe clips in mowing.

It is not enough to apply gypsum to poor land to secure a large yield of Clover. In addition to deep, and thorough tillage, on many soils the application of wood ashes, lime and common salt will be found extremely useful. These are nearly identical in character with those found in the ash of this plant. Instead of plowing clover in, and mixing it up with the soil as a fertilizer, a portion of it can be made into mutton, wool, and

cheese, to good advantage. In the states of Ohio and Indiana where large herds of swine are raised by some farmers, much use is made of good clover pasture, to keep the growing animals, from the time they are weaned, till they are ready for fattening. Note the large per centage of the phosphate of lime to form the bones of young animals, and the earthy portion of their membranes and muscles, and the liberal supply of organized nitrogen to build up all nitrogenous tissues, and you will see the great value of this plant for the nourishment of all granivorous animals. No person in the habit of reasoning from cause to effect, would ever expect food like pure starch, oil or sugar, (which do not contain a particle of nitrogen,) to form muscles and membranes, that always have some 14 or 15 per cent of their dry weight, of this peculiar element. A hen cannot form a hard shell to her egg without lime, nor can a pig make bone without the phosphate of the same mineral.

A dog fed exclusively on starch, fat, or sugar, or on any compound of the three, and water, invariably dies before many weeks, from starvation. He can not change these compounds of carbon, oxygen, and hydrogen, into those portions of his system which require nitrogen.

The following analyses of lean meat, wool and cheese, will show how admirably clover is adapted to the production of those articles.

Physiologists distinguish three principal tissues in the bodies of animals; the Muscular, the Nervous, and the Cellular.

The muscular tissue was referred to by the common term, lean meat. It consists of an assemblage of contractile fibres, which acting on the bones as cords, give locomotion to the animal machine. Muscular flesh is always a compound substance; consisting of a contractile element called fibrine, abumen, fat, geletine, an odorous, extractive matter, lactic acid, different salts, and the coloring principle of the blood. Fibrine geletine and abumen, all contain nitrogen. 100 parts contain of

	Carbon.	Oxygen.	Hydrogen.	Nitrogen.
Animal Fibre,.....	52.3	23.7	7.0	16.5
Wool.....	50.65	24.61	7.03	17.71
Casene, (cheese,)....	53.5	23.7	7.0	15.0
Dry Ox Blood,.....	52.0	21.3	7.2	15.1
Horn,.....	51.99	24.10	6.72	17.23

There are about 2 lbs. of nitrogen in 100 lbs. of dry clover. Hence, if all the nitrogen in this plant went to repair the daily wear and tear of muscle, in a sheep, calf, or horse, it would require 825 lbs. of dry clover to make 16.5 lbs. of dry muscular fibre; or 100 lbs. to form 2. But there is no reason to suppose, that the whole of the nitrogen contained in food, goes to form the nitrogenous tissues of the system. More or less passes off without benefit to the animal. By carefully weighing the food consumed by different animals, and weighing them to learn the precise gain for every 100 lbs. of hay, grass or

provender consumed, we may ascertain whether a pig, sheep, or steer, gains the more muscle and fat for any given amount of food. From the very thorough manner in which sheep digest their nourishment, and from general observation, there is not much doubt in regard to the fact, that this animal will elaborate rather more good meat from 100 lbs. of grass, and particularly clover, to say nothing of its fleece, than any other animal kept by the farmer. Be that as it may, taking the wool into the account, and the short time required to bring sheep to maturity, or into productiveness, there can be no question of their great value when skilfully managed. That sheep can become fat on good clover, may be inferred from the circumstance that 100 lbs. of that plant contain 4 lbs. of oil, according to M. Boussingault, p. 421. To yield this, it must be early cut, and cured in the very best manner. In ordinary crops, 30 lbs. of hay may be made from 100 of green clover.

If you winter young cattle mostly on straw, try and give them a little clover each day, because, in 333 parts of wheat straw, there is but one part of nitrogen; while to form 333 parts of muscular fibre, the animal must have 54 parts, or 16.5 per cent., of this constituent of lean meat. It is because 1 lb. of clover hay is as good as 6½ lbs. of wheat straw to make into new muscles, or to repair the wear and tear of old ones, that I prescribe its use with straw, at least once a day in wintering stock. Remember that, in the dried blood of a young and healthy steer or heifer, there is 17 per cent. of nitrogen. In liquid blood there is a fraction less than 3 per cent. Hence, 1½ lbs. of perfectly dry and choice clover, will make one lb. of liquid blood, so far as nitrogen is concerned.

The science of forming pure, and healthy blood, both in man and beast, is sadly neglected in this age of great pretension, but of precious little sober thinking.

For the Genesee Farmer.

Profitable Farming.

DEA. CHARLES TENNY, of the town of Riga, Monroe County, the last summer, gathered from ten acres of land, (seeded to clover,) twenty tons of hay, the first crop, when the land was left to go to seed. The second crop was cut and secured; from which he thrashed thirty-five bushels clean Clover Seed, and about one barrel seed of second quality.

The produce from the 10 acres brought Mr. TENNY as follows:

Thirty-five bushels Seed, at \$7,00 per bush.,	\$245 00
One barrel Seed, at \$6,00,	6 00
Twenty tons Hay, at \$10,00 per ton,	200 00

	\$451 00
Expenses on above,	60 00

Profit to Mr. Tenny,	\$391 00
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Feb., 1846.

W. A. W.

The Analysis of Soils.

THE Editor of this paper is prepared to analyze soils in the most critical and satisfactory manner. He has incurred a large expense for Apparatus, and devoted, first and last, not a little time to the investigation of the subject.

Specimens of soil—a pound or so of earth is enough—can be sent, done up in a strong paper, to the office of the Genesee Farmer. An analysis of the surface soil, and subsoil will be made at five dollars.

The following is the analysis of General Harmon's soil, which we made in the Laboratory of Professor Emmons, in Albany, not long since:

SURFACE SOIL.

After the soil had been well dried in a warm room for many days, 100 grains had

Water of Absorption,	4.50 grs.
Organic Matter,	3.00
Silica,	75.67
Carbonate of Lime,	1.96
Oxide of Iron,	4.63
Magnesia (phosphate,)	1.00
Sulphate of Lime (gypsum,)	1.35
Alumina,	2.47
Potash and Soda,	traces.
Loss,	.37
	100.00

SUBSOIL.

Water of Absorption,	4.
Organic Matter,	3.40
Silica,	73.29
Alumina and Oxide of Iron,	13.03
Carbonate of Lime,	0.95
Loss,	0.23
	100.00

The above analyses are highly valuable in the cultivation of the soil referred to. First, they reveal the important fact that the soil of Gen. H's farm, contains a plenty of *magnesia*, *lime*, *gypsum*, and *iron*. Secondly, that it lacks *potash*, *soda*, and to some extent, *phosphoric acid*.

The deficiency indicated, will be supplied, by the application of *wood ashes*, a little *common salt*, and crushed *bones*. Ashes alone, as they contain some soda, chlorine, and phosphoric acid, as well as potash, will be of much service.

It takes about two weeks to analyze a single specimen. We have put the price much lower than the work ought to be done; but if we lose nothing but our time we shall be satisfied. Having the *tools*, of course we shall be happy to receive orders to use them.

For the Genesee Farmer.

Wood Seed—Inquiry.

A SUBSCRIBER of the Genesee Farmer wishes to obtain some *Wood Seed*. Should any person have it for sale, please give notice in the next Farmer, where it can be had, what price per lb., and directions how to cultivate, and prepare it for use.

Waterloo, 2d mo., 16th, 1846.

Will some correspondent answer the above inquiry, in time for our April number?—ED.

Proper Time for Cutting Timber.

SEVERAL correspondents of the New England Farmer are discussing the much mooted question, "At what season of the year ought timber to be cut or felled to be the least liable to decay?"

GEN. DEARBORN remarks that, "from experience, and the information I have received from various parts of the Union, I am fully satisfied that for wood to be used as fuel, or in the arts, the trees should be felled when they are in *full foliage*, and never after they have ceased to grow. Why timber is more durable when trees are cut down in summer than in winter, is a question in vegetable physiology which has not been explained,—and may not be; but the *fact* is undeniable."

This assumption of a "fact" is not only questioned, but, as the critic seems to believe, quite overthrown. Professor BRANDE and CUTHBERT W. JOHNSON are quoted to prove that "trees should be felled from the time the leaves begin to fall till they begin to bud."

The latter is the popular opinion among Authors, who copy from one another with a degree of carelessness, and lack of original investigation, not very creditable to the profession. So early as 1669, a law was enacted in France forbidding the felling of timber between the months of April and November. This was based on the common belief that trees cut in the season of their growth, made less durable timber and lumber than if felled when their foliage was off. Like most other old and venerated customs, this came to be questioned, and was required to pass the searching ordeal of modern investigation. Accordingly, the French government employed DUHAMEL, a gentleman distinguished for his science, and long experience in forest culture, &c., (being at the head of that department of civil affairs,) to test the question of the durability of timber cut at different seasons of the year. He found that the common opinion which *assumes* that a green tree has more water or sap in it in summer than winter, not founded in fact. The difference in the moisture when accurately measured by perfect drying, whether the tree be cut in June or January, is very small. The earlier decay of timber cut when the leaves are on, and the tree is growing, is attributable, not to an excess of sap in its trunk, but to its ascending to the leaves, and rapid evaporation, after the stem of the tree is severed by the axe, and the supply from the root cut off. When no more sap can pass up in the albumen (sapwood) atmospheric air enters all the sap vessels at the butt of the tree and extends quite up to the leaves, filling what would otherwise be a *vacuum*. If there was no green foliage on the tree, all evaporation from its vast surface of leaves would be suspended; and especially, if its sap was frozen, would its circulation be next to nothing. It is known that if the stem of a green plant be placed in a tum-

bler of water, its leaves will keep fresh much longer than they will if denied that advantage. Corn leaves curl up in July and August, and become partly dried in a hot sun, when they evaporate moisture faster than a parched soil can supply water to their roots.

Some may ask "what evidence is there that atmospheric air on penetrating the trunk and branches of a tree felled in June, will excite fermentation in its partly organized juices, affect injuriously its cellular tissues, and thus induce premature rotting, or decomposition?"

The process marked out by the Creator for the purpose of transforming organized vegetable and animal tissues, and other substances, back again into their original elements of air, water, and earth, is a *study* which cannot be despatched in a single paragraph. Suffice it to say, in this connection, that the *oxygen* of the air, *heat* and *moisture*, are the principal agents employed by Nature to accomplish this important work. In all the cells and tubes of all plants there is a nitrogenous substance, that is, a substance, unlike woody fibre, starch, oil, sugar, and gum, but like the sticky matter in wheat bread, and the white of an egg that contains nitrogen. In the presence of a due degree of heat, moisture, and atmospheric air, this *glutinous, albuminous, nitrogenous* substance, (we repeat the terms that they may be the sooner understood by all our readers) acts as a ferment (yeast) to ferment the whole lump. If a tree or stick of timber be well dried or seasoned, then fermentation or incipient decay is prevented. The same is true of lean meat. The chemical action of salt on the tissues of meat, wood and other organized substances, should be known to every farmer. A strong solution of common salt, chloride of lime, copperas, blue vitriol and other salts, may be made to permeate and fill all the pores in timber at no very great expense, and thus prolong its durability for an indefinite period. Timber has been so saturated with salts of *iron* as to answer in the place of iron rails for cars and locomotives to pass over. The logs are placed upright on end, and the solution is supported in contact with the cut surface above the end by water tight, gum-elastic bags. Entering the end of the log, the fluid passes down through it and drips like sap at the bottom. By taking off the pressure of the atmosphere from the lower end of the log, by the aid of an air pump properly adjusted, the solution descends far more rapidly. A good air pump for extracting the sap and air from a fence post and other timber, and filling the same with strong brine, will cost \$25. Among other chemical apparatus for experimenting for the benefit of agriculturists, we have purchased an instrument of this kind. It can be used probably to some advantage in curing meat. We have something to say on the latter topic, and the cheap purification of common salt for dairy purposes. At

present however, we must go back to our text. Timber should be felled when there are no leaves on the trees (except ever greens,) and should be seasoned under cover. If it is to be placed under water at once, then it may as well be cut in June as at any other season. Soaking timber in strong brine, constantly adding salt as it penetrates the wood, and the brine becomes weakened, is a practice older than Venice.

Human Progress and Elevation.

WE invite attention to the extract of an Address before the Farmer's Club in Junius by our valuable correspondent "S. W.," which stands for SAMUEL WILLIAMS of Waterloo.

Commend us to a man that has a living faith in the goodness of Providence, and the ability of the human race to improve alike, as physical, intellectual, and moral beings. To suppose that there is any necessity for cultivating a million acres in this state, and using nearly two millions of bushels of seed wheat, to produce *less* than fourteen millions of grain, is to assume that the culture of wheat must soon be abandoned in this country. And if we can exhaust the soil for the growth of wheat, the same bad system will render the earth barren in regard to other vegetables used as food for man. Every body knows that by unwise tillage a farmer may so impair the fertility of his fields as to make his crops cost him twice as much manure and labor as they need to cost. Hence it is that so many counties in New York are fast losing their rural population.

This system of depopulating rural districts, is now only beginning to be felt in this portion of the state. It will gradually increase for fifty years to come, unless we can make a common and successful effort to render agricultural labor quite as productive and valuable here, as it is in any new country west of us. It is only by the proper cultivation of the Intellect that controls and directs all farming operations in Western New York, that we can hope to produce all our crops at the least possible expense, and at the same time improve the soil on which they grow. God has made it our duty, and greatly for our interest to study the immutable laws by which He, through the sweat of the husbandman, changes crude earth, air and water into bread, meat, milk, wool and flax for the comfortable support of his rational beings on this planet.

Farmer's Clubs.

DR. LEE—*Dear Sir*: Although personally unacquainted with you, yet having become a subscriber to the "Genesee Farmer," and wishing all success as well to your journal, as to the cause of agriculture throughout the land, I venture to address you at this time, mainly for the purpose of requesting you again to press the subject of forming "Town Clubs"—a subject to which you adverted in the number for the pres-

ent month, in a leading article under the heading "Teach one Another." This is an important subject, and probably more so than will strike the minds of many of your readers, but who, having their minds again, or often, directed to it, especially at this season of the year, may give their attention at first, and finally be led to action. I simply suggest the subject to you, not knowing whether you intended referring to it again or not.

I hope, however, that, should you see no immediate good effects resulting from your advice and suggestions in said article, you will not despair, but persevere in a good and noble cause.

Yours truly,

AGRICOLA.

West Bloomfield, Jan., 1846.

MR. EDITOR:—We have organized in this town a Farmer's Club, for the purpose of collecting and disseminating facts connected with practical agriculture; and also to induce our working farmers to turn their attention to the improvement of the mind as well as the soil. As a means of accomplishing this, our first step is to procure a supply of Agricultural papers for general circulation and perusal; and I now send you with this, the cash for 60 copies of the current volume of your valuable "Genesee Farmer" for that purpose.

We also have regular weekly meetings of our Club, at which subjects are discussed having a direct bearing upon the great business in which we are engaged. The meetings are well attended, and much interest is excited; and we are not without hopes that great good will be the result.

Yours, &c.,

J. L. HOSFORD.

Castile, Wyoming Co., N. Y.

WE are grateful to our friend Mr. HOSFORD for the interest he takes in extending the circulation of the only Agricultural Journal published in Western New York; and in promoting the organization of Town Agricultural Clubs. There is not a town in the state west of Utica that should not receive at least 100 copies. To companies of eight or more, a work suitable for binding, of 300 pages, with illustrations, can be had at three York shillings. If the Editors and Correspondents do not make each of the twelve numbers worth the price of a year's subscription, they will fail to meet the just expectations of many friends, who have spoken of the Farmer.

Shall we not have the pleasure to announce in our next paper the formation of many new associations for mutual instruction, the advancement of agriculture, and the elevation of those that till the earth? Farmers must act together before they can accomplish the great work of placing their noble profession at the head of all the *learned* and *scientific* pursuits which are studied, and practiced in civilized life. That knowledge is power, and the lack of it weakness, are truths too apparent to gain anything by argument.

Lecture before the Junius Farmers' Club.

MR. EDITOR:—At the request of the Farmers' Club, Junius, I send you the following extract of my lecture, before that Club, on Friday evening last.

S. W.

Waterloo, Feb., 16, 1846.

“There are doubtless some farmers here present, who reason that, as agriculture has existed thousands of years, as an Art, without a scientific basis, it should thus continue a simple imitative art, to the end of the world. This would be good philosophy, my friends, if man had only the necessities of the lower animals; but being of a nobler nature, “created after the image of his Maker,”—gifted with superior intellectual endowments, for his own improvement, comfort and support—it is incumbent on him that he should give “evidence of the hope that is in him,” by the improvement of his talents, for the benefit of himself and his race; and that his talent should be neither misapplied, nor suffered to “rust in him unused.”

To make a good Priest, a Lawyer, or a Doctor of Medicine, a long and patient study of books is considered indispensable. To make a good Mechanic, at least some knowledge of mathematics is necessary, before he can be instructed to frame a common building, or to construct any article requiring a given power, regularity, or motion. But ask a farmers' opinion, what it takes to make a good Farmer, and he will place his art in an intellectual position, far below that of the mechanic; ten to one he will place it on a level with that of the wood-sawyer, or the hod-carrier. Make farming, what God in the beginning designed it to be, an intellectual science, and you rid the drudgery connected with it of half its terrors. But as long as a farmer pursues his calling mechanically, without other light than traditional practice, or the vagaries of the crazy moon, just so long he will be a hod-carrier—stimulated only by the most sordid of the passions, the love of gain, or the fear of want—just as his fellow laborer, the Ox, is stimulated by the fear of the lash.

Ask Professor LIEBIG how much he would take to work all day in a Chemical Laboratory, among the fumes of liberated acids, without taking note of the combinations and results produced there, and he would tell you that he had rather work so long on a tread-mill. Every man's farm is, on a grand scale, a Chemical Laboratory; yet how many farmers daily perform thereon a tread-mill business! How often, how many thousand times, I have heard a farmer complain of the hopeless, ill-requited drudgery of his calling. But whoever heard an experimental Chemist complain of the drudgery of his noisome vocation. Did the great FULTON ever complain of the drudgery of his labor, in perfecting the steam engine? I presume not; for here the immortal mind lifted

up and sustained the mortal body. Let the farmer thus study the science of his great art, and in the same manner will his body be sustained in its labors, by the unfolding beauties of nature, as disclosed by the never failing regularity, and consistency, of nature's laws.

It is not necessary, that every farmer should be a practical chemist; it is sufficient for him to know the theory of that simple organic chemistry which pertains to the earth's vegetable products. He can learn from books or agricultural papers, the analyses of the ashes of the grain and plants he produces. Here he will see that wheat contains more of the phosphates of lime and potash than any other grain; and that common wood ashes, crushed, or calcined bones, poudrette, urine, &c. &c. will furnish these phosphates to the soil in larger quantities than any other known substances. He will here learn that the whole structure of vegetation, except the ashes, is composed of four simple atmospheric gasses, to wit: carbon, hydrogen, oxygen and nitrogen, the latter substance is combined with hydrogen in the form of ammonia. He will here learn, also, the manner in which these gasses are evolved in the soil, and assimilated by the growing plants; the action of manures, the two-fold office of lime, and the alkalies, both as the inorganic constituents of plants, and as solvents of other matter in the soil, as ready food for plants.

If England had our wood ashes, the bones, horns, hoofs and urine of animals, wasted in this country, it would save her millions of dollars expended for imported manures. But we are fast paying the penalty of our reckless waste of God's bounties. The average yield of wheat in Seneca county is now computed at eleven bushels to the acre; in England, it is not less than forty imperial bushels to the acre. But if England beats us four to one in the production of wheat, how much more would she exceed us in the growth of Indian Corn, if her climate permitted its acclimation? How often have I passed a corn field early in the season, the weeds above the corn; when fairly stunted the farmer hoes it, and the drought takes it. Verily, say I to myself, this farmer must be a rich man, or he could not thus afford to fence, plough and plant a field, and then throw away the crop! Ask this man in the fall how his crop turned out, and he will tell you the drought almost destroyed it. Truly the mercy of God is long suffering, or he would turn this man to a pillar of salt, for thus belieing his most gracious blessing, the warming influence of the sun. I have often heard of a season too hot for Indian Corn, but I never yet saw such a phenomenon in this climate, on a tenacious soil. 'Tis true that when you do not plant early, manure high, and till often, drought may curl the leaves. But in my garden I grew this dryest of dry seasons, the greatest yield of Indian Corn, to the rod square, that I ever saw grow on the earth's

surface. The whole secret of growing Indian Corn, is, in so manuring and tilling the soil, that the atmospheric gasses can penetrate it; the laboratory of nature is fed, as the oxygen of the air feeds the fire; the grand product is, carbonic acid, and ammonia, the main constituents of all vegetation.

Ask a farmer to subscribe for an Agricultural paper; ten to one he will tell you that he don't believe in *book farming*. Tell him that there are some things he has not learned; and he will present to the mind's eye, the figure of a hedge-hog, armed at all points, against all that is written. Do I say too much, when I pronounce such a man as "lost to nature and her charities"—dead to himself and to all human progress. I can only compare him to the mutineer in the play, who, when asked if he had hope of heavenly bliss,

"He sank, and made no sign!"

Such men seem to think, that the fat things of the earth are their indefeasible right; and they go on, wasting and exhausting the earth's surface, with a recklessness akin to that of the fool, who says, "there is no God."

If I was asked why the noblest of all callings, the science of Heaven endowed Agriculture, has so long been behind other sciences, in progress and improvement, I should attribute it, mainly to the isolated life of the farmer. The good book says, that the "face of the man sharpeneth that of his friend." There is great practical good sense in this scripture. In cities and villages, this sharpening creates emulation, diffuses knowledge, the love of books, and gives a spur to genius. 'Tis said that the diamond has originally a rough exterior—that nothing can thoroughly bring out its lustre, but the friction of diamond against diamond. Hence, my friends, the importance of Farmers Clubs, where men meet together, as we have met this evening, for mutual improvement. Such frequent intercourse, and interchange of opinions, will do much to elicit information, sharpen the mind, and to bring out its powers. Man, in an uncultivated state, is a vain, bigotted, egotistic animal—wedded to his own errors, and to the errors of his education. When he lives always alone, shut out from society, without reading or other mental instruction, he becomes emphatically a poor creature! His highest ambition is to excel his fellow at mowing, or chopping—attributes depending on that strength and activity, which he only holds in common with his ox, or his horse! The beast of the field has instincts unerring, which are sufficient for him; but man stands in piteous need of reason, religion, and the lessons of experience, to restrain and direct those passions aright, which otherwise never fail to precipitate him into hopeless errors, and degrading superstitions.

* * * * *

Laboratory—a room fitted up with apparatus for the performance of chemical operations.

Relative Value of Hay, Roots, and Grain.

DR. D. LEE—*Dear Sir*: I should be glad if you would publish a table in your valuable paper, showing the relative value of the different kinds of roots, say Beets, Carrots, Turnips, &c., compared with Corn, Oats and Hay, to feed stock.

I would like to learn the benefit, if any, derived from the steaming of hay and straw, for the feeding of cattle and horses.

I have just received the January number of your paper, which is the first paper I have taken on the subject. It has awakened in me a good deal of anxiety to obtain information in relation to the subject of Agriculture.

Respectfully yours, A. KING.

Albion, Erie, Co., Pa., Jan. 25, 1846.

REMARKS ON THE ABOVE.

In 1000 lbs. of Potatoes	there are	750	of water,
" " " Turnips,	" " "	925	" "
" " " Beets,	" " "	878	" "
" " " Carrots,	" " "	876	" "

Our correspondent will see by the above figures that there are only 25 lbs. of dry matter in 100 of potatoes; and barely *seven and a-half* lbs. in 100 of turnips. Two bushels of beets or carrots are equivalent to one of Potatoes, and three of turnips are about equal to one of that valuable tuber. It takes about 280 lbs. of potatoes to supply the place of 100 of good meadow hay, to feed cattle, horses, and sheep; and 560 lbs. of carrots or beets, and 840 of turnips. These statements are made on the authority of Boussingault, who carefully weighed the hay and other food, as well as the animals fed for months together.

All food is rendered more digestible and nutritious for being cooked for man and beast.

Taking wheat flour as the standard of nourishment and placing it at 100, it will take to form an equivalent

119	lbs. of	Barley Meal,
108	"	Buckwheat Flour,
138	"	Corn Meal,
67	"	Peas,
171	"	Rice,
613	"	Potatoes, (moist,)
126	"	Potatoe Meal,
757	"	Carrots,
1335	"	Turnips,

These equivalents are founded on the *lean meat-forming* principle contained in the above articles of human food, and not on their *fat-forming* elements. The element that governs the lean meat, or muscle forming process in the animal system is called *nitrogen* or *azote*. Wheat flour will make more or less good bread, according as it contains more or less *gluten*—a nitrogenous substance that forms a kind of gain, when children chew wheat. How to raise wheat rich in gluten, is a point in practical agriculture of great importance. We shall allude to it in due time to benefit the crops now on the ground.

As the brilliancy of the diamond is increased by friction, so is truth by investigation.

For the Genesee Farmer.

Manures—Their Application.

On the subject of Manures much has been written and much has been said ; still it is fertile and full of interest. The subject cannot, in my opinion, be too frequently agitated, or brought into view, nor too strongly urged.

When we consider how much the productiveness of our farms depend on the manure heap, and how much this matter is at times neglected, a few remarks, I trust, will not be unacceptable, and although familiar to most of you, if they stimulate one person to apply them, who has hitherto neglected to do so, the object in making them will be attained.

The collection and application of manures I consider to be the grand secret in good farming. It gives us grass and grain. It is by a liberal application of manure that extraordinary crops have been obtained. It is consequently an object of minute attention to collect as much as possible, and to apply it in the most advantageous manner. Although there is little danger of applying too great a quantity to land, it may be used to excess. Indian corn is a voracious feeder, and will bear a copious dressing, but the crops of small grain may be injured by manuring too highly.

Manuring the soil forms a grand item in farming, both on account of its expense and its need to replenish the land; it is therefore very important to know the art of managing this department with the greatest economy, and preventing waste in any possible shape.

Very few farmers ever have a sufficiency of animal manures for their purposes. Hence recourse must be had to other means for augmenting the manure heap.

The great principle of all manures may be understood from this fact, that whatever animal or vegetable substance dies, is converted into manures for other plants in a living state by the natural process of putrefaction. By this process it is gradually, but effectually decomposed; and the parts are fitted for entering into new combinations, and for adding to the substance of the living plants. Thus, instead of nuisances, Nature furnishes manure, and no substance whatever is lost. This is one of the beautiful and admired laws of Nature; and though we cannot investigate her very minute operations, we are able, by observation, to learn much, and by industry to derive great advantages.

A great deal has been said about the fertility of plants. Pulverised earth, water as an excrement, carbonaceous matter in a soluble state, and various gaseous substances have been successively in repute; some plants have been supposed to draw part of their food from the atmosphere, in a larger proportion than others; and it has been thought that grain and green crops require to be supported with food proper to each class; and

that one particular crop, on that account exhausts the substance on which it feeds if too frequently repeated.

Practice has introduced more discoveries into agriculture, assisted by observation, than science. At the same time, though the man of science will not presume to dictate to the skilful practical farmer, he may not only improve but enlighten, and even give dignity to agriculture as an art, by rendering it in some degree a science also.

The application of manure depends on the natural state of the soil, and on the purposes for which it is to be applied. Observation and experience determine how to act and what to apply; also how and when the application should be made. Yet it would be of important use to the farmer, in remarkable cases, to call in the aid of science. Many expensive trials have been made in redeeming some soils, or turning them to useful purposes in vain.

The farmer knows, or ought to know, that some soils want solidity, and others have too much; that some exceed in cohesion, others in looseness, and that a moderate degree of these properties is considered essential to fertility. With this view, sand is applied to tenacious clay; and clay on sand and gravel. But these applications are not made in the strict order of manures; they are mechanically wanted, in order to give to the soils a proper consistence for admitting plants to grow in them, and to push their small roots without losing hold, and at the same time to feed in a regular manner, imbibing in just proportion the moisture and nutriment it contains without being either parched or burned.

Putrid manures applied in proper quantities furnish direct nutriment for plants; and calcareous manures probably do the same, in some degree; but they certainly furnish it indirectly, by resolving organic substances contained in the soil into a mucus assisted by moisture. At the same time these manures are always productive of mechanical effect, in opening and deepening the soils to which they are applied.

From my own observation and experience, I have come to the conclusion that manure arising from animal and vegetable substances, should be exposed as little as possible to the sun, the air, and drenching rains, and when applied to the soil, be immediately plowed in. It is my opinion also, that manure, when plowed in, cannot be kept too near the surface, provided it is well mixed and covered that the essence will be dissolved by rain, and taken up by the roots of the plants. So extremely minute are the mouths of the plants, that the nourishing parts of manure can enter there only in a state of solution by water.

My object and great aim is to make and get manure; and to carry this into effect, nothing that would contribute in the least degree for increasing the manure heap is thrown away. I

have always made it a practice of converting every article of rubbish and filth about my premises, weeds, and coarse grass around the fields and fences, into manure; and have even hauled saw-dust, turners chips, and sumac leaves, from the morocco dresser, to bed my cattle and absorb the urine previous to mixing in the compost heap. I also haul anthracite coal ashes from the city, on which I set a high value for a top dressing on my meadows.

But however correct and economical may be the manner of saving and applying manure, the quantity, it cannot be denied, still falls short of the farmer's wants. How to supply this deficiency merits the deepest attention of the husbandman.

I am an advocate for compost, and for that purpose I mix all the produce of the cattle-yard, the sheep yard, the horse stable, the pig sty, and the poultry house.

The dung of the hog, owing to the greater fatness of the animal and the nature of its food, is the richest and strongest; that of the horse the most heating; that of cattle the coldest but the most durable. The dung of sheep is quick in operation; therefore the mixing of cattle, horse, hog, and sheep dung for all kinds of soils and all kinds of crops is always to be preferred, as the one corrects the defects of the other, and prevents the fermenting process from going on too rapidly.

The utility of fermented dung is proved from the little advantage derived from what is dropped upon the ground, and has not undergone that process. In the course of its being fermented, also the seeds of weeds and the eggs of insects are destroyed.

My yard is dishing, still it sometimes overflows, and where the excess passes off, I cause a basin to be excavated to retain the liquid. Near this basin, which is outside the yard, I place my compost heap, which I commence with a layer of yard manure, about one foot in thickness; then a layer of soil; then a layer of green weeds; then a coat of shell lime and ashes; then a layer of turf; then a layer of horse, hog, or sheep dung; then a coat of soil, and so on, with such materials as are available. In short, every thing of a fertilizing nature is placed in the heap, carrying up the sides square until the pile reaches to the height of from five to six feet. As the heap progresses, each layer is saturated with the liquid which escaped from the cattle yards, and then covered with fine soil to prevent the escape of the volatile parts of the manure, and in the next place, to absorb the gasses, so that the soil used for a covering becomes itself a valuable manure—a point long since established by the practice of many enlightened farmers. After remaining a sufficient time I cause the whole heap to be carefully and completely turned and mixed, throwing on liquid manure as the work progresses. A

fermentation soon takes place, sufficient to destroy the vitality of the seeds of such weeds as may find their way into the heap. After two turnings it generally gets completely broken down and comminuted. By mixing a small quantity of salt to the heap, I have no doubt it would add greatly to its fertilizing properties.

In this way I have added from one hundred to one hundred and fifty loads of good manure per year.

I have used with good success bone dust, horn shavings, bristles, salt fish, and poudrette. They are all highly concentrated manures, and are valuable for the immediate crop, but for after crops and enriching the soil durably, give me the compost heaps.

I once had great faith in the use of gypsum, but after several experiments with it, I became satisfied that it was of no benefit on my soil, and I have therefore abandoned its use altogether.

C. N. BEMENT.

Albany, Feb., 1846.

WE commend the above article to the careful study of all young farmers.—Ed.

To Correspondents.

Mr. G. W. BARR, of Erie, Pa., asks us to publish in the Farmer "a Plan or Constitution for a small Agricultural Society." This paper was too far made up when his note came to hand to permit us to do so till the April number, when his wishes shall be complied with. There are six or eight choice farming counties in Western Pennsylvania, each one of which is capable of maintaining a most efficient and useful Agricultural Society.

"FARMER C.," of Sodus, is informed that his letter has come to hand, and that the subject to which it relates—the supposed collection of *nitre* in old heaps of leached ashes—will be attended to in our next.

Mr. DAVIDSON of Loudon Co., Va., has our thanks for the *grafts* of valuable Apples which he has sent us. His interesting letter, describing this fruit, came to hand after our March number was in type. It will appear in the next paper.

"NIAGARA" has our thanks for his short and pithy articles on the culture of Potatoes and the Disease in the same; and the Extirpation of the Canada Thistle. These Communications will appear in our next.

Several other Communications and Inquiries, recently received, will have early attention.

TAYLOR'S STEAM FACTORY.—Mr. E. TAYLOR, No. 6, Hill Street, of this city, has put in operation a good establishment for the manufacture of all kinds of Farming Implements—such as Fan-Mills, Corn Grinders, Corn and Seed Planters, Scythe Snathes, Straw Cutters, Patent Churns, &c. &c. Mr. T. also manufactures a great luxury in the shape of an admirable apparatus for *Vapor and Shower Baths*.

Preserving Timber.

MESSRS. EDITORS:—I learn by the "Rail Road Journal," that some spruce cross ties on one of the Massachusetts Railroads, composed of sticks 7 feet long and 6 X 6 inches square, had recently been impregnated through the pores with sulphate of copper, by way of experiment, to try the effect as to preserving it.

Basswood is very light, soft wood, and noted for its decaying qualities, it is not used for timber in any kind of out door work for this reason, we have no timber that rots in a shorter time than basswood.

In 1834, I impregnated some basswood with a strong solution of blue-vitriol, (sulphate of copper,) it was seven feet long, ten inches wide, and three inches thick, green, with the bark on, cut in June. This stick lay six years partly buried in the ground. I then took it up and made a thorough examination, and was surprised to find it so wonderfully preserved, in every part, even the bark was solid, and adhered together as firmly as when first cut. I then examined the remaining portion of the tree, and found it almost wholly decayed, having been left on a side hill, rocky land, where it had fallen.

This stick has since been exposed in the same way to wet and dry, heat and cold. Last summer I made another examination, and found it to all appearance, as sound as when first cut, every portion of it was examined also, by cutting and splitting off a piece.

Whether I am the first that has discovered the wonderful preservative qualities of blue-vitriol applied to green timber, I know not.

The woody part of most kinds of timber in full vegetation is only one-third, the other two thirds is composed of sap and air, about equal quantities. I think the above solution might be freely infused into living timber by capillary attraction.

S. W. JEWETT.

Waybridge, Vt., 1846.

[Boston Cult.

REMARKS.—Our friend Mr. J. will find it difficult to prove that the air in green wood weighs half as much as the water and solid matter, found in "green timber." Perhaps when he says that one third of green timber is "air," he means in bulk, and not in weight. Most of the air that circulates in the trunks of trees is contained in their sap, and the percentage is small. 100 parts of green walnut dried at 212, lost 37.5 per cent of moisture; 100 parts of white oak lost 41 per cent; 100 of white maple, 48 per cent.—Boussingault estimates the average of water in green timber at 40 per cent; one half of which only is dissipated by seasoning in common air.—100 lbs. of dry wood, whether pine, basswood, or hickory, evolve equal quantities of heat on burning. Mr. Jewett's experiment is alike valuable and interesting; although the same process had been practiced many years ago.—ED. GEN. FAR.

Mineral vs. Barnyard Manure.

PROF. HENRY D. ROGERS, in his report on the Geology of New Jersey as copied by Prof. Hitchcock, (Geology of Massachusetts, page 94,) says:

"Mr. Woolley manufactured a piece of land in the proportions of 200 loads of good stable manure to the acre, applying upon an adjacent tract of the same soil, his *marl* (green sand of N. J.) in the ratio of about 20 loads per acre. The crops (timothy and clover,) were much the heavier on the marled land, with this additional advantage, that the plot fertilized with the fossil manure was entirely free from *weeds*, while the stable manure had rendered its crop very foul."

This marl, according to Prof. Roger's analysis, contains 10 per cent of *potash*.

Why, we ask, was one load of this "fossil manure" worth a good deal more than 200 loads of "good stable manure?"

Answer,—Because the former contained more of the essential mineral elements of timothy and clover than the latter. There was more *potash*, *lime* and *phosphoric acid* in the 20 loads of marl, than in the 200 loads of stable manure. Hence it often happens that a farmer might be the gainer by exchanging 2000 lbs. of barnyard manure for 100 lbs. of pure guano.

For the Genesee Farmer.

Ashes as a Manure.

MR. EDITOR:—I like your views on the subject of ashes as a manure. It is nearer to the true fertilizer of the soil than any other within the reach of the farmer. From my experience I think a bushel of unleached ashes worth more than two bushels of plaster, on any crop—particularly if applied as a top dressing, and not on too low and wet land. Its operation is quick, and not perhaps as lasting, on the the grasses as plaster—but, for summer crops, altogether preferable. So convinced am I of this fact, that I get the dogs out as soon as I see an ash pedlar come within sight of the house!

Its effect is better on loamy and sandy soils, than on clays. Mixed with plaster it operates well on corn—and, with plaster and common soot, on wheat and grasses, sown the first dry days in the spring. It is the solvent for the siliceous or flint, that is the glazing and one of the components of straw, hay stalks, and the frame of every kind of grain that is cultivated.

Plaster costs about one shilling per bushel, and the ash men only pay 8 to 10 cents for ashes; and it must be very bad economy to sell ashes to buy plaster with. A mixture of plaster with ashes, sown broad-cast on corn before the first hoeing, operates just as well as applying it to the hills—at least such is my experience.

Feb., 1846.

I.—Y.

Mineral—Any natural substance of a metallic, earthy, or saline nature.

Farmer's and Mechanic's Society of Raisinville, Mich.

WHEN we wrote the brief article under the head "Teach one Another," published in the January number of the Farmer, our thoughts were confined to Western New York—little dreaming, that we should stir up the tillers of earth in Pennsylvania, Ohio, and Michigan, to a sense of the importance of forming Agricultural Associations. Such, however, seems to have been the case, if we are to credit the statements of many friends who have written us on the subject.

Mr. LEONARD SACKETT of Raisinville, Monroe Co., Mich., remarks that "the organization of our Society is owing to the perusal of the article in the January number of the GENESEE FARMER, headed 'Teach one Another.' Mr. A. G. BATES made an excellent Address, and at your suggestion we have made fifty cents the initiation fee. Beside what we have given for the Genesee Farmer, we have sent \$3 for the Albany Cultivator, and intend, as our numbers increase, to purchase a library, &c."

We inform Mr. S. that we have "the back volumes of the Farmer bound," for sale, and will mention the subject of "Farm Implements" to those that manufacture and sell them, and do what we can to accommodate our Raisinville friends.

Cortland Co. Agricultural School.

DEAR SIR:—I send you a list of names for your paper to commence with the first number for this year, 1846. I have made quite an effort to procure subscribers; but you know many people love darkness rather than light, and it is hard to make them think differently.

I notice your favorable remarks concerning the effort of Mr. WOOLWORTH in getting up a class in Agricultural Chemistry and Geology. His effort has met with unexpected success. He has a class of 25 or 30, and is delivering a course of lectures once a week to us Farmers. His lecture room is crowded to overflowing, and I can assure you we have a fine treat every Friday evening. Mr. W's class is composed of very intelligent and enterprising young men from this and other counties, and the interest they manifest in the study argues well for the cause, and I hope similar efforts may be made in other places.

Yours, PARIS BARBER.

Homer, Jan. 10th, 1846.

MR. BARBER has our thanks for the list of names he has sent us. But we copy his brief note mainly to express our high appreciation of the efforts of Mr. WOOLWORTH to impart to the young Farmers of Cortland county a knowledge of Agricultural Chemistry and Geology. There is too much intelligence and patriotism among the Agriculturists of that region to permit the acknowledged ability of Mr. W. to lack patronage, and eager pupils.

For the Genesee Farmer.

To the Farmers of Monroe County.

WHO shall support the MONROE COUNTY AGRICULTURAL SOCIETY? This is an important question, requiring the serious attention of every farmer in the county. They are to be benefited by its success, and should cheerfully contribute to its support, their money and personal exertions, whenever needed. The fact that Monroe County possesses all the necessary elements for a flourishing Society, has been abundantly demonstrated in years past; and can not these elements be rendered available, so as to have the burdens more equally borne? How was the necessary amount raised at the time of the Fair last autumn? The farmers paid a part; but at least one half was fairly begged by two individuals who canvassed the City of Rochester, and solicited donations, as well from those who were not, as who were interested in Agriculture. This should not be.

The beneficial influence of this Society upon the farmers generally, has, I believe, seldom been doubted or underrated, and will any of you consent to receive these benefits without acknowledging proper obligation to the source from whence they spring? Will you allow it to be published in the reports of the State Agricultural Society, that Monroe County produces a greater amount per acre upon her land under cultivation than any other county in the state, and at the same time allow the Officers of your Society to solicit aid from those who do not know a sickle from a bill-hook? I cannot believe it, and trust that before the time of the next Fair, every one of you will have entered your names as members, and prepared something for exhibition and competition. Then you will take a proper interest in its success; the list of premiums can be much enlarged, and I warrant that each of you will receive the worth of your dollar in gratification on the day of the Fair.

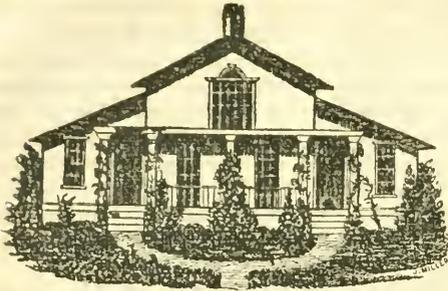
The attention of the several Town Committees is requested to this subject; they are respectfully urged to bear it continually on their minds, and to enrol as members all their neighbors and acquaintances, and report to the Treasurer as soon as convenient.

In behalf of the Executive Committee,
J. W. BISSELL, Cor. Sec'y.

Feb., 1846.

TO BRONZE IRON CASTINGS.—Iron castings may be bronzed by thorough cleaning, and subsequent immersion in a solution of sulphate of copper, (blue vitriol,) when they acquire a coat of the latter metal. They must be then washed in water.

That state of life is most happy where superfluities are not required, and necessaries are not wanting.



From the American Agriculturist.

A Cheap Farm-House.

WHOEVER rears his house in air,
Will need much gold to build it there ;
While he that builds an humble cot,
May save some gold to boil the pot.
While that so high the cot outshows,
Is hard to climb the good wife knows.
Who has the cot ne'er wants a home ;
Who spent the gold to want may come.

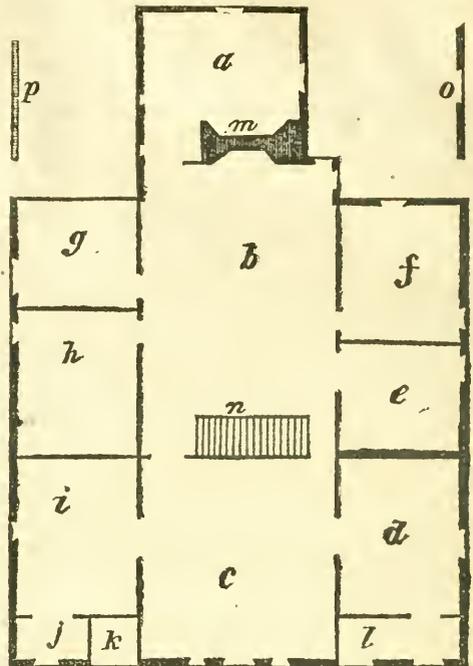
It is an old proverb, Mr. Editor, that many a man has built his house so big he could not live in it. Sometimes it is because he don't know how to build less. Can we help to show him? Notwithstanding the high character and the adaptability of Mr. Downing's works to the "upper ten thousand," the wants of the lower *ten hundred thousand* are not satisfied.

It is often the case, particularly in settling new countries, that a man wants something that will answer for immediate shelter, and which he would be glad so to build that it would by and by form part of the house—so he may be able to build part of a house this year, and perhaps another part another year.

Now, any plan that is so arranged that the new beginner can build it in parts, having each part complete in itself, will be useful to many of your readers, who will never read "Cottage Residences;" and if they did, could not adopt a single plan in the book, for want of means. It is for the benefit of this class that I have arranged the enclosed plan. It is particularly intended for the *new settler*, and to be built on the *balloon plan*, which has not a single tennon or mortice in the frame, except the sills; all the upright timber being very light, and held together by nails, it being sheeted upon the studs under the clap boards, is very stiff, and just as good and far cheaper than ordinary frames.

Description.—*a*, Wash-room, 13 x 13; *b*, kitchen, 16 x 24; *c*, parlor, 16 x 16; *d*, *f*, *h*, *i*, bed-rooms, 10 x 12; *e*, store-room, 8 x 10; *g*, pantry, 8 x 10; *j*, *l*, clothes press; *k*, entry; *m*, fire-place; *n*, stairway; *o*, wood-house; *p*, garden gate; the pump should be in the wash room.

I would have a lawn in front, with shrubbery, and an orchard on the side opposite the garden. Between the garden and the house should be a road to the rear buildings, and between this road and the house I would have a strip of green sward



ornamented with shrubbery. A corresponding strip also should be reserved between the house and orchard. All the rest may be left to the taste of the person owning the premises.

Now, suppose a family just arrived at the "new location," and designing to build a house upon the above plan. First, they need some immediate shelter. Two hands in two days, can put up the room 13 by 13, marked wash-room (*a*), in the plan, with a lean-to roof, the sides covered with wide $\frac{3}{4}$ inch boards, feather-edged together, with a rough floor, which, with a rough shed to cook under, will serve for bed-room and parlor while the house is building.

Next add the room marked kitchen (*b*), a good sized farmer's kitchen, 16 by 24. Board up the sides in the same way and finish off inside complete, and you then have a house with two rooms, the wash-room answering well for a summer cooking room. Divide the chamber into three rooms, two of them 8 by 14 each, and the other 10 by 16, including the stairway (*n*). Make the posts of this part of the building 12 ft. 6 in. high from the sleepers of lower floor, and the lower room 7 ft. 6 in. in the clear; the joice ten inches deep, and the upper room will be 4 ft. high under the eaves, and you will consequently have to finish up the rafters till you get high enough in the centre.

Now add as you are able one or both of the wings, containing each a bed-room 10 by 12 (*d*, *f*, *h*, *i*) and pantry and store-room 8 by 10 (*e*, *g*;) each of these is also a lean-to, the outside posts of which should be 6 feet high, and the roof rising 4 ft., will leave two feet above in the side of the

centre building for lights into the stairway chamber. These side rooms will also have to be finished a little way up the rafters, to get height enough.

The sides of these rooms, which were formerly the outside of the main building, can be plastered or papered upon the rough boarding.—Your house so far is a whole house, complete in itself, but next year you want it more extensive. Go on then, and add the front room (*c*,) with or without the wings and porch, *d*, *i*, *j*, *k*, *l*, either of which could be added afterwards, by making your calculations as you go along, building one room after another as you are able, and until you finally get a very comfortable house, completed like the plan. In calculating sizes of rooms, I have not allowed for thickness of walls. The front chamber I would leave all in one room, with one large window in the front, and opening out upon the top of the portico, and having a drum which would be heated by the stove in the room below, and make a pleasant sitting, sewing, or nursery room, either in summer or winter.

As in all my design I aim at great economy of cost, convenience of arrangement, and occupancy of all the room for some useful purpose; so now I hope you are able to add a little cheap ornamental work to the front. Support the porch which is 6 ft. by 24, upon five neat columns, with railing, except the door way; make the roof flat, with a pretty little railing on top, so that we can come out of the front chamber of a balmy evening to smell the honeysuckles that have been trained up from below. Carry out bulwarks upon the roof of each wing, to hide the pitch. Put in a large window in the centre of the parlor front, of a half hexagonal shape, with two narrow windows each side, opening by hinges down to the floor, through which in summer we can also have access to a pleasant seat upon the porch, and still enjoy the company of those who might choose to remain within the room.—For the sake of symmetry, I place a door at each end of the porch, only one of which will be an open sesame, unless perchance about the time you get "the new white house" done, the sovereigns should elect you justice of the peace, or you happen to be a doctor, or somebody else, that wants a room for an office, just see how conveniently you can open the blind door through a passage like that on the other side, into one of the front bed rooms (*i*,) 10 ft. by 12, where you could keep your official dignity very snug, without disturbing the family.

The kitchen, which should be the grand desideratum in every farm house, you will perceive is so situated that it has only nine feet of surface exposed to the weather, which will save many a load of wood, and yet by opening room doors, it can be well ventilated in summer.

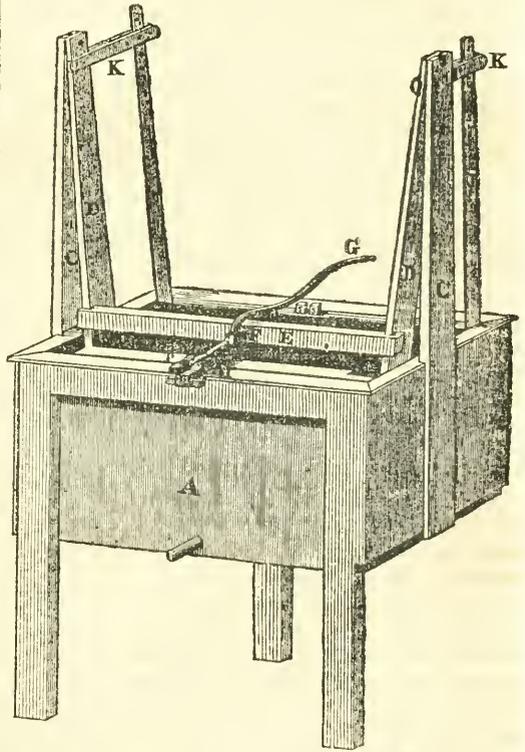
Until you do get the wood house built, you can

use the wash room in winter to keep a stock of kindling wood. If you like the plan and have the means, of course it will be best to build the whole at one time. But, if necessary to build by sections, you can do as I have directed, or you can build the front part first, or build the entire centre part first, and afterwards add the different rooms that lean-to.

My object is to accommodate the new settler and poor man, with a plan by which he can get a home without building himself out of a house, or getting a great shell of an outside show, full of unfinished emptiness. Look at the plan and see how far I have succeeded, and such as it is, accept it as a Christmas present from your sick friend,

SOLON ROBINSON.

Indiana, Dec. 25, 1845.



Arnold's Improved Patent Lever Washing Machine.

We give considerable space to the above engraving of this Machine, *only* for the reason that, from the united testimony of some thousands who have used it for a long time, we have no doubt in regard to its great value for washing clothes in an easy and satisfactory manner. The Machine is for sale by Wm. E. ARNOLD, 214 Main street, in this city. Price, in Rochester, \$7.

It is also manufactured and for sale by Agents in different sections of the country.

WHEN WATER is converted into steam it expands to 1700 times its former bulk.

New-York State Agricultural Society.

Cattle Show and Fair for 1846, to be held at Auburn, Sept. 15, 16, and 17.

PREMIUM LIST FOR 1846.

ON FARMS.

For the best cultivated farm of not less than 50 acres, exclusive of woodland, regard being had to the quantity of produce, the manner and expense of cultivation, and the 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 J. B. Nott, Sec'y.

EXPERIMENTS AND ESSAYS.

- For the most satisfactory experiment of stall feeding cattle, with a full detail of all the circumstances, \$20
- For the most satisfactory experiment in converting green crops or other vegetable matters into manure, with full details, &c., 10
- For the most satisfactory experiment made for increasing manures in forming compost, 10
- For the most satisfactory experiment for top dressing grass, 10
- For the most satisfactory experiment for subsoil plowing, 10
- “ “ “ eradicating Canada thistle, 10
- For the most satisfactory experiment for draining, 10
- “ “ “ irrigation, 10
- “ “ “ on the improvement of seed wheat, by culture and propagation, 10

FARM DWELLINGS.

For the best design accompanied with plans and elevation, combining convenience, economy, and good taste.

For best, \$15 | Second best, \$10

Competitors for the premiums on Experiments and Designs, must forward their manuscripts to the Secretary, Albany, previous to the first of December, 1846, free of postage.

CATTLE.

CLASS I.—DURHAMS.

- Best bull, over 3 yrs old, \$15 | Second best, \$10
Third best, Diploma.
- Best bull, 2 years old, 10 | Second best, Col. Tour.
Third best, Diploma.
- Best yearling bull, 10 | Second best, Col. Tour.
Third best, Diploma.
- Best bull calf, Col. Tour. | Second best, Diploma.
- Best cow, 3 years old, 15 | Second best, 10
Third best, Diploma.
- Best heifer, 2 years old, 10 | Second best, Col. Tour.
Third best, Diploma.
- Best yearling heifer, 10 | Second best, Col. Tour.
Third best, Diploma.
- Best heifer calf, Col. Tour. | Second best, Diploma.

CLASS II.—HEREFORDS.

- Best bull over 3 yrs old, \$15 | Best cow, \$15
Second best, 10 | Second best, 10
- Best bull, between 1 and 3 years old, 10 | Best heifer between 1 and 3 years old, 10
Second best, Diploma. | Second best, Diploma.

CLASS III.—DEVONS.

- Best bull, 3 years old, \$15 | Second best, \$15
Second best, 10 | Second best, 10
- Best bull between 1 and 3 years old, 10 | Best heifer between 1 and 3 years old, 10
Second best, Diploma. | Second best, Diploma.

CLASS IV.—AYRSHIRES.

- Best bull, over 3 yrs old, \$15 | Best cow, \$15
Second best, 10 | Second best, 10
- Best bull between 1 and 3 years old, 10 | Best heifer between 1 and 3 years old, 10
Second best Diploma. | Second best, Diploma.

CLASS V.—CROSSES OF NATIVE AND IMPROVED.

- Best cow over 3 yrs old, \$15 | Third best, Vol. Trans.
- Second best, 10 | Best yearling heifer, \$5
- Third best, Vol. Trans. | Second best, Col. Tour.
- Best 2 year old heifer, 15 | Third best, Vol. Trans.
- Second best, 10 | Best heifer calf, Col. Tour.

CLASS VI.—NATIVE CATTLE.

- Best cow over 3 yrs old, \$15 | Third best, \$5
- Second best, 10 | Best yearling heifer, 5
- Third best, Vol. Trans. | Second best, Col. Tour.
- Best heifer, 2 years old, 15 | Third best, Vol. Trans.
- Second best, 10 | Best heifer calf, Col. Tour.

WORKING OXEN.

- Best team of 20 yoke from any one county, \$25 | Third best yoke, Vol. Trans.
- Second best, 15 | Best ten yoke of oxen from any one town, \$20
- Best yoke of oxen, 15 | Second best, 10
- Second best, 10 | Third best, Col. Tour.

THREE YEAR OLD STEERS.

- Best yoke, \$10 | Second best, \$5
Third best, Diploma.
- Best team of 10 yoke from any one county, \$15.
- To boys between the ages of 16 and 20 inclusive, who shall exhibit the best broke yoke of 3 year old steers, of their own training, Col. Tour.
- Second best, do., Diploma. | Third best, do., Trans.

TWO YEAR OLD STEERS.

- Best yoke, \$10 | Second best, Col. Tour.
- 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, Col. Tour.
- Second best, Diploma. | Third best, Vol. Trans.

YEARLING STEERS.

- Best yoke, \$8 | Second best, Col. Tour.
- 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, Diploma. | 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 AND FAT SHEEP.

- 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.

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.

STALLIONS.

CLASS I.—For all work.

- Best, over 4 years old, \$10 | Third best, Diploma.
- Second best, 5 | Fourth best, Vol. trans.

CLASS II.—Blood.

- Best, over 4 years old, \$10 | Third best, Diploma.
- Second best, 5 | Fourth best, Vol. trans.

CLASS III.—Draught.

- Best, over 4 years old, \$10 | Third best, Diploma.
- Second best, 5 | Fourth best, Vol. trans.

THREE YEAR OLD STALLIONS.

- Best 3 years old stallion, \$10 | Third best, Diploma.
- Second best, 5 | Fourth best, Vol. trans.

GELDINGS.

- Best Gelding, \$5 | Second best, Vol. trans.

MATCHED HORSES.

Boat pair,-----\$10 | Second,----- Diploma.
Third best,-----2 Vols. trans.

MARES.

Best brood mare (with foal at her foot,) for all work, \$10
Second best,-----\$5 | Third best,-----Diploma.
Fourth best,-----Vol. trans.
Best brood blood mare (with foal at her foot,) 10.
Second best,-----5 | Third best,-----Diploma.
Fourth,-----Vol. trans.
Best brood draught mare (with foal at her foot,) 10.
Second best,-----5 | Third best,-----Diploma.
Fourth-----Vol. trans.
Best mare 3 years old,-----5 | Second best,-----Diploma.
Third,-----Vol. trans.

SHEEP.

CLASS I.--LONG WOOLED.

Best buck,-----\$8 | Best 5 ewes,-----\$8
Second best,-----Col. tour. | Second best,-----Col. tour.
Third best,-----Diploma. | Third best,-----Diploma.
Best pen 5 lambs, 5.

CLASS II.--MIDDLE WOOLED.

Best buck,-----\$8 | Best five ewes,-----\$8
Second best,-----Col. tour. | Second best,-----Col. tour.
Third best,-----Diploma. | Third best,-----Diploma.
Best pen 5 lambs, 5.

This class includes the South Down, Norfolk, Dorset, Native, &c.

CLASS III.--MERINO AND THEIR GRADES.

Best buck,-----\$8 | Best five ewes,-----\$8
Second best,-----Col. tour. | Second best,-----Col. tour.
Third best,-----Diploma. | Third best,-----Diploma.
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,-----\$8 | Best five ewes,-----\$8
Second best,-----Col. tour. | Second best,-----Col. tour.
Third best,-----Diploma. | Third best,-----Diploma.
Best pen 5 lambs, 5.

This class includes all those generally denominated Saxons, whether of pure or mixed blood.

SWINE.

Best boar, over 10 mo.,-----\$10 | Best sow,-----\$10
Second best,-----Col. tour. | Second best,-----Col. tour.
Third best,-----Diploma. | Third best,-----Diploma.
Best lot of pigs under 10 months, not less than four in number, Colmans tour. Second best, Diploma.

In awarding premiums on hogs, reference will be had not merely to size or 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, one cock and two hens,-----\$3
For the best lot of Black Poland, not less than three,-----3
For the best lot of large fowls, not less than three,-----3
For best pair of ducks,-----\$3 | For best pair of turkeys,-----3
For the best pair of geese,-----3
For the best and greatest variety of barn-yard fowls owned by the exhibitor, \$10.

FARM IMPLEMENTS.

Best Plow,*-----Silver Medal. | 2d best straw cutter, Dip.
Second do-----Diploma. | Third do Vol. transactions.
Third do-----Vol. trans. | Best corn & cob crusher, \$10
Best subsoil plow, Sil. Med. | Second do-----Diploma.
Second do-----Diploma. | Third do-----Vol. trans.
Third do-----Vol. trans. | Best clover machine, 10
Best farm wagon, Sil. Med. | Second do-----Diploma.
Second do-----Diploma. | Third do-----Vol. trans.
Third do-----Vol. trans. | Best flax & hemp dresser, 10
Best harrow, Silver Medal. | Second do-----Diploma.
" Cultivator, do. | Third do-----Vol. trans.
" Fanning mill, do. | Best horse cart,-----Diploma.
Second do-----Diploma. | " ox cart,-----do
Third do-----Vol. trans. | " horse rake,-----do

Best horse power, Sil. Med. | " ox yoke,-----do
Second do-----Diploma. | " farm harness,-----do
Third do-----Vol. trans. | " saddle,-----do
Best corn stalk cutter, S. M. | " grain cradle,-----do
Second do-----Diploma. | " six hand rakes,-----do
Third do-----Vol. trans. | " six hay forks,-----do
Best threshing machine, | " 6 grass scythes,-----do
Silver Medal. | " 6 cradle scythes,-----do
Second do-----Diploma. | " 6 dung forks,-----do
Third do-----Vol. trans. | " six axes,-----do
Best drill barrow, Diploma. | " six hoes,-----do
" Straw cutter, Sil. Med. | " hay rigging,-----\$5

*The trial of plows will take place on Tuesday, Sept. 15th.

For the best and most numerous collection of agricultural implements, \$10.

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,-----Silver Medal.

PLOWING MATCH.

First Premium,-----\$15 | Third Premium,-----\$10
Second do-----12 | Fourth do Colman's tour.
Fifth,-----Vol. transactions.

For boys under eighteen years of age :

First premium,-----\$10 | Second,-----5
Third,-----Vol. transactions.

One-fourth of an acre will be required to be plowed within an hour and a quarter, with 15 minutes for rest—the furrow slice to be not over 12 inches wide, nor less than 8 inches in depth. The plowman to drive his own team, and the furrow slice to remain as left by the plow.

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 | Third best,-----\$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, nor for fifteen days preceding the trial. The cows to be owned by the competitors previous to the 1st day of February, 1846. 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 lbs. of the butter so made to be exhibited at the Fair at Auburn, 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 executive committee 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. The increased list of premiums is offered with the hope that it will induce extensive competition throughout the state. Let this object be accomplished, 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 improvement may be made.

Best 25 lbs made in June, \$10 | Second best,-----Col. Tour.
Second best,-----Col's. Tour. | Third best,-----Silver Medal.
Third best,-----Vol. Trans. | Fourth best,-----Diploma.
Best 50 lbs. made at any time, | Fifth best,-----Vol. Trans.
\$15

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 ; the mode of 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.

CHEESE.

One year old and over.

- Best 100 lbs.,.....\$15 | 3d best,.....Silver Medal.
- 2d best,.....Col. Tour. | 4th best,.....Diploma.
- 5th do.,.....Vol. Transactions.
- Less than one year old.
- Best 100 lbs.,.....\$15 | 3d best,.....Silver Medal.
- 2d best,.....Col. Tour. | 4th best,.....Diploma.
- 5th do.,.....Vol. Transactions.

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.

DAIRIES.

- For best cheese dairy,.....\$50 | Second best,.....\$30
- Third best,.....\$20.
- B. P. JOHNSON, of Rome, Oneida county, Chairman.
- For best butter dairy, \$25 | Second do \$15 | Third do \$10
- ZADOC PRATT, of Prattsville, Chairman.

The competitors for the above premiums must comply with the following regulations. They must state the actual product of the cheese or butter dairy, the locality of such dairy in latitude; the composition of the soil as near as may be where the dairy farm is situated; the kind of grass used for pasture and for hay; the quantity, in pounds, of milk per cow on the average and in the aggregate; the quantity of cheese or butter to the hundred pounds of milk produced; the gross quantity of milk and cheese, or butter, produced, the quality of the cheese or butter, the method of making, the breed of cows composing the dairy, and all such other details procured as shall determine the most profitable mode of conducting the cheese or butter dairy business.

SUGAR.

- Best 25 lbs. maple sugar, \$10 | Third best,.....Diploma.
- Second best,.....\$5 | Fourth best,.....Vol. Trans.
- For the best 25 lbs. of cornstalk sugar, Silver Medal.

No premium to be awarded unless the sample offered shall be deemed worthy of it.

The process of manufacture and clarifying must be particularly stated in reference to the maple and cornstalk sugar.

SILK.

- Best specimen manufactured, (woven into cloth or ribbons).....\$15
- Second best,.....10
- Third best, Colman's Tour.
- Fourth best,.....Vol. Trans.
- Best specimen not less than one pound reeled silk,.....\$5
- Second best,.....Diploma.
- Third best,.....Vol. Trans.
- Best specimen sewing silk, not less than one pound, of domestic growth,.....\$10
- Second best,.....5
- Third best,.....Diploma.
- Fourth best,.....Vol. Trans.
- Best one-half bushel cocoons, 1846,.....\$10
- Second best, Colman's Tour.
- Third best,.....Diploma.

DOMESTIC MANUFACTURES.

- Best woolen blankets, \$5—Second, 4—Third, 3.
- Best ten yards flannel, \$5—Second, 4—Third, 3.
- Best 10 yards woolen cloth, \$5—Second, 4—Third, 3.
- Best woolen carpet, \$5—Second, 4—Third, 3.
- Best tow cloth, 15 yards, \$3—Second, diploma.
- Best 10 yards linen, \$5—Second, 4—Third, 3.
- Best 10 yards linen diaper, \$5—Second, 4—Third, 3.
- Best hearth rug, \$5—Second, 4—Third, 3—Fourth, 2—Fifth, Trans—Sixth, Dip.
- Best 10 yds. kersey, \$3—Second best, 2—Third, Trans.
- Best rag carpet, 15 yds. \$3—Second, 2—Third, Trans.
- Best bed quilt, or other bed or window furniture, discretionary premiums, at the option of the committee.
- Best double carpet coverlet, \$4—Second, 3—Third, 2—Fourth, Trans.
- Best pair woollen knit stockings, \$2—Second, Trans.—Third, Diploma.
- Best wove woollen stockings \$2—Second, Tran.—Third, Dip.
- Best cotton wove stockings, \$2—Secons, Vol. Trans.—Third, Diploma.
- Best pound of linen sewing thread, \$2—Second, Trans.—Third, Dip.
- Best lincn woven stockings, \$2—3d, Trans.—3d, Dip.
- Best lincn knit stockings, \$2—Second, Trans.—3d, Dip.
- Best knit cotton stockings, \$2—Second, Tr.—3d, Dip.

FRUIT.

- For the greatest variety of table apples, \$5.
- For the second greatest,.....\$3 | For the 3d greatest, Vol. Tr.
- For the best twelve sorts, not less than one of each, \$3.
- Best new seedling apple,.....\$3
- For the greatest variety of table pears,.....3
- For the second greatest,.....Vol. Trans.
- For the greatest variety of winter pears,.....“ “
- For the best twelve quinces,.....“ “
- For the best twelve peaches,.....“ “
- For the best twenty-four plums,.....“ “
- For the best six bunches of native grapes,.....“ “
- For the best six bunches of foreign grapes,.....“ “
- For the best dozen figs,.....Diploma.
- For the second best figs,.....Vol. Trans.
- For best one-half dozen oranges,.....“ “
- For best one-half dozen lemons,.....“ “
- For best dozen nectarines,.....“ “
- For best dozen apricots,.....“ “
- For best dozen pomegranates,.....“ “
- For best pint almonds,.....“ “

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.—L. F. Allen, Black Rock; Dr. A. Stevens, New York; Dr. A. Thompson, Aurora; I. C. Platt, Plattsburgh; Prof. J. Jackson, Schenectady.

FLOWERS.

- For the greatest variety and quantity, Silver Medal.
- For the second greatest, Dip. | For third greatest,.....Vol. Tr.
- For the best Floral ornament, Silver Medal.
- For the second best,.....Dip. | Best seedling Dahlia,.....Dip.
- For third best,.....Vol. Trans. | Second best,.....Vol. Trans.
- For the best twenty-five varieties of Dahlias, Silver Medal.
- For the second best,.....Dip. | Third best,.....Vol. Trans.
- For the most beautiful bouquet, composed of not less than twelve varieties, Col. Tour.
- Second best,.....Dip. | Third best,.....Vol. trans.
- For the greatest variety of house plants owned by one individual, Diploma,.....Second greatest, Vol. Trans.
- For the best 20 varieties of German asters, Vol. Trans.
- For best six varieties carnation pink,.....“
- For best twelve varieties roses in bloom,.....Diploma.
- Second best,.....Vol. Trans.
- For best 3 varieties of Cactus in bloom,.....Dip.
- For best 3 varieties Camellia Japonica, in bloom,.....Dip.
- For best single Camellia in bloom,.....Diploma.
- Best 6 Geraniums in bloom,.....“
- Second best,.....Vol. Trans.

VEGETABLES.

- 24 best stalks celery, 2 Vols. | 12 best sweet potatoes, trans.
- Trans. | 12 best watermelons, “
- 6 best heads cauliflower, 2 | Best ½ peck Lima beans, vl. tr.
- Vols. Trans. | Best half peck Windsor
- 6 best heads broccoli, 2 Vol. | beans,.....“
- Trans: | Best bunch double pars-
- 12 best white table tur- | ley,.....“
- nips,.....Vol. Tr. | Three best squashes,.....“
- 12 best carrots,.....“ | Largest pumpkin,.....“
- 12 best table beets,.....“ | 12 best ears seed corn,.....“
- 12 best pursnips,.....“ | Best half peck table po-
- 12 best onions,.....“ | tatoes,.....\$2
- 3 best heads cabbage “ | Second best,.....Trans.
- 12 best tomatoes,.....“ | Best seedling potatoe,.....\$5
- 2 best purple egg plants, “ | 12 Canteleupe melons,.....Tr.

Discretionary premiums will be awarded on choice garden products not above enumerated.

MISCELLANEOUS.

- Best Iron Gate for farm purposes,.....Silver Medal.

- Best Ornamental cast-iron vase, on pedestal, ---- Diploma.
 " Sample drain tile, ----- Diploma.
 " quarter of an acre of osier willow, and the best specimens manufactured from the product, \$8
 Best specimen wire hurdle fence, to be accompanied with an account of cost, Silver Medal.

DISCRETIONARY PREMIUMS.

Will be awarded for—

- 1st—Stoves and other Manufactures of Iron.
 2d—Paintings and Drawings.
 3d—Ornamental Shell, Needle, and Wax Work.
 4th—Implements and Machinery.
 Also, for all such other articles and products not enumerated above, as shall be deemed worthy of encouragement.

FIELD CROPS.

- Best crop of wheat raised upon any one farm, \$15.
 Second best, ----- \$10 | Third best, - - 2 vols. trans.
 Best crop of spring wheat raised upon any one farm, \$15.
 Second best, ----- \$10 | Third best, - - 2 vols. trans.
 Best crop of Indian corn raised upon any one farm, \$15.
 Second best, ----- \$10 | Third best, - - - vol. trans.
 Best crop of barley raised upon any one farm, \$10.
 Second best, ----- \$5 | Third best, - - - vol. trans.
 Best crop of rye raised upon any one farm, \$10.
 Second best, ----- \$5 | Third best, - - - vol. trans.
 Best crop of oats raised upon any one farm, \$10.
 Second best, ----- \$5 | Third best, - - - vol. trans.
 Best crop potatoes, for table, raised upon any one farm, \$10.
 Second best, ----- \$5 | Third best, - - - vol. trans.
 Best crop of potatoes, quantity considered, raised upon any one farm, \$10.
 Second best, ----- \$5 | Third best, - - - vol. trans.
 Best crop of sugar beets raised upon any one farm, \$10.
 Second best, ----- \$5 | Third best, - - - vol. trans.
 Best crop of mangle wurtzel raised upon any one farm, \$10.
 Second best, ----- \$5 | Third best, - - - vol. trans.
 Best crop of ruta бага raised upon any one farm, \$10.
 Second best, ----- \$5 | Third best, - - - vol. trans.
 Best crop of carrots raised upon any one farm, \$10.
 Second best, ----- \$5 | Third best, - - - vol. trans.
 Best crop of peas raised upon any one farm, \$10.
 Second best, ----- \$5 | Third best, - - - vol. trans.
 N. B. It is understood the above premiums are to be awarded for crops raised in the usual cultivation of the farm—to include the entire crop raised in each case. It is not intended to offer premiums for crops raised on small parcels of land—by unusual manuring and cultivation.

- Best acre of corn, for fodder, \$5.
 Best half acre of hops, - \$5 | Best half acre of tobacco, \$5
 Best half acre of flax, - - - 5 | Best acre of cabbage, - - - 5
 Best acre of broom corn, \$5.
 Best acre of clover seed, \$10.
 Second best, - - - Col. tour. | Third best, - - - vol. trans.
 Best acre of timothy seed, \$10.
 Second best, - - - Col. tour. | Third best, - - - Diploma.

Those who present claims to premiums for farm crops must state in writing the following particulars: The condition of the soil at the commencement of cultivation for the crop, the previous crop and cultivation, and quantity of manure used upon it, the quantity and kind of manure the present season, the quantity and sort of seed used, the time and manner of sowing, cleaning & harvesting the crop, the amount of the crop determined by actual weight or measurement, and the expense of cultivation. The land shall be measured by some surveyor, who shall swear to the correctness of his survey, and that it was made with a chain and compass, and the claimant of the premium, with two other persons who assisted in measuring, shall certify under oath as to the quantity produced from the piece of land mentioned in the certificate of the surveyor—and a sample of grain shall be presented at the annual meeting, with the oath of the applicant that the same is a fair sample of the whole crop.

The statements required from those who compete for the premiums on farms and field crops, must be sent to J. B. NOTT, Recording secretary, Albany, previous to the 1st of December, 1846, and the premiums will be awarded at the annual meeting of the Society on the 3d Wednesday of Jan.

N. B. Plate will be substituted for money, on the application of the persons receiving the premium.

PREMIUMS FOR 1847—1848—1849.

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. Before 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 a detailed statement 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 is to be made, and the manner of application. Also, an accurate account of the cost of the material and its application.

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 2d best, \$30. 3d 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 7 or 8 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 lb., 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.

Best, \$30. 2d best, \$20. 3d best, \$10.

The applicant 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; number of ewes, wethers and bucks.

5th. The value of sheep when fattened, and the value of lambs for the butcher.

HORTICULTURAL DEPARTMENT.

BY P. BARRY.

Orchard and Garden Operations for March.

Pruning.—Orchards should now be pruned, if not already done. Young trees require but little, just enough to keep the heads in proper shape, and to remove branches, that cross or interfere with others. Old trees, the heads of which have grown dense with branches, should be thinned out to admit the sun and air; this improves, very much, both the size and flavor of the fruit. In doing this a pruning saw should be used—the limbs should be cut close to the tree, and the cut smoothed over with a sharp pruning knife or a chisel. No pruning should be done, if it can be avoided, after the sap has commenced flowing. The Plum, Cherry, and other trees apt to give out gum, which is termed bleeding, had better be pruned in midsummer. Trees that were top grafted last season, or previous ones, should be carefully examined, and all the natural shoots that have sprung up below the graft should be pruned off.

Deciduous Ornamental Trees and Shrubs should now be pruned. This must be done with a view to improve their shape. All straggling, irregular, decaying, or dead branches should be removed.

Scions for Grafting.—Finish cutting your Scions now, as soon as possible. This matter of cutting scions is very roughly and badly performed, generally speaking. A sharp knife should be used, and two or three buds of the young shoot, the last years growth, should be left. We find that many cut off the *whole* of the young, and more or less the old wood. The person cutting should have labels ready to label each sort as it is cut. Every cultivator should endeavour to know the *correct* name of each variety he cultivates. In grafting he should note down in a memorandum book the name of each sort, and the source whence he procured it—and we may add, that no scions should be procured from a source of *very questionable correctness*.

On this matter of names we wish to impress upon every grower the importance of the greatest possible care and exactness. It will not be in future as it has been. The grower who knows his varieties, and has them correctly named, will find more ready sale, and better prices than his neighbour who knows *only* that he has got fruit of some kind or other.

Planting Fruit Trees, &c., should be commenced as soon as the weather will admit. Last season the ground was open about the 4th of March, and we then transplanted trees—that was rather unusual. Gooseberries, Currants, Raspberries, and all such things, that commence growing early, should be attended to first.

Grafting, should be attended to as soon as the

sap is in motion. Plums and Cherries should be grafted first. It is better in the case of these that the trees have not started at all. Apples and Pears may be grafted later. Get your scions, tools, &c., all in readiness. Grafting is an exceedingly simple operation—every farmer should be able to do it—full directions are given in Downing's and other fruit works. Where persons are employed to do it, they should be such *only* as are well known, and can be fully relied upon. Itinerant quacks have filled our country with errors. Avoid them.

Strawberry Beds, Bulbous Roots, Tender Trees, Shrubs, Plants, Roses, Grape Vines, &c., that have been protected during winter should be uncovered as soon as the weather is mild. Broken and bruised limbs should be pruned off, and the earth carefully dressed around them—supplying manure where necessary.

Hot Beds.—Every farmer should have at least *one* hot bed frame, if it were only to forward plants for the garden—such as cabbage, culiflowers, Celery, Tomato, Egg Plant, Pepper, &c. Persons who live at a great distance from market, gardeners who raise such plants for sale, find it difficult to get them, and by depending on those raised from seed in the open ground, the summer is half gone before vegetables can be had fit for use. Stable manure is abundant, and it requires no great mechanical genius to construct the frame and sash. This can be done now before the ground thaws.

Lettuce and Early Peas may be sowed as soon as the ground is open.

Compost and Manure Heaps, for the vegetable and fruit garden, and orchard, should be thoroughly turned, mixed up, and put in complete readiness for application.

Fruit and other Trees and Shrubs, that have been neglected, should receive a liberal dressing of well rotted manure or compost around the roots, as soon as the ground can be worked. If the trunks have become mossy, they should be carefully scraped, and washed with strong soap suds. The increased beauty and fertility of the tree next summer will be an ample recompense for this trouble.

Orchard Caterpillars.—These plagues, that have of late years become so numerous and destructive, by *toleration*, in our section, can *now* be destroyed easily, when pruning is going on, and scions cutting, &c. The eggs are now seen on the limbs of the trees—deposited in rings around them. These rings are of a brownish gray color, from a quarter to half an inch long, and each contains 200 to 400 eggs. Suppose a tree to contain 20 of these rings (and some have more,) there are 8,000 caterpillars, with ravenous appetites ready to devour the foliage of your trees as soon as it makes its appearance. Go to work now, and look sharply for these eggs; pick them from the limbs and destroy them.

Prof. HARRIS, who, we believe, calls this insect *Clisiocampa Americana*, or American tent caterpillar, says: "If a liberal bounty were offered, for the collection of the eggs and continued for ten years, they would, at the end of that period be nearly exterminated." The Professor's calculation almost frightens us. We now, on our own hook, offer the following bounty:—Every man or woman, who goes to work resolutely, and destroys all the eggs of these insects on their own premises, and urges the performance of the same duty on their neighbors, may enjoy the consolation of having rid themselves, and aided in ridding the community, of a very destructive and disagreeable visitor. We will be glad to hear who has been most active in this matter. Remember not a day is to be lost.

Poles for Beans and other Climbers should now be made ready for use. Also labels for fruit trees and for the garden, if not done already.

Arbors and Summer Houses, and other garden ornaments, might be prepared now and made ready to be erected when the ground is thawed. Speaking of *Summer Houses*, reminds us of a very neat one we saw figured in the February number of "The Cultivator." The writer who described it, said that the whole, including materials, cost less than he once gave for a pair of boots which he soon wore out. We don't know what to infer from this, whether the boots were dear, or the summer house cheap. If we knew the cost of the boots we might recommend the summer house to our readers for a model.

To Correspondents.

TRANSPORTING TREES TO THE WEST.

W. A. PARMALLEE, Esq., and other friends in Ohio, Michigan, &c., who have made enquiries about the practicability of procuring trees from this place in the spring, are informed that if they forward their orders in good season they can receive them with perfect safety.

The practice of the nurserymen is to take up the trees for western orders, and retard their growth until lake navigation is opened.

Trees can be sent from this place to Buffalo, by Rail Road, in a few hours, and thence by lake to any part of the west. The fall is the better season for very distant points.

We would add, in this connection, that we have a splendid fruit and tree growing region far enough north to make our nursery trees suitable for any part of the country—particularly Canada and the Western States. The healthiness of the Fruit Trees here begin to attract the attention of Eastern fruit growers,—hence they are sending large orders to our nurserymen, every season.

APPLE SEEDS.

REV. D. E. BROWN. Apple seeds will do well planted in the spring, provided they have not been allowed to remain dry during the winter.

They should be kept in boxes, mixed with sand, and placed where they would freeze and thaw. Seeds are not to be had at any of the Seed Stores in this city at present, nor any where else that we know. They should always be procured in the fall, about the time of cider making.

THE CHERRY.

ITS VALUE, CULTIVATION, VARIETIES, &c., &c.

THE culture of the fine varieties of the Cherry commends itself to the attention of every land owner, from the farmer with his 500 acre farm to the merchant or mechanic with his village lot, for the following among other reasons:

First: The fruit is invaluable for its ripening at a season of the year, June and July, when scarcely any other is to be had.

Second: No other fruit surpasses it, as a dessert, in beauty, delicacy, and richness.—A dish of fresh pickled Hearts and Bigarreaux is no mean luxury. Other varieties, such as the Dukes and Morellos, are of great value for cooking and preserving, and general confectionary purposes.

Third: The trees grow rapid, are cultivated with great ease, and come early into bearing.—We have a large number of Cherry trees on our place, but 5 years planted, and not over seven years from the bud, that are now over a foot in diameter, and have borne for 3 years. Last season many of them produced between 2 and 3 bushels. In this respect they accommodate the most impatient dispositions.

Fourth: The form of the Cherry tree is regular and handsome, and on this account it is well adapted for shade and ornament. It is just the thing for combining utility and beauty in dooryard trees or avenues. Mr. Loudon, the late distinguished English author, states in one of his works, that in Germany he traveled several days through a continuous avenue of Cherry trees.—We wish such avenues abounded in our own country.

CLASSIFICATION.—Scientific cultivators have divided Cherries into three classes, thus:

1st. *Bigarreaux*, which comprises all those of firm, sweet flesh, like the well known Graftion, or Yellow Spanish, or *Bigarreau*, as Mr. Downing has vaguely re-christened it. In this class are the largest and most beautiful cherries known, the trees are free, rapid growers, and attain a large size, the leaves are broad and thin, and hang rather loose and pendent. All of this class are more or less heart-shaped. Formerly it comprised only those that were two colored, such as the Yellow Spanish alluded to; but this distinction is now lost.

2d. *Heart Cherries*. The fruit of these is usually heart-shaped, and the flesh tender and sweet. The trees are similar in growth and habit to the Bigarreux, the only distinction being

in the texture of the flesh or pulp. Our well known Black-Heart, Black Tartarian, and Black Eagle, are its finest representatives.

3d. *Duke and Morello Cherries.* This class has roundish fruit, very tender, juicy flesh, and all more or less acid. The trees do not grow so fast nor so lofty as the two first classes; the young wood is more slender and of a darker color, and the leaves are smaller, thicker, a darker green and are supported in a more erect position.—This class comprises several that, when fully ripe, are excellent table fruit, such as the world-renowned May Duke, which we figure below, the Belle de Choisy and Carnation. Some are only fit for pies, tarts, &c., as the Kentish, Morello, &c.

The third class is quite distinctly marked; it is subdivided by some, forming the Morellos into a class by themselves, but this is of minor importance. The first and second classes are not distinctly separated—many of the best cultivators differing on the subject. Indeed, in our opinion, the Black Tartarian and Black Eagle are as firm fleshed as some of the Bigarreaux. So that, practically speaking, there are but two distinct well marked classes, the first comprising *Hearts and Bigarreaux*, rapid, lofty growers, large pendant leaves and sweet, heart-shaped fruit, and the

Dukes and Morellos, slow growers, dark colored shoots, and smaller, darker green, thick leaves, round, tender, and sub-acid to acid fruit. Every grower can bear in mind and recognise these distinctions.

We may add that the Dukes and Morellos are very hardy, succeeding well in the coldest climates, and in almost any quality of soil.

Propagation.—Cherries are propagated by budding and grafting; the former method is preferable, and is most generally practised by nurserymen. The Mazzard, or common black Cherry, makes the best stocks. Seeds of these are sowed in the autumn, and in two years from that time, or in one year on rich dry soil, they will be fit to transplant into rows for budding. Bud in July and August, and on good soil; they will make fine trees for transplanting in two years, and even, if necessary, in one year.—When dwarf trees are wanted, seeds of the Morello are sowed for stocks.

Soil.—The Cherry succeeds well on a great variety of soils—any common garden or orchard is suitable. A rich, dry soil, somewhat sandy, and pretty well elevated, seems most congenial to it. Under such circumstances we find the oldest and most healthy trees, the largest crops and finest fruit.

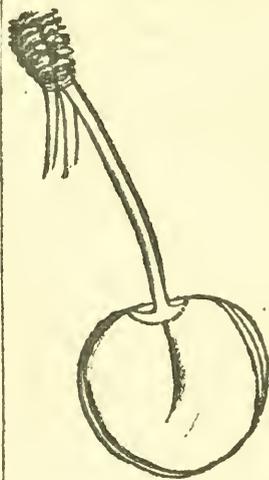
Planting.—Standard trees of the two first named classes should be planted about 20 feet apart, or say 26 on the most favorable soils—for the smaller standards in the third class, 15 to 18 feet will be sufficient. An important matter in transplanting cherry trees, is to do it at the prop-

er season, either in the fall after the leaves have dropped, or very early in spring before the buds begin to swell. The Cherry starts growing very soon in the spring, and before people are apt to move in the business of planting, their sap has commenced to flow, then there is more or less risk in moving them. The better way is, in cold situations north of us, to procure Cherries and other trees rather tender for fall planting, in October and November, and lay them in by the roots in a cellar, or bury them out of doors. They will then be at hand in the spring. In spring planting, the safest way is to move early, just as soon as the ground is thawed. Moist weather should be chosen if possible.

Pruning.—Standard Cherry trees require little pruning; dead or gummy branches, and those that grow unsightly and across others should be cut out. Mid summer is the best season for pruning; in the spring, while sap is in active motion, gum is apt to flow out and continue until it kills the tree.

We give below figures and descriptions of two very valuable varieties—besides a choice list which we have proved here, and can recommend. In future numbers we will figure and describe some of the best, in order to make our readers acquainted with them.

May Duke. (Fig. 7.)



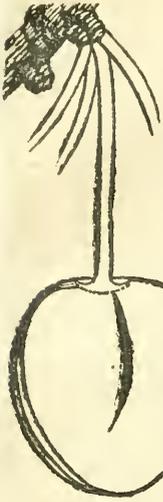
This is a valuable old variety, held in the highest esteem wherever the Cherry is cultivated. With us, however, it is not so popular as many other varieties, Black Tartarian, Black Eagle, &c. The tree is very hardy, is a great bearer, and the fruit ripens gradually, is in use, for cooking purposes, for nearly 3 weeks—and when fully ripe is delicious for the dessert.

Fruit large, roundish, borne in clusters,

bright red, changing to very dark when fully ripe. *Stalk* rather long, and the fruit slightly flattened at both ends. It is some acid, when but partially ripe, as it usually is when brought to market; but when perfectly mature, that is, when the color has become quite dark, almost black, it is rich and delicious. It is fit for use here about the beginning of June.* Scattering specimens of unripe fruit are to be found on the trees until the regular crop is entirely gone. This is a particular characteristic.

*The season of Cherries ripening, varies from 8 to 10 days, according to the season. In 1844, we believe Cherries generally were 10 days earlier than in 1845.

Napoleon Bigarreau. (Fig. 8.)

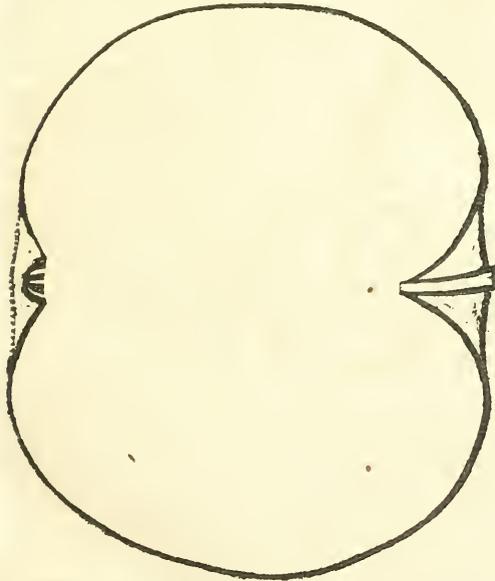


This is one of the most productive & beautiful cherries we have ever seen. The tree is a lofty and vigorous grower, and every way one of the most desirable varieties in the whole catalogue of Cherries.

Fruit large, oblong, heart shaped. *Stalk*, stout; skin whitish yellow, bright mottled red on the sunny side. *Flesh* firm, juicy, and sweet. Begins to ripen last week in June, and continues to the middle of July. It bears immense clusters—we have counted 2 dozen ripe, perfect fruit on 4 inches of a

limb. We noticed this and some others in the July number of our last volume.

The following are very fine varieties. All have been proved on our ground, and from a personal knowledge of their excellence we can recommend them with confidence:—May Duke, Davenport's Early, Bigarreau de May, Black Eagle, Black Tartarian, Black Heart, Napoleon Bigarreau, Yellow Spanish, Large Red Bigarreau, China Bigarreau, Belle de Choisy, Florence, Downer's Late, Gridley, Morello, Sparhawk's Honey.



Ribston Pippin. (Fig. 9.)

This is, and has been for a long time, one of the most popular Apples in England. In this country it is less esteemed than many American sorts, and has not been extensively cultivated.—

We are inclined to believe it has not been so fully and fairly tested by our fruit growers as it should be; and we bring it forward now in order to direct attention to it. We are satisfied it will do well in Western New York. It succeeds admirably around Toronto, where it is to be found in every good garden. We had a barrel of them grown there last season, and they were fair and fine flavored. It is unquestionably a *first rate* Apple. We are giving it a fair trial on our place, and expect to have it bear next season.

Fruit—medium size, about as large as a Newtown Pippin. *Form*, roundish. *Skin*, greenish yellow, streaked with dark red; russety round the stalk. *Stalk*, short, medium thickness, inserted in a cavity rather wide, and of moderate depth. *Calyx*, closed, small, in an irregular basin. *Flesh*—yellow, very firm, brittle and juicy, with a rich high flavor. In use from December to March.

Aurora Horticultural Society.

At a meeting of the *Aurora Horticultural Society*, held Feb. 11th, 1846, the following persons were appointed officers for the coming year:

DAVID THOMAS, of Greatfield, *President*.

VICE PRESIDENTS.

MATHEW TALLMAN, Scipio;

MOSELEY HUTCHINSON, East Cayuga;

BENJAMIN C. AVERY, Aurora;

HENRY MORGAN, Aurora;

WILLIAM COZZENS, Union Springs;

ELIAS ROGERS, Moravia;

WALTER G. BRADLEY, Genoa;

LEWIS A. MORRELL, Lansing.

Secretary—ALEXANDER THOMPSON, Aurora.

Treasurer—LEWIS HIMROD, Aurora.

Auditor—RICHARD MORGAN, Aurora.

Directors.—John H. Chedell, Auburn; E. W. Amos, Aurora; Christopher Morgan, Auburn; Geo. W. Branch, Moravia; Charles Howland, Union Springs; Isaac Jacobs, Genoa; William R. Grinnell, Ingleside.

ALEX. THOMPSON, *Sec'y*.

Why can not flourishing Horticultural Societies be maintained in the villages of Geneva, Canandaigua, Le Roy and Batavia, as well as at the beautiful village of Aurora?—[ED.]

DEFERRED NOTICES.—In consequence of so much of this number being occupied with the premium list of the State Ag. Society, several items prepared for this department of the paper have been necessarily laid over. Among these are notices of some fine varieties of apples received from S. W. COLE, Esq., of the Boston Cultivator—and of the *Horticultural Society of the Valley of the Genesee*, which has just been organized. We shall give a list of Officers, Committees, &c., in our next, and may have a word to say respecting it.

Peas Wanted.—Wanted, at the Genesee Seed Store, two or three hundred bushels Peas, of the first quality, for which the highest cash price will be paid by

RAPALJE & BRIGGS.

2tf.

No. 10, Front-st., Rochester.

Plows for Sale.—We have on hand, and intend to keep constantly for sale, the celebrated *Diamond* and *Wisconsin* Plows, the merits of which have been fully tested. Price, \$7,00 for medium size. The farming community are respectfully invited to give us a call.

RAPALJE & BRIGGS,

2tf.

No. 10, Front-st.

NEW SEED and IMPLEMENT WAREHOUSE.



GENESEE SEED STORE & 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 of 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.

RAPALJE & BRIGGS.

Rochester, Feb. 1, 1846.

ROCHESTER WOOLEN MACHINE MANUFACTORY.

B. F. SMITH,

Selye, Buildings, Mill-Street, Rochester, N. Y.

The proprietor of the above establishment having had the experience of seven years' connection with the firm of Goulling and Smith, Worcester, Mass., and having every facility for procuring all improvements in the various articles of WOOLEN MACHINERY, used in the manufacturing districts, flatters himself that he will be able to supply the demands for this kind of Machinery, to the entire satisfaction of those who may favor him with their patronage.

He will manufacture to order, CARDING MACHINES, for manufacturing and custom work; Jacks, Broad and Narrow Looms, Picking Machines, Gigs, Nappers and Brushers, &c.

He will also furnish to order, MACHINE CARDS, SHEARING MACHINES, (broad and narrow.) Reeds and Harnesses, Shuttles and Pickers, Comb Plate and Card Cleaners, Picker String and Lace Leather, and Manufacturers' Findings.

Grain Bags.—The subscriber has a large lot of Grain and Flour Bags on hand, for sale at reduced prices.

Now is the time for all to supply themselves, as they must be sold. To be had at E. Watts' Hardware Store.

JAMES H. WATTS.

Rochester, Feb. 1, 1846.

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

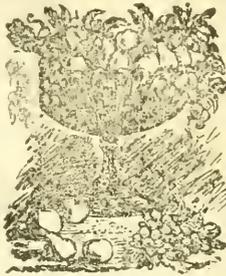
RAPALJE & BRIGGS.

No. 10, Front-st.

Clover and Timothy Seed.—For sale at the Genesee Seed Store, No. 10 Front-st., Rochester.

Feb. 1, 1846.

RAPALJE & BRIGGS.

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

The subscribers respectfully announce to their friends and the public, that their present stock which they offer for sale the ensuing Spring of 1846, is the finest ever grown in Western N. York, and unsurpassed in quality by any establishment in the country.

The collection of fruits comprises the most esteemed varieties of the Apple, Pear, Peach, Plum, Apricot, Cherry, Neotarine, Almond, Grapes, &c.

The trees are well grown, thrifty, and beautiful, and have been propagated with such care as to ensure correctness.

All are warranted genuine as represented.

PEAR TREES on QUINCE STOCKS for DWARFS and PYRAMIDS, can also be furnished of the finest varieties. These will bear the first or second year after transplanting, and are beautifully adapted to garden culture.

3,000 fine thrifty young trees of the famous New American Apple; the "Northern Spy," are also on hand.

STRAWBERRIES—All the fine new esteemed varieties, including Stoddard's new Alpine.

Also a large and fine collection of Ornamental Trees, Shrubs, Roses, (including a quantity of splendid Standard or Tree Roses, 3 to 6 feet high; Herbaceous Plants, Bulbous Roots, Double Dahlias, &c.

Our new descriptive catalogue will be sent gratis to all POST PAID applications.

Trees and Plants will be packed in the best style, and shipped to any port or place that may be designated.

It is for the interest of purchasers that they forward their orders now, without delay, that they may be executed in proper season. Address

ELLWANGER & BARRY.

Rochester, March 1, 1846.

FARMERS, CURE YOUR HORSES!

GEO. W. MERCHANT'S CELEBRATED

GARGLING OIL.

An Invaluable Remedy for Horses, Cattle and other domestic animals, in the cure of the following diseases:

Fresh Wounds,	Fistula, Sitfast,
Galls of all kinds,	Strains, Lameness,
Sprains, Bruises,	Sand Cracks,
Cracked Heels,	Foundered Feet,
Ringbone, Windgalls,	Scratches or Grease,
Poll Evil, Callus,	Mange,
Spavins, Sweeney,	Horn Distemper.

Also a valuable Embrocation for diseases of the Human Flesh.

Since the virtues of the Gargling Oil have become so extensively and favorably known to the farmers of the United States and Canada, as a curative oil in diseases of animals, and as a consequence, its demand becoming great—there has not been wanting those whose cupidity has suggested to them that if they could concoct something as nearly resembling in appearance as they could GUESS, with any thing for a name, they might urge it upon unsuspecting customers as a substitute for the true Gargling Oil. The proprietor would therefore caution those who purchase to be sure the name of G. W. Merchant is blown on the side of the bottle. *All others are an ATTEMPT at imitation, and are therefore an imposition.

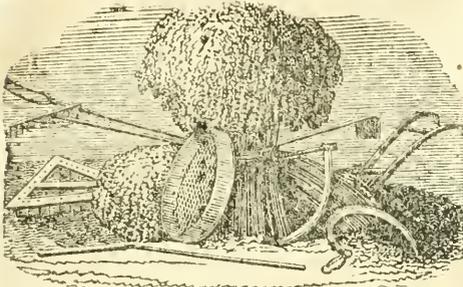
For testimonials, synopsis of diseases, and mode of treatment, see pamphlet which accompanies each bottle.

For sale at the ROCHESTER SEED STORE, and by Druggists and Store-keepers in the United States and Canada.

Corn Shellers!—A first rate article, price \$10, for sale at No. 10, Front-st.

RAPALJE & BRIGGS.

Wanted, at the Genesee Seed Store, 500 bushels Timothy and Clover Seed, for which the highest cash price will be paid by the subscribers. RAPALJE & BRIGGS.



**ROCHESTER SEED STORE,
AND
WARE-HOUSE FOR FARMING TOOLS.**

DISSOLUTION.—The co-partnership heretofore existing under the firm of B. F. SMITH & Co. is this day dissolved by mutual consent. All accounts will be settled by JAMES P. FOGG, who will continue the SEED and TOOL business, at the old stand on his own account.

B. F. SMITH.
JAMES P. FOGG.

January 1, 1845.

The subscriber having purchased the interest of Mr. B. F. Smith, in the SEED and IMPLEMENT 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 seedsman 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; while those varieties of foreign growth, which experience has shown are the best, such as Cabbage, Cauliflowers, Brocoli, all the varieties of Garden and Field Turnip, Scarlet Short-Top Raddish, Scarlet and White Turnip-Raddish, Dwarf and Early Peas, with Twenty choice varieties of FLOWER SEEDS, have been imported by the subscriber from the long established house of R. WRENCH & SONS, of London.

FIELD SEEDS.

RED and WHITE CLOVER, TIMOTHY, BARLEY, Seed-Corn, Italian and Siberian Spring Wheat; Early June Potatoes, Marrowfat and other Field Peas, Rye-Grass, Orchard-Grass, Lucerne, &c. &c.

VEGETABLE GARDEN SEEDS.

A choice and select variety of PEAS, BEANS, CABBAGE, CAULIFLOWER, CELERY, BEETS, CUCUMBERS, MELONS, RADDISH, SQUASH, Herb-seeds, &c.

FLOWER SEEDS.

The collection of Annual and Perennial FLOWER SEEDS, contains many new and choice varieties.

AGRICULTURAL & HORTICULTURAL TOOLS.

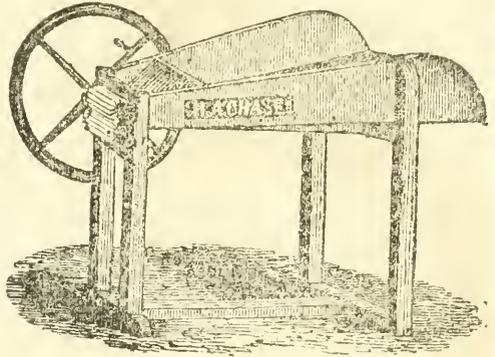
At the Ware-Room, adjoining the Seed Store, may be found an extensive and complete assortment of Agricultural and Horticultural Implements, embracing almost every tool used in the cultivation of the Farm and Garden.

SUPERIOR PLOWS.

The celebrated MASSACHUSETTS PLOWS, of three sizes, several hundred of these Plows, have been sold in Rochester, and vicinity, and have given entire satisfaction. Also, Deleno's Dimond Plow—Sub-Soil and Side-Hill Plows—The Gang-Plows—Two Horse CULTIVATORS, for working summer-fallows, and getting in wheat. Corn Cultivators, Root-Cutters. Corn-Planters, Drill-Barrows, Hoes, Shovels, Scythes and Snaths. Garden-Rakes, Corn-Shellers, STRAW CUTTERS, &c. &c.

Rochester, January 1, 1846. JAMES P. FOGG.

TO FARMERS AND OTHERS.



GENTLEMEN—I am now manufacturing and offering for sale, SANFORD'S PATENT STRAW CUTTER, in the City of Rochester.

Said machine was patented two years ago, and has this year for the first time made its appearance among you; and for cheapness, durability, and amount of work, I say it cannot be beat. It took the first premium at the State Fair, and at the Fairs of Onondaga, Wayne and Monroe Counties. I now ask you to examine it, try it, and then buy it, if you please.

For sale at the GENESEE SEED STORE, No. 10 Front St., Rochester.

H. A. CHASE.

Rochester, Nov. 1845.

RECOMMENDATIONS.

I recently witnessed the operation of "Sanford's Perfect Straw Cutter," sold by H. A. CHASE, of the American Temperance House, Syracuse, and most cordially recommended said Machine to all persons wishing to cut straw, hay, or stalks, for food to be given horses or cattle. Simple in its construction, least liable to get out of order by use, and for ease to the operator, and despatch with which the work is done, it cannot be surpassed, if equalled, by any machine constructed for the same purpose that I have ever seen. Its operation is only to be seen to be admired, and the machine and its principle approved.

Elbridge, July 21, 1845. SQUIRE M. BROWN,
Pres't. On. Co. Ag. Society.

MR. CHASE'S STRAW CUTTER.—The undersigned, officers of the Wayne County Agricultural Society, would express their commendation of the machine exhibited at our Annual Fair, by Mr. H. A. CHASE, of Syracuse, called "Sanford's Perfect Straw Cutter." We believe it is the best machine of the kind ever invented, and that its superiority and usefulness need only to be known to secure for it general adoption by our farming friends. Simple and substantial in its construction, and efficient in its operation, it performs its work in the highest degree of perfection, and is easily kept in repair. It cuts and mashes the straw, hay or stocks, in a manner termed by English husbandmen *chaffing*. Its low price brings it within the acquisition of every farmer, and we feel that it cannot be too highly recommended to the agricultural portion of our fellow citizens.

C. S. BUTTON, Newark, Pre'st.

D. KENYON, } Vice Presidents.
J. A. MILLER, }

SAMUEL E. HUDSON, } Ex. Com.
T. HEMSWAY, }

W. P. NOTTINGHAM, Treasurer.

Palmyra, Oct. 2, 1845.

CORTLAND VILLAGE, Nov. 19, 1845.—Mr. H. A. CHASE.—The Machine arrived safely, a couple of weeks since, and I have subjected it to a most thorough trial. You remember though we gave it the first premium at Utica,* I stated some objections to some of its details. I find I was mistaken. It cuts easier and faster, I think, than any machine with which I am acquainted. It takes one of my men but a few minutes to am feed for six horses for a day.

Yours respectfully, HENRY S. RANDALL.

* Mr. RANDALL was Chairman of the Awarding Committee on this class of Improvements, at the State Fair, Utica.

MARKET INTELLIGENCE.

ROCHESTER, Feb. 23, 1846.

Owing to the recent heavy fall of snow, and severe weather, there are but few transactions in this Market.

The reader is referred to the article headed "British Corn Laws," on our first page.

Rochester Produce Market.

(CORRECTED FOR THE GENESEE FARMER.)

Wheat,-----	1,00	a 1,06	Pork, bbl, ----	10,00
Corn,-----	50	53	Pork, cwt,----	4,00 4,50
Barley,-----	42	45	Beef, cwt,----	3,00 3,50
Oats,-----	32	34	Lard, lb,-----	7 7 1/4
Flour,-----	5,25		Butter, lb,-----	12 14
Beans,-----		88	Cheese, lb,-----	6 7
Apples,-----	25	50	Eggs, doz,-----	12 13
Potatoes,-----	25	31	Poultry,-----	7 7
Clover Seed,-----	5,75	6,00	Tallow,-----	6 7
Timothy,-----	1,75	2,00	Wool,-----	
Hay, ton,-----	12,00	13,00	Sheep Skins, fresh,	1,00
Wood, cord,-----	2,50	2,75	Green Hides, lb,	3 7
Salt, bbl,-----		1,25	Dry "-----	6 7
Hams, lb,-----	5	6	Calf Skins,-----	5 6

NEW YORK, Friday evening, Feb. 27.

Flour.—The market has been very inactive to-day, and without sales of importance to make quotation. The market may be quoted at \$5,50 for good Western brands.—There are rumors of sales below this rate. No shippers were in market, but probably a few thousand bbls. could be sold for England \$5,37 1/2. N. O. flat hoop we quote 5,12 1/2. Round hoop is \$5 a 5,12 1/2. In southern there is not much doing.

Grain.—There is nothing doing in wheat, holder's views being above those of shippers or millers. Corn is without change.

Whiskey.—No change to note. The market is firm, and bbls. are nominally 23 1/2 a 24 cts., but we hear no sales.

Seeds.—The sales of Clover are light, but the inquiry is good. Holders are rather too firm for operations. A sale of 500 bbls. old Ohio, was made at 8 1/2 cts. Of Timothy 100 bbls. prime sold at \$17, and of Rough Flax 400 bushels at \$1,25, for crushing.

NEW YORK, Feb. 23.—Flour is very quiet. Genesee \$5,50. Southern \$5 a \$5,25. Handsome yellow flat corn is offered at 66 cts, and 64 1/2 is bid.

BUFFALO, Feb. 23.

In flour there is no disposition to operate, and prices remain as previously noted. We hear of a sale of 12 bbls. new mess pork at \$12,50—10 bbls. prime do. at \$8,50—6 bbls. of shoulder slanks at \$7—a lot of butts at \$3,50, and an invoice of lard at 7 1/4 cents. Some movement is discernable in cheese, and we notice the sale of 6000 lbs. Ohio on private terms. Highwines move off moderately at 24, and whiskey at 20.—*Com. Adv.*

RACINE, Feb. 17.

The operations in our market are light. Wheat will not, we believe, command over 70 cents a bushel for the best winter grain.—*Adv.*

MILWAUKIE, Feb. 14.

Prices are still drooping. Wheat sells at from 63 to 70 cts.; flour \$3,75 from wagons; oats 22 cts.; barley 35 cts.

ERRATA.—On page 56, near the bottom of the 2d column, for "to make 16.5 lbs. of dry muscular fibre," read to make 100 lbs. &c.; and 100 lbs. of dry clover to form 16.5 lbs. of dry muscle.

CHOICE FRUIT TREES.

FOR SALE, at the Rochester Commercial Nursery, on Main street, one mile east of the Court House. The subscribers offer for sale nearly 200,000 Fruit Trees of various varieties and sizes, for cash or credit, upon the most favorable terms.

Also—An assortment of hardy Ornamental Trees and Shrubs.

Also—Scions of almost every description of Fruit. The above have been thoroughly tested, and will be warranted of the kinds represented.

BISSELL & HOOKER, at the Nursery, or J. W. BUSELL, No. 1, Arcade Hall.

March 1, 1846.

2m.

Acknowledgments.

THE Publisher desires again to express his thanks to the numerous *substantial friends* of the GENESEE FARMER.—The daily additions to our subscription list, from various sections—Western New York, Pa., Ohio, Michigan, &c., more particularly—give abundant evidence of the generous exertions of the readers of this Journal, to extend its circulation in their various localities.

It was our intention to publish, in the Feb. or this No., a list of the names and residence of all those persons who had obtained eight subscribers, or over—which would answer as a receipt, and also show to whom we are indebted for a large share of patronage. But want of space compels us to omit the list—not, however, without the hope of giving it, with many additions, in a future number. We have in our mind's eye the names of over a score, each of whom have sent us from 25 to 60 subscribers: indeed, they are in type, but necessarily deferred.

To Postmasters, Agents, &c.

POST MASTERS and others who have interested themselves in obtaining and forwarding subscriptions for the FARMER, will please accept our sincere thanks for so generous an exercise of their influence. We trust they are disposed to continue their valuable aid in behalf of this publication—by extending its circulation, and thus enhancing its usefulness in their respective vicinities. Those interested will oblige us by complying with the subjoined requests:

Remittances by Mail.—Persons ordering the Farmer, are requested to enclose the money, instead of sending Post-office drafts. This will save us much trouble. If money is properly enclosed, we will run the risk of loss by mail.

Post Office Address.—Subscribers wishing to have their paper changed from one Post-office to another, will please state where it is now sent, in order that we may make the proper correction. It is no easy task to look over several large books to find and erase the name of a subscriber.

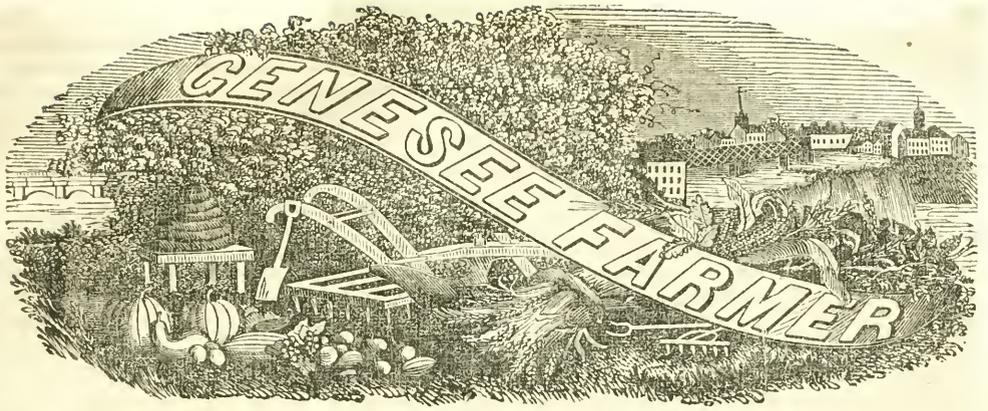
Discontinuance.—Post-Masters, or others, returning the Farmer, to be discontinued, will please write the name of the person, and post-office where sent, on the wrapper. This will keep the papers uninjured, so that we can use them for new subscribers—and also enable us to correct our books promptly.

☐ Owing to the large and continued increase of subscribers, the first edition of our January and February numbers is nearly exhausted. In order to supply all new subscribers with the entire volume, we have already reprinted one of the back numbers, (adding several thousand to the original edition,) and shall reprint the other in a few days. We hope our friends will keep the ball in motion, and let none of their friends or neighbors be without the Farmer for the want of an invitation or opportunity to subscribe.

A **HINT.**—If each subscriber, after he has read this number, will permit a neighbor who is not a subscriber to peruse it, we trust that at least one-half of them will order the paper. Our terms are so low that we can not afford to hire agents, and must depend entirely on the kindness of the friends of Agriculture and Horticulture to extend the circulation and usefulness of the Farmer.

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THE GENESSEE FARMER:

Issued the first of each month, at 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 over the Rochester Seed Store (2d story,) Front street, nearly opposite the Market.

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.

Delay of this Number—Explanation.

THE publication of this number of the Farmer has been unavoidably delayed until the middle of the month, in consequence of the impossibility of procuring suitable paper at an earlier period. The dam of the Paper Mill in this city was swept away by the freshet in March—yet we were promised a supply of paper the first of April. But we were again disappointed,—and finally obliged to send abroad in order to obtain paper of a proper size and quality, and then wait (until our patience and patriotism nearly evaporated,) for it to be manufactured, &c. Every possible effort was made to prevent the delay, but the elements proved decidedly unpropitious and inflexible.

“This is the head and front of our offending,” and we trust our friends will not censure us for a delay which could not be avoided.

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 our friends will bear this in mind, and forward the subscriptions of those who want the Farmer.

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 trust that all who like the manner and matter of the Farmer will lend their influence in extending its circulation and usefulness in their respective vicinities.

Lectures on Agricultural Chemistry.

THE Editor of this paper will be prepared to deliver lectures on Agricultural Chemistry during the month of April, and perhaps more or less through the season, in various parts of Western New York. In case he shall go out to lecture, (having had the experience of last year to guide him,) he thinks it best to be provided with a Chemical Apparatus, and to spend two weeks in a town, giving 8 or 10 lectures, and instruction in the *practical details* of analyzing soils, the ashes of plants, &c. By this means, fifty or one hundred persons can acquire, with the aid of books, a familiarity with the elements of the science, and the properties of the tests, and reagents used to elicit important facts, which will be of incalculable service in directing aright all their farming operations.

The charge for going and spending two weeks in a town, including the analysis of soils, will be \$50. If fifty or one hundred farmers think favorably of this matter, they have only to subscribe fifty cents or a dollar each, and they, and their sons and daughters, can have an opportunity of attending these lectures at no great distance from their own doors.

Provided any lectures abroad, after the first of May, shall interfere with his duties to his school, none will be given.

PROCEEDINGS OF THE CLINTON COUNTY AGRICULTURAL SOCIETY FOR 1845.—We have received from WILLETS KEESE, Esq., a copy of the proceedings of the Clinton County Agricultural Society, for 1845, with a list of premiums for 1846. We regret that the Society has found it necessary to put the fee of membership at \$5, in order to raise the necessary funds to sustain it. This shows a lack of interest on the part of the great mass of farmers, which should not exist.

The crops of wheat and corn on which premiums were awarded were grown at a good profit. Seed corn soaked 12 hours in water, and rolled in plaster. Corn treated to a dose of *ashes* and plaster on the hill.

Canal Tolls on the Products of New York Agriculture.

WE were slightly in error when we said in our March number, that the Canal Board had reduced the tolls on corn to 2 mills per 1000 lbs. per mile. The toll is to be 3 mills instead of 2. As the farmers have a deep interest in this question of high, low, and discriminating tolls, we desire to call their attention to a few facts, which the political and other journals have somehow overlooked.

The man that raises and fattens 10,000 lbs. of cattle, sheep, or swine, in Western New York, and wishes to send them alive to tide water, for a market, in a canal boat, (which, with reasonable tolls, would be the cheapest and best way to reach the city of New York,) must pay into the treasury of the State just *eight times* as much money for the use of the canal, as is exacted of a Wisconsin merchant that sends the same weight of lead an equal distance through the same State improvement. This enormous—this most unjust discrimination against the stock growers of Western New York, particularly those of Chautauque, Cattaraugus, Wyoming, and Allegany counties, operates to prevent the use of the canal for the purpose named; while the Canal Board place it at the service of those engaged in transporting *lead* from Wisconsin and Illinois, *coal* from Ohio and Pennsylvania, *tobacco* and *hemp* from Kentucky, and *cotton* from Tennessee. We do not complain that the tolls are so reduced as to invite the transit of the articles named through the canal. But we do contend that, while the Canal Board is so liberal to the inhabitants of the West and South, it has no moral right to impose on our own citizens *prohibitory* tolls, on all fat-cattle, hogs, and sheep; on oats, hay, hemlock lumber, and many other articles too numerous to mention. The toll on potatoes is twice as high per 1000 lbs. as on lead. On a ton of pressed hay, the Canal Board exacts four times as much money as it does on a ton of lead. On a ton of *oats* the toll is four times as heavy as it is on a ton of hemp, or tobacco. On pine lumber the toll is 80 per cent. higher than it is on mineral coal, and 240 per cent. higher than on lead.—Erie county could easily send vast quantities of hemlock lumber to tide water, if its inhabitants were permitted to use the Erie Canal on equal terms, pound for pound, with those that boat lead through it. But, some how a farmer's dollar will only go one-fourth as far in paying toll on a ton of oats, as the manufacturer's dollar in paying toll on a ton of hemp; or the merchant's in paying toll on a like amount of that prime article of *human food*—tobacco!

If the State now realized any considerable revenue from high tolls on pressed hay, oats, fat cattle, &c., the loss of toll might be urged as a reason why no farther reduction should be made. But as the rate is *strictly* prohibitory, and pre-

vents the receipt of any revenue worth naming, there can be no loss from a reduction, no matter how much. It is not the fear of loss in tolls that keeps them up.

We urge this matter the more at this time, because fresh meats packed in ice will soon be shipped from New York and Boston direct to England, and be admitted duty free. Our partially exhausted wheat fields greatly need the renovating aid of more stock and manure. Independently of this, however, we are free to state our firm opposition to a policy that depopulates Western New York, by saying to its industrious young men, "go west and dig lead out of the earth, and not stay in New York and dig oats from her soil; and as a bounty to induce you to emigrate, twelve and a half cents shall go as far in paying toll on the Erie canal on a ton of Wisconsin lead, as a dollar will go to pay toll on a ton of New York oats." This policy must be abandoned. How much more are 100 lbs. of oats *worth* at tide water, than 100 lbs. of lead, that the toll should be eight times higher on the former than on the latter?

The commercial men engaged in the coal, lead, salt, cotton, hemp, and tobacco trade, look well after their interests; but who looks after the interests of the 50,000 farmers in Western New York, when the Canal Board is in session?—Which, among all the political papers, keeps a watchful eye over everything that is likely to affect injuriously the farmer's great, and useful calling? If no one does this, then is it not highly important to the numerous tillers of the earth that, they sustain a Journal wholly devoted to their prosperity, above the reach of party politics, and yet so cheap that its light, and truth may visit every log house in the land? How are we to have an enlightened public opinion, to control all State officers, and legislation? Or should the agricultural public have *no opinion* in regard to the rate of tolls imposed on the weighty, and cheap articles, which this same hard working Public desires to send to a distant market?

If our present readers could be persuaded to lend us their assistance, so far as to place the Farmer in the hands of one-third of the heads of families engaged in agricultural pursuits, in this State, west of Syracuse, Public Opinion would soon so modify the canal tolls as, practically, to place the soil of Western New York 100 miles nearer than it now is, to tide water. Instead of losing our industrious young men, and diminishing our rural population, we should then double our present numbers, and the substantial value of our farms. Be that as it may, it is our duty to press upon the attention of our readers this point: that it is alike impolitic and unjust to compel the people of Western New York to emigrate to Tennessee, Kentucky, Ohio, or Illinois, after they have paid for the old Erie canal, before the Canal Board will permit them to use

it, on equal terms as to rates of toll, with the persons now growing cotton, hemp, and tobacco, or taking coal and lead from the earth, in those States. If there be any good reason why a fat ox raised in Western or Central New York, that weighs 2000 lbs., should be taxed in toll on the canal, 8 mills per mile, while 2000 lbs. of lead going in the same boat, by chance, is charged only 1 mill per mile, we should like to see it on paper. If money is the object, then reduce the tolls on fat cattle, sheep, and swine, down to 1 mill per 1000 lbs. per mile, or at a rate only *twice* as large as that on lead. By this means thousands of fat animals will pay a revenue to the State, that otherwise would not contribute one cent to its income. This reasoning applies as well to the stock growers of Chenango, Madison, Tompkins, Chemung, Steuben, Yates, Oswego, and Lewis counties, as to those residing in counties through which the Erie canal passes. It would not be difficult to demonstrate that the utility of our canals may be increased 50 per cent., with an increase of revenue to the State, by so adjusting the tolls that all weighty agricultural products, including lumber and timber, can reach tide water through these artificial water courses. Take the extreme point west, and 60 bushels of oats, weighing a ton, can be sent from Buffalo to New York for \$2,40; or at 4 cents a bushel, exclusive of tolls. At the rates fixed for 1846, the toll on a bushel of oats, weighing 33 lbs., will be four cents and four mills from Buffalo to Albany. Reduce this to 2 cents per bushel, and the revenue will be increased five-fold on this article of coarse feed.

Oil or Fat in various articles of Food.

ACCORDING to the elaborate researches of Messrs. Payen, Dumas, and Boussingault, there is of oil, in one hundred parts of

Common Maize,.....	3.3	Dry Lucern,.....	3.5
Rice,.....	0.3	Meadow Hay,.....	3.3
Oats,.....	5.5	African Wheat Straw,...	3.2
do., an inferior kind,...	3.3	French " ".....	2.2
Rye,.....	1.3	Oat Straw.....	5.1
Rye Flour,.....	3.5	Bean Meal,.....	2.1
Hard African Wheat,...	2.1	Beans,.....	2.0
Venezuela do.,.....	2.6	Peas,.....	2.0
Flour,.....	2.1	Lentils,.....	2.5
do.,.....	1.4	Potatoes,.....	0.93
Fine Bran,.....	4.3	Oil Cake,.....	9.0
Coarse Bran,.....	5.2	Carrots,.....	0.17
Dry Clover,.....	4.0		

It seems incredible that there should be 5.1 per cent. of oil in *oat straw*, and only 2 per cent. in beans and peas. We should much prefer 160 lbs. of peas, to make into pork, to their equivalent, 40 lbs. of oat straw!

BUTTER.—Practice has proved that 62° is the best temperature for cream at the time of churning. If below this, pour in hot water; if above it, cold, until it is brought to the required point. This point is ascertained of course by a thermometer.

For the Genesee Farmer.

From what Sources do Plants derive their Organized Elements?

“Are nothing more nor less than so much water in a solid form.”—GEN. FAR. p. 11.

Is this true, in theory or fact? Are the oxygen and hydrogen in wheat or straw in the *state* of water? If so, then are the hydrogen and nitrogen of wheat in the state of *ammonia*, and the carbon and oxygen in the state of carbonic acid or oxide, and the carbon and hydrogen just as much in the state hydro-carburet. Liebig states as the fact that, plants take from the atmosphere their carbon and the *elements of water*, and the elements of water form a part of the food of plants.

But who can believe that 97 per cent., or even 90 per cent., of vegetables is derived from the atmosphere? So long as *manures* produce their accustomed effects, is this possible? This fact of the value of manures has been the grand obstacle to the belief of this notion. Though much carbon may be derived from the atmosphere through the leaves, the whole can not be, so long as the *product of each soil* is “limited by the measure of its own fertilizing ingredients.”—The solution given by Mr. Ruffin of this difficulty is self-destructive, viz., “that the force of growth given by the soil, enables the plant to seize upon and appropriate a certain increased but definite proportion of the inexhaustible treasures of the atmosphere.” What is this *force of growth* but the strength derived from the manures of the soil; in other words, the plant is nourished and strengthened by the very elements in the soil, which that power thus acquired takes only more abundantly, than it otherwise would do, from the atmosphere. It is not enough to introduce into the soil the earthy ingredients which enter into the most healthful operation of vegetable life, but the carbon and other elements must be combined with them to produce the greatest product. There can be no doubt too, that only a portion of the carbon of the atmosphere enters a plant by its leaves; for, carbonic acid is absorbed by the water in the atmosphere, and comes down with it, as does the ammonia, in rains, snows, &c., and must find its way through the ground by the roots into the vegetable.—Thus Liebig says that, “the roots * * * absorb constantly water and carbonic acid,” and it would be very singular if other matter than the earthy ingredients should not enter by the roots with the water and carbonic acid. There is no necessity of pressing the principle beyond its obvious extent. Plants operate as the grand means of preserving the necessary balance of the elements of the atmosphere. They remove a large proportion of the carbonic acid, and return the corresponding proportion of oxygen. They use the elements of water, and by means of water take up the ammonia which is rising into the atmosphere from the decomposition of animal and

vegetable matter. They seize upon the elements in the soils, which form their pabulum or support. The economy is beautiful; the operation is admirable; the result most beneficent to the vegetable and animal kingdoms. C. D.

REMARKS ON THE ABOVE.

Our esteemed correspondent gives to the expression, "water in a solid form," a more limited, and precise definition than we are in the habit of doing, when writing for the unlearned who constitute a large majority of our readers; and as a mark of respect for whom, we aim to avoid as much as possible the use of scientific terms of Greek origin, like the words *oxygen* and *hydrogen*. However water or its elements, in connection with carbon, may be transformed into wood, starch, sugar, oil, gum, and other vegetable substances, we think it not amiss to say that such water is in a "solid form," so long as water furnishes about one-half of the solid matter in all plants.

"C. D." asks: "Who can believe that 97 per cent., or even 90 per cent. of vegetables is derived from the atmosphere? So long as manures produce their accustomed effects, is this possible?"

These queries raise the most important question that exists, either in the practice, or the science of rural economy. It is one, to the investigation of which we have bestowed some time, and not a little thought. Although pressed for room in this number of the Farmer, we must take it, so far as shall be necessary to explain our views, in a concise manner, on the great question: "From what sources do plants derive their carbon, oxygen, hydrogen, and nitrogen, or their organized elements?"

If we take 100 lbs. of perfectly dry, unbolted wheat flour, and carefully burn it to ashes, we shall have less than $2\frac{1}{2}$ lbs. of incombustible mineral matter. $97\frac{1}{2}$ lbs. of the flour will have been converted into vapor and gas, and dissipated far and wide through the atmosphere.

Combustion is only one process among many, by which nature transforms all organized substances, whether vegetable or animal, into *air* and *vapor*. Every body knows that, when plants and animals die, they decompose on the face of the earth, and while rotting, give off into the surrounding atmosphere, most offensive effluvia or gases, which, in some sections, like the rich alluvial bottoms at the West, are sufficient to render whole counties quite unhealthy. Do not the droppings—the dung and urine of all animals—fall on the surface of the ground and throw into the air, *naturally*, no inconsiderable portion of their carbonic acid and ammonia? The carbon in the carbonic acid expelled from the lungs of each human being on the globe, in three days, will weigh a pound, on a fair average, taking old and young together. This will give *daily* to the atmosphere, from this source alone, some 300,000,000 lbs. of carbon from the daily food of man. The ceaseless respiration of all other animals will discharge into the same immense reservoir, at least ten times as much carbonic acid. Fermentation, however, furnishes infinitely more of the gaseous elements of plants than the respiration of animals. Volcanoes and gaseous fountains discharge a vast amount of carbonic acid and nitrogen derived from the decomposition of organic remains, both vegetable and animal, by heat—these remains being more or less diffused through stratified rocks some thousands of feet in thickness. We will not allude to the quantity of carbonic acid, associated with lime and magnesia in the earth, and liable at all times to be expelled into the air by internal heat, however generated.

Vegetables are the only known agents employed by Providence to purify the air we breathe, by consuming all these noxious gases. In what way do they perform this great service—this wonderful *double favor* for all that eat, as well as all that breathe? For no animal, not even the lowest in the scale of created beings, can live on the elements of another animal, when disorganized into carbonic acid and ammonia. Plants alone have the power to re-organize the simple elements of water and air into nourishment for animals. How is this done? An immense amount of water is evaporated from the surface of the ocean and the earth, as well as from lakes and rivers. This liquid is endowed by Infinite Wisdom with the power of *seizing* in the atmosphere, and bringing with it down to the earth, *in a harmless form*, all the gases given off by combustion, respiration, fermentation, and the rotting of all vegetable and animal substances.—Rain water, armed with carbonic acid, to aid in dissolving

carbonate lime and magnesia, iron and the silicates of potash and soda, together with the phosphates, sulphates, and chlorides of these bases—minerals which plants must have—enters the roots of vegetables and ascends to their leaves. There the blessed light and heat of the sun, in a way unknown, transform carbonic acid, water, and ammonia, into woody fibre, starch, oil, sugar, gum, gluten, albumen, and other vegetable products. The green portion of the stems of plants, as is witnessed in the Cactus family, can also change carbon, ammonia, and the elements of water, into organized tissues. Nor are the roots the only portion of vegetables through which carbonic acid, water, and the gases that water holds in solution, enter. The pores in the leaves of plants not only permit the escape, by evaporation, of large quantities of water, taken up by their roots, but they at times imbibe moisture and carbonic acid directly from the atmosphere. What portion of the food of any given plant taken from the air, enters it through its leaves, and what by its roots, is a question of no practical importance. It is, however, a question of the highest moment to ascertain how much of the substance of the soil is really consumed in producing 40 bushels of wheat on an acre. It is all important to learn, if we can, what portion of such a crop is made up of ingredients taken from Nature's grand store-house of vegetable food—the Atmosphere.

After a long course of investigation, extending through many years, which would fill a volume if fully written out, we venture the opinion that, in forming 2,000 lbs. of seed wheat, nature does not use more than 200 lbs. (10 per cent.) of solid matter, taken from the substance of the earth. Over 40 bushels of wheat have been grown in Scotland on an acre of land that had only one-half of one per cent. of organic matter in the surface soil. But we will not argue this point from facts, however unquestioned, collected from extreme cases. We are willing to concede that, a fair wheat soil should have five per cent. of organic matter, capable, on decomposition, of yielding carbon and nitrogen to wheat plants. We will go farther and admit that, this organic matter is, on an average, twice as soluble as the mineral ingredients that go to make wheat. Now, take 100 lbs. of this soil and pour over it rain water which has been boiled, till you have dissolved out 100 drachms of earthy matter. Fix the carbonic acid and ammonia as you expel them from the solution by heat, and weigh them. Evaporate to dryness the salts and organic matter not volatilised, which the water has dissolved. Dry thoroughly at 250° F.—weigh, and then burn in a platinum crucible. Weigh the residuum. If the loss by combustion, and the weight of the carbonic acid and ammonia expelled by heating the solution after the soil was washed or leached, make 10 per cent., then your soil will come up to an average of good wheat land, to wit, it will yield to rain water nine parts of the salts of lime, magnesia, potash, and silica, &c., to one of the organic elements of wheat.

Let us now suppose that a wheat field has a fair supply in due proportions, of all the mineral elements necessary to make 2000 lbs. of seed on each acre; and that it has five per cent. of vegetable mold, which is twice as soluble as the other portion of the soil. And here let us suggest that, if the solid organic elements on the surface of the earth were very soluble, like snow and salt, they would all dissolve in a single season, and leave the soil without a particle of organized matter. There is great wisdom displayed by the Contriver of all things, in rendering vegetable mold so *insoluble*. With five per cent. in the soil, and that twice as rapidly consumed by decomposition as the mineral elements, who does not see that vegetable mold will be much sooner exhausted, than any other resource for supplying cultivated plants with food?

Let us now suppose that nature is about to form 2000 lbs. of wheat, whose 1952 lbs. of carbon, hydrogen, oxygen, and nitrogen, or their carbon and nitrogen alone, are to come from vegetable mold. We have shown that, to get 10 lbs. from that source *exclusively*, the plants must take up into their circulating vessels, in the same water or sap, 90 lbs. of earthy ingredients! To convey to the embryo seeds of wheat 1000 lbs. of carbon, drawn from the solid substance of the soil, more than 10,000 lbs. of dissolved minerals must go up to the same destination, although in forming the kernels of wheat nature can use only 43 pounds of these minerals! Striking as are these statements, the truth of which can not be gainsayed, they are only one horn, and that the smaller one, of the dilemma, upon which many men of learning and science have fallen.

Take 100 pounds of a good wheat soil having 5 per cent. of common vegetable mold, and we ask, how much *organ-*

ized nitrogen does it contain to form gluten in wheat?—Dissolve any way you please, the five pounds of carbon, oxygen, hydrogen, and nitrogen it contains, and then tell us how many pounds of good wheat your nitrogen will supply. This is a very important question, because the value of wheat for making bread is measured by the amount of nitrogen it contains in gluten and albumen. We will answer the question. Provided your vegetable mold is as rich in nitrogen as wheat straw dissolved into compost, it will take 6½ lbs. of the organic matter in the soil, to form one pound of wheat.* Hence it is demonstrated that, throwing the ammonia and nitrogen out of the account, nature must decompose organic matter, and take up through the circulation of wheat plants, five times more carbon than she needs to form kernels of wheat, to obtain what nitrogen is necessary to perfect the seeds of this plant! Can anything be more unlikely?

At best, the natural supply of available nitrogen to form 40 bushels of wheat on an acre is deficient. Hence, ammonia—a compound formed by the union of 14 parts of nitrogen with 3 of hydrogen—is an essential ingredient in the 10 per cent. of a wheat crop, which should be applied to the soil—allowing as we do 90 per cent. to come from water and air.

In our last number we stated that, an acre of good clover often has 3693 lbs. of carbon, oxygen, hydrogen, and nitrogen, organized in a solid form, after all the moisture is expelled. It frequently happens that 100 lbs. of gypsum adds 2000 lbs. to the carbon, oxygen, &c., organized in a crop of clover. From whence comes this immense gain of carbon, if not from the atmosphere? 100 lbs. of guano have added 5000 lbs. to a crop of potatoes. Does any body believe that, this manure decomposes several thousand pounds of additional vegetable matter, in the soil, to form these 5000 lbs. of potatoes? From some experiments which we have tried, we have reason to believe that you may weigh 100 lbs. of dry soil, moisten it with rain water, and grow in the same 25 lbs. of potatoes more than your seed, and on drying the soil again, it will not have lost but one pound. We have often weighed carefully 500 grains of soil, planted it with wheat or corn, and then weighed the crop when well dried as well as the soil in which it grew; but we have not chosen to publish the results till we can repeat the experiments with the advantage of a very delicate and accurate balance, for weighing every element.

We see millions of acres of prairie grass annually consumed by fire, and all its combustible elements scattered by the four winds of heaven, year after year, for centuries in succession. Is the soil exhausted by the operation that sends from it countless tons of carbon and nitrogen into the atmosphere? Not at all. It is most admirably fitted to bear, by the ashes which have been left behind, prodigious crops of wheat and corn. So soon as said ashes shall be washed out of the surface soil, or removed in hay and grain, down will go their crops to the old Virginia average. If a man sells nothing but air and water off his farm, no matter in what shape they go, showers and winds will soon fill the vacancy. But when he sells in bones and ashes, whether in wheat, corn, or hay, all the minerals that nature uses to form his crops, let him know that, his children will have to leave "the old homestead," or give twice as much soil for a loaf of wheat bread as they ought to give.

We shall be the last to undervalue the use of manure.—All we contend for is, that the fertilizing elements in a dead horse, which escape into the air, fall some where to make grass and milk, by chance to feed a living colt. As the water that evaporates in one state may fall in another, so the prairie grass burnt in Illinois, with a strong west wind, may fertilize the meadow of a farmer in Ohio—falling of course in dew or rain. But remember that, neither the bones of a dead horse, nor the ashes of plants go with their gaseous elements.

With 59 counties in the State of New York, and Monroe far from being the largest, produces one-tenth of all the wheat grown in the State. This county has no more carbon or nitrogen in its soil than Chenango county, nor has it greater means for making barn-yard manure. Why, then, do the people of Chenango import most of their flour, while those of Monroe export some 200,000 bbls.? It is only because the soil of Chenango lacks some of the mineral elements, found in the seeds of this bread-bearing plant, which exist in the soil of this region. It is owing to her phosphates of lime and magnesia, her chloride of sodium, and sulphate

of potash in an available form, that Monroe county shows by the recent census an aggregate yield of grain of all kinds, worth \$600,000 more than the product of any other county in the State. The quality of a soil must be judged by its mineral constituents, rather than by the amount of *muck or mold* it may happen to possess. Where the former are right, as in the recent lavas of Etna and Vesuvius, with proper seeds, the dews, rains, snows, and winds of heaven will soon bring carbon and nitrogen enough to cover the nakedness of the land. When we say that, in forming 1000 lbs. of wheat, nature takes 900 pounds on an average, from water and air, and 100 from the substance of the soil, of which 24 are minerals and 76 organic elements, we probably credit the soil with more carbon and nitrogen than it really furnishes. Nor can we see how this view of the subject discredits the value of manure, which gives both saline and gaseous elements directly to the roots of plants.—If carbonic acid in rains and dews will aid in dissolving the carbonate of lime, so also will the same gas as it is set free from dung rotting in the earth. If the nitrogen that escapes in the perspiration of a horse will aid in making oats and clover for him to eat, so also will the nitrogen in his other excretions if applied near the roots of plants. It by no means follows that, because our Maker is as bountiful as he is merciful, therefore we should abuse his bounty, as we do his mercy.

Constitution for an Ag. Society.

Mr. G. W. BARR, of Western Pennsylvania, requests us to publish a Constitution for an Agricultural Society. We give below the Constitution of the Madison Co. (N. Y.) Agricultural Society, which is perhaps as good as any we could furnish in the space it occupies. There is a spirit of inquiry and improvement manifested by the farmers of Western Pennsylvania, which cannot fail of proving highly beneficial. We wish them God-speed in their endeavors to "improve the soil and the MIND."

ARTICLE 1. This Society shall be called the "MADISON COUNTY AGRICULTURAL SOCIETY," for the advancement of Agriculture, Horticulture, and the Domestic Arts.

ARTICLE 2. Any person may become a member of this Society by paying into its Treasury one dollar, on admission, and one dollar annually thereafter, during his continuance as a member. Any person paying ten dollars, on admission may become a life member.

ARTICLE 3. The officers of this Society shall be a President, three Vice-Presidents, Corresponding Secretary, Recording Secretary, Treasurer, and fourteen Managers, (one from each town,) who shall, together, constitute the Executive Committee. They shall be elected annually by a majority of votes present, and shall have power to fill vacancies in their own body.

ARTICLE 4. It shall be the duty of the President to preside at all meetings of the Society and of the Executive Committee, and to call special meetings of the Executive Committee when deemed necessary.

ARTICLE 5. The Executive Committee shall appoint Local Committees in the several towns of the County, whose duty it shall be to examine farms and crops, which may be offered for premiums; to obtain members, collect fees, and perform all necessary labors connected with the operations of the Society, in their respective towns.

ARTICLE 6. It shall be the duty of the Executive Committee, (five of whom shall constitute a quorum,) to exercise a general supervision of the affairs of the Society; to appropriate the funds of the same, in such manner as shall best subserve the interests and forward the objects of the Society; to offer premiums, and to appoint Committees to award them, and to distribute all seeds, plants, books, &c., received for the Society, and to make their annual report at the annual meeting.

ARTICLE 7. The Executive Committee shall determine the time and place, and make the necessary preparations for an Annual Fair, and give sufficient previous notice of the premiums to be awarded thereat.

ARTICLE 8. All competitors for premiums must be members of the Society.

ARTICLE 9. This Constitution may be altered at any annual meeting, by a vote of two-thirds of the members present.

* See Boussingault, p. 349.

Nitre in old Ash Heaps.

MR. EDITOR—The question has been disputed whether nitre will accumulate in wood ashes, under any circumstances, unless in contact with decaying animal and vegetable matter. It is known to boilers of potash, and others that have observed the finishing process termed "melting," that a very inflammable gas is given off that is often troublesome to the workmen, and imputed by them to the effect of nitre existing in the ashes before lixiviation. The advocates of the affirmative refer to the accumulation of nitre in the Mammoth Cave in Kentucky, and other similar places, in confirmation of their opinion.—Those who maintain the opposite opinion contend, (excepting the electric agency,) that nitric acid is formed *only* during the decay of animal and vegetable matter, by the union of the nitrogen of the decaying mass with the oxygen of the air superinduced by the presence of an alkali, as it is supposed to take place in the artificial nitre beds.

If some one of your scientific correspondents will decide this question, and explain the phenomenon alluded to, attending the "melting" process, through the *Genessee Farmer*, it will subserve the cause to which its columns are devoted.

FARMER C.

P. S. I would add, by way of explanation, that the question was started by the inquiry whether the refuse ashes of an ashery that had lain in a very large pile a number of years, had improved their qualities for agricultural purposes, by generating nitre.

C.

REMARKS.—*Nitrification* is a chemical phenomenon which, at best, is involved in no little obscurity. It is known that much more nitrogen is obtained in the *nitrates* formed in artificial nitre beds, than is furnished by the decaying organised matter. This can only be accounted for by admitting that nitrification, like *oxydization*, is a kind of combustion, where nitrogen, after nitrification has commenced, is drawn directly from the atmosphere to keep up the chemical action, just as oxygen is drawn from the atmosphere to keep up combustion after the chemical combination of carbon and oxygen has once started. If this explanation be the true one, as we think it is, the fact that nitrogen can be taken from the air, and, in connection with oxygen, combined with lime, potash, and soda, in a well constructed compost heap, is a matter of great practical importance.

Whether a heap of leached ashes will, or will not form a kind of artificial nitre bed, for the accumulation of nitre, will depend on the quantity of organic matter each heap may possess. It is barely possible that, the presence of nitrogenous substances undergoing decomposition, is not necessary to begin the formation of the nitrate of potash, in an old ash heap. But we know of no direct experiments which demonstrate such to be

the case. There is, however, more or less carbonaceous matter in all ashes, and doubtless some nitrogen. It is questionable whether this organic matter is in a condition to aid in forming nitre. Rain water falling during thunderstorms on heaps of old ashes, and perhaps at other times, brings with it not only ammonia, but nitrous or nitric acid, which, like the ammonia that rises from manure in stables, and aids in forming nitrates on plastered walls, may produce nitrate of potash in ash heaps. These nitrates, however, are very soluble, and most of them will doubtless be washed out, just as the soluble potash is leached from freshly burned ashes.

Every farmer should place his leached ashes, after making soap, under cover in compost with fermenting manure—leaving an open space through the centre of the heap for the air to pass through as in a proper nitre bed. A sound discretion must be used in applying water to moisten the mass. By this process, if we can credit the results said to be attained in artificial nitre beds, the nitrogen of the atmosphere may be transformed into a most valuable fertiliser of the soil.

The gas given off from melting potash which deflagrates (flashes like powder) is oxygen, which is not itself combustible, but a supporter of combustion. This gas is highly concentrated in nitrates of potash and soda, which in conjunction with intensely heated carbonaceous matter, being set free, an explosive combustion or deflagration takes place.

Analysis of the Mineral Elements in Wheat.

THE following analysis of the ash of wheat is given by Dr. WILL, a gentleman that possesses a high European reputation as an analyst.—We have confidence in its correctness.

100 parts contain

Potash from	22 to 34 parts,
Soda	16 "
Lime	2 to 3 "
Magnesia	9 to 13 "
Peroxide of iron	1 "
Phosphoric acid	49 "

Dr. Will gives 2 per cent. more phosphoric acid than M. Boussingault. The latter found as the average of his analyses 47 per cent. of phosphoric acid in the ash of seed wheat.

There is an egregious *blunder* or *error* in the table of Prof. Johnston's Agricultural Chemistry, where the author professes to quote the analysis of Dr. Sprengel of the ash of wheat. The amount of phosphoric acid is given by Prof. J., both in the London and American edition, at only *one tenth* of the sum stated by Dr. Sprengel. There are other errors in the table equally inexcusable, which we shall take an early opportunity to point out—not having room in this number to go into the discussion of the subject on its merits.

Oats.

OATS are undoubtedly *far richer* in nitrogenous or muscular matter, in proportion to the weight, than wheat. A comparison, according to the analysis of Prof. Johnston, shows this.

One hundred pounds each of fine wheaten flour and shelled or hulled oats contain

	<i>Wheat.</i>	<i>Oats.</i>
Muscular matter, -----	10 lbs.	18 lbs.
Fat, -----	3 "	6 "
Starch, -----	50 "	65 "
	-----	-----
	63 lbs.	39 lbs.

Albany Cultivator for March.

REMARKS.—We do not doubt that the editor of the Cultivator quotes the above figures correctly from Prof. Johnston, but there is a sad mistake *somewhere*. If 100 lbs. of "fine wheaten flour" contain but 63 pounds of starch, gluten (muscular matter,) and fat, all told, what shall we call the other *thirty-seven pounds of something*, in 100 lbs. of dry flour? Will the editor of the Cultivator explain?

In vol. I., p. 170 of Johnston's Agricultural Chemistry, after describing the process of separating gluten from wheat flour, the author says: "The flour of other grain also yields it [gluten] by similar treatment, though generally in a *much smaller* quantity. This appears from the following table. The grain of

Wheat contains	8 to 35	per cent. of gluten.
Rye	" 9 to 13	" "
Barley	" 3 to 6	" "
Oats	" 2 to 5	" "

How *wheat*, as is well known, can yield from 8 to 35 lbs. of gluten in 100, and *oats* only from 2 to 5 lbs., and yet oat meal contain 80 per cent. more gluten than wheat flour, passes our comprehension. Indeed, the statement is an absurdity. That a pound of oat flour & meal contains 100 per cent. more of the elements of "fat" than "fine wheaten flour," is an averment which no practical man will credit. Nor will he credit the other statement, that oat flour has 33 per cent. more starch in it than wheat flour. If oat meal will yield 18 lbs. of "muscular matter" where the same weight of wheat flour will give but 10 lbs., 6 lbs. of "fat" where an equal amount of wheat flour will give but 3 lbs., and 65 lbs. of starch to 50 lbs. from wheat flour, then a bushel of oats is worth at least a bushel and a half of wheat!

ASHES.—At a late Agricultural meeting at the State House in Boston, Mr. STANLEY said that he had tried ashes every way. One season he put ashes in the hill in one part of the field, when planted, and on the remainder of the field, applied it soon after the corn came up. Where it was put in the hill, the corn ripened about ten days sooner than the other, and produced at the rate of about ten bushels more per acre. The next year, a part of a row was missed in applying ashes. The result was, that three times the quantity was raised where the ashes was applied.

A few Practical Hints on Growing Corn.

By spreading long unfermented manure over a piece of poor meadow or pasture land, which now yields but little grass, one may raise a large crop of corn, by turning under the manure, and harrowing the sod thoroughly before planting.—The harrow should pass lengthwise with the furrows. The rows should run north and south, that the sun during the day may shine on both sides of them. Ashes should be scattered over the hills after planting. The after culture may be in the usual way, taking care to cut up the corn at the roots before the crop is fully ripe, and secure the stalks in the best manner for winter fodder.—The latter will be worth more than the hay or grass, had the field not been broken up.

Soaking seed corn in a weak solution of common salt and epsom salts is thought to be more advantageous than steeping it either in sal. ammoniac or salt petre, in solution.

We intend to apply a compound of wood ashes, plaster, lime, and common salt, to a large portion of our cornfield this spring, in just the proportions, as near as may be, that potash, soda, chlorine, lime, sulphur, and phosphorus are needed by nature to form the crop.

Soaking Seed Corn.

MR. EDITOR:—I wish to inquire what is the benefit of soaking seed corn in salt petre, and how much it requires to the bushel, and what will prevent the worms from injuring it soon after it comes up? Yours in haste,

Brighton, Ohio.

A. KINGSBURY.

REMARKS.—We have in another article in this number suggested that, a solution of chloride of sodium and sulphate of magnesia (common salt and epsom salts) is better to soak corn in, than either salt petre or sal. ammoniac. The opinion is founded on the fact that kernels of corn need both the chlorine and soda in the common salt and the sulphur and magnesia in the epsom salt; and also on the results of some experiments with the several kinds of brine. The time of soaking or "steeping," as it is called, and the quantity of each salt to be used, are points as yet not so well settled as they should be. We advise every one to try a few kernels many days before planting. The point to be attained is this: Make the solution as strong as practicable and not injure the germ in the seed. In Scotland seeds are steeped from 12 to 48 hours, and some times longer. Four ounces each of the salts named, dissolved in water enough to wet or cover a bushel of corn, have been used with good effect. An equal weight of salt petre, or sal ammoniac, if preferred, can be used in the same way.

Unleached ashes applied on the hill around the corn plants will probably serve to keep off worms and insects.

ANATOMY AND PHYSIOLOGY, designed for Schools and Families, by CALVIN CUTTER, M. D. Second Edition, with 200 Engravings. Publisher, Benjamin B. Mussey, Boston.

THE author of this book has been very successful in divesting his subject of everything that can offend the most sensitive reader, either in the school room or family circle; and yet, by the assistance of numerous engravings, he has contrived to illustrate and describe all the more important organs of the "human form divine," and the office of each organ, in a manner alike interesting, clear, and intelligible.

All females, in particular, should read this little work, that they may see as in a mirror, how easy it is to compress their ribs and lungs by tight lacing, and thus destroy the natural and healthy action of the heart, and respiratory organs, vitiate the blood, banish the glow of health from the cheek, induce constitutional weakness to end in protracted pain, and premature death.

There is a copious Glossary, explaining the meaning of all technical terms, as well as a valuable Index, giving appropriate directions for the treatment of bleeding wounds, cases of poisoning, choking, &c., where the danger is imminent before medical aid can be brought to the relief of the sufferer.

For sale by S. Hamilton, No. 6, State-st., Rochester. Price 75 cents.

Mr. H. has also for sale "The Farmer's and Horseman's Guide," &c., &c., being a collection of recipes for preparing and administering medicines to horses, cattle, and sheep, with some account of their diseases and the treatment of the same. Price 25 cents.

TRANSACTIONS OF THE MADISON COUNTY AGRICULTURAL SOCIETY, for the years 1842, '43, '44, and '45, together with an Abstract of the Census of 1845, and an Article on the Geology of the County, with a Map.

The above is the title of a very neatly executed pamphlet of 46 pages, sent us by an officer of the Society. We have read these Transactions and the article on the geology of Madison county, with lively interest. It is the first attempt of any Agricultural Society in the State to give a colored geological map of the county, showing the character of the different rocks on which the soil rests, and also how the decomposition of such rocks affects the quality of the soil, and its adaptation to various crops. This is an important step in the right direction. If the farmers of Madison are true to themselves, and mindful of the best interests of their children, they will come up as one man to sustain, and advance the prosperity of their County Agricultural Society. There should be a noble, and generous emulation between the County Societies of the Empire State, to see which shall do most to increase the profits, and elevate the standing of Rural Labor in New York. To accomplish this object, a knowledge of agricultural geology and chemistry is indis-

pensable. Nor can the study of the organic structure of all domestic animals and cultivated plants, and of the function or office performed by each organ be neglected, without sustaining a material loss, as well in the *purse*, as in the *intellect*. We can not too often, nor too earnestly commend the *study* of the unerring laws of Nature, which govern all the results of the varied, and almost continuous toil of the American husbandman.

THE FARMER'S DICTIONARY: a vocabulary of the Technical Terms recently introduced into Agriculture and Horticulture from various Sciences, and also a compendium of Practical Farming; the latter chiefly from the Works of the Rev. W. L. Rham, Loudon, Low, and Youatt, and the most eminent American Authors. Edited by D. P. GARDNER, M. D., Honorary Member of Several Agricultural Societies. With numerous Illustrations.—New York: Harper & Brothers, Publishers, 82 Cliff Street. 1846.

WE have barely room in this number to acknowledge the receipt of a copy of the above valuable work from Messrs. SAGE & BROTHERS booksellers, corner of Buffalo and State-Sts., Rochester. It is a work of 874 pages, with double columns, and filled with pertinent descriptions of all or nearly all the various operations in practical agriculture, as well as definitions of all terms found in books that treat of the several sciences, which pertain to Rural Economy. It is illustrated with numerous engravings, and in a word, supplies a deficiency in agricultural literature, which its friends will rejoice to find so satisfactorily accomplished. We shall recur to the subject again.

It is also for sale by S. HAMILTON, bookseller, Rochester. Price \$1.50.

HOW TO PREPARE RENNET.—A Herkimer County cheese manufacturer gives the following directions in a communication to the editor of the Michigan Farmer:

After having emptied the stomach, (but not washed it,) a stick which will bend, but not break, is inserted to keep it stretched out; it is then filled with salt and hung up to dry, kept in a dry place to prevent its dripping, occasioned by dampness. Those of the previous year make the best cheese. When prepared for use, a rennet is put into a pint of clear water for one night, two quarts of brine having been boiled, skimmed, and become cold, is added to it. Of this liquor, which must bear an egg, and have salt to spare, half a gill will turn to curd five pails of milk, if first rate; but the strength of rennets greatly vary. As the liquor is used up, add salt and water till the strength is exhausted.

OIL CAKE should be steeped in hot water and made into a kind of paste before it is fed to any animal. From 25 to 39 lbs. of dry cake are equivalent to 100 of good hay.

For the Genesee Farmer.

Early Planting of Potatoes.

I HAVE been a good deal troubled with the rot in my potatoes, for several years, and have expended all of my sagacity to discover the cause and cure. I have also read all the speculations on the subject, and they are not a few, embracing every suggestion from *wire worms to witchcraft*, and without any satisfactory result to my mind.

I observed, last fall, that those planted in low ground, or planted too close together, and those that were the most shaded by weeds or tops, were the most affected; while those in the same field, where they extended to higher ground, and were more exposed to the sun and a free circulation of air, were exempt from the disease.

I am quite sure the cause of the disease is in the leaf and stems, whereby the sap is not returned to the root in a perfected and healthy state, which is the cause of the imperfection of the tuber. I have never been able to discover the action of any insect, nor the existence of any mildew or parasitic plant, and the only difference in the diseased plant from the healthy one, is a discoloration of the bark of the vine, and a soft flabby feeling like as if it was wilting. I therefore concluded that the disease originates in the leaf or lungs of the plant, and is generated from some peculiar state of the atmosphere, and of which cholera and endemical diseases in the animal system are analogous.

I propose *early planting and early gathering*, as a probable cure for this pestilence, as all early planted and early gathered potatoes, last year, were exempt from this disease. From the 1st to the 15th of May, and previous to corn planting, I would prefer. I do not think the disease is propagated from diseased seed; but it would be well to try both kinds, as it is an item of knowledge important to be known. Wetting and rolling in lime destroys all the fungus plants that affect the vegetable economy, and could do no harm.

H. Y.

For the Genesee Farmer.

Flax on Winter-killed Wheat.

MR. EDITOR:—It has been stated to me that flax seed, sown on land where winter wheat has been killed out, and well harrowed in, will do well. The harrowing of the land will prove quite a benefit to the wheat that may be alive.—From one-half to three-fourths of a bushel of seed to the acre will be sufficient. The flax can be cut and threshed with the wheat, and easily separated in cleaning, as the flax seed will run through the screen of the mill into the box. No farmer need fear injuring what wheat may have escaped being killed by harrowing it in the spring, as it will prove a decided benefit to the crop. I think rolling after harrowing is useful.

Le Roy, March, 1846.

M. N.

For the Genesee Farmer.

FRIEND EDITOR:—As this journal is intended to diffuse information to the cultivators of the soil generally, and for the best modes of doing so, I wish through its pages to interrogate some of its experienced friends of agriculture—hoping they will furnish the information for the next number. A piece of light and somewhat sandy soil, having been cropped for several years, what will be the best course to pursue, in order to enrich it for spring crops, and how deep should it be plowed?

On a somewhat low, rough, and rather turfy piece, I wish to make a meadow of timothy grass. What will be the best method to get it in order, the time for sowing, and the quantity of seed per acre? How much land should be planted with corn to produce fodder, for the season, for two cows? Will it pay a farmer to draw his manure seven miles? What would leached ashes do for such land, and to be drawn the above distance?

LEARNER.

Rochester, 2d mo. 23d, 1846.

REMARKS.—Without wishing to prevent by so doing any of our able correspondents or readers from answering the above questions, we will briefly reply to the same.

“A light sandy soil, which has been cropped for several years” and become somewhat exhausted, will, in the absence of barn-yard manure, be more benefitted by a fair dressing of leached ashes mixed with caustic lime, one of the latter to five of the former, than by any other fertilizer of equal cost. The quantity to be applied per acre must depend on the expense of the ashes.—It should be plowed from one to two inches deeper than it was ever before plowed, in order, first, to deepen the mellow soil; and secondly, to bring up to the chemical action of the light and heat of the sun, atmospheric and other meteoric influences, various alkaline and other earthy minerals, which are necessary to the growth of all cultivated plants.

If your low land is wet, by all means drain it before you sow timothy seed. Don't forget that one ton of hay grown on land well drained is worth a ton and a half taken from a wet, cold, sour soil. In the latter case the quantity of nutritive matter is comparatively quite small.

Plant from two to three acres in corn to make the fodder for two cows, so as to be sure and have enough. If you have an excess, make it into compost by adding thereto every particle of the dung and urine of the cows. By so doing you may greatly enrich your land, extend your corn-fields, and soon have large crops of shelled corn gratis, or as profit.

When a farmer and his team have little else to do, it will pay to haul leached ashes and manure seven miles. Let us add that by mixing the ashes and manure together before their application, both will be improved.

Plaster--Wood Ashes.

C. N. BEMENT, of Albany, in his valuable communication in the last Farmer, on "Manures and their application," says—"I had once great faith in the use of gypsum, but after many experiments with it, I became satisfied that it was of no benefit on my soil, and I have therefore abandoned its use altogether." Mr. BEMENT is not singular in his opinion of the value of plaster, as it is generally applied, broadcast, to the growing crop. I daily hear our best Seneca county farmers observe, that plaster has little or no effect on the crop, except clover; that, even on this, its effect is often imperceptible.

In the first place, we may infer that farmers expect *too much*, from plaster alone; then it may often happen, that the carbonate of lime in the soil, has been made into plaster by the mineral and vegetable alkalies, deposited in the soil by the manure applied to it, or by decomposing clover previously plowed under; besides, plaster being slow to dissolve, one large dose, coarsely ground as it is with us, may suffice for several successive crops.

If farmers were as zealous to procure house ashes, as they are to provide themselves with plaster, methinks they would reap a ten-fold reward. At this time, the soap boilers' pedlars are picking up the best house ashes in this village, at the exchange of 1 lb. of black soap, for more than an imperial bushel, about 4 cents for the large bushel. I know of no article, shame on our farmers to say it, which at this time is sold so very far below its intrinsic value, as our domestic wood ashes.

But there is another office in the economy of manures, in which plaster may be advantageously applied; let every farmer keep it in his stable, and strew it frequently over his barn-yard, in warm dry weather; the escaping ammonia from the dung and urine, will then be converted by it into the sulphate of ammonia, a non volatile salt. When applied to the field with the manure of the yard, the growing crop will disengage and assimilate the ammonia, leaving the plaster again to assume its former character, the sulphate of lime.

S. W.

Waterloo, March 14, 1846.

MASSACHUSETTS BECOMING A WHEAT-GROWING STATE.—"In Essex county, 40 bushels of White Flint winter wheat were raised to the acre, the past year, weighing 61 pounds to the bushel, and was sold for seed at \$2,50 per bushel, yielding \$100 dollars to the acre, less the cost of plowing, &c., and 6 casks of lime (slacked,) which cost \$3,37. The land had been mown for several years, was broken up and well harrowed, limed, the grain limed, then sown, and harrowed, and rolled in on the sod. There is no doubt that drought operated unfavorably.—The soil is a rich, dark loam, and a clay pan."

Farmers' Clubs.

AMERICAN INSTITUTE, }
March 10, 1846. }

DEAR SIR:—I am highly pleased to see, in your valuable paper, the GENESSEE FARMER, the strong recommendations of the foundation of Farmer's Clubs. In my opinion, and in that of our most able members, these Clubs are destined to effect more real good to the country than almost every other kind of associations—and the daily correspondence which we have, convinces us that we are right.

And we intend to persevere in the practical work of interchanging, to the utmost extent, grafts of all the most valuable fruit trees—the most useful seeds of all plants—and to give, with them, such careful descriptions as will insure to him who receives them a certainty of their results.

By persevering in this interchange, we shall, in a few years, cover our fields and gardens with fruit of the most precious sorts. Much may be done, this season, by a simultaneous movement of the Clubs already formed.

If you think with us, take hold of the subject, and make it a prominent topic in your periodical.

I am respectfully yours,

F. B. WAKEMAN.

REMARKS.—The above letter was not intended for publication; but our friend Mr. WAKEMAN will pardon the liberty, as it brings a very important subject, that of improving our fruits, in a plain and practical way, directly before the public. We trust the day is not distant, when every town in the State will have a well organized, working FARMER'S CLUB, for the improvement, not only of fruits, but of all cultivated plants, and domestic animals; and above all, for the improvement of that infinitely higher and nobler being—Man himself.

TO CURE A STIFLED HORSE.—Take one gallon of urine, and put therein a small handful of junk tobacco, boil down to one quart; then add two ounces of the oil of spike, one ounce of the oil of amber, two spoonfuls of spirits of turpentine, and two spoonfuls of honey. Put into a jug, and cork it tight for use.

Process of application.—Rub the stifled bone hard with the mixture fifteen or twenty minutes; then dry it in thoroughly with a red hot fire shovel, then ride the horse forth and back one hundred rods. Repeat the above two or three times, and the cure will be effected.—*Am. Ag.*

TWO FACTS WORTH CONSIDERING.—According to the official returns laid before Parliament, there were imported into the United kingdom of Great Britain in 1840, from all countries, 1,993,405 quarters of wheat. This is the *first* fact.—The second is that, with equal advantages as to duty, the farmers of the United States sent to England in the year named, only 73,755 quarters, or one 25th of the whole.

Growing Clover Seed.—Does it injure the Soil?

MR. EDITOR:—In a recent number of the Farmer, "S. W." says—"One of our best Pennsylvania German farmers, who has bought some half a dozen farms with the products of a single farm, in wheat and clover seed, complained to me the other day that, in spite of the green crop of clover plowed into his wheat fallows, the wheat heads grow shorter and more shrunken every year."

It would meet a question of some interest to agriculture, if S. W., or his German friend, would inform us what system of cropping he has pursued, for in my experience clover seed is one of the most exhausting crops we can raise on wheat lands. Some years ago, in order, as I thought then, to increase the product of wheat and the profits of my farm, I commenced raising clover seed to alternate with wheat. After continuing the practice for three years, I found that my wheat heads, like those of our German friend, grew shorter and more shrunken every year.—I therefore abandoned raising clover seed, even for my own use, preferring to buy my clover seed of Seneca county farmers to raising it.—I think it is better practice to pasture our clover fields, and to keep all the stock of cattle and sheep our circumstances will permit.

As I understand that the crops of wheat are much lighter in Seneca county than formerly, it is clear there is some defect in the system of farming pursued. Can any of our Seneca friends tell what are the causes of this deterioration in their wheat crop, and if it has any visible connection with the raising of clover seed?

Yours respectfully, W. S.

Wheatland, Feb. 26, 1846.

WOOLEN STATISTICS.—From a recent work issued in New York, containing an account of the woolen factories in this country, and other statistics connected with them, it appears there are 28 in Maine, not including small wood-carding works; 58 in New Hampshire, 141 in Massachusetts, 76 in Vermont, 40 in Rhode Island, 123 in Connecticut 226 in New York, 10 in New Jersey, 101 in Pennsylvania, 4 in Delaware, 16 in Maryland, 18 in Virginia, 80 in Ohio, 9 in Kentucky, 6 in Indiana, 6 small in Michigan, 6 in Illinois, 7 in Wisconsin, 3 in Missouri, 2 in Iowa, 4 in North Carolina, 3 in Georgia, and 2 in Tennessee. Total in the Union, 1042.

MASSACHUSETTS INDUSTRY.—There are seven hundred miles of Railroad in operation in Massachusetts, costing twenty-eight million dollars.

It is a curious and important fact that, the people of Massachusetts annually produce 50 per cent. more property or wealth than any equal population in the United States, according to the most accurate statistical returns. Why is this?

Value of Green Food for Sheep.

M. PERRAULT found by careful experiment, that 100 lbs. of green lucern fed to sheep would go as far in nourishing the animal, as 158 lbs. of similar food well cured, and then fed. In the latter case, the digestive organs of the sheep do not extract more than two thirds of the flesh and fat forming elements which they take from succulent, green plants. If a good deal of the nutritious matter fed to domestic animals in *dry food* slips through their stomachs, and by the mouths of their lacteal glands, which should convey nourishment from the intestines to the blood vessels, it is obvious that the steeping of all dry food will be of great utility, and good economy. The loss, however, is not wholly to be attributed to defective digestion. In cutting lucern and clover, there is a sensible waste of leaves and other very nutritious portions of these plants.

POTATO ROT.—*A Curious Fact.*—In the latter part of the summer of 1844, a farmer of the township of Lincoln, Addison county, Vermont, was quite behind all his neighbors in cutting his grass in his meadows. At night some waggish boys went into one of his meadows and cut down all the grass in it. They also went into his potato patch and cut a few swaths through it. When the time came for digging potatoes, his potatoes were found principally rotted *except where the boys had mowed off the tops.* Those were found to be sound and good.

This experiment would seem to show, that the rot or disease begins in the tops; and suggests, as the means of saving a crop of potatoes, to apply the scythe as soon as the tops begin to die.

The above circumstance was related by a creditable and well informed person, who resides at no great distance from the township of Lincoln.

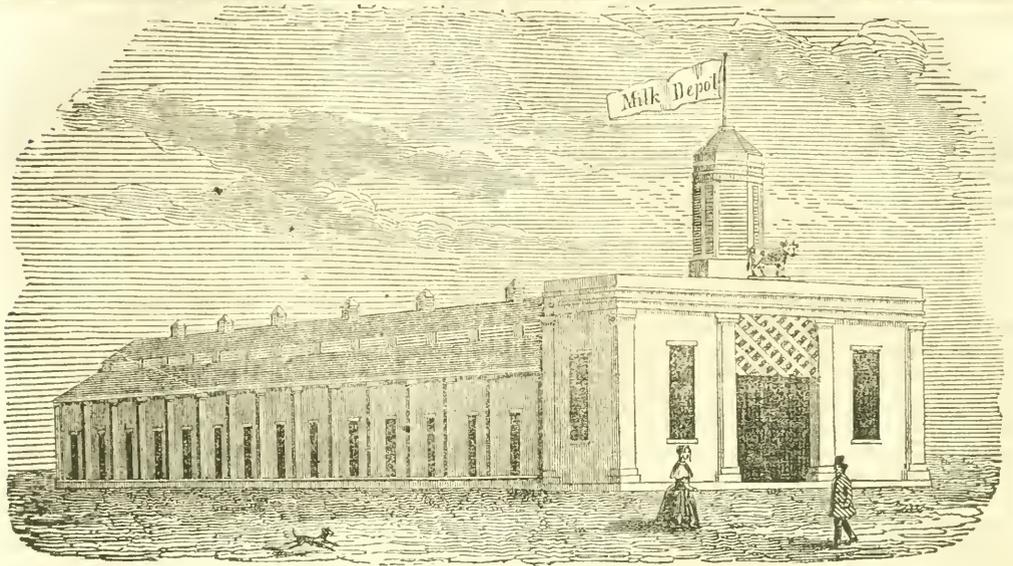
H. G. CANFIELD.

Canfield, Trumbull co., O.

WE clip the above from the Ohio Cultivator as it corroborates certain *facts* indicating that the tops of potatoes are first affected, noticed by us last season, and published in this paper.—ED.

POTATOES IN MAINE.—In 1814 the potato crop in Maine was 12,304,000 bushels, only second to that of New York, which was 17,000,000 bushels. New York raised six bushels, and Maine twenty-four bushels, to every person in these respective states. From last year's crop, it is estimated that the loss by rot this year in Maine, cannot be less than \$1,230,000, or more than two dollars to every person in the state.

CUTTING FOOD FOR SHEEP.—Mr. Thomas Noble, of Stark Co., Ohio, in a letter to the Ohio Cultivator, says:—"My sheep consist of 1600 head, and so far I have lost *none*; all in fine order, and by close attention we intend to keep them so. We *cut all their feed*, and the saving thereby is at least one third."



Depot of the Rochester City Milk Company.

Office of the Rochester City Milk Co., }
Rochester, March 2, 1846. }

EDITOR GEN. FARMER:—In compliance with your request, I herewith transmit to you, a sketch of the Milking House and Depot, which our Company propose to construct this spring, in this city, immediately on the banks of the Genesee River, near the centre of the town, for the accommodation of *one hundred cows*, and for the sale of milk of the very best quality.

The building is in the shape of a —1. The front of brick, 50 feet in length, and 25 feet in depth, and 20 feet in height, with a rear building 175 feet long, and 32 feet in width—built with a centre hall or arcade, twelve feet wide and twenty feet high, with windows and ventilators in the tops, (as shown in the sketch,) to admit a free circulation of air, in the warm seasons of the year.

On each side of this hall, there is a range of mangers and stanchions for *fifty cows*—with troughs in front of them through which water is to be constantly running.

The floor is to be of clay, paved with flat stone, set *edgewise*, in the rear of the cows, with a gutter one foot in width, immediately behind the cows; and between these gutters and the doors at the sides of the building, there is an alley, *five feet* in width on each side. The doors for the entrance of the cows are three and a half feet wide, seven feet high, and twelve feet apart. Over the cows, between the hall and the sides of the building, there are floors for the reception of the winter fodder of the stock, capable of holding two hundred tons of hay or corn fodder.

The gutters drain into cisterns in the basement, and trap doors in them let the manure down into carts, in which it is drawn daily to the company farms in the vicinity of the city, where the crops are produced to supply the milk cows in the Depot. The teams bring down a load of grass or hay, and carry back in return a load of manure—it being cheaper to transport the feed to cows than to cart the milk, twice a day, from the farms to the city.

The front of the building is occupied for an office, and rooms for the sales of milk, ice-cream, &c., and the attic for the lodging room of the men belonging to the establishment, while the cellar is used for roots, and milk room, and also a part of it for a small steam engine, employed to cut up and *steam the food* for the cattle, pump the water from the river to supply the reservoirs in the building, and to *heat the stable* in winter, by steam.

In the rear of the office are the rooms for the milk-wagons, and sleighs, and adjoining these is the stable for the horses that are used for distributing milk throughout the city.

The whole cost of the building is estimated at \$2,500, including the engine, fixtures, &c.

I will, if you desire it, furnish you with a statement of the manner in which the establishment is to be conducted, and the method of keeping the cows, &c., &c.

Truly yours,

C. B. STUART,

General Ag't Rochester City Milk Co.

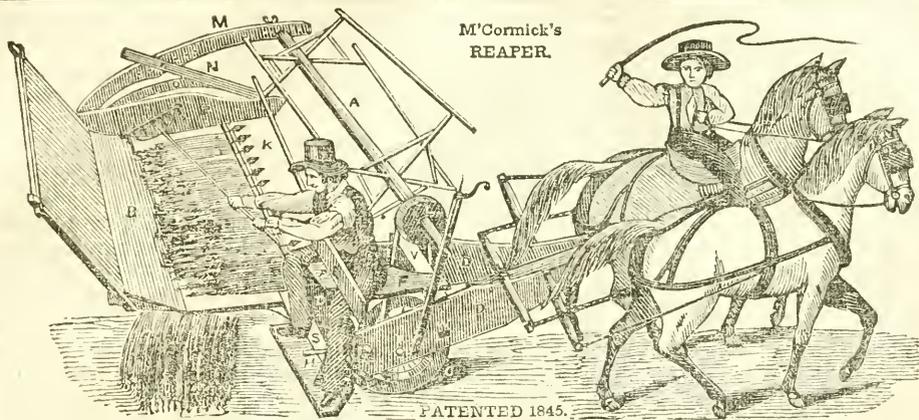
P. S. The Rochester City Milk Company furnishes the citizens of Rochester with pure and wholesome milk, at the following low tariff of prices:

DAILY AVERAGE IN 1 MONTH.	From 1st June to 1st October.	From 1st October to 1st June.
36 qts. and over,	2 cents per quart	2½ cents per quart.
12 " " under 36,	2½ " " "	3 " " "
2 " " " 12,	2½ " " "	3½ " " "
1 " " " 2,	3 " " "	4 " " "

To find the *average*, add the quantity taken in *one month*, and divide by the days in the month.

SKILFUL WHEAT CULTURE.—Mr. ANSON WOLCOTT, of East Bloomfield, has grown an average of 40 bushels of wheat per acre for 3 years, alternately, in succession. The seed was sown after summer crops of corn and potatoes. Mr. W. makes a point of using both unleached and leached ashes, together with a little lime and gypsum.

BOLOGNA SAUSAGES—LOUIS PHILIPPE.—When teaching French and Dancing at a Boarding School, near Newtown, Bucks County, a friend narrates to the Courier that he conceived the idea of manufacturing Bologna sausages, and accordingly purchased a quantity of beef and ham, and with the assistance of a colored man, made up a lot of the article, packed, and forwarded them to France. This fact was incidentally furnished by an old lady now in the city, who *then* lived in the neighborhood, remarking that she knew how to make good Bologna sausages—and being asked where she obtained the recipe, replied, "from Louis Phillippe."



McCormick's Patent "Virginia Reaper."

McCormick's Reaper.

This machine, an engraving of which is given above, has been considerably improved since its first introduction into Western New York.—From the numerous certificates shown us, we are inclined to believe that the Reaper, as improved, is a truly valuable labor-saving implement.

See advertisement, page 100.

Dr. Lee's Lectures on Agriculture.

AT the conclusion of the last Lecture, given at the Court House in Rochester on Monday evening, the 16th of March, the following proceedings were had :

On motion of L. B. LANGWORTHY, the meeting was organized by calling SILAS WALKER to the chair, and appointing L. WETHERELL, Secretary.

Messrs. L. B. LANGWORTHY, JACOB GRAVES, and L. ADAMS were, on motion, appointed a committee to draft resolutions expressive of the sense of the meeting.

The committee thereupon presented the subjoined resolutions, which were unanimously adopted :

Resolved, That we have received much valuable information from the course of Lectures on the science of Agricultural Chemistry and Geology, recently delivered by Dr. LEE in this city, and that his illustrations and explanations of the most interesting natural phenomena attending the renovation of soils, the culture of different crops, and the growing and improvement of domestic animals, have been not less plain and practical than able and scientific.

Resolved, That the study of the natural sciences, which have a direct bearing on Agricultural pursuits, by the young men who are to follow such pursuits, can hardly fail of conferring on them great advantages over those that disregard these branches of useful knowledge.

Resolved, That we believe a repetition of these, or the delivery of a similar course of Lectures, in every farming district in Western New York, would prove highly interesting and valuable to all cultivators of the soil, and greatly aid in promoting Agricultural improvements.

Resolved, That the thanks of this meeting be tendered to Dr. LEE for his highly interesting and instructive course of Lectures, just concluded.

On motion, it was voted that the proceedings of the meeting be published in the Genesee Farmer.

SILAS WALKER, *Ch'n.*

L. WETHERELL, *Sec'y.*

An Extraordinary Cow.

MR. JOHN JONES, an extensive farmer in New Castle county, Delaware, in a statement to the Committee on Farms, of his stock of cows, farming operations, &c., describes his cow "Yellow Flower" as having given milk about four years, and made an average of one pound and ten ounces of butter each day for that length of time!" He says: Thus you see her lowest milking may be put down at 14 qts. per day.

Greatest milking,	26 " "
Greatest yield of butter,	2½ lbs. "
Lowest,	1½ " "
Average,	2 lbs. 10 oz.

Yellow Flower is an annual calver, and beats Mr. Frost's most famous cow in England, which made on an average 2½ lbs. of butter each day for four years. Yellow Flower is a *native* cow, and will be 10 years old on the 10th of June, 1846. Mr. Jones has eight cows, all natives, which make an average of 48 lbs. of butter per week.

Mr. J. keeps what appears to be accurate farm accounts, and has made a fortune by purchasing some 800 acres of poor land on a long credit at an average of \$10 per acre, and then buying 20,000 bushels of lime, also on credit, at over 20 cents a bushel, beside gypsum and clover seed, to renovate the soil. The estate now pays the annual interest of \$100 per acre over and above all expenses.

We gather the above interesting facts from the Baltimore American Farmer.

TEA PLANT IN FRANCE.—A letter was read at a late session of the Paris Academy showing the possibility of cultivating the tea plant in France. The writer states that he is able, by his mode of preparing the tea grown in France, to produce as fine qualities as the best imported from China. He has forwarded samples to the Royal Society of Agriculture, so that we soon shall have a report from that body on the subject.

For the Genesee Farmer.

Experiment in Growing Potatoes.

MR. EDITOR—*Sir*: I wish to state the result of a small experiment, and ask a few questions. In planting potatoes, last spring, I set apart four short rows of equal length. First row, applied spent tan bark, a common iron shovel full to three hills. Second row, leaches ashes, a shovel full to four hills. Third row, plaster, a handfull to two hills. Fourth row, nothing.

On digging the following was the result:—Those with bark, 75 lbs.; ashes, 67; plaster, 62; with nothing, 61.

The field from which the above rows were taken was full of the white grubs, and many of the potatoes injured. There were some in almost every hill, except where the bark was applied, in which row I found but two. Variety—round Pink-eye, one potato in a hill. Soil—sandy loam.

First question I wish to ask is concerning a matter of every day occurrence. How should corn be measured in the ear? I have seen it done in two ways. Sometimes it is carefully placed in the half-bushel or baket, with the hands; at other times thrown in promiscuously with the scoop-schovel: two bushels of ears for one of shelled. Now, in using a small measure there is manifestly a difference. Equal and exact justice to all men is my motto.

What is a corn barrel, how large is it, and how made?

How may the common black ant be destroyed in an orchard? I have an orchard in which there is a nest of them at the root of every tree. It has alternately been plowed, planted, hoed, sowed, cradled, and mowed, for the last seven or eight years. An answer to the questions, and a notice of the experiment, are solicited in the Farmer.

THOMAS WRIGHT.

Rush, N. Y., Feb., 1846.

REMARKS.—If tan bark will destroy or keep away "grubs" from potatoes and other plants, the *fact* is important. If Mr. WRIGHT will shell a-bushel of corn as the article usually is when harvested, and then dry it thoroughly for many weeks, it will skrink about 22 per cent in bulk. Hence, when a man tells the exact truth in regard to the number of bushels of even shelled corn harvested, you must discount one fifth for shrinkage in ordinary cases.

A "barrel," to measure corn in, is equal in size to a common flour barrel. For handling corn in the ear it is used instead of a basket at the South and Southwest, with pieces of ropes tied into the staves for handels. On the Mississippi river, (where the corn trade is immense,) a barrel of ears is shelled and measured accurately, and from that the grain in 1000 barrels, or any other number, is calculated.

We regret that we cannot prescribe a remedy for the ravages of the "black ant." We venture to suggest, however, the free use of leached ash-

es, mixed with quicklime, to be placed around the trees. This compound will greatly benefit the fruit, as well as the trees, if it does not drive off the ants.

Michigan Subsoil Plow.

MR. EDITOR:—Having had three years experience with the Michigan Subsoil or Trench Plow, I feel it my duty to give to the public, through your paper, the result of my experience, and, if possible, show the superiority of its work over all other plows. To those who have not seen the plow I will state, that it is two plows on one beam, one running behind the other, and from three to five inches deeper, bringing up the sub or under soil and laying it on the top of the turf turned under. I plow with it from 7 to 11 inches deep, depending on the nature of the soil—loam and sand requiring the deepest plowing.—When I purchased the plow I supposed I should only plow turf land with it, but now I use no other. I find it equally advantageous in turning under stubble as turf. I plow but once for any crop. Last spring I turned up 20 acres of turf, sowed part to peas and part to barley; took off the crop; and plowed again in August and sowed to wheat. I found my land in a better condition than to have summer fallowed, and I got an increased crop of barley and peas. You may pasture up to the time of sowing, or mow, if your land is strong enough to bear it. I have practiced it with better success than with an ordinary summer fallow. Crops stand either a wet or dry season much better than with an ordinary plow. In a wet season it drains the water off more effectually, and much quicker, and the surface soil is not deadened by stagnant water, and giving greater depth of soil in a dry season the roots run deeper, and the plant bears up longer. It covers turf so effectually that the land appears like an old field, and the earth lying over the sod retains all the gasses arising from the decomposition of vegetable matter turned under, while with light plowing much of it passes off in the atmosphere, and is lost. It is a great preventive against June grass, and other obnoxious weeds; it covers them so deep the crop always gets the start of them, and a few times plowing will clean the land.

With spring wheat I have been equally successful. I plow in the fall, either turf or stubble land, and sow early in the spring, without plowing. I am so well pleased with it that I would not have my land plowed with any other plow, if it could be done for nothing. No farmer would do without one, if he knew what they are. Any person can have a plow by addressing a line to the subscriber, directed to Darien Centre, Genesee Co., N. Y.

ALVA JEFFERSON.

Darien, March 19, 1846.

EVERY farmer should be a permanent subscriber to a good agricultural journal.

For the Genessee Farmer.

Rust, Mildew, and Charcoal.

MR. EDITOR:—Though I am not a practical agriculturist or chemist, I take the liberty to suggest to you, or to your readers if you see fit to publish them, a few remarks on Lime, Plaster, and Charcoal as manures—together with rust on wheat, as I consider them intimately connected.

The principal use of quick-lime, when applied as a manure, is to draw the carbon from the organic matter, which will then readily decompose and form food for the growing plant. Plaster, or sulphate of lime, acts in the same way, with the addition that the sulphuric acid leaves the lime and passes over to the alkalies in the organic matter. In proof that this is the principle on which they act, I will bring a few well conceded facts. 1st. That lime or plaster, when applied where there is little or no organic matter, has but little or no effect. 2d. That the larger the amount of organic matter the greater the effect. 3d. That plaster, when sown just before, in a rain, or just after a rain, does but little if any good. The reason of which is, that water absorbs carbon and saturates the lime with it before it has operated on the organic matter. I need not inform *you*, sir, but doubtless many of your readers are not aware that anything saturated with carbon is imperishable, and decomposes only as the carbon is given off. Charcoal is the purest carbon in the vegetable form, with which we are acquainted, and will last for ages if of any size, if acted upon by nature only. The effect of pulverized charcoal is the opposite of lime and plaster, and should be used only when there is a superabundance of organic matter.

Now for the rust—and, to introduce the matter, I will just state the combination of causes that produce it. 1st. A low, sheltered situation. 2d. A soil rich in organic matter, and frequently very rich in alkalies. 3d. About the time the wheat is in the milk, a still atmosphere, small showers, or heavy dews with hot sunshine between. We all agree as to the causes, and must be satisfied as to effect; but in the whys and wherefores we are not so fortunate, hardly two writers agreeing in opinion, which gives me but little courage in setting mine afloat, so many others, and from abler pens, having preceded it—but here it goes, hoping that if I have not hit upon it, it may help some one to progress still farther towards finding out this disideratum.

I consider that the effect of the above causes is, to deprive the plant of a full share of carbon, without which it can not mature any more than we can live without atmospheric air. I think of no better way to explain myself, so as to be understood, than to take each cause and note its particular bad effect. 1st. A low, sheltered situation is peculiarly fitted for a bad circulation of air. 2d. A soil rich in organic matter, &c., gives a superabundance of food to the plant, and

of course requires a proportionate amount of carbon to ensure health. 3d. A still atmosphere does not bring carbon from the surrounding country as it would if it were in motion, so the leaves (the leaves are the lungs, and the plant takes in carbon from no other source,) of the plant soon inhale the small quantity of carbon within their reach, made still smaller by being absorbed by the water from the showers and heavy dews.

One word farther in explanation. The juices pass up through the pores by capillary attraction—get charged with carbon through the leaves—pass down between the fibre and cuticle, or bark, (if we may so term it,) and if properly assimilated form another course of fibre, if not the course of nature would be to eject it from the system through small slits in the cuticle, called stomata.

Now if this is the fact, what is the remedy? I answer that the best one with which I am acquainted, is, a judicious use of pulverised charcoal. 1st. To keep the organic matter from decomposition as much as possible, and—2d. to supply the plant with carbonic acid through the air, in a measure, when it is partly absorbed by water and not supplied by wind from the surrounding country. Such is my theory, and I might bring many acknowledged facts in support of it; but will forbear, being a friend of short articles.

MR. EDITOR:—Excuse me for troubling you with a postscript to my yesterday's communication; but I think if what I am about to advance is fact it is high time for the world to know it. It is to extend my theory of rust to the potato disease—and the way it acts is this: The tuber is formed by the sap passing up the fibre of the stalk, and down between the fibre and cuticle into the root, and of course has an opening for it, which plants without tubers have not: and the sap, which otherwise would have formed fibre, if it had a sufficiency of carbon, passes down also, and not belonging there, does this mischief, which there is so much talk about. The remedy is, of course, the same as for wheat. The blight or fire blight in pears, &c., is accounted for in the same way, and, I think, the mildew on peas, &c. Yours,
Pittsford, March, 1846. T. E. H.

REMARKS.—The theories of our correspondent are ingenious, but we fear that his explanations of the mysterious workings of Nature, in the matters discussed, will not be satisfactory "to the world." We give place to them in the hope that, the frequent collision of intellect with intellect will ultimately evolve important discoveries for the common benefit of our race.

Our correspondent is in error when he says that "plants take in carbon from no other source beside their leaves." Rain and other water that enters the roots of plants carries with it no small amount of carbon in carbonic acid held in solution. There are other remarks which are open to criticism, but we let them pass.

HORTICULTURAL DEPARTMENT.

BY P. BARRY.

Culture of the Peach.

THE PEACH is an important fruit in our region. Our soil and climate are highly favorable for its culture, and there is a great and increasing demand, with high prices, for the fruit. We are glad to know that fruit growers are turning their attention to it. By choosing a proper site for orchards, and selecting suitable varieties, Peaches may be grown here with as great success, as any where in the Union.

We have seen, here, and have raised in our own grounds, as large crops (for the age and size of the trees,) and as large and fair specimens of fruit, as we have ever seen in New Jersey or Delaware. The *peach worm* is the chief difficulty we have to oppose, and that is not a serious one—neither does it trouble us to any considerable extent.

The west or north sides of hills are preferable for Peach orchards; there they are less subject to injurious freezing or thawing in winter and spring. They cease growing sooner in the autumn, and consequently ripen their wood better, and the fruit buds are more likely to escape spring frosts. In our vicinity, however, good crops are produced in any situation where the soil is right, and due attention given to culture.

A light, dry, fertile soil is the best, and as the peach exhausts the soil rapidly, though not requiring great richness, it should receive a dressing of compost, manure, ashes, &c., now and again, to keep the trees in a thrifty, growing state.

Trees one year old from the inoculation are the safest and best for transplanting. The Peach grows rapidly, and the fourth year after planting a good crop may be reasonably expected. The proper distance, in orchards, is 20 to 25 feet, or about 100 trees to an acre.

The following are a few of the best varieties we know for general culture, and would make a nice collection.

Sweet Water—a large, beautiful white Peach; a good grower and bearer; ripens early in Aug.

Early Tillotson—a fine early Peach, but the tree is very liable to mildew, which is a great objection to it; early in August.

Crawford's Early—large and fine, one of the best yellow Peaches; middle of August.

Yellow Alberge—a very fine, old variety, well known and greatly esteemed here; a great bearer; middle to end of August.

Royal Kensington—a large and fine peach; first rate; end of August.

Coolidge's Favorite—large size and fine flavor; grows and bears well; September.

Jacques' Rare Ripe—one of the largest and finest Peaches; bears abundantly, and is of first quality; September.

Nagle's Favorite—very fine; Aug. and Sept.
Red Rare Ripe—a standard sort; old and well known.

Crawford's Superb—one of the largest and finest yellow Peaches known; latter part of Sept.

Red Cheek Malacaton—fine old variety; well known.

Snow Peach—first rate; hardy and productive; fruit remarkably delicate and handsome in appearance; September.

White Imperial—Large and delicious; tree is hardy and a vigorous grower; first rate; end of August.

FOR CLINGSTONES, the *Lemon, Orange, and Heath* are very fine.

Culture of Esculent Roots.

Rhubarb.—This is a plant that should be cultivated in every kitchen garden. It makes delicious pies and tarts when nothing else can be had for that purpose; we prefer it to gooseberries for our own use. Immense quantities of it are sold in London, and in all our own principal markets. Its valuable properties are fast becoming known. The attention which has recently been given to it, has caused the production of new varieties of gigantic size, single leaf stalks of some of them weighing two pounds.

Myatt's *Victoria* is the best we have seen of the large kinds. It is of monstrous size, and the flavor is excellent. A correspondent of the "Cultivator" describes the "*Leviathan*" as having "leaf stalks as long as a walking stick, and leaves as large as an umbrella." That's not bad, we think.

The roots may be obtained at the nurseries and should be planted in a rich, mellow, deep soil. The smaller kinds may be planted in rows three feet apart, and two feet apart in the rows; and for the largest the distance should be nearly doubled.

Sea Kale.—This is a fine kitchen garden plant, that is much neglected. Comparatively few know anything about it. It is fit for early use, and is fully equal to Asparagus, when properly grown and cooked. It may be raised from seed, or the plants can be had in the nurseries, and may be cultivated in any good garden soil. It is best when blanched, like celery; and to do this, pots or boxes are placed over the plants early in the spring, as soon as the ground is thawed, to exclude the light. In this way it shoots up tender and beautiful; when the leaves are three or four inches above ground they are fit for use and may be cut. It is dressed and served up like Asparagus. It is a good plan to cover the roots in the fall, or beginning of winter, with earth, or what is better, rotten manure. It may be blanched in this way, by those who may not have leisure to use pots or boxes, as recommended above.

Asparagus should now be planted. Prepare

the soil well by trenching 18 inches or 2 ft. deep, and abundantly manuring. Procure good two or three year old roots, and they will be fit for cutting the second year after planting.

Where a large plot is to be planted for marketing, the place may be prepared with the plow. A subsoil plow should be used, or an ordinary plow may be run twice in the same furrow.

When the ground is prepared it may be laid out in beds, 4 or 5 feet wide, and the roots planted in rows 1 foot by 1½, and an inch and a half below the surface. For extensive culture, rows 3 feet wide, and plants 18 inches apart, is better, as the ground can be worked with greater facility. The whole matter is as simple as the culture of Indian Corn, and no man who appreciates the value of healthy, nutritious vegetables for his family, will allow this spring to pass without planting, if he has not already done so.

To Correspondents.

PRUNING, &c.

IN our last number, we remarked, among other brief hints intended to remind our readers what should be done—not *how* or *why* it should—that “orchards should now be pruned, if not already done, and that no pruning should be done, if it can be avoided, after the sap has commenced flowing;” meaning, *that spring pruning should be completed before the flow of sap commences.*

We have received a communication from “Brockport,” on this subject, assuming that we have erred in advising winter or spring pruning, and that mid-summer is the only proper season for pruning. In support of this he quotes the *Genesee Farmer of 1832*, “*Kenrick’s Orchardist*,” “*Buel’s American Farmers’ Instructor*,” and “*Gaylord and Tucker’s Husbandry*,”

He says—“The reasons in favor of summer pruning are, that the wounds heal rapidly, leaving the wound uninjured, while if pruned in winter they dry and crack under the cold winds and never thoroughly grow over; and spring trimming permits the escape and loss of the sap, and, to some extent, induces effects similar to the winter operation.”

We are no advocate of severe pruning at any season of the year—particularly in common orchard culture. All that is necessary is to thin out superfluous branches, and regulate the form of the tree. In our region this can be done with safety in the month of February and beginning of March. Reasons in favor of pruning, at this time, are—*First*: the sap which would be expended in sustaining this superfluous wood, will increase the vigor and productiveness of the remaining portions of the tree, and aid in developing and maturing the fruit. *Second*: The farmer has much more leisure in February than he has in mid-summer. We find it difficult to direct much attention to the orchard during summer. The wounds caused by removing small limbs heal up

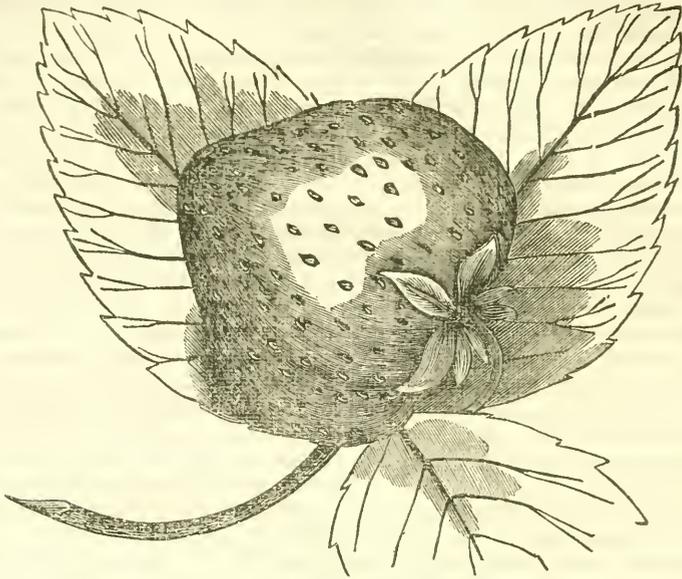
immediately if pruning is carefully performed, and where large limbs are taken off, which should be done only in cases of absolute necessity, a composition of some kind may be used to exclude the air until the wound closes. Summer pruning should be performed very cautiously. To deprive a tree of a large portion of its wood and leaves while in a growing state, frequently produces a stagnation of the sap, and induces disease. We find, in pruning small trees in the nursery very moderately—only removing a few of the side branches—that it causes a partial relaxation of their energies. Still we practice summer pruning, and indeed pruning at all seasons, more or less, *except in spring when the buds are swelling and the flow of sap commences, and until the leaves are full grown.* If people would attend properly to their trees during the whole season, no pruning would be necessary, that would injure a tree in summer, fall, or winter.

We base our remarks on experience. Those who prefer other methods are at liberty to adopt them. We would suggest, however, that in cases of this kind some *standard authority* in fruit culture should be chosen. As our correspondent has not quoted Downing’s work on “Fruit and Fruit Trees,” we would beg leave to recommend it to his notice.

As regards the *Virgalieu Pear*, we would inform “Brockport” that the figure and description given in our January number, were taken from a genuine specimen before us, and will be instantly recognized as correct by all who are familiar with that popular and valuable fruit.—Circumstances modify, sometimes materially, the form, flavor, and time of ripening of fruits. That described as not arriving at maturity on the tree, we should say was not the *Virgalieu*, except the soil is very cold and unfavorable. The other spoken of in Oneida county is more likely to be the *genuine thing*.

OUR Nantucket (Mass.) correspondent is referred to an article on the subject of his inquiry, published elsewhere in this department.

PLEASE GIVE US CREDIT.—We find our hints on Garden and Orchard operations for March, copied in the *Troy Budget* of 24th March, credited to the “New York Morning News”! We suspect the “News” has published them as its own, and in doing so has garbled them a little, and thus perverted the sense, which shows it knew nothing about the matter. For instance, in speaking of cutting scions, we said that “two or three buds of the last years growth should be left.” The *News* has it, “two or three buds of last years growth should be left on the scions”! We are glad to see our items copied, but we wish it to be done correctly, and due credit given us. Some of our exchanges we find are copying our figures of fruits, without any acknowledgment. Be honest gentlemen, if you please.



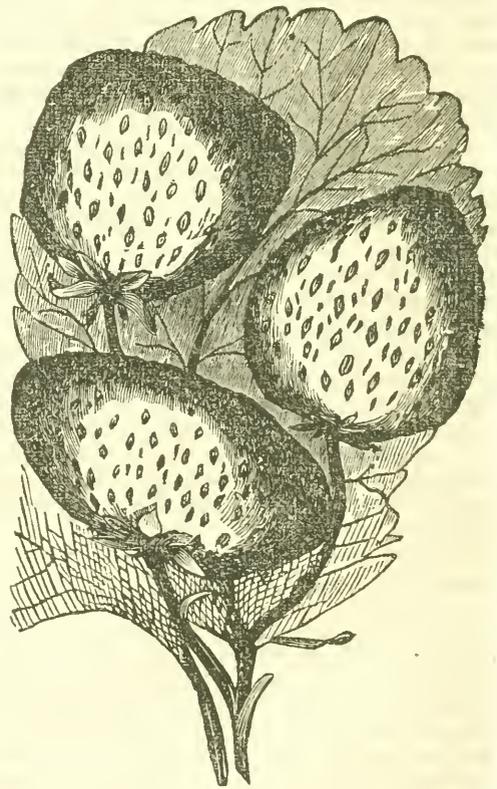
HOVEY'S SEEDLING STRAWBERRY. (FIG. 10.)

Culture of the Strawberry.

It is needless for us to waste our paper in commending the culture of this fruit to the attention of all who are fortunate enough to have a garden, or land enough to make one. Suffice it to say, that no man or woman is worthy a garden who will not appropriate a portion of it to the culture of the Strawberry. It is a most delicious and healthy fruit. The plants are easily procured and easily cultivated. In the August number of our last volume, we gave brief directions for planting and cultivating, and noticed a few choice sorts for small collections.

Lest some one may not have that number to refer to, or anything else better, we will add a brief hint or two now. In the first place, it is decidedly better not to attempt this matter at all, than not to do it properly. We have seen strawberry beds enough, that were complete nuisances in a garden—planted on an unprepared soil—neglected entirely after planting—of an unknown variety, perhaps *unworthy* of culture.—The matter should stand just the reverse of this. The ground should be well prepared, *deep* and *rich*. The plants should be of well selected, esteemed varieties, procured from a well known source.

The plants may be set, where ground is limited, 18 inches apart each way; where there is plenty of land, 18 inches apart in the rows, and 2½ feet between the rows is preferable, as it gives room enough for culture. In all cases the ground should be kept well worked, and clear of weeds, and the runners should be removed as often as necessary. In the fall, say October or early in November, a dressing of well rotted manure should be spaded or forked in between the rows.



ROSS' PIGEON. (FIG. 11.)

In cold districts, such as in the counties of Oneida, Herkimer, Otsego, &c., and north of us in Canada, a covering of branches of evergreens, or leaves, should be given, to the depth of two or three inches. After the second or third year's

bearing, the plants may be renewed by allowing young plants, runners, to establish themselves in the spaces between the old ones—having previously prepared the spaces by spading and manuring. After the young plants are well rooted, and when the crop has been all gathered, the old ones may be spaded down to enrich the ground. This is a very simple and very excellent method of renewing the plants—a matter that should not be neglected, as old plants become sterile or produce inferior fruit.

The following are very fine for general culture: Hovey's Seedling, Ross' Phoenix, Keen's Seedling, Large Early Scarlet, Bishop's Orange, Red and White Alpine, and particularly *Stoddard's Seedling Alpine*, which has attracted so much attention for its extraordinary size and productiveness. We give in this number figures of Hovey's Seedling and Ross' Phoenix, both superb kinds. We may add here, in regard to Hovey's Seedling, that the fruit committee of the Massachusetts Horticultural Society has recently awarded a *special premium* to Hovey & Co. of \$50 for this variety, and state "that after a trial of 12 years, they know of no Strawberry of superior merit, and where it is cultivated near other varieties, it will prove one of the best, where all are good." There are several new varieties we are now cultivating, which are highly spoken of, but we cannot at present, recommend them for general culture.

Horticultural Society.

OFFICERS of the "Horticultural Society of the Valley of the Genesee," for the current year:

- | | |
|--|---------------------------|
| WILLIAM PITKIN, <i>President.</i> | |
| L. B. LANGWORTHY, | } <i>Vice Presidents.</i> |
| ISAAC HILLS, | |
| J. R. MURRAY, | |
| A. ERICKSON, | |
| ASA ROWE, | |
| J. W. BISSELL, <i>Treasurer.</i> | |
| JAS. H. WATTS, <i>Corresponding Secretary.</i> | |
| J. M. WHITNEY, <i>Recording Secretary.</i> | |

The HORTICULTURAL SOCIETY of the Valley of the Genesee, present the following list of premiums for the year 1845:

VEGETABLES.

- | | |
|--|-----|
| Asparagus—Earliest and best three bunches,..... | \$1 |
| Peas—Earliest and best half peck, \$2—second best, \$1 | |
| Cucumbers—Earliest and best pair,..... | 2 |
| Rhubarb—Best 12 stalks,..... | 1 |
| Potatoes—Earliest and best half peck,..... | 1 |
| Tomatoes—Earliest and best six,..... | 1 |
| Corn—Earliest and best six ears,..... | 1 |
| Celery—Best dozen, \$2—second best, \$1. | |
| Cauliflower—Best single,..... | 1 |
| Lima Beans—Earliest and best half peck,..... | 2 |
| Best display of vegetables during season,..... | 3 |

Discretionary premiums will be awarded by the Committee, at their discretion, to the amount of \$11.

FRUIT AND MELONS.

- | | |
|--|--|
| Apples—Greatest number of varieties and best grown, \$3—best six specimens of summer, \$1—best six specimens of fall, \$1. | |
| Pears—Greatest number of varieties and best grown, \$3—best six specimens of summer, \$2—best six specimens of fall, \$2. | |
| Cherries—Best three specimens, \$2—best 3 varieties, \$2 | |
| Peaches—Earliest and best six specimens, \$3—best three varieties, \$3—greatest number of varieties and best grown, \$2—best single specimen, \$1. | |

- | | |
|---|-----|
| Apricots—Earliest and best six specimens, \$2—greatest number of varieties and best grown, \$2. | |
| Plums—Earliest and best six specimens, \$2—greatest number of varieties and best grown, \$2. | |
| Nectarines—Best three specimens,..... | \$1 |
| Quinces—Greatest number of varieties and best grown,..... | 2 |
| Gooseberries—Best flavored three specimens, \$1—greatest number of varieties and best grown, \$2. | |
| Currants—Greatest number of varieties and best grown, 1 | |
| Raspberries do. do. do. | 1 |
| Strawberries—Greatest number of varieties and best grown, \$3—earliest and best 12 specimens, \$2—best 12 specimens, \$2. | |
| Grapes—Greatest number of varieties and best grown, \$2—best single bunch, \$2—second best single bunch, \$1. | |
| Watermelons—Best specimen, \$2—second best, \$1. | |
| Muskmelons—Best specimen, \$2—second best, \$1. | |
| Best show of assorted fruit at fall exhibition,..... | 3 |
- In addition to the above, the Committee will award discretionary premiums, should they think proper, amounting to \$13.

FLOWERS.

- | | |
|--|-----|
| Hyacinths—Best display,..... | \$2 |
| Tulips, do. | 2 |
| Peonies, do. | 3 |
| Pansies, do. | 1 |
| Roses, (hardy,) greatest number of var. and best grown,..... | 3 |
| Do. best six varieties,..... | 2 |
| Do. (Bengal,) do. do. | 1 |
| Do. (Bourbon,) do. do. | 1 |
| Do. (Noisette,) do. do. | 1 |
| Carnations and Picotees, best display,..... | 2 |
| Do. do. best twelve varieties,..... | 1 |
| Do. do. best single bloom,..... | 1 |
| Annals—Best display during season,..... | 3 |
| Dahlias—Greatest number of varieties and best grown,..... | 4 |
| Do. best twelve varieties,..... | 2 |
| Do. best single bloom,..... | 1 |
| Do. best seedling,..... | 1 |
| Flowering Shrubs—Best display during season,..... | 2 |
| Do. Trees, do. do. | 1 |
| Best Floral design, \$3—second best, \$2. | |
| Best bouquet of cut flowers, \$2—second best, \$1. | |

GREEN-HOUSE PLANTS.

- | | |
|--|--|
| Best 12 plants, \$2—best single specimen, \$2. | |
|--|--|

NATIVE FLOWERS.

- | | |
|------------------------------------|-----|
| Greatest number of varieties,..... | \$3 |
|------------------------------------|-----|
- In addition, the Committee will award discretionary premiums as above, amounting to \$10.

NURSERYMEN'S PREMIUMS.

- | | |
|---|-----|
| Best display of green-house plants at fall exhibition,..... | \$5 |
| Best Floral design,..... | 3 |
| Best show of Apples,..... | 1 |
| Do. Pears,..... | 1 |
| Do. Peaches,..... | 1 |
| Do. Plums,..... | 1 |
| Do. Cherries,..... | 1 |
| Do. Apricots,..... | 1 |
| Do. Strawberries,..... | 1 |
| Greatest number of varieties of Roses,..... | 1 |

ESSAYS: OPEN TO ALL.

- | | |
|---|-----|
| Best Essay on Curculio, with result of experiments and insect in various stages,..... | \$5 |
| Best Essay on Honey bee moth,..... | 5 |
| Do. Peach worm,..... | 3 |

RULES.

No article shall be entered for competition except at general exhibitions, 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 names and the name of the producer; and no specimen incorrectly named, shall be considered as entitled to any premium.

J. M. WHITNEY, Rec. Sec'y.

MANURING PINKS.—The Gardener's Chronicle says, a friend manured some pinks very freely with rotten rags, and the improvement in the appearance of the bloom was astonishing.

The Horticultural Society of the Valley of the Genesee.

WE publish in another place the names of the officers of this Society; also a list of premiums, offered for the present year, 1846.

The objects of this Society will be, to awaken such a spirit of improvement in gardening, throughout the *Genesee Valley*, as will enrich our Gardens and Orchards with the finest fruits of the earth, and embellish every home with trees, shrubs, and plants of ornament. The best gardens in the world, at this day, owe their richest treasures to the influence of Horticultural Societies. Ours, if well managed and well patronised, as we do hope it will be, must prove a great public benefactor. We call on every friend of improvement, in Western New York, more particularly in the *Valley of the Genesee*—every lover of fine fruits and beautiful flowers—all who have an interest in the improvement of the soil, or who wish to see their *own* section of country take its proper rank in the progressive movement of the day, to give prompt assistance in building up and sustaining this Society.

The great landed proprietors should assist freely, if only in view of their individual interests. They, in a particular manner, will be benefited. The Society will aid in developing the superiority of our country for fruit growing and gardening, and thereby enhance its value materially.

We are glad to be able to state, that many wealthy and tasteful citizens of the surrounding country and villages, have expressed their satisfaction at the formation of the society, and promised their hearty co-operation.

THE FRUIT CULTURIST, Adapted to the Climate of the Northern States; Containing Directions for Raising Young Trees in the Nursery, and for the Management of the Orchard and Fruit Garden. By JOHN J. THOMAS.

WE are indebted to a friend for a copy of this work, which is received just as our paper is going to press. We have glanced hastily over it, and find it exactly what we expected—a plain, practical little book, well calculated to effect the designs of the author, as stated in the preface, viz: "To furnish useful directions to those who may be little acquainted with the management of fruit trees, promote the culture of the best varieties, and improve their treatment so as to secure excellence and productiveness in a more eminent degree than is usually attained."

It is divided into two parts. The first contains "*General directions and practices*," and the second "*On the different kinds of fruits*." Each part is divided into chapters, in which the various branches of the subject are separately treated, in as plain and concise a manner as possible.—One chapter is devoted to *implements*, illustrated with engravings—and at the end is a "descriptive list of fruits," after the manner of the best nursery catalogues. This is decidedly *the* book

for the "ten hundred thousand" fruit growers in the northern states. Every man and woman who cultivates to the number of *one* tree should have it, and have it immediately. It will save an immense deal of trouble in asking questions of persons who are perhaps too busy, or ill qualified, to answer them. To the multitudes of persons of *all* professions, and of *no* profession, who are here and there embarking in the nursery business, without the least knowledge of the matter, it is invaluable.

We hope it will be placed in every school district library in the State. It is well adapted to promote taste and knowledge amongst the young. We may refer to it again, when we have more space and leisure—and after we have given it a more careful perusal. It can be had of D. M. DEWEY, Arcade News Room, Rochester, at the price of 50 cents.

MOUNT HOPE BOTANIC GARDEN AND NURSERIES, Rochester, N. Y. (*South St. Paul st., nearly opposite the Cemetery.*)

THE Proprietors of this Establishment offer for sale an unusually large and fine collection of
FRUIT AND ORNAMENTAL TREES,
FLOWERING SHRUBS, VINES AND ROSES, HARDY HERBACEOUS PLANTS, DOUBLE DAHLIAS AND BULBOUS ROOTS;
GRAPE VINES, RASPBERRIES, STRAWBERRIES,
AND GOOSEBERRIES; ASPARAGUS ROOTS,
RHUBARB, &c.; HEDGE PLANTS,
GREEN HOUSE PLANTS, &c.

The collection of Fruit Trees comprises the most popular varieties cultivated, and has been grown with the greatest possible care to ensure accuracy. The Proprietors are *practical and experienced Nurserymen*, and wholly devoted to the business;—all the important operations are either performed by themselves or under their immediate inspection.

Experience has fully proved that the trees grown at this point, in addition to being free from diseases, are better adapted to cold climates than those of any other portion of the United States.

The collection of Apples includes several thousands of the famous new American Apple, the "*Northern Spy*."

A large assortment of Pears, of the choicest kinds, are propagated on quince stocks for DWARFS and PYRAMIDS, and will bear the first or second year after planting; they are admirably adapted for garden culture. A lot of these are now on hand, of extra size, for immediate bearing.

The collection of Ornamental Trees is large and fine, comprising several hundred of the splendid *Paeonia Imperialis*. The catalogue of Roses embraces the most popular new varieties. A great variety are propagated for standard or Tree Roses, 4 to 6 feet high, with fine heads.

Of *Double Dahlias* the assortment is unsurpassed, including the finest show flowers yet introduced to this country, and many that were imported last season at 5 guineas each. A catalogue will be published in April.

The stock of Green House Plants is very extensive, and includes the most beautiful new Pelargonium (*Geranium*), Fuchsia, Camellia, Calceolaria, Verbena, Cactus, &c., &c., all finely grown, and will be sold at greatly reduced prices.

Trees and Plants packed in the best manner, and shipped to any part of the country agreeable to order.

Priced catalogues sent *gratis* to all *post paid* applications. Orders from unknown correspondents should be accompanied with a remittance or reference.

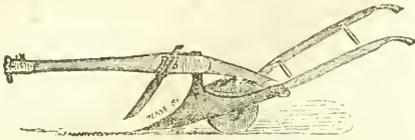
ELLWANGER & BARRY

Rochester, April, 1846.

Sanford's Straw Cutter.

For sale by PALALJE & BRIGGS at the *GENESEE SEED STORE*, No. 10 Front St., Rochester. Price \$15.
Rochester, April 1846. [4-1f.]

"Burrall's Patent Shell-Wheel Plow."



Saves one-third draft, and works well.

MADE and sold, at Wholesale and Retail, by CURTIS, ROSE & Co., (Geneva, Ontario Co., N. Y.,) manufacturers of Threshing Machines and Separators, Clover Mills, Corn Shelling Separators, (a new and desirable article,) Steam Engines and Boilers, Mill Gearing, Water Wheels, Stoves, Hollow Ware, Potash and Caldron Kettles, &c.

The Wheel Plows and Corn Shellers can also be obtained at the following places:

RAPALJE & BRIGGS, Genesee Seed Store, Rochester.

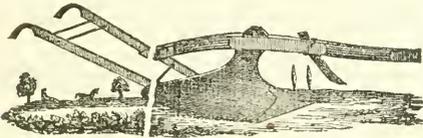
EDEN FOSTER, Batavia.

HALL, RHOADES & SHERMAN, Syracuse.

PETER CRONKHITE, Hallowell, Canada.

B. F. Davy & Co., Bath, Canada. [4-3t]

American Plow Factory!



[This cut does not properly represent the Plow.]

CODDINGS AMERICAN PLOW.

THE UNIVERSAL TESTIMONY of all who have used this Plow, is, that it is the Plow for every farmer to have in his possession. It will draw lighter than any plow now in use to do the same work, thus saving much work for your teams. The following extract from the report of the committee of the State Agricultural Fair will show the difference in this respect between this and some of the best Plows tested.—"Cayuga County 388 pounds draft; Ontario Co., 431 do.; Caledonia, 422 do.; Eagle, (Mass.) 415 do.; Lockline, improved, 483 do.; Iron Beam, 388 do.; Livingston Co., 400 do.; [Coddings American, 320 do.]" Sixty-eight pounds lighter draft than the lowest on the ground. With this plow you can turn your furrows up hill—give them the half lap, completely shutting in the grass so as to prevent its growing. With it you can plow your stony ground, stubble or clover, and "any thing else." They are wooded with first rate seasoned white oak timber, in the very best manner, and warranted to be right in every respect. They are ground and polished before leaving the shop, which makes them ready for immediate use.

Call at the Shop and examine the recommendations.—Among others who have used them, we would refer to the Society of Shakers, near Mt. Morris. Orders supplied, at wholesale and retail, to any part of the U. S. or Canada, and a constant supply on hand at the American Plow Factory, on Aqueduct st., rear of No. 17 Buffalo st., Rochester, N. Y., by CAPRON & CURTIS.

* * * Also for sale, in this city, by Philip W. Cornwell, Frankfort—E. Taylor, Agricultural Warehouse, Hill st.—Z. C. Colvin, South St. Paul st.—and Smith & Gould, corner of Buffalo and Trowbridge sts. By John Reynolds, Pulneyville; W. J. Stoutenburg, Williamson; J. L. Sanford, Palmyra; B. Fish, Sodus Phalar; C. P. Smith, Ontario, and country merchants generally.

N. B. Points always kept in the vicinity where plows are used. [Wood and Country Produce taken in exchange for Plows. [4-2t]

Peas Wanted.—Wanted, at the Genesee Seed Store, two or three hundred bushels Peas, of the first quality, for which the highest cash price will be paid by

RAPALJE & BRIGGS.

2ft. No. 10, Front-st., Rochester.

Eggs.—The subscriber has for sale a few dozen EGGS from the breed of fowls described by Bement as the "Ostrich Fowls." Price, 37½ cents per dozen.

J. W. BISSELL,

At the Commercial Nursery, Main-St., Rochester.

Agricultural Books.

SAGE & BROTHER, corner of Buffalo and State streets, Rochester, have a large and well selected assortment of the most approved Works on Agriculture, among which are the following:

Johnson's Farmer's Encyclopedia—Downing's Fruits and Fruit Trees of America—Boussingault's Rural Economy—Johnston's Agricultural Chemistry—The American Poulterer's Companion—Stewart's Stable Economy—Youatt on the Horse—Hind's and Mason's Farrieries—Youatt and Clatter on Cattle—Morrell's American Shepherd—Blacklock's Treatise on Sheep—Farmers' and Emigrants Hand Book—Kenrick's American Orchardist—Buell's Farmer's Instructor—Gaylord & Tucker's American Husbandry—Armstrong's Agriculture—A Treatise on Vegetable Physiology—Liebig's Animal and Agricultural Chemistries—Beatty on Agriculture—Falkner's Farmers Treasure—Smith on Productive Farming—Fessenden's Complete Farmer—Child on Beet Sugar—Fessenden's New American Gardener—Johnson's Gardening for the Ladies—Bridgeman's Gardener's Instructor. [4-2t] Rochester, April, 1846.

The newly Imported Horse 'Consternation'

WILL serve mares at \$20, the ensuing season, at the stables of C. T. ALBOT, Stoke Post, Oneida county, N. Y.

He is sixteen hands high, very powerful, and has splendid action. He was got by Confederate, dam Curiosity by Fingar. He took the First Premium at the State Fair in September last. [4-2t]

The Imported Horse Alfred,

WHICH took the first premium at the New York State Agricultural Fair, in 1843, will stand for mares this season, 1846, at the following places, viz:

At WILLIAM GARBUETT'S, Wheatland, as follows:—

On Saturday and Monday, May 2 and 4	" " " 16 " 18	" " " 30 June 1	" " " June 13 " 15	" " " 27 " 29	" " " July 11 July 13
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At JOHN BAKER'S, Macedon, as follows:—

On Saturday and Monday, May 9 and 11	" " " 23 " 25	" " " June 6 June 8	" " " 20 " 22	" " " July 4 July 6	" " " 18 " 20
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At the American Hotel, in Rochester, on Wednesdays and Thursdays of every week, to the close of the season, commencing April 29 and 30.

TERMS:—Ten dollars to insure a foal, payable 1st of March, 1847. Persons parting with mares before foaling time will be held responsible for the services of the Horse.

GEORGE FORDON.

March, 1846.

JOHN BAKER.

Colman's Agricultural Tour.—Subscribers to the above work are hereby notified that No. 5 is now in the hands of the agent, ready for delivery, and they will please call for them. JAMES H. WATTS, Agent.

Rochester, April 1, 1846.

Corn Shellers!—A first rate article, price \$10, for sale at No. 10, Front-st. RAPALJE & BRIGGS.

Castor Oil Beans.—Just received, and for sale at the Genesee Seed Store, No. 10 Front-st., by

[4] RAPALJE & BRIGGS.

Rakes—99 dozen I. Stark's superior Hay Rakes, for sale at the Genesee Agricultural Store, No. 10, Front-st., by

[4] RAPALJE & BRIGGS.

Branch Peas.—100 Bushels German Branch Peas, a very superior article, just received and for sale at the Genesee Seed Store. [4] RAPALJE & BRIGGS.

Plows for Sale.—We have on hand, and intend to keep constantly for sale, the celebrated Diamond and Wisconsin Plows, the merits of which have been fully tested. Price, \$7,00 for medium size. The farming community are respectfully invited to give us a call.

RAPALJE & BRIGGS,

2ft. No. 10, Front-st

McCORMICK'S PATENT "VIRGINIA REAPER."

[FOR CUT OF THIS MACHINE. SEE PAGE 91.]

BROCKPORT, March 20, 1846.

THE undersigned respectfully offers his PATENT REAPER to the farmers of New York, and the Western States generally; and while he believes that no labor saving machine has ever been introduced in public favor more cautiously, and at the same time with more general satisfaction to purchasers than his Reaper, he has the satisfaction of being able to present it for the harvest of 1846, in a greatly improved state. He can now warrant the raking of the wheat from the machine to be accomplished with ease and completeness, by a man comfortably seated upon it, whose position may be seen from the above cut. This improvement was thoroughly tested in the last harvest with the most signal success, and as is believed, perfects the Reaper. An account of its operation on the estate of the late Gen. Mills of Mount Morris, by Samuel J. Mills, Esq., is hereto subjoined.

This Machine, unlike many of the improvements of the present age, is not now offered to the public either as an untried experiment, or only having been partially tested, and therefore not to be relied upon. It has been extensively and most successfully in use in Virginia, since the harvest of 1842; and during the last two years has been extensively introduced into most of the wheat growing states of the Union, and in no case has it met with any opposition. So wide has been its range of operations in the last harvest that it would be impossible, in a publication of this description, to give all, or even very many of the numerous certificates that have been procured of its satisfactory performance. Hand Bills will be issued in the course of a few days by Messrs. BACKUS, FITCH, & Co. of Brockport, Monroe Co., containing not only a description of the Machine, but the most full and unequivocal testimony of its usefulness and value to the farmer, by numerous individuals of the very first respectability who have witnessed its operations. The terms on which this machine may be had, and the guaranty that will be given on its sale, should induce every farmer whose lands and crops suit its operation to give it a trial—as, should it prove equal to the guaranty, it will do more than pay for itself in cutting a single harvest. Any person can make the calculation for himself. As improved, one man to rake, and a boy to drive the horses, will attend the Machine, instead of two full hands as before, and from two to three acres more in a day may be cut by the improved Raker than with the old, by means of the greater ease with which it is done, which makes a great difference in a single harvest of any extent—say \$25 or \$30.

The Reaper is warranted to cut from 15 to 20 acres a day—to save an average of a bushel of wheat to the acre that would be lost by ordinary cradling, to be durable and not liable to get out of order, and the raking as stated above. Price \$100, payable on delivery at Brockport, Monroe Co., New York; or time will be given for good paper drawing interest.

The undersigned, Patentee of the Machine, has contracted with Messrs. BACKUS, FITCH, & Co., of this place, experienced, well known, and established manufacturers, for the making of a large number of Reapers for the ensuing harvest, to whom orders may be directed. Many orders have been already received from the west, as well as from the surrounding country; therefore any persons desirous of obtaining machines would do well to make early application, as we do not expect to be able to supply all demands.
C. H. McCORMICK.

[From the Mount Morris (N. Y.) Spectator.]

MR. HARDING—Dear Sir: Having made a trial of Mr. Cyrus H. McCormick's Reaping Machine, for Cutting Grain, I take pleasure in making a public statement of it, agreeably to his wishes. Mr. McCormick, the inventor, introduced his machine here from Virginia. He did not arrive with it until the season for cutting Wheat had nearly passed—and consequently cut only about thirty acres for me. The ground was level, being on the Genesee Flats, though the surface was somewhat uneven, as it was a piece turned over last fall, when put into wheat, with a very heavy turf, and many of the sods still remaining on the top of the ground. But they seemed to form no impediment to its successful operation. The machine cut one piece of twenty-five acres in a little less than a day and a half; averaging about two acres per hour for the time it was in operation. The wheat cut, if well filled, would yield about thirty bushels to the acre. The grain was cut cleaner and more even than could have

been cut with the cradle or sickle. It is drawn by two horses with ease, and is attended by a man to rake, and a boy to ride and drive. The raker rides on a seat attached to the Machine, and rakes the wheat off at the side in gables ready for binding. The Machine is simple in its construction.—The Knife has a sickle edge, and plays horizontally; and is represented to cut one hundred acres or more without sharpening. The reel gathers the wheat for cutting, and lops it over on the table for the raker. I design to use the Machine the next season. I have no doubt it would work well on up lands, where tolerably free from stumps and large stones.

A number of persons who were present and witnessed its operation, uniformly, I believe, expressed much satisfaction.

An incident occurred which may not be out of place to mention. Two Cradlers, hearing that a Machine was in the lot for cutting Wheat, never having seen one, and believing that they could cut faster and better than any live Machine, started, with Cradles in hand, with the determination (to use their own words) of "skunking it." As they reached the fence, in sight of the Machine, and saw the rapid pace with which it moved, they hid their cradles in the crook of the fence, and sloped off.

Yours, &c., SAMUEL J. MILLS.

Mt. Morris, Aug. 15, 1845.

The undersigned deem it necessary to add but little to the foregoing account of the celebrated "Virginia Reaper," as given by the inventor. After witnessing its operation, and that to the satisfaction, we believe, of a large number of farmers who were present, we were induced to purchase the exclusive right to supply the counties of Monroe and Orleans. We were, and still are, satisfied that it must almost entirely supercede all other methods of harvesting on all lands suited to its operation, which (it will be observed from certificates) are neither required to be level or smooth, though it is of course desirable to prepare lands as well as may be for its operation. It is also adapted to small, as well as large farms, as two, three, or more can unite in the purchase of a machine, according to the extent of their harvest, or the size of their farms.

As has been stated by Mr. McCormick, we have contracted with him to manufacture a large number of his Reapers, which will be furnished on the terms above mentioned, and for which orders will be thankfully received, and promptly and faithfully attended to.

BACKUS, FITCH, & CO.,
Brockport, Monroe County, N. Y.

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.

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. April, 1846. SAMUEL MOULSON.

CHOICE FRUIT TREES.

FOR SALE, at the Rochester Commercial Nursery, on Main street, one mile east of the Court House. The subscribers offer for sale nearly 200,000 Fruit Trees of various varieties and sizes, for cash or credit, upon the most favorable terms.

ALSO—An assortment of hardy Ornamental Trees and Shrubs.

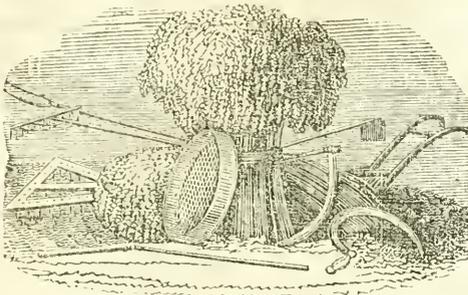
ALSO—Scions of almost every description of Fruit. The above have been thoroughly tested, and will be warranted of the kinds represented.

BISSELL & HOOKER, at the Nursery, or
J. W. BISSELL, No. 1, Arcade Hall.

March 1, 1846.

2m.

Wanted, at the Genesee Seed Store, 500 bushels Timothy and Clover Seed, for which the highest cash price will be paid by the subscribers. RAPALJE & BRIGGS.



**ROCHESTER SEED STORE,
AND
WARE-HOUSE FOR FARMING TOOLS.**

By JAMES P. FOGG.

The subscriber having purchased the interest of Mr. B. F. Smith, in the SEED and IMPLEMENT 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 seedsman 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; while those varieties of foreign growth, which experience has shown are the best, such as Cabbage, Cauliflowers, Brocoli all the varieties of Garden and Field Turnip, Scarlet Short-Top Raddish, Scarlet and White Turnip-kaddish, Dwarf and Early Peas, with Twenty choice varieties of FLOWER SEEDS, have been imported by the subscriber from the long established house of R. WRENCH & SONS, of London.

AGENTS for the sale of Rochester Seeds by the package, &c.—*Attica*, H. D. Gladding, *Amsterdam*, J. W. Sturtevant, *Auburn*, Hudson & Buckbee, *Albion*, Charles W. Perkins, *Batavia*, Lucas Saver, *Ballston*, E. W. Lee, *Buffalo*, W. & G. Bryant, *Brookport*, A. B. Bennett, *Canandaigua*, L. C. Cheney & Co. *Cazenovia*, Dr. A. Ford, *Castile*, Halsted & May, *Dansville*, H. B. Williams & Son, *Elmira*, Tracy Beadle, *Geneva*, Hemmip & Cone, *Geneseo*, L. Turner, *Hudson*, W. & G. Storrs, *Homer*, Wm. Sherman & Son, *Illica*, Lewis H. Culver, *Lockport*, S. H. Marks & Co. *Le Roy*, Tompkins & Morgan, *Lansingburgh*, R. Harrison, *Mumford*, J. Phelps & Co. *Mount Morris*, R. Sleeper, *Oswego*, C. & E. Canfield, *Perry*, R. H. Smith, *Pew Yan*, John H. Lapham, *Palmyra*, Hoyt & May, *Port Byron*, S. K. Kendriks, *Scottsville*, Garbutt & Co. *Seneca*, D. L. Powell, *Syracuse*, Foster & Nott, *Seneca Falls*, C. L. Hoskins, *Troy*, J. Daggett & Co. *Utica*, J. E. Warner & Co. *Union Springs*, Wm. Cozzens, *Warsaw*, Dr. A. Frank, *Waterford*, Wm. A. Waldron, *Waterloo*, T. McClintock, *Wyoming*, Cornwall & Maine, *Pittsfield*, *Mass.* Isaac L. Cole, *York*, James McPherson, *Adrian*, Mich. D. K. Underwood, *Brantford*, C. W. J. & R. Curtis, *Chicago*, Ill. N. Sherman, Jr. *Columbus*, Ohio, John Miller, *Detroit*, Mich. J. W. Strong, Jr. *Hamilton*, C. W. S. Kerr & Co. *Jonesville*, Mich. Smith & George, *Kingston*, C. W. Charles Hsath, *London*, C. W. Edward Adams, *Monroe*, Mich. Hosmer Graham, *Marshall*, Mich. A. Callender, *Milwaukee*, W. T. Holton & Goodall—*Jackson* & Jewell, *Niagara*, C. W. James Harvey, *Pontiac*, Mich. Rogers & Dunklee, *St. Catharines*, C. W. S. L. St. Johns—Boomer, Brothers & Co. *Springfield*, Mass. Chapin & Gunn—Benj. K. Bliss, *Sandusky City*, Ohio, W. T. & A. K. West, *Toronto*, C. W. Robert Love, *Toledo*, Ohio, Raymond & Co. *Westfield*, *Mass.* Jessup & Co. *Ypsilanti*, Mich. Edmunds & Co.

Rochester, N. Y. JAMES P. FOGG.

NEW SEED and IMPLEMENT WAREHOUSE.



GENESEE SEED STORE & 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 of 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.

RAPALJE & BRIGGS.

Rochester, Feb. 1, 1846.

FARMERS, CURE YOUR HORSES!

GEO. W. MERCHANT'S CELEBRATED

GARGLING OIL.

AN Invaluable Remedy for Horses, Cattle and other domestic animals, in the cure of the following diseases:

- | | |
|-----------------------------|-----------------------------|
| <i>Fresh Wounds,</i> | <i>Fistula, Sitfast,</i> |
| <i>Galls of all kinds,</i> | <i>Strains, Lameness,</i> |
| <i>Sprains, Bruises,</i> | <i>Sand Cracks,</i> |
| <i>Cracked Heels,</i> | <i>Foundered Feet,</i> |
| <i>Ringbone, Windgalls,</i> | <i>Scratches or Grease,</i> |
| <i>Poll Evil, Callos,</i> | <i>Mange,</i> |
| <i>Spavins, Sweeney,</i> | <i>Horn Distemper.</i> |

Also a valuable Embrocation for diseases of the Human Flesh.

Since the virtues of the Gargling Oil have become so extensively and favorably known to the farmers of the United States and Canada, as a curative oil in diseases of animals, and as a consequence, its demand becoming great—there has not been wanting those whose cupidity has suggested to them that if they could concoct something as nearly resembling in appearance as they could GUESS, with any hing for a name, they might urge it upon unsuspecting customers as a substitute for the true Gargling Oil. The proprietor would therefore CAUTION those who purchase to be sure the name of G. W. Merchant is blown on the side of the bottle. All others are an ATTEMPT at imitation, and are therefore an imposition.

For testimonials, synopsis of diseases, and mode of treatment, see pamphlet which accompanies each bottle.

☞ Sold at the ROCHESTER SEED STORE, and by Druggists and Store-keepers in the United States and Canada.

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

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

MARKET INTELLIGENCE.

Rochester Produce Market.

(CORRECTED FOR THE GENESEE FARMER.)

Wheat,-----	1,00	a 1,03	Pork, bbl,-----	12,00
Corn,-----	41	46	Pork, cwt,-----	4,00 4,50
Barley,-----	44	50	Beef, cwt,-----	3,00 4,00
Oats,-----	32	34	Lard, lb,-----	7 8
Flour,-----	5,25		Butter, lb,-----	10 12
Beans,-----		38	Cheese, lb,-----	3 3½
Apples,-----	25	50	Eggs, doz,-----	9
Potatoes,-----	25	31	Poultry,-----	7
Clover Seed,-----	5,00	5,25	Tallow,-----	6 7
Timothy,-----	2,00	2,50	Maple Sugar,-----	8
Hay, ton,-----	10,00	12,00	Sheep Skins, fresh,-----	1,00
Wood, cord,-----	2,00	2,50	Green Hides, lb	3 7
Salt, bbl,-----		1,25	Dry "-----	6 7
Hams, lb,-----	7		Calf Skins,-----	5 6

Rochester, April 15, 1846.

NEW YORK, April 15.

Flour is steady at \$5,37½ a \$5,43—without sales for shipment. A sale of 2,600 bush. N. O. Corn sold at 67½ cts.—Sales 40,000 bush. Clover at 7½ cts. for export. Provisions are quiet at previous prices. A sale of 50 bbls. Tallow was made at 7½ prime. 218 bbls. beef Hams brought \$8,50.

BOSTON, April 13.

PROVISIONS.—There is more inquiry. Sales of 400 bbls. prime pork at \$10, 4 mos.; 300 do. mess, supposed at \$11,25, cash; Boston No. 1 Beef, \$7, cash; New York prime, 5,87½, cash.

Flour.—The market is dull and in some instances prices have declined. Moderate sales of Genesee, common brands, at \$5,50 a 5,62½; fancy brands, 5,87½ a 5,94; Fredericksburg, \$5 a 5,06½; Howard street, 5,12½.

CORN.—Sales of yellow flat at 70 cts.; white 68 a 69 cts.

BUFFALO, April 14.

There is rather more firmness in flour to-day than there has been before for a few days. Holders generally are asking \$4,50, and for finer brands \$4,56, but we hear of no sales except for city trade to a limited extent at \$4,56 for common brands, and \$4,75 for a little extra.

A cargo of Indian Corn, 2300 bush, was sold afloat at 43 cts.

There is not much doing in Pork, as yet very little having arrived from the west. We hear of a sale of 50 bbls. Mess at \$10,75, and 12 bbls. at \$11, in three lots. In Prime there is nothing doing; we quote at \$3. 20 bbls. short Shoulders sold at \$6,50.

Butter is dull and sells from 3 to 10 cts.; a few kegs sold at 8 cts.

In Beef there is not much doing; we quote Mess at \$6,50, and prime at \$4. Lard sells to city trade 7 cts., and Dried Apples \$1,25 per bush.

Cloverseed is sick; nominally held at \$5. Grass-seed \$1,75.—Express.

CINCINNATI, April 10.

Flour.—Sales from wagon at \$3,65; 50 bbls. from store 3,60; 200 do. from canal 3,65.

BACON.—Hams 6 a 6½ cts.; city packed sides 5 cts.; shoulders 3¾ cts.

BEEF.—A sale of 24 bbls. mess at \$6; 30 do. prime at \$4.

BUTTER.—A sale of 1,000 lbs. sold at 6 cts.—Chron.

To Postmasters, Agents, &c.

POST MASTERS and others who have interested themselves in obtaining and forwarding subscriptions for the FARMER, will please accept our sincere thanks for so generous an exercise of their influence. We trust they are disposed to continue their valuable aid in behalf of this publication—by extending its circulation, and thus enhancing its usefulness in their respective vicinities. Those interested will oblige us by complying with the subjoined requests:

Remittances by Mail.—Persons ordering the Farmer, are requested to enclose the money, instead of sending Post-office drafts. This will save us much trouble. If money is properly enclosed, we will run the risk of loss by mail.

Post Office Address.—Subscribers wishing to have their paper changed from one Post-office to another, will please state where it is now sent, in order that we may make the proper correction. It is no easy task to look over several large books to find and erase the name of a subscriber.

Western New York Agricultural School.

The undersigned, in connection with Gen. RAWSON HARMON, of Wheatland, Monroe Co., will open on the 1st of May next, at the residence of the latter, an Agricultural School, designed to teach in the most thorough and systematic manner, both the Practice and the Science of Rural Economy, in all their various branches.

The Farm is large and under a high state of cultivation, yielding annually some 1400 bushels of wheat, sold at extra price for seed, which is eagerly sought after in all the wheat growing districts of the Union. Gen. HARMON is a working practical farmer, and will devote his personal attention to the instruction of all pupils attending the School. There are now growing on the premises over fifty distinct varieties of Winter Wheat. The undersigned will have a Chemical Laboratory for the analysis of soils, plants, and animal substances; and no pains will be spared to make the School the most practical and useful of any in the State. Able Assistants, both in Literature and Science, will be employed, so soon as buildings can be erected to accommodate a large number of students.

TERMS—Twenty-five Dollars a Quarter, or \$100 a Year—including board, washing, tuition, &c.
April, 1846. DANIEL LEE, M. D.

The Genesee Farmer.

VOLUME VII, FOR 1846.

Each Number of this Volume, (which commenced in January, 1846,) instead of SIXTEEN, contains TWENTY-FOUR LARGE OCTAVO PAGES,—is printed on NEW TYPE, and GOOD PAPER,—and embellished with appropriate ENGRAVINGS. The paper will make a handsome volume of about three hundred pages, suitable for binding at the expiration of the year. No reasonable expense or effort will be spared, but every proper exertion used to make it acceptable to the Farming community, by rendering it at once the cheapest and best paper of its size and kind in the Union.

ITS EDITORIAL DEPARTMENT will continue under the supervision of DR. DANIEL LEE, its present talented and popular Editor. Its HORTICULTURAL DEPARTMENT will be conducted by P. BARRY, Esq, an experienced and practical Horticulturist.

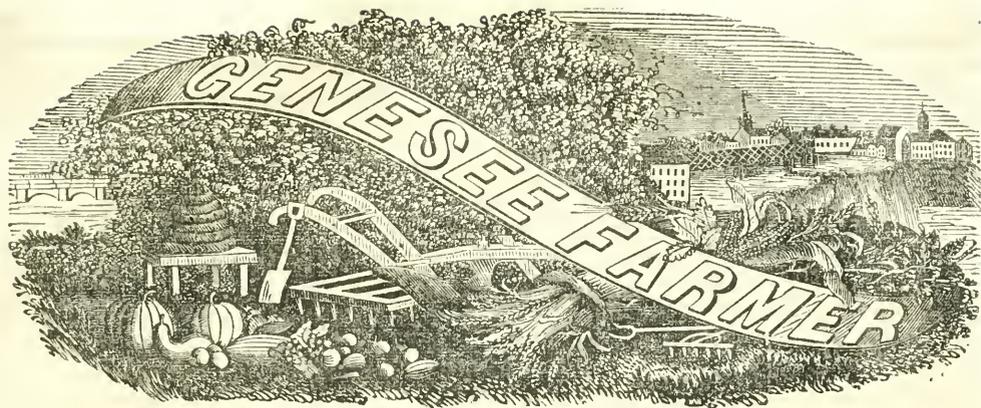
TERMS, same as heretofore—FIFTY CENTS A YEAR, in advance; 5 copies for \$2; 8 copies for \$3.

Now is the time to subscribe! and those who wish to do so, are requested to send in their orders as soon as convenient. Persons ordering the paper will please write plainly the name of the Post Office, County and State to which it is to be sent—and also state whether they have the January number. Post Masters, and other friends of Agricultural Journals, are requested to obtain and forward subscriptions for the Farmer. Post Masters may enclose money at our risk. Address D. D. T. MOORE,

Rochester, N. Y.

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THE GENESEE FARMER:

Issued the first of each month, at 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 over the Rochester Seed Store (2d story,) Front street, nearly opposite the Market.

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.

Western New York Agricultural School.

THE Editor of the Farmer is now at Wheatland, making arrangements for opening this Institution on the first Monday of the present month. As the enterprize is an important one, we cannot allow the occasion to pass unnoticed. Dr. LEE, as is well known to many of our readers, has directed his attention for several years to the study of Agricultural Science, and made no little effort for the establishment of Agricultural Schools in this State. His associate in the enterprise, Gen. RAWSON HARMON, is also well known as one of the best practical farmers in the Union. Gen. H. has been eminently successful in the cultivation of wheat. He now has over FIFTY distinct varieties of winter wheat growing upon his excellent farm, where the School is located.

With such men at its head—one thoroughly acquainted with the *Science*, and the other well experienced in the *Practice* of Agriculture—we see no reason why this School should not receive, as it will certainly merit, extensive patronage and encouragement. The farmers of Western New York should see to it that an institution of this character, upon their own soil, is properly sustained—for it will afford their sons a more thorough and practical education than can be obtained at any of our Academies or Colleges.—And intelligent men of other occupations and

professions will, we think, find in this School a desideratum which their sons desire or ought to possess—something more than a mere literary education. The day is not distant when similar schools, furnishing to pupils a correct knowledge of the theory and practice of good husbandry, will be established and sustained in different sections of the country. The gentlemen above named are the pioneers of the good work in Western New York, and we trust their truly laudable enterprise will receive ample encouragement and patronage.

Among the many favorable notices which we have observed in our exchanges, we copy the sojoined:

M.

WESTERN NEW YORK AGRICULTURAL SCHOOL.—Dr. DANIEL LEE, of Buffalo, editor of the Genesee Farmer, has made arrangements with Gen. RAWSON HARMON, to open an Agricultural School at the residence of the latter in Wheatland, Monroe County, N. Y., on the 1st of May next, to teach the science and practice of agriculture. The farm of Gen. HARMON contains 200 acres of improved land, which is under excellent cultivation in the various kinds of crops suitable to the climate.

From the well known characters of Gen. Harmon and Dr. Lee, we have no doubt that they will keep an excellent Agricultural School, and one highly deserving the patronage of the public. The pages of this periodical will bear witness to the zeal with which we have continually advocated them, and we are rejoiced to be able to announce that one is at length to be established in this State. We hope it may meet the patronage that it is sure to merit, and that it may be followed by others throughout the country. It is high time that farmers' sons were taught their business *scientifically* as well as *practically*. We are of opinion that, ten years hence, people will look back with perfect wonder that agricultural schools were not established at the first settlement of the country.—*Amer. Agriculturist* for February.

AGRICULTURAL SCHOOL.—We learn that Dr. D. LEE, who is now editor of the Genesee Farmer, in connexion with Gen. RAWSON HARMON, have formed arrangements for opening a school for the study of scientific and practical agriculture. It is to be located on Gen. H.'s farm, in Wheatland, about sixteen miles from Rochester. We have not yet seen a plan of this school, but we presume a leading object will be to *test theories* by practical and careful experiment in *field culture*; and in doing this, in a proper manner, it cannot fail to be highly useful. Dr. LEE has devoted much study to the science of agriculture, and we believe has had considerable experience in the capacity of a teacher. Gen. HARMON is considered one of the best practical farmers in the State—in wheat culture, in particular, he has been quite eminent; and the community are under large obligations to him for his numerous and well-conducted experiments to test the relative value of a great many kinds of wheat. We wish the school success.—*Alb. Cultivator*.

Forests—Their Influence on Climate, &c.

THE cupidity of man is no where more inconsiderately manifested, no where seen in a more lamentable point of view, than in the injudicious, often wanton, destruction of the forests of a country. Reckless, and perhaps ignorantly so, of consequences, he prostrates acre after acre, with the sole view of hoarding up wealth, even when he has already more perhaps than he is capable of enjoying. It is true, the immediate wealth of the country is thereby increased, and we have become a rich as well as a great nation; but posterity will suffer the fruits of our folly, or to say the least, of our imprudence, and regret that we did not rather leave them *wood* than *money*—Even *we* are already beginning to suffer the fruits of our own cupidity and mismanagement; while, judging from present appearances, we shall leave to posterity, not a wilderness, but a desert. I am aware that these considerations will have little influence on those who “live only for themselves;” but certainly that man is not to be envied, whose whole aim and object in living are confined within the narrow limits of self.

It is not my design to consider the subject exclusively in relation to posterity, but rather to offer a few remarks on the influence of forests on climate, and to endeavor to show that the climate of a country is essentially changed by the destruction of its forests. The first effect thereby produced is to destroy the uniformity, or rather the equability, of a climate. In Germany, the destruction of the forests, and the draining of the lakes, it is said, have tended to render the climate warmer. This increase of temperature must evidently be confined to the summer season, for reasons which will appear in the sequel. In the Cape de Verd Islands, the destruction of the forests has tended to render the atmosphere sultry; and the once delightful climate of Greece, of Italy, and of many other countries, has suffered from the same cause. In our own country, who does not remember when our climate was more equable and uniform than at present. Our winters were cold, it is true; but they appeared and disappeared in their proper season; and the excessive heat of our summers was modified by the cool and refreshing forest-breezes. Our springs exhibited the gradual and beautiful transition from winter's cold to summer's heat, a phenomenon now rarely witnessed in its pristine beauty.

Immediately connected with the effect upon the atmosphere, and a consequence thereof, is its effect upon the earth. In all countries where observations have been made, it is found that the springs and streams have greatly diminished, and in some countries, almost entirely “dried up.” Such has been the effect on those of the Cape de Verd Islands, mentioned above, many of which have, since the forests have been destroyed, entirely disappeared; and the writer

well remembers the time when several streams in one of our eastern part of this State, so lately as the early part of the present century, were of sufficient size and uniformity to render them valuable as mill-streams, and on which a number of mills were erected, but which are now entirely dry during a large portion of the summer, and of so little value for economical purposes, that nearly all the mills have been suffered to run to decay. Several springs also which then furnished a plentiful supply of water during most of the year, now seldom flow during a large portion of the summer season. I might also add the total or partial failure of wells, of late so frequently complained of in different parts of the country, especially at the east. Wells that had never been known to fail before for perhaps half a century, or more, have within the last few years evinced symptoms of a decline unknown in their early history.

Another effect attributable in a great measure to the same cause, is the frequent and severe drouths witnessed almost every season in those countries and states where the forests have been extensively destroyed. Witness those terrible drouths and consequent famines that have of late years visited the Cape de Verd Islands.—Witness also those that have lately visited our own eastern states, and the eastern portions of this state. I do not mean to say that these effects are to be attributed entirely to the destruction of the forests, but I have no doubt this is one, and a principle cause.

Another effect attributable to the same cause, and a plain proof of a change of climate, is the difficulty of raising fruit and winter grain. Who has not observed the great change in this respect? The writer well remembers the time when winter wheat was raised in the eastern part of the state, as abundantly and as easily as in the western. The farmer had only “to put his seed into the ground,” in the proper time, and he felt sure of an abundant crop. No wheat, (or very little and that with great difficulty,) is now raised in that part of the state. This cannot be attributed to the exhaustion of the soil for two reasons: first, because wherever the experiment has of late been tried the fall growth is good, but it is killed during the winter and spring; and second, because even on well manured, or entirely new soil, the result is very nearly the same: the autumn growth is abundant, but it cannot withstand the severity of winter. The same effect begins to manifest itself in this part of the state. In regard to fruit, especially plums and peaches, every one who has given attention to the subject, must have observed the change. Plums have either entirely disappeared from the older parts of the country, or are raised with great difficulty, and peaches are fast following in train. These things, as already stated, are not the effect of exhaustion in the soil, but of wintry exposures; in other

words, of a change of climate. It appears from the best information obtained on the subject, that the climate of this country is gradually becoming colder; and whether it be true or not that the heat of summer is greater than formerly, it will follow that the winter's cold must be greater.

"But," it may be asked, "how does the presence of forests prevent these effects, or their absence (destruction) produce them?" We answer, 1st. They protect the earth from the effects of severe frosts. It is well known that frost never penetrates so deeply into the earth, in forests, and their immediate vicinity, as in the open fields. This results partly from the protection they afford against the action of winds, and partly from their preserving the uniform depth of the snow.* Hence the greater amount of forest in a country, the greater the protection.—Hence also even a small number of trees scattered through fields, and along roads and fences, will, by checking the force of winds, contribute in some measure to the same effect. And how easily might the number of such trees be multiplied, not only without injury to the farmer, but even to his manifest advantage, as well as to the great beauty and advantage of the country.

2d. They modify the intense heat of the summer air by evaporation from the leaves. Plants and trees absorb moisture from the earth, much of which, incapable of being appropriated to their use, is thrown off by their leaves. Their leaves are their organs of respiration, and by imparting moisture to the atmosphere they mitigate its intensity and tend to equalize its temperature. We have a familiar illustration of this in the cooling of the air in our rooms in hot weather, by sprinkling water upon the floor. Hence even scattering trees will contribute their proportion to the same effect. This is evident from the fact that orchards are cooler than naked fields; an effect attributable not wholly to the shade, but in part also to the moisture thrown off by the leaves. Hence the difficulty of drying hay in orchards.

3d. From whatever cause it may happen, I believe it is true, that more water falls in woody countries than in those that are divested of their forests. This, together with the protection which the forests afford against evaporation from the surface of the earth, and their influence in checking the violence and effect of winds even in summer, operates to prevent severe drouths, and consequently, the drying up of streams and springs. It may also be remarked, that the failure of these in time diminishes the quantity of water raised by evaporation from the earth, and thus tends to promote drouth.

If what has been said above be true, we see the duty which people owe both to themselves and to posterity. That it is true in the main, there can be no doubt. We infer, then, the duty of

* Snow, forest trees, and shrubs greatly check the radiation of heat from the earth.—Ed.

every one who has the means, to promote the cultivation of all kinds of trees that may be either useful or ornamental; not only fruit, but forest trees. And we earnestly request all owners of wood-lands to exercise a judicious economy in the management of them, both in regard to quantity and arrangement. Lands should always be cleared with reference to the direction of prevailing winds, and every unproductive spot of land should remain untouched. That man can hardly be forgiven, who from mere mercenary motives, cuts down nearly all the timber from his 100 acres, (more or less,) reserving, as he very complacently tells us, enough for his own use; much less he, who sweeps away every thing in the shape of a tree, (except, perhaps, a few fruit trees,) from every part of his premises, not even sparing the shade trees by the way-side. By such management, or rather mismanagement, he not only injures himself, but, to the extent of his influence, the whole community. How much better would it be for every inland country, if the clearing of the lands had been subjected to some wholesome restraints, or pursued upon scientific principles.

Again, I might argue the importance of preserving and promoting the growth of trees, on other grounds than those of interest and utility. The barren and desolate appearance of a country divested not only of its forests but even of its scattering shade trees and parched with drouth, is anything but inviting to a traveller or a man of taste. What an uninviting world would this soon become, if its physical affairs were regulated according to the taste; or rather the want of taste of some of its occupants! Even in its fallen state it has not lost all its primitive beauty, and if man would only "keep it, and dress it," it might even now be made almost a "garden," both in beauty and productiveness.

I might also urge our duty to posterity.—What will the future generations do, if the present shall continue the present system of destruction? I know of no reason why the owner of a valuable farm must necessarily clear nine-tenths of it for the purpose of accumulating property, even for his children. Does he not see that wood-lands are more valuable in almost any part of the country, than others? Will he not then better consult the interests of his children by leaving them lands in a state of nature, than in a state of exhaustion? It is true, *we* may not suffer for want of fuel, (though we may suffer other evils;) but where is our philanthropy? where our benevolence, if we are willing to sacrifice the interest of posterity to our own cupidity?

We often complain of physical evils. Some of these are evidently beyond our control; others are doubtless caused, or at least, greatly aggravated, by our own injudicious management. It is true, however, in physics, as in socials and morals, that he who violates a law must suffer its

penalty. The time will perhaps arrive when this subject will be better understood; but in order to accomplish this much desired result, it is necessary that those who desire it should speak out on the subject. II.

Fairport, N. Y., March 20, 1846.

The Benefit of Science in Wheat Culture.

IN the last volume of the Journal of the Royal Agricultural Society of England, Prof. PUSEY, writing under date of January 6, 1846, gives the following interesting communication:

"Several accounts of the good effect of burnt clay as a manure have appeared in the Journal: having used it with success, I am induced to add my own testimony in its favor, chiefly on account of the very bad quality of the land on which it succeeded. It is a farm of about 500 acres, which I bought about seven years since, on the Oxford clay, of the very stiffest description, never plowed with less than four, sometimes with five or even six horses. The soil was like bird-line in wet weather, and in dry summers like stone, requiring a pick-axe to break it. Many of the fields might be described as being all subsoil, there being no real mold on the surface. The average yield of wheat did not exceed 16 bushels an acre, and on some fields the thistles were more numerous than the stalks of wheat. It had the worst possible character, so that even in 1839, when prices were good, many farmers who looked at the farm declined to occupy it, and I had great difficulty in finding a tenant at all. Having bought the farm, however, chiefly because it is the most difficult sort of land to manage, (said, indeed, to defy improvement,) in order to try what could be made of it, as Lord Ducie and Mr. Morton have done at Whitfield with so much success, I underdrained the whole, in the first instance at 10 feet apart, but now at 30 feet apart, and 34 inches in depth. In order to make the land work more easily, I procured from Essex some laborers conversant with the mode of burning clay which is there practised. Into the details of that process I need not enter, as excellent accounts of it have been given in this journal by Mr. Pym, (vol. III, p. 323, and by Mr. Randell, vol. v, p. 113.) I burnt large quantities for the tenant, but until last year no record of the effect had been kept, when, seeing him apply it to a small field of 8 acres, I begged him to omit the burnt clay on one corner of the field, that we might know whether it was worth while to burn any more clay. Mr. Cheer did so accordingly. The crop was a very fine one; and after harvest he threshed out about one eighth of an acre separately. He found the result as follows:—

ONE ACRE.	WHEAT.
No manure,.....	37½ bushels.
80 yards burnt clay,.....	45½ "
80 yards ditto, sheep-folded, ..	47½ "

It will be remarked that this is not a garden

experiment, but applies to a whole field of wheat, and that the account was given in by the occupier of the land. Now I have lying before me the valuation at which I bought this identical field, one of the worst on the farm. It is 10s. an acre for rent, or 14l. for the fee-simple. Thorough draining with thorns, at 10 feet asunder, cost about 3l. 10s. It could now be done with pipes for 2l. Dressing with 80 bushels of burnt clay cost about 2l. 5s. The crop must have been worth this year about 17l., or nearly the fee-simple of the land and the cost of the improvements. It will be observed that on a third lot the land was dressed with sheep-folding, in addition to the burnt clay, but that the increase of yield was trifling. The manure, in fact, was more than the crop would bear, and the wheat was consequently laid by the wet summer. This is a conclusive proof that the burnt clay, in this instance, acted as a manure, and not merely mechanically. I do not mean that burnt clay will always act as a manure, indeed I know that it sometimes fails to do so, and there is yet much to learn on the subject; but this case of success being beyond suspicion of accident, I have thought right to detail the circumstances of the trial, as an encouragement to the owners and tenants of the worst and most expensive kind of heavy land, which I believe to be the Oxford clay, where it is not covered with soil of a different quality. This farm at Longworth is that on which the trial of the plows reserved from Shrewsbury took place last autumn; and Mr. Parkes, in his report on the implements, bears witness to its obstinate nature."

Here is an instance in which a "Professor"—the worst kind of a book farmer, purchased 500 acres of land, which had doubtless been regarded as unprofitable, since the time when Julius Cæsar conquered Britain; and, by the aid of science, made "the first crop nearly pay," not only "for the improvements, but the fee-simple of the land!"

How to make Compost.

MR. W. E. RUSSELL, of New Lisbon, Ohio, asks us to publish in the Farmer, the composition of one or more varieties of Compost, and the best method of preparing them. He states that he does not find anything satisfactory on the subject in Liebig, Boussingault, and the writings of other authors; and adds, that lime can be burnt on his place, or near to it, at 6 or 7 cents a bushel. Ashes can be had at 8 to 10 cents a bushel; charcoal at 3 to 3½ cents; barnyard manure at 12 cents for a two horse wagon load; salt at \$1.50 a barrel; gypsum at \$11 a ton; marsh muck and leached ashes for the hauling 1½ miles. His "soil is mostly composed of clay and sand, underlaid at various depths with a stratum of lime."

If we knew just how much vegetable mold there is in Mr. R.'s soil, and what amount of phosphates, sulphates, and chlorides, of lime,

magnesia, iron, potash, and soda, it contained, (which an analysis would reveal,) we could prescribe a Compost that would fit his case to the dot of an \bar{i} .

To prepare compost, however, on a common plan, dig your swamp muck and dry it well (if you can under shelter) before you haul it to your barn yard, or into the field where the compost heap is to be used. One pound of dry peat will absorb several pounds of water. Hence the great gain in drying previous to hauling.—Spread this on dry earth one foot in thickness. Spread over the muck a layer of slaked lime four inches in depth, and mix the two together.—Place above this, first a layer of manure, stable or barnyard, eight or ten inches thick, and a layer of leached ashes of equal thickness. If you add one third *unleached* ashes in place of the leached, the compost will be much improved. The alternate layers of manure and ashes can be built up four feet or more, drawing in on all sides, and covering the whole heap with a mixture of gypsum and muck six inches deep, to absorb all gases, and retain them. If you have reason to believe that your soil lacks soda, chlorine, and iron—of the latter there is probably no deficiency—then dissolve in water 50 lbs. of green vitriol (sulphate of iron,) and twice as much common salt (chloride of sodium,) and apply the brine to the compost heap.

WE commend the following to the attention of corn growers. It is taken from the Farmer's Library.

Preparation of Seed Corn.

My corn crop was increased about 33 per cent., by a simple preparation of the seed as follows:

At noon of the day before planting, 18th May, I put my seed-corn to soak in a strong decoction of copperas water, say 2 lbs. copperas to warm soft water sufficient to cover a bushel of corn. The next morning took out a peck, added a pint or more of soft soap, stirred it thoroughly, then put on plaster enough to make it convenient for planting, say one quart. The whole field was planted with the seed thus prepared, except 4 rows, which were planted with the seed without any preparation. The after culture of the whole was alike—passing through each way with the cultivator, and hoeing twice. The four rows last mentioned were cut up, harvested, and the corn weighed and measured by itself; also four rows next adjoining, the seed of which had been prepared as above. The produce of the four rows of unprepared seed was eleven bushels and a half. The product of the four rows from the prepared seed was seventeen bushels—a difference of five and a half bushels of ears in one hundred and twenty hills. The yield of the remainder of the field averaged fully equal to the four rows measured.

The difference in the growth and appearance of the corn of prepared and unprepared seed was striking from the time of its appearance above the ground until it tasselled—the former looking green and vigorous, the latter puny and yellow. It was all cut down by the frost when about three inches high, but came on finely after the first of June. There was scarcely a soft ear in the field, excepting on the four rows of unprepared seed. These were about a week later in ripening than that from the prepared seed. The soil is a sandy loam. The whole expense of preparing the bushel and three pecks of seed did not exceed 62½ cents. The increased produce of the field by preparing the seed was over 200 bushels of ears. LANSING WETMORE

CHEAP PAINT.—An Ontario Farmer gives the following recipe for a cheap paint. He says he has tried it on brick, and finds it well calculated to preserve them, and prefers it to oil paint. He says, also, that it will last longer on rough siding of wood than oil paint will on planed siding or boards.

Take one bushel of unslacked lime and slack it with cold water; when slacked, add 50 lbs. of Spanish whiting, 17 lbs. of salt, and 13 lbs. of sugar. Strain the mixture through a wire sieve and it will be fit for use, after reducing with cold water. In order to give it a good color, three coats are necessary on brick, and two on white. It may be laid on with a brush similar to whitewash. Each coat must have sufficient time to dry before the next is applied.

For painting inside walls, take as before, one bushel of unslacked lime, 3 lbs. of sugar, 5 lbs. of salt, and prepare as above, and apply with a brush.

You can make any color: use for yellow, Ochre instead of whiting; for lemon color, Ochre and Chrome Yellow; for lead and slate color, Lamp-black; for blue, Indigo; for green, chrome green. The different kinds of paint will not cost more than one-fourth as much as oil paints, including labor of putting on.

CUT WORMS.—To the remark that "cut worms may be destroyed by continued tillage and a naked and open soil," I beg to say that the cut-worm would not be found in corn, were it not planted in sward or sod-land. They are the progeny of a species of beetle or other insect, which could never propagate its kind without the aid of dung, which is found in grass fields, which have been fed by horses or cattle, and in this they enclose their egg or eggs, and sink them a given distance below the surface; hence, an autumnal or winter plowing of such land destroys them by exposure to the rains and frosts of that inclement season—a doctrine which at least has met the concurrence of every practical man among us.—*Boston Cultivator*.

Cultivation of Indian Corn.

EDITOR GEN. FARMER:—Enclosed I send you a communication from a gentleman of R. I., whose name has gone the rounds of the newspapers, upon the subject of cultivating corn, &c. As it is accompanied with a wish that it may prove serviceable to myself and others, I send it to you that you may insert it, or such portions of it as you may deem of interest to the readers of your valuable journal. If you do not publish any of it, of course no objections will be taken by

Yours respectfully,
West Bloomfield, March, 1846. AGRICOLA.

PORTSMOUTH, R. I., March 3, 1846.

I. P. JENKS, Esq.—*Dear Sir:* Yours of the 29th Jan. was received yesterday. You say that the New York Courier & Enquirer states that I raised from eight acres a crop worth \$695 66. There are two mistakes in the statement. The quantity of land planted was 8 acres and 18½ rods; the amount \$605 65, as printed in the Herald of the Times, published at Newport, R. I., as follows:

593 bushels of shelled corn, at 80 cts. per bushel,	\$474 40
50 do ears refuse corn., at 15 cts. do	7 50
3 large ox cart loads Sweeds turnips, 12½ do	18 75
20 tons of stalks and fodder, at \$4 50 per ton,	90 00
5 large ox wagon loads of sweet pumpkins, \$3 a load,	15 00
	\$605 65

The errors were probably committed by some editor in copying from another paper.

The amount of corn was ascertained by shelling average baskets. The field was planted on shares, and the crop divided by baskets. Every basket was filled and tallied in presence of both parties,—the field averaging 73 bushels and 2½ quarts per acre of sound corn. One selected acre, 13½ by 12 rods, yielded 89 bushels and 18½ quarts. The seed used was the small species of ear corn, planted scarcely 3 feet apart each way. The stalks were not so large as some other kinds produce, but producing more ears than the large generally do, and better filled, with a small cob. The soil was rather wet. The west end of the field, I should say, was a gravelly clay, the gravel quite small; as we proceed eastward, less gravel, with a bluish clay. About two acres at the east end was a gravelly loam, which produced the smallest corn.

The field was spread over with Menhaden or bony fish, in 1841, at the rate of about 50 barrels to the acre, and since been used for a sheep pasture until last spring when I spread about 20 loads of barn-yard manure, mixed with sea weed, on six acres, previous to plowing. The remainder was planted without being manured; it was the best part of the lot, and the corn was an average. The manure was drawn on the field before the first of March, when it was dug over and left until the first of April, and then again dug over. I then deposited it in small heaps for convenience in spreading, and spread it no faster than I plowed it in, that the different salts and

gases might not evaporate and thus lose their nutritive influence.

I plow about 5 inches deep, with the furrow slice as narrow as it will turn over and lay flat. I harrowed about six acres with a heavy ox harrow, three times in a place. The remainder I rolled with a heavy roller. I could discover no difference in the corn on the harrowed or rolled; but I think it was one third more work to tend the rolled than the harrowed, of equal quantity.

I manured about one acre of the dampest of it in the hill. In preparing the seed I soaked it in a strong solution of copperas water, 12 or 15 hours, and then, after draining, mixed air slacked lime with it until the grains would separate, and covered it as soon as dropped to prevent it from shrinking. It was not troubled by the birds or worms.

My manner of attending to corn is, as soon as it is up sufficient to discover the rows, to commence harrowing or using the cultivator, and generally go over it four or five times in a row each way. In weeding I am careful to loosen the ground around the plants, and remove all hard substances from the corn, and put a little fine mold around the plants. The second hoeing I make a small flat hill, and leave the hill lowest around the plants as much as I can conveniently, in order to conduct the rain to the roots. About the time the plants begin to put forth for ears, I go over my fields and pull up the weeds that are in the hills, and chop the others off just under the surface of the soil. I prefer letting the tops remain until the tassel begins to curl.—I think by cutting them sooner the stalk will bleed and take some nourishment from the ears.

I have followed the above mode of cultivating Indian Corn for a number of years, and have always been successful. I came to the decision in favor of small flat hills, from experience. A number of years ago I had a field of about six acres; I hoed one half of it the old way, by making large hills—the other part as above described. The result was, I harvested nearly one fourth more from the small than the large hills, the tillage being the same on the whole lot.—My neighbors, seeing my success, have generally adopted the same plan, and express themselves fully satisfied with the result.

I have thus given you a true account of our estimate of the crop raised, and my manner of cultivation,—hoping it may be useful to yourself and others, as I consider agricultural pursuits the most honorable as they are the main support of all our free institutions.

Respectfully yours,
LAWTON TAYLOR.

P. S. The estimate of the crop would fall short of the amount it would command, as corn has been selling on the Island for 85 cents per bushel, and corn fodder from 8 to \$10 per ton. The turnip crop was very much injured by the drouth, in July.

Monroe County Agricultural Society.

LIST OF PREMIUMS FOR 1846.

HORSES.

Table listing horse premiums: Best Stud, vol. Trans. & \$3; Second best, do. 2; Third best, do. 1; Best pair Matched do. 3; Second best, do. 3; Third best, vol. Trans. & 1; Best Mare, (with colt,) do. 3; Second best do., 3.

CATTLE, CLASS I.

Table listing cattle premiums: Thorough-bred Durhams, Herefords, Devons, and Ayrshires. Best bull over 2 years old, \$8; Best bull calf, 5; Best bull, under 2 years old, vol. Trans. & 3; Best heifer do., 1.

CATTLE, CLASS II.—Native or Grade.

Table listing cattle premiums: Best bull, over two years old, vol. Trans. & \$6; Second best, 5; Third best, 3; Best bull, from 1 to 2 years old, vol. Trans. & 4; Second best, 3; Third best, 2; Best bull calf, 2; Second best, vol. Trans. 1; Best pair steers, 3 years old, trained, 5; Second best, 3; Third best, vol. Trans. & 1; Best pair fattened oxen, Colman's Reports and 1; Second Best, v. Trans. & 1; Best fattened animal, for beef, 3; Second best, vol. Trans. & 1; Best pair working oxen, 5; Second best, 3; Third best, vol. Trans. & 1; Best milk cow, v. Trans. & 5; Second best, 3; Third best, vol. Trans. & 1; Fourth best, vol. Trans. 1; Best heifer, under 3 years old, 3; Second best, vol. Trans. & 1; Third best, vol. Trans. 1.

SHEEP.—Long or Coarse Woolled.

Table listing sheep premiums: Best buck, vol. Trans. & \$2; Second best, 2; Best 3 ewes, vol. Trans. & 2; Second best, 2.

SHEEP.—Fine-Woolled.

Table listing sheep premiums: Best buck, vol. Trans. & \$5; Second best, do. 3; Third best, do. 1; Best three ewes, do. 3; Second best, do. 2; Third best, do. 1; Best three lambs, do. 2; Second best, 2; Third best, vol. Trans. & 1; Best 3 fattened sheep, Col. Rep. 2; Second best, 2; Third best, vol. Trans. 1.

SWINE.

Table listing swine premiums: Best boar, vol. Trans. & 3; Second best, 2; Third best, vol. Trans. & 1; Best sow, with her pigs, 3; Second best, 2; Third best, vol. Trans. & 1; Fourth best pigs, under 3 months, 3; Second best, vol. Trans. & 1.

FIELD CROPS.

Table listing field crop premiums: Best acre of wheat, four vols. Transactions and \$5; Second best, do., Colman's Reports and 3; Third best, do., " " 2; Fourth best, do., " " vol. Transactions and 1; Best field of ten acres or more, four vols. Tr. & Col. Rep. 1; Best field, from five to ten acres, Colman's Reports. 1; Best acre of Indian Corn, Colman's Reports and 3; Second best, do., " " vol. Transactions and 3; Third best, do., " " 2; Fourth best, do., " " vol. American Institute and 1; Best acre of oats, " " vol. Transactions and 2; Second best, do., " " 1; Third best, do., " " vol. Transactions. 1; Best acre of peas, " " 5; Second best, do., " " 3; Third best, do., " " vol. Transactions. 5; Best acre of potatoes, " " 5; Second best, do., " " 3; Third best, do., " " vol. Transactions. 3; Best half-bushel of potatoes grown from seed, " " 5; Second best, do. do. do., " " 3; Third best, do. do. do., " " vol. Trans. 3; Best half-acre ruta бага, " " 5.

Table listing field crop premiums: Second best half-acre ruta бага, \$3; Third best, do., " " vol. Transactions. 3; Best half-acre of mangle wurtzel, " " 5; Second best, do., " " 3; Third best, do., " " vol. Transactions. 3; Best half-acre sugar beet, " " 5; Second best, do., " " 3; Third best, do., " " vol. Transactions. 3; Best quarter acre of carrots, " " 5; Second best, do., " " 3; Third best, do., " " vol. Transactions. 3; Best quarter acre of parsneps, " " 5; Second best, do., " " 3; Third best, do., " " vol. Transactions. 3.

BUTTER, HONEY, AND SUGAR.

Table listing butter, honey, and sugar premiums: Best 10 lbs. butter, \$3; Second best, " " vol. Transactions. 3; Best 20 lbs. packed butter, made in May or June, " " 3; Second best, " " vol. Transactions. 3; Best 10 lbs. honey, " " 3; Second best, " " two vols. Genesee Farmer. 3; Best 10 lbs. maple sugar, " " 3; Second best, " " two vols. Genesee Farmer. 3.

LADIES' DEPARTMENT.

Table listing ladies' department premiums: Best 10 yards home made flannel, \$3; Second best, " " two vols. Genesee Farmer. 3; Best 10 yards domestic fulled cloth, " " 3; Second best, " " two vols. Genesee Farmer. 3; Best one-fourth lb. sewing silk, " " 3; Second best, " " vol. Transactions. 3; Third best, " " two vols. Genesee Farmer. 3; Best specimen of domestic manufactured silk, " " 3; Second best, " " vol. Transactions. 3; Third best, " " two vols. Genesee Farmer. 3.

PLOWING MATCH.

To the owner of the team which plows one-fourth of an acre best within seventy-five minutes, Col. Rep. & \$2; Second best, " " vol. Transactions and 2; Third best, " " two vols. Genesee Farmer and 2; Fourth best, " " 2. The depth of the furrow must not be less than seven inches, and the width not less than twelve inches. Single or double team, at the option of the plowman.

ON FARMS.

For the best managed farm, not less than 40 acres, reference being had to the general system of management and the profits obtained, rather than to natural advantages or expensive improvements, Colman's Reports and \$4; Second best, " " vol. Transactions and 3; Third best, " " Washington's Letters and 2; Fourth best, " " two vols. Genesee Farmer and 1. Committee for the east side of the Genesee River.—John H. Robinson, Henrietta,—Caleb K. Hobbie, Irondequoit,—Gideon Ransdell, Perinton,—Samuel P. Gould, Brighton,—Samuel Miller, Penfield.

The list of premiums named above is also offered for the best farms on the west side of the Genesee River.

Committee for the west side of the Genesee River.—Wm. Garbutt, Wheatland,—E. P. Root, Sweden,—Wm. Otis, Gates,—Jesse Harmon, Ogdén,—Geo. C. Latta, Greece.

Persons desiring to compete for premiums on farms are requested to give notice to either of the Committees, or to James P. Fogg, Treasurer of the Society, at the Rochester Seed Store, as early as the first of June. The committee will visit them all, once or more, during the summer.

The next meeting of the Society will be held on the second Tuesday of August, over the Rochester Seed Store, for the purpose of appointing awarding committees, and making other arrangements for the Annual Fair.

JOHN H. ROBINSON, President.

JAMES H. WATTS, Rec. Sec'y. Feb. 10, 1846.

Give us large crops which leave the land better than they found it, both making the farmer and the farm rich at once.

Destroy all Noxious Plants.

OUR readers need not be told that Wheatland is famous for producing large crops of clean wheat. One part of the process, as practiced by the farmers in this town, we have witnessed, and hasten to commend to our readers. It is the diligent extirpation with the hoe of every weed and noxious plant in a whole wheat field, that nothing but *clean wheat* may grow. If the seeds of ches, cockle, burrs, daisies, Canada thistles, &c., &c., are not permitted to form in any field, road, or lane, most of these pests will soon cease to trouble the husbandman.

The old and trite maxim, "a stitch in time saves nine," applies with great force to the destruction of all weeds before they go to seed. If no man took into his barn anything but pure wheat, oats, barley, corn, peas, beans, rye, flax, clover, timothy, and herds grass, the manure of his barn-yard would cease to be a magazine of the seed of fifty different plants, and all calculated to rob his crops of their appropriate nourishment. The English agriculturists find it a great task to keep their lands clean; and the same difficulty is experienced in all the older portions of this country. The subject is one of great practical importance, and has not received that general attention in New York, which it deserves.

Care in the use of clean seed for every crop is not sufficiently attended to. Look well to this point, and allow no tory weed, burr docks, elders, red root, nor Canada thistles to grow on or about your premises.

A TREATISE ON MILCH COWS, whereby the quality and quantity of milk which any cow will give may be accurately determined by observing natural marks or external indications alone; the length of time she will continue to give milk, &c. By M. FRANCIS GUENON, of Libourne, France. With introductory remarks on the Cow and the Dairy, by JOHN S. SKINNER, Editor of the Farmers' Library. Published by GREELY & McELRATH, New York. 1846.

WE are indebted to its publishers for a copy of this work. It is neatly printed and illustrated with numerous descriptive engravings. We refer those interested in the subject to an examination of its pages. For sale by D. M. DEWEY, Arcade News Room, Rochester. Price, 37½ cents, in pamphlet form—62½ cents, bound.

WISCONSIN PLANTS.—MR. M. SPEARS of Milwaukee, W. T., (in a letter containing a remittance for a club of new subscribers,) says:

"I raised 325 bushels of wheat and 200 bushels of corn, by my own labor, the last season, and found time to collect and preserve 500 plants. I would like to exchange with you, or any other farmers in your region. If there are any farmers who are pleased with the study of Botany, and would like to get some of our Wisconsin plants, I would be glad to exchange. Direct to MORE SPEARS, Milwaukee, W. T."

How to make Soap.

MESSRS. EDITORS:—If you think the following article worthy of an insertion in your valuable paper, it is at your service. I have seen a great many well written articles on agriculture, cookery, &c., &c., but as I do not recollect of seeing anything written on "making soap," I will give you the following, which is the result of years of experience:

First, set up your tub as usual, with sticks and straw, and then put your lime (slaked) on the straw to the depth of three or four inches—then take a long stick that will come a few inches above the top of the tub—wind a hay rope around the stick, nearly its whole length—let the stick go through the tub two or three inches, then you can draw your lye without putting your hands into it underneath. Put your grease into the kettle, and turn in about two quarts (or enough to cover the bottom of the kittle) of your strongest lye. Boil a few minutes, and then turn in a little more lye, and continue to pour in as the lye boils over, until your kettle is about two-thirds or three-fourths full, when you can fill up the kittle, and after skimming the contents well, dip out and empty it in the barrel. Put in two pounds rosin to one barrel of soap. If your lye is of sufficient strength, you will be sure to have good soap. I have heard people complain a great deal that they did not have good luck in making soap. Their ashes were not good or not made from good wood or something or other. But if the above directions are carefully followed, I can assure them that they will have no reason to complain of poor luck, or anything of the kind.

N. B.—Clear grease does not require more than ten minutes boiling, but where there are bones, it takes longer time. Some people put lime in the cask or tub, but the main use of lime is to strain the lye, and make it pure—therefore it should be put on the top of the straw at the bottom of the tub.—*Maine Cul.*

For the Genesee Farmer.

PLASTER ON STABLE FLOORS.—"S. W.," of Waterloo, recommends that every farmer should keep plaster in his stable. I will inform him that if his floors are of wood, he may find, in a year or two, that a dry rot has progressed under the plaster which may let his horse's foot through a hole of its own size in the plank, though to sight it may appear perfectly sound. Such was my experience, where a box of plaster had stood on my barn floor for about a year or eighteen months. L.

Catharine, N. Y., April 1846.

FOR GRUBS IN SHEEP'S HEADS.—Light a pipe, insert the stem a good way up the nostril of the sheep, cover the bowl with a handkerchief, and blow the tobacco smoke vigorously through the stem up each nostril.

Science and Agriculture.

WE copy the following judicious observations on the application of science to agriculture, &c., from the *Cheshire, (England,) Chronicle* :

"It is as important to the country that agriculture should be scientifically understood and studied as that manufacturing science should progress. The mere culture of the land is nothing, except it be conducted on the best possible principles. To plow and manure, to sow and reap, to break up and lay down land, to breed and to rear stock, and to farm and to labor on a farm, merely as they who have passed did, is no great merit. This is merely to exercise an imitative talent. The resources of the mind ought to be brought to the labor; and profiting not only by experience, but in learning by experiment, we may hope to see improvement progress in an equal ratio in agriculture as in mechanics; and the knowledge that the stores of experimental philosophy affords to be applied to this, the most useful of all arts, because it produces the raw material on which the human race is fed and clothed. When the merely operative farmer knows the value of science, he will see that it is the best auxiliary to the production of agricultural wealth; and learn the secret why his better informed neighbor, who has devoted some attention to such pursuits, has beat him in the career of enterprise. Agricultural societies are peculiarly beneficial in communicating this knowledge. They bring the results of all systems into competition; and must set those who are behind in the contest thinking why they are so. Whatever experiments have been tried, whatever failures experienced, are brought under the review of all, the first as lessons to instruct, and the last as rocks to avoid. The real value of crosses in breeding, of intermixtures of soils, of the action of peculiar manures, of the introduction of seeds, and of the utility of implements, are tested. The landlord and the tenant, whose interests are identical, are brought together, and may profit by the intercourse."

From the *Boston Cultivator*.

Poultry.

MESSRS. EDITORS:—I doubt whether there are any animals kept by the farmer, which will yield him more real profit than domesticated fowls. If proper care be taken with them, and they are allowed to roam at large about the farm yard and premises, they will produce eggs sufficient to bring in a profit double the amount of their expenses; provided, however, all hens will do as well as mine have done the past year.—Yet, I doubt whether hens generally deposit so large an amount of eggs in the same space of time, as the annexed statement will show.

From April 1st, 1845, to April 1st, 1846, I have sold in market 282 dozen of eggs, (being the produce of 23 hens,) at an average price of

164 cents per doz.; amounting to \$37,63 cts. Sold also from the same, \$8,00 worth of chickens, which, added to \$37,63, makes a total of \$45,63.

During the same length of time they have consumed 24 bushels of corn, worth 80 cts. per bushel; amounting to \$29,20. This sum deducted from \$45,63 leaves a profit in my favor of \$25,98.

I have made no account of the eggs and chickens used in my family, (which has been not a few.) If I had done this, the balance in my favor would have been increased several dollars. I will offset this, however, by the damage done by the hens on the farm.

Let no one say hereafter, that there is no profit in keeping fowls, if properly managed. One great reason why farmers think there is no profit, is because they never take the trouble to ascertain what their eggs come to in dollars and cents. They will put an over estimate on the grain fed out, and pay but little regard to what their hens produce in return.

My method of keeping hens is attended with but little expense and trouble. Some of my neighbors take great pains during the winter season, with supplying their fowls with fresh meat, or liver, and varieties of grain, &c.; yet they do not seem to get any more eggs in consequence. I make use of little except corn and scalded meal; the latter, however, but once or twice a week. I keep plenty of old mortar in and about their roosting places, (which is about half under ground,) and occasionally throw in a hod of ashes for them to roll in, which is an excellent preventive of lice.

I pay particular regard to the time of feeding early in the morning, and just before sunset.—Some make a practice of keeping a quantity of corn before their fowls day after day, and let them eat at their leisure. I do not coincide exactly with this practice; I believe in regularity in feeding fowls, as well as hogs, cattle, horses, &c.

There is no profit, in my opinion, resulting from raising chickens, other than for one's own use. I commonly kill off my old hens and keep my pullets over, being much better to lay, I think.

Thus much I have said in regard to domestic fowls, making it appear that there is as much profit in keeping hens as any animal kind a farmer can have, considering their value.

ALBERT TODD.

Smithfield, R. I., April 1, 1846.

SUBSTITUTE FOR POTATOES.—A Western paper suggests the propriety of growing *artichokes* as a substitute, in some degree, for potatoes—and on the authority of Ellsworth's reports, states that they are better spring feed for hogs, cattle, and sheep, than the potato, at a diminution of cost in production.

For the Genesee Farmer.

The Culture of Potatoes.

MR. EDITOR:—The rot among potatoes has given rise to many theories respecting its cause—none of them, I believe, satisfactory. That it cannot be attributed to any particular state of the weather, or to any particular kind of soil, is proved by its prevailing so universally in this country as well as in Europe. The belief at one time entertained by a few, that all at once the potato had failed from the want of new varieties, has, too, gone the way of other theories.

Whether it arises from animalcules, or “*the absence of a trace of copper in the soil,*” or from fungi, let the learned decide. In the mean time, let the farmers note what experience teaches, and if they cannot find out the cause, at least, by different methods of cultivation, endeavor to find out a cure. Having suffered much for two or three years past by the rot, and having read of lime being of service in preventing it, I concluded to give it a trial. For that purpose I had my seed potatoes, which were carefully selected from the remains of my diseased crop the year before, cut and rolled in newly slaked lime, and put in the hills of some a little lime; others, lime and ashes—plaster and ashes, and ashes alone. When harvested I could perceive but little difference, and that little I thought was in favor of the ashes.

They were *all* sound. I had them put in a dry cellar, and left a free circulation of air so long as I could with safety from the frost. Mine were planted early—before any of my neighbors. Theirs were much larger than mine, and appeared perfectly sound, and they thought they had got the better of me this time. I began to think so myself, but in a short time their finest looking potatoes began to exhibit dark spots—then an examination was made of those in heaps, as well as those in the cellar, and those in the former, particularly, were found to be decaying in great quantities. Mine were and are perfectly sound. When my hands were busy planting them last spring, a person passing in the road stopped to see what we were doing, and on learning, said, as he was going for a load of lime, he would try some on his potatoes when he planted them. I have since been informed, for he resides some miles distant, that where he used lime his potatoes were sound, and where he did not, in the same field, they were unsound; and so well convinced was he and his neighbors of the benefit of the lime, that they intended to do the same this year. I would recommend early planting and the use of lime. Mine were plastered when they were about a foot high. B.

Harewood, Pa., April, 1846.

HAY AND OATS AS FEED FOR HORSES.—Twenty-five pounds of oats, on a fair average, have been found equivalent to fifty pounds of good hay in nutritious qualities.

Raising Potatoes.

THIS important question now presents itself—How shall we raise potatoes? For the plague may be on them again. Every reflecting farmer who has read the Cultivator for a year past, has learned much on this subject, from the numerous facts that have been presented. We have given our opinion that the disease was owing to the atmospheric influence, and a number of correspondents have expressed the same opinion. But allowing this or any other general cause for the malady, it appears evident that there are numerous predisposing causes, and that preventives may be used with partial, perhaps with general, though not invariably with universal success.

Therefore avoid as much as possible predisposing causes, use preventives, and thus

“Act well your part and do your best,
And leave to Omnipotence the rest.”

In the first place, select for planting those kinds of potatoes that are least liable to injury from this disease.

Early planting has in most cases been in some measure a preventive of rot, as the potatoes were grown, and vegetation had ceased before the disease commenced.

Early kinds of potatoes have escaped more than late ones, for the reason above given.

Potatoes have done better on soils tolerable light and dry, than on wet heavy soils.

High, airy situations should be preferred to low damp situations, where the air is damp, heavy, and more chilly on cool nights.

A northern exposure should be preferred to a southern.

New lands either recently from the forest, or sward land, are more favorable than old lands.

Animal manure should not be used, or it should be well composed or decomposed, and then used sparingly, and spread, and mixed intimately with the soil.

Pasture lands, that are not very poor, will be favorable for avoiding the rot.

Applying lime or plaster to the seed before planting, seems to be a remedy in some measure.

Lime, ashes, salt, plaster, soot, charcoal, and some other substances have favorable effects, not only in preventing the disease, but some of them serve as a manure in promoting the growth of the potato. There are various ways of using these; some are used alone; in some cases several are mixed; and the proportions have been varied by different experimenters. We have published various experiments and the results.—*Boston Cultivator.*

THE BETTER WAY.—The sons of the poor die rich; while the sons of the rich die poor!—What an encouragement to toil through life, acquiring wealth to ruin our children! Better to use our money as we go along—educate our sons—secure their virtue by habits of industry, and let them take care of themselves.

Indian Corn for Soiling and Fodder.

WE doubt whether the value of Indian Corn is more than half known yet among the generality of farmers; and if the unparalleled drought throughout the country last summer should have a tendency to teach it to them, the terrible lesson may be looked upon as a mercy rather than a scourge, from a benificent Providence. During the past eight months, thousands of animals have perished or been sacrificed for want of grass or fodder to sustain them, all of which might have been saved and kept in good condition, had each farmer sown a few acres of corn for soiling and fodder. We saw last summer, on a light sandy soil, a crop of corn growing, which turned out six tons of excellent dry fodder per acre. It was sown on the first day of July, in drills three feet apart. The land was plowed deep, and highly manured. This crop was the means of saving a superior herd of cows from starvation. Henceforth, however promising the grass and hay crop may be, let no farmer depend entirely upon it, but let him sow a few acres of corn for summer soiling, or to be cured for winter's use. He will then be tolerably independent of a capricious season.

When corn is tolerably advanced in its growth it completely shades the ground, and the drought will have little effect upon it. A larger crop may usually be grown in drills than when sown broad cast; and if these drills be two or two and a half feet apart, we believe it will be found better than nearer, especially in a very dry season, as the cultivator can be often run between the rows, stirring the ground effectually, and neutralizing, in a measure, the effects of dry weather. We recommend sowing at least one acre of corn for fodder, for every five head of cattle kept on the farm. If there be an overplus of hay it is very easily disposed of.—*Amer. Agriculturist.*

HINTS TO HOUSEKEEPERS.—Woolens should be washed in very hot suds and not rinsed.—Lukewarm water shrinks them.

Suet keeps good all the year round, if chopped and packed in a stone jar, and covered with molasses.

When molasses is used in cooking, it is a prodigious improvement to boil and skim it before you use it. It takes out the unpleasant raw taste, and makes it almost as good as sugar.

Use hard soap to wash your clothes, and soft to wash your floors. Soft soap is so slippery that it wastes a good deal in washing clothes.

It is easy to have a supply of horse-radish all winter. Have a quantity grated while the root is in perfection, put it in bottles, fill it with vinegar, and keep it corked tight.

Do not wrap knives and forks in woolens; wrap them in strong paper. Steele is injured by lying in woolens.—*Am. Trav.*

Oat Fodder for Horses.

AT a discussion had at a meeting of the Darlington (Eng.) Farmers' Club, Dec. 8th, on the best and cheapest mode of keeping draught horses during winter, Mr. Trotter said:

"I have paid some attention to the subject of keeping of draught horses during winter: for the last three years I have adopted quite a different mode to what I previously followed. My method formerly, was to allow my draught horses each 2 bushels of oats per week, together with 1 bushel of beans and as much hay as they could eat, generally clover hay. For the last three winters I have fed them almost entirely on cut oat-sheaf—cut into half-inch chaff—which has been a very great saving to me.

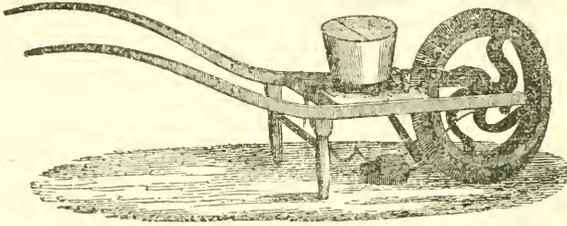
In an oat crop of about 40 stooks per acre, which might yield near 60 bushels, the feed of a draught horse averages 2 sheaves per day, or 14 sheaves per week, which would be about a bushel and 3 pecks per week, if they had been thrashed out, which is a saving of a peck of oats per week, each horse, from what I formerly gave them; besides, I save the bushel of beans per week, and the clover hay, which was a very considerable item. When I first changed my mode of feeding, the horses improved in condition wonderfully, thus showing that it suits them well. When they are very hard worked, I allow them half a peck of oats at dinner time besides the cut sheaf.

Last winter I had only 18 acres of oats; those kept 12 draft horses, besides four young ones occasionally. This quantity of oats would not have served me through the year, had I not pursued this system of feeding."—*Lon. Ag. Gaz.*

BRONZING OF MEDALS, AND ORNAMENTS OF COPPER, &c.—Having thoroughly cleaned and polished the surface of the specimen, with a brush apply the common crocus powder, previously made into a paste with water. When dry, place it in an iron ladle, or on a common fire-shovel, over a clear fire for about one minute; and when sufficiently cool, polish with a plate-brush. By this process a bronze similar to that on tea-urns is produced; the shade depending upon the duration of the exposure to the fire.

By substituting finely powdered plumbago for crocus powder in the above process, a beautiful, deep, and permanent bronze appearance is produced.

ENGLISH GRAIN AND FLOUR MEASURE.—A friend informs us, says the Pennsylvania Inquirer, that the English quarter of wheat is 560 lbs., or a quarter of a ton, and is equal to eight English bushels of seventy pounds each, or nine and one-eighth American bushels of sixty pounds.—The English sack of flour weighs 280 lbs., and seven sacks are equal to ten American barrels of 196 pounds each.



Pratt's Corn Planter and Seed Sower.

Pratt's Corn Planter.

WE have received an inquiry from a Seneca county farmer relative to Corn Planters. He wishes to know where a good machine, worked by horse power, may be obtained, and at what price. We are unable to give the desired information,—and presume there is not such an article in the country. "*Pratt's Corn Planter and Seed Sower,*" represented in the above engraving, is, we believe, the only planting machine manufactured in this vicinity. It is favorably spoken of by those who have witnessed its operation. We have had no opportunity of testing its utility, and cannot speak of it from personal knowledge. The editor of the Southern Planter, in a notice of the machine, says:

"It is simple in its construction and unerring in operation. Suppose the ground to be prepared for the seed, the wedge-like projection on the face of the wheel makes a furrow of the proper depth, into which the seed are dropped through a small tube leading to it. On the side edge of the wheel are pin holes into which pins may be screwed at pleasure; in the revolution of the wheel these pins strike and raise the projecting end of the lever, by which a slide, connected with the other end of the lever moving through the bottom of the hopper, is drawn forward. In this slide there is an opening into which the seed falls, and this movement of the lever draws this opening forward over the upper end of the tube through which the seed falls into the furrow. After the pin has passed round and let the lever fall, the slide is drawn back into its original position by a spring at the other end, and is again ready for another operation. The hole in the bottom of the hopper can be altered, at pleasure, to pass different sized seeds, or different quantities of the same seed, and the position of the pins can be varied according to the distance required between the droppings; an apparatus is affixed which secures a regular and even covering of the seed.

"The machine is rolled forward by hand, and the furrowing, dropping, and covering, are all accomplished by the machine, saving thereby the use (where the ground is checked) of two horses, two plows and two hands, doing the work with much more regularity than it can possibly

be accomplished by the most skillful dropper."

The machine is manufactured and for sale at the Steam Factory of Mr. E. TAYLOR, No. 6 Hill street, Rochester.

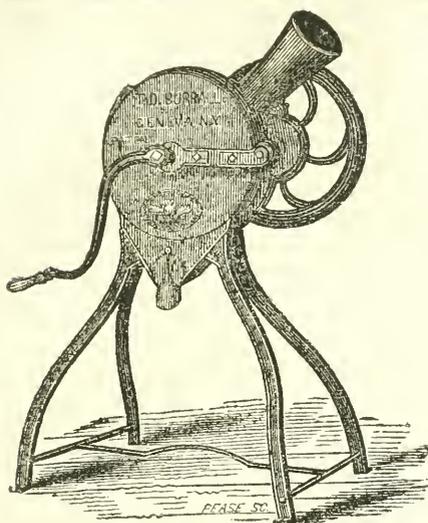
MITCHELL'S MAP OF NEW YORK.—We are indebted to the Rev. N. J. RICE, (general agent for the sale of Mitchell's Maps in Western New York,) for a large and splendid Map of this State, with its counties, towns, cities, villages, internal improvements, &c. It is embellished with four handsomely engraved views of important national events that have occurred within the limits of the State. All the counties and towns in the State are arranged, in a tabular form, in the margin of the map, with the population according to the last census. Price, \$2 75.

Mr. RICE will furnish the above map, through his agents, in all the counties of Western N. Y., at the publishers' price. Also, in like manner, the following Maps from Mitchell's Establishment, Philadelphia, viz: Map of the World—Reference and Distance Map of the U. S.—The National Map of the American Republic—Tanner's Universal Atlas, (with 72 maps,)—New Map of Texas, Oregon, and California—A New Map of the Western States—and a variety of Pocket Maps, &c. &c. The office of the general agent is at No. 10 Exchange street, Rochester.

IN the absence of the Editor, we adopt the subjoined notice from the American Agriculturist:

QUARTERLY JOURNAL OF AGRICULTURE AND SCIENCE.—We are glad to hail the appearance of this able and high toned journal again, for we feared it might not be continued another year. It abounds with valuable articles, both agricultural and scientific, and we earnestly commend it to the attention of our readers as worthy of their support. It is conducted by Dr. E. Emmons, State Geologist, and A. Osborn, Esq., Albany, N. Y. The present number has a beautiful steel-engraved portrait of Governor Wright, and several other embellishments. It contains 169 pages, and is as well got up as the best European journals of the kind. The price is only \$2 a year. We shall think it a disgrace to the country if this work is not well sustained.

SCARE-CROWS.—Suspend bright sheets of tin on tall poles, at proper distances, through your corn fields, and the crows will not disturb your corn, as the least wind causes a reflection that will prove just as frightful to them as an explosion of gunpowder or the report of a gun. We have tried this plan for several years and never without success.—*American Farmer.*



Burrall's Corn Sheller and Separator.

THIS is a very neat and compact machine, invented and manufactured by T. D. BURRALL, of Geneva, N. Y. We have seen it in operation, and think it works admirably. The principle upon which it operates is simple and ingenious. It is for sale at the Seed Stores, on Front street, in this city. Price, \$10.

In noticing this machine the Cultivator gives the following communication:—

When will wonders cease? Do not stare, gentle readers, for it is even so. Mr. T. D. Burrall, of Geneva, has made an improvement in the simple implement of a corn-sheller, which "takes the rag off" of all its predecessors. It cannot be beat. Why, just look at the above cut. See how simple it is—all iron—strong and substantial, and what is more, it cannot easily be put out of order. Durable too—last a man's life time. Why, there is nothing of it—a mere pocket edition. Still its operation is wonderful; it strips the kernel clean from the cob, without breaking either the corn or the cob; and what is more, it not only separates the corn from the cob, but the cob from the corn, and deposits the corn at the bottom in a half-bushel, fit for market or the mill, and the cob through a "knot hole" or orifice on the back side, near the top, thereby saving the trouble of cleaning up," as with other machines. Take it in your kitchen and it is fine fun for the boys to shell from twenty to thirty bushels of corn in an evening. The "gude" wife will have no reason to complain of dirt or a "muss" on the floor.

To be serious, Mr. Burrall has really presented us with a most efficient and useful machine, leaving the shovel, frying-pan handle, and all other machines far in the back ground. The principle of the sheller is not new, but the improvement consists in the case or shell which encloses the operating parts, and the complete separation of the corn from the cob. It requires but little power, and is capable of shelling from 10 to 12 bushels per hour.

C. N. BEMENT.

VINEGAR FROM BEETS.—A farmer in Detroit says—"The last season I grated about a bushel of the sugar beet to a fine pulp, and pressed the juice therefrom, of which I obtained six gallons. I put the same in a vinegar barrel, which was entirely empty, and in less than two weeks I had as good and as pleasant vinegar as I ever obtained from cider, and was equally as strong and clear."

For the Genesee Farmer.

COMPARATIVE VIEW of the quantity of Rain for six years, from 1840 to 1845, both inclusive, with a general mean or average for the whole number of these years:

1840—29.34 inches.	Average over the State, 35.38.
1841—30.53 inches.	Average over the State, 32.57.
1842—33.19 inches.	Average over the State, 37.04.
1843—30.31 inches.	Average over the State, 36.75.
1844—26.17 inches.	Average over the State, 32.44.
1845—34.41 inches.	Average, unknown.

General average, here, 30.66.—Over the State, 34.83.

The average quantity of rain that falls in a year, at any given place, depends upon its latitude, proximity to the Sea, elevation of the region, and exposure to the prevailing winds:—also to different local causes that influence climate. Humboldt estimates that the average depth of rain which falls annually at the latitudes of 0°, 19°, 45°, and 60°, may be taken respectively at 98, 80, 29, and 17 inches.

The greatest depth of rain that has been registered at any one place, in a year, is at Maranh, lat 2½° S., and which is stated by Humboldt, 277 inches. This is much above the average, and more than double the quantity registered at any other locality.

At St. Domingo the annual fall is estimated at 120 inches; at Havanna, 91; at Sierra Leone, 86; at Paris, 19.1; at Petersburg, 18.2; at Stockholm, 18.7; at Glasgow, 21.33; at London, 24.9; at Edinburgh, 25; at Rochester, N. Y., 30.66; in the State of New York, about 35 inches.

Some extraordinary falls of rain have been given. On the 25th of October, 1825, a fall of 32 inches, within 24 hours, occurred at Genoa; at Joyeuse, in the south of France, 31 inches within 22 hours. These last facts are gathered from the Reports of the British Association for 1840.

L. WETHERELL.

Rochester, April, 1846.

TO KILL MOSS ON BUILDINGS.—Having read an article in a late number of the Cultivator, recommending white lead for killing moss on the roofs of buildings, which may be a very good one, I will mention what I think an economical one. Take wood ashes or lime, and sprinkle them on the roof, near the top, just before a rain, and I think it will kill it as effectually as any thing. If people would wash the roofs of their buildings once in three or four years with lime and water, they would not be troubled with moss on them.

By the way, I would recommend to those who are about to cover their buildings with shingles, and especially sawed shingles, to dip them in boiling tar, pitch, or rosin; say dip the butt ends eight or nine inches and out again, as soon as you will, and enough will penetrate into the shingles to preserve them, I think, double the time that they would last without going through this process.—*Boston Cultivator.* T.

A Farmer's Life.

I wish I could see in all farmers a disposition to magnify their calling; but I have been grieved in many a farm house, to listen to lamentations over what they term their "hard lot." I have heard the residents upon a noble farm all paid for, talk about drudgery, and never having their work done, and few or no opportunities for their children; and I have especially been sorry to hear the females lament over the hard fate of some promising youth of seventeen or eighteen, who was admirably filling up his duties, and training himself for extensive usefulness and influence. They have made comparison between his situation, coarsely clad and working hard, and coming in fatigued with some college cousin, or young man who *clerked* it in a store, till at length the boy has become dissatisfied, and begged off from his true interests and happiness.

I am conversant with no truer scenes of enjoyment than I have witnessed in American farm houses, and even log cabins where the father under the influence of enlightened Christianity, and sound views of life, has gone with his family, as the world have termed it, into the woods.—The land is his own, and he has every inducement to improve it; he finds a healthy employment for himself and family and is never at a loss for materials to occupy his mind. I do not think the physician has more occasion for research than the farmer; the proper food of vegetables and animals will alone constitute a wide and lasting field of investigation. The daily journal of a farmer is a source of much interest to himself add others. The record of his labors, the expression of his hopes, the nature of his fears, the opinions of his neighbors, the results of his experiments, the entire sum total of his operations, will prove a deep source of pleasure to any thinking man. If the establishment of agricultural societies, and the cattle shows of our country, should have the effect of stimulating one farmer in every town to manage his land and stock upon the best principles of husbandry, there would be a wonderful and speedy alteration in the products of the earth, because comparison would force itself upon his friends and neighbors, and his example would be certainly beneficial, for prejudice itself gives way to profit.—*Choulet's Address.*

Noble Sentiments, Well Expressed.

COMMON SCHOOLS.—When the State furnish the means for schooling its children, and those children, or their parents, neglect those means, the funds of the State are not only wasted to the extent that they are not improved, but the absent children are grossly wronged, and the public defrauded of the benefits which would result from their education. Liberty, without intelligence, can not be properly appreciated or long preserved. Our district school-houses are the moral and in-

tellectual laboratories, where, under the fostering care of the State, and the blessing of Providence, the minds and characters of the rising generations, as they succeed each other, are to be fitted for the enjoyment of freedom, and for performing the high duties of freemen; or their neglect is to sink those generations to the condition of slaves, whether they continue to live under the name of liberty or not. No expedient should be left untried, which the wisdom of the Legislature can suggest, or the vigilance of school committees or citizens invent, to fill our school-houses, and give to every child the benefit of the liberal and free provisions made for him. To perfect our system of common schools, higher qualifications in teachers, more permanency in their employment, and better wages for their services, are demanded. These are subjects which, in your paternal care for the present and future children of the Commonwealth, you cannot with safety overlook. I am happy to believe that at this time there exists, among the thousands of teachers in the State, a truer estimate of the dignity and magnitude of their employment, and more zeal to benefit themselves for it, than has ever before existed.—*Address of Gov. Briggs to the Legislature.*

RESURRECTION OF A THREE THOUSAND YEAR OLD PEA.—In the year 1833, Sir Gardener Wilkinson brought from Egypt a vase of great antiquity, which had been dug out of a mummy pit. This vase was presented to the British Museum, and was opened in the presence of several antiquarians; but it contained only a small quantity of dust and a few seeds, among which were peas, vetches and wheat. Three of the peas were presented to Mr. Grimstone by T. J. Pettigrew, who kept the peas by him until 1844, when, having purchased the herbary at Highgate, he set them in a pot of composite. The pea soon sprang from its three thousand year trance into vegetable life, but yellow, as if it had been jaundiced with a diseased liver. When it had attained sufficient height, it was carefully transplanted into the open garden; it thrived, blossomed, and in August last (1844,) Mr. G. harvested 55 seed from its pods. These were planted this year, and all of them have thrown up their stems, blossoms and pods, and again give hope for an abundant increase. The pea has many peculiarities, one of which is, that the pod projects through the blossom, leaving the latter behind it, while the generality of peas push, or rather carry off the blossom at the tip of their pods. Mr. Grimstone was offered last year twenty pounds for twenty of these peas, which he refused to accept, preferring rather to multiply than to sell. The bloom of this pea is white, and of a bell form.—*English paper.*

THE BEST BOOK.—The best book for a farmer is the Bible; and the next best works, are those devoted to Agriculture.

Importance of Solar Rays to Health.

An able and lucid article in Chambers' Edinburgh Journal, after pointing out very sensibly the necessity not only of light and heat—but also of their coming by *radiation*, (which is called *actinism*, from a Greek word signifying a ray,) to the proper growth and health of plants and trees, proceeds thus:

Turning now to the animal economy, we find growth, health and developement also curiously affected by the absence or presence of the solar influence. Dr. Edwards has shown that if tadpoles be nourished with proper food and exposed to the constantly renewed action of water, (so that their tracheal respiration may be maintained) but are entirely deprived of light, their growth continues, but their metamorphosis into air-breathing animals is arrested, and they remain in the form of large tadpoles. He also observes that persons who live in caves or cellars, or in very dark and narrow streets, are apt to produce deformed children; and that men who work in mines are liable to disease and deformity beyond what the simple closeness of the atmosphere would be likely to produce. It has been stated on the authority of Sir A. Wylie, that the cases of disease on the dark side of an extensive barrack at Saint Petersburg, have been uniformly for many years in the proportion of three, to one on the side exposed to strong light. Further, Dupuytren relates the case of a lady whose maladies had baffled the skill of several eminent practitioners. The lady resided in a dark room (on which the sun never shone) in one of the narrow streets of Paris. After a careful examination Dupuytren was led to refer her complaint to the absence of light, and recommended her removal to a more exposed situation. This change was followed by the most beneficial results; all her ailments vanished. The more therefore that animals are exposed to the influence of light the more free are they, in ordinary circumstances, from irregularity and deformity.

In another part of the article it is shown that heat and light alone, without the solar radiation, will not suffice for the health of vegetables or of animals; else the artificial fires and lustres of our apartments would have that effect; but they do not. An indispensable agent is actinism.

Now, do not the foregoing facts prove the unhealthiness of changing night into day, as many of our fashionable and semi-fashionable, and pseudo-studious people do?—the unhealthiness of wasting in bed the bright and bracing hours of the early morning, when Nature bids us be out of doors, digging, or walking, or riding? Is not the balefulness of dark rooms made palpable? Draw aside those curtains—open those window-blinds, thou sluggard; and let Aurora and the rising sun look full into thy chamber, to shame thee forth, if they cannot charm thee forth, to

inhale strength and health in those best and most beautiful hours of the day.—*Richmond Whig.*

THE POTATO DISEASE.—The Brussels Journal publishes the following letter from Barleduc (Antwerp) relative to the disease in the potatoes:—"In gathering in our potatoes in October last, we found that the greater part of them were diseased, and, moreover, were covered with tubercles. It immediately occurred to us to replant those tubercles in a light, sandy soil; the result of which was, that we obtained a second crop in January: this time the potatoes were perfectly healthy and of an excellent flavor, and kept perfectly well in our cellars. Subsequently we made another experiment, which was attended with similar success. Potatoes of the year 1844 planted in the month of September last have likewise produced an abundant yield, and of a superior quality. Are not these experiments of a nature to remove all fears respecting the cultivation of the precious vegetable, and the apprehensions which many persons entertain lest it be found impossible ever thoroughly to eradicate the disease which we have this year had to deplore?"

POTATO ROT.—From the results of experience and investigation, this disease appears to be a "parasitical fungus," very small, but in its nature like the toadstool or mushroom. From this fact, the last season, I considered what would destroy this vegetable excrescence, either in the seed, or otherwise; to accomplish this, I dipped the seed potatoes, just before planting, in strong brine, and while wet dusted them with fresh slacked or quick lime. Very few of my potatoes have shown any sign of the rot, although many were in a diseased state at the time of planting. It may, or may not, have done good. As it did no injury, I intend to try it again.—*Far. Monthly Visitor.* P.

SUPERIOR METHOD OF PREPARING POTATOES FOR FEEDING STOCK.—Mr. Boggild, of Copenhagen, washes his potatoes well, steams them thoroughly, and then, *without allowing them to cool*, he cuts them in a cylinder furnished internally with revolving knives, or crushes them in a mill, and mixes them with a small quantity of water and three pounds of ground malt to 100 lbs. of the raw potatoes. This mixture is kept in motion and at a temperature of 140 to 180 deg. F., for from one to five hours, when the thick gruel has acquired a sweet taste and is ready for use. Given in this state, the results of experimental trials are said to be—1st, that it is a richer and better food for milk cows than twice that quantity in the raw state. 2d, That it is excellent for feeding cattle or sheep, and for winter food; that it goes much farther than potatoes when merely steamed; and that it may be economically mixed up with chopped hay and straw.

From the Michigan Farmer.

Cheese.

It is difficult to give intelligible written directions on this subject, as success depends so much on experience that it requires practical teaching; but when this is not to be had, we must make up by care and observation in practice, what is necessarily deficient in theory. To make the cheese of a small dairy—say eight or ten cows, which would produce seven pails of milk per day, which if properly managed would make twenty lbs. of cheese, I give the following rules; one point being constantly observed—that is temperature: as too much heat not only affects the quality, making it hard and poor, but diminishes the quantity. The milk when set for curd, should be at 90 degrees, or about two degrees below milk heat. The rennet is then added, two or three spoonfuls to seven pails of milk.—The exact quantity can only be ascertained by trying its strength. If the proper measure has been used the curd will be fit to break up in one hour from the time it was set; which may be done with a long handled skimmer or curd breaker. This must be done very gently to avoid bruising the curd, and losing the cream. It is then left one half hour to settle, a pail-full of the whey is then made milk warm, and returned to the curd gradually, all the time breaking it up. Another pail-full of whey is now made two degrees above milk heat, and most of the whey remaining on the curd, let into another vessel, left cold. The warm whey is then returned to the curd, breaking it up as fine as peas. It should be now one degree above milk heat: if it is not, heat more whey and put on. It is then left fifteen minutes, the strainer is then spread in the cheese-basket, the whole mass put into it, breaking it up as the whey drains out. A pail of cold whey is then put on to cool it. After being sufficiently drained, it is returned to the cheesetub and salted, one gill of salt to 16 lbs., then put into the hoop and pressed with about half of the proper weight put on, till near night, it is then turned, the whole weight put on, and pressed until next day, when done.

If you wish to make a double curded cheese, make the second curd in the same way as the first. When it is ready to go to the press, take the first curd, (now a cheese,) out of the press, but not out of the hoop, cut and scratch over the upper surface, making it rough, that the second curd may adhere firmly to it. It is then put into the hoop, with the other, pressed until near night, when it is turned into another strainer, and pressed till the next cheese is ready for the press, when it is taken out and rubbed with lard, a bandage sewed on it and turned, and rubbed every day.

Another way of making a double curded cheese is, to make the first curd *without* warm whey, merely cutting it up in the basket and letting

the whey drain out, kept till next day, when it is cut into small pieces, warm whey put on it until it is a little more than milk warm, then drained and chopped; the second curd made according to the *first* rule, is mixed with it, salted, and put to press.

A DAIRY-WOMAN OF HERKIMER CO.
Fairfield, N. Y., Feb., 1846.

Bread Making.

THE RISING.—Boil a quantity of hops, strain them, stir flour into the liquor when boiling hot; let it cool sufficiently, put in a small quantity of brewer's yeast; let it stand until perfectly light, then knead it hard with meal, cut it into thin cakes, and dry it in the sun.

FOR MAKING BREAD.—Soak a small quantity of the cake in warm water an hour or two, put it to sponging in your flour till it rises; knead it and let it stand till it rises again; knead it again, and put it in parts for the oven; let it stand until it rises, then bake the usual time.

TO MAKE MILK YEAST.—Take half a pint of new milk, one pint of hot water, half a teaspoonful of salt, half a teaspoonful of saleratus, stir in flour to the thickness of common batter; keep warm five or six hours.

TO MAKE BREAD.—When light, take two quarts of warm milk, one teaspoonful of saleratus, stir in flour and yeast to the thickness of common batter; keep warm; when light, make small loaves, bake thirty minutes.

TO MAKE CRACKERS.—Take 5 ounces butter, 4 eggs, 1 pint milk, beat the eggs and stir in as much as you can; then beat with a flat iron ten minutes without adding flour; then break off a piece large enough for a cracker; knead and roll out thin, and bake in a hot oven.—*Selected.*

TO MAKE THE BEST COPAL VARNISH.—Take one pound of gum copal, and melt it in a flask over a brisk fire of charcoal; at the same time, in another flask, boil or heat to the point of boiling, one pint of linseed oil; as soon as the gum is melted, take it from the fire, and add the hot oil in small quantities, at the same time stirring or shaking it till they are thoroughly incorporated. Allow the mixture to cool below the boiling point of water, and then add nearly a quart of spirits of turpentine: cork the flask slightly, and expose it a few days to the rays of the sun, which will make it work more smooth and shining. If a larger quantity is to be made, a copper boiler, that is small at the top will answer to melt the gum in. For ordinary or coarse work, a larger proportion of oil and a little rosin may be added.

If oil is used, in which red lead and litharge (in the proportion of half a pound of each to a gallon of oil) have been previously boiled, the varnish will the sooner dry.—*Scientific Amer.*

"The life of fame is action understood,
That action virtuous, great and good."

HORTICULTURAL DEPARTMENT.

BY P. BARRY.

Care of Newly Transplanted Trees.

Those who have planted trees during the last month, should bear in mind the necessity of careful culture during the ensuing summer. It is too common for people to suppose their work is done when the tree is placed with its roots in the earth. This error proves fatal to thousands of trees, annually, in our country. A tree requires culture, as well as a hill of potatoes, or corn, and is not less sensible of neglect. Under good management an orchard will come into bearing the third or fourth year after planting, and the trees will have attained a good size, and handsome appearance; while, if neglected, they will be miserable, crooked, mossy, unsightly things. So you who have planted may choose for yourselves. Meantime we take the liberty of presenting for your consideration, the following excellent chapter from "The Fruit Culturist," (a book which all fruit-growers ought to possess,) on this subject:

CULTIVATION OF THE SOIL.

The importance of good transplanting has been already noticed; yet very few practice it as it should be done.

There is another department in the care of fruit trees, still less known and appreciated, and still more important; perhaps not so much so in itself as from its almost universal neglect, and the consequent disastrous results. This is thorough cultivation of the soil. For, of many hundreds of trees which the writer has seen transplanted by various cultivators, more have been lost from neglected after-culture, than from all other causes put together.

Persons who purchase young trees treat them variously, as follows:

1. Some kill them at once by drying them in the sun or wind, or freezing them in the cold.
2. Others kill them by crowding the roots into small holes in hard ground, where they can never flourish, and rarely live.
3. Others set them out well, but that is all. This done, they consider the whole work as finished. The trees are suffered to become choked with grass, weeds, or crops of grain—some live and linger, others die under the hardship; or else are broken off by cattle, or broken down by the team which cultivates the ground.

An intelligent friend purchased fifty very fine peach trees, handsomely rooted, and of vigorous growth; they were well set out in a field containing a fine crop of heavy clover and timothy. The following summer was very dry; and a luxuriant growth of meadow grass nearly obscured them from sight. What was the consequence? Most of them necessarily perished.

Another person bought sixty, of worse quality

in growth; he set them out well, and kept them well cultivated with potatoes. He lost but one tree; and continuing to cultivate them with low hoed crops, they now promise to afford loads of rich peaches, before the dead stubs of his neighbor, just mentioned, have disappeared from his grounds.

Another neighbor a year ago bought fifty good trees. Passing his house late in summer, he said to me, "I thought a crop of wheat one of the best for young peach trees?" "Just the reverse; it is one of the worst—all sown crops are injurious, all low hoed ones beneficial." "Well, answered he, "I have found it so—my fifty trees all lived it is true, but I have lost one year of their growth by my want of knowledge." His trees were examined; they were in an excellent soil, and had been well set out. All the rows but one had stood in a field of wheat; that one was hoed with a crop of potatoes. The result was striking. Of the trees that stood among the wheat, some had made shoots the same year, an inch long, some two inches, and a very few, five or six inches. While on the other hand, on nearly every one that grew with the potatoes, new shoots a foot and a half could be found, and on some the growth had been two feet, two and a half, and three feet. Other cases have furnished nearly as decisive contrasts.

An eminent cultivator of fine fruit, whose trees have borne for many years, says in a late letter, "My fruit garden would be worth twice as much as it is, if the trees had been planted in thick rows two rods apart so that I could have cultivated them with the plow. Unless fruit grows on thrifty trees, we can form no proper judgment of it. Some that we have cultivated this season, after a long neglect, seem like new kinds, and the flavor is in proportion to the size. Bearing trees often stand in thick grass, and poor crops and poor fruit are the usual result; and the nurseryman who sold them is not unfrequently pronounced a rogue for thus distributing worthless kinds, when good cultivation would wholly change their character.

The "thick rows," two rods apart, spoken of in the preceding extract, may be composed of trees which stand from six to ten feet apart in the rows. This mode admits of deep and thorough cultivation, and the team can pass freely in one direction, until close to the row, where the soil need not be turned up so deeply, or so as to

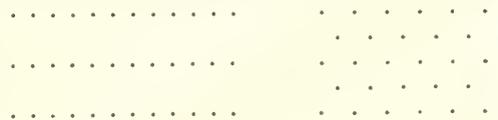


FIG. 12.

FIG. 13.

injure the roots. Fig. 12 exhibits this mode of planting; and Fig. 13, another mode, where the trees are in hexagons or on the corners of equilateral triangles, and are thus more equally dis-

tributed over the ground than by any other arrangement. They may thus be cultivated in three directions. For landscape effect, this is undoubtedly better than any other regular order.

Trees are frequently mutilated in cultivating the ground with a team; to obviate this difficulty, arrange the horses when they work near the line of trees, one before the other, *ad tandem*; let a boy ride the forward one, use long traces, and a short whipple-tree, and place the whole in the charge of a careful man who knows that one tree is worth more than fifty hills of corn or potatoes, and no danger need be feared.

When it becomes necessary for trees to stand in grass, as in some instances near dwellings, a circle of several feet around each tree, must be kept mellow by the spade. The work should be shallow near the tree to prevent injury to the roots, and gradually deepen as it recedes. This operation, when repeated several times during summer, has been known to increase the growth five fold. But a not less important result is the



FIG. 14.

exclusion of the mice, for which this is by far the most effectual method, if the surface is raised nine or ten inches round the tree just before winter. The grass no longer affords these animals any hiding place; and the embankment round the stem prevents the collection of deep snow. It proves completely effectual. Fig. 14 represents the mode in which this embanking should be done.*

Among the crops which are best suited to young trees, are potatoes, ruta bagas, beets, carrots, beans, and all low hoed crops. Corn, though a hoed crop, is of too tall a growth, shading young trees too much by its formidable stalks. All sown crops are to be avoided,† and grass is still worse. Meadows are ruinous. An acquaintance who purchased a hundred peach trees and placed them in meadow land, lost most of them by the overgrowth of the grass; and the following winter the mice, who avoid clean culture, destroyed the remainder. Every one was lost. A clean, mellow, cultivated piece of ground, kept so a few years, might have saved the whole of them, and brought them soon into bearing.

* The writer has often saved young trees of the pear and apple, which have been girdled by mice, by fitting in small pieces of wood with the fresh bark, so as to restore the connexion between the two several portions of the bark, covering the whole with grafting wax.

† Peas are by many regarded as a good crop for orchards. They are much worse than corn which is kept hoed, though the corn shades the young trees more. A friend had a large peach orchard sown with peas, and bordered on one side with corn, in which one row stood. Such was the benefit to the peach trees, from the hoeing given to the corn, that the row standing in it was conspicuously marked out by the deeper green of its foliage, at the distance of half a mile.

ROSES.—There are three modes, says Buist, within the reach of all for the propagation of garden or June roses—namely, by layering, budding, and grafting.

Apples.

WE are under obligations to S. W. COLE, Esq., of the Boston Cultivator, for specimens of the following 12 varieties of Apples, which we have received in good condition:

Green Newtown Pippin.—This is correct. Mr. C. says he procured it from the neighborhood of the celebrated Orchard of Mr. PELL, at Pellham.

Yellow Newtown Pippin.—This is also genuine. These, Mr. C. states, are now selling at \$3,50 per barrel in the Boston market.

Esopus Spitzenberg.—This is the same as that well known and extensively cultivated with us.

Baldwin.—This is well known to be the most popular Apple in Massachusetts. It is beginning to make its appearance with us, and we believe will succeed as well here as in Mass., but is far inferior, in our opinion, in quality, and does not keep so well, as the *Swaar* and *Northern Spy*.—Mr. Cole says it is a prodigious bearer, every second year, and sells now, Feb. 26, in their markets at \$3,50 per barrel—and adds that large orchards of it, alone, are now planted—one he mentions of 500 trees.

Late Baldwin.—This is a fair looking, reddish apple, a good deal like the Baldwin, but it is evidently a different apple. The stem is stouter and shorter; it lacks the unfailing russet in the cavity of the stem, and is coarser grained, and inferior in flavor. Mr. Cole says he found this in Maine some 12 years ago: it keeps a month longer than the Baldwin, and bears prodigiously, and that its great advantage is that it bears in odd years, i. e. 5, 7, &c., when fruit with them is scarce.

Baldwin Betweenty!—This is the barbarous title of a very large, beautiful Apple, which Mr. C. considers a connecting link between the Baldwin and *Late Baldwin*. Having only a single specimen before us, we cannot be positive, but we are pretty sure that it is neither more nor less than a Baldwin modified by peculiar circumstances. Mr. C. believes so too, but says its peculiarities are fixed. We have compared this with another Apple before us, which we received from JAS. W. SIBLEY, Esq., of this city, as a *Steele's Red Winter*, and find them to be identical. We pronounced this *Steele's Red Winter* to be the Baldwin as soon as we saw it.

Blue Pearmain.—This is a large, beautiful, fine flavored fruit—always commands a high price in market. We have had it bear on our place. It bears but moderately. The tree is a fine vigorous grower.

"Spitzenberg".—The specimen sent us under this name is, we are pretty sure, the Flushing Spitzenberg, with which we were once very familiar. It is readily distinguished from the Esopus by its darker color, more regular outline, and the brown spots that are sprinkled over it.—

It is a handsome, fine fruit, but inferior to the Esopus.

Seek-no-further.—This is identical with our well known Apple of that name.

Peck's Pleasant.—This is a fine Apple, and succeeds well as far as we know it to be cultivated in our section. Mr. C. says "it is as good as the Newtown Pippins, and will doubtless do better so far north as we are. It is a moderate bearer and requires good culture to make it fair."

JOHN J. THOMAS says, "it is a great and constant bearer, and is remarkable for its handsome, smooth surface, and excellent flavor." DOWNING says, "it bears regularly and well." No doubt, like all others, good culture improves it. It keeps well till April, and deserves extensive cultivation.

Cluster.—This is a fine, handsome Apple, appears to be a good keeper. We do not know that we have ever seen it before under any name. Mr. Cole says that he found it in the Boston market, and that it came from our state under this name. It is about medium size, round and regularly formed, skin greenish yellow ground, delicately streaked with red—the red streaks centre around the stem like beautiful rays.—Flesh white, very tender and juicy, with a very agreeable flavor. We like this apple much, and should be glad to learn more about it. In our opinion it is superior to the Baldwin.

Dight's Sweet.—This is an excellent sweet Apple, which we learn from the Boston Cultivator is the product of a seedling tree 30 or 40 years old. The specimen before us is rather below medium, round and reddish, with a yellow ground; flesh is tender, juicy, and a very pleasant sweet.

Roxbury Russet.—This, Mr. Cole says, is just coming into market, as the Baldwin goes out, and fills up a space from March to July. He says in dry land and common culture it bears poorly and the fruit is knotty; but on rich and moist soils, and with good culture, it is a profitable fruit. The great characteristic which gives this fruit its value is its long keeping. It is small and ill looking, and we confess we would never eat one if we could get any other.

The Flower Garden.

ANNUAL flower seeds will mostly be sown by this time, and many are fit for transplanting from the seed now. To do this, a moist day should be chosen, and a ball of earth taken up with each. Shading from the sun is also necessary for a day or two. To succeed well with Annuals, the ground must be rich and mellow, and kept well worked, and during dry hot weather evening waterings are necessary.

No flower border can be at all complete without Verbenas, Monthly Roses, Fuchsia, (Lady's ear drop,) and such plants as bloom profusely all summer. These can be had in pots, and turned

out now in the border, and be again taken up and saved for next season—or young plants may be propagated. Petunias are annuals, very beautiful, and easily cultivated. There are many varieties, of various hues. They are easily propagated from cuttings, and seed freely. Geraniums cultivated in the house, if plunged in the border, will contribute to its beauty. Pansies, pinks, and carnations are all pretty border flowers, and may yet be transplanted, or seeds sown.

Dahlias should now be planted—either dry roots, or young well rooted plants in pots, propagated from cuttings. These flower much more freely, and produce better blooms than the old roots. Dahlias soon degenerate, and old shy bloomers should be thrown away; they are only nuisances. The splendid new varieties exceed anything in the floral world, for grandeur, and a few, at least, should be in every garden. They are propagated in vast quantities, in the nurseries, and are offered for sale cheap—with the exception of the *very rare new sorts*. These are sold very high the first and second season. In some of the Dahlia catalogues of the present spring, many kinds are noted at \$3 to \$5 each, for pot plants. For the Dahlia, the ground should be deep and rich—the plants should be kept neatly tied up to stakes, and pruned to single stems.

Hyacinth Show.—Horticultural Society.

THE "*Horticultural Society of the Valley of the Genesee*" advertised and held a "Hyacinth Show" last week, (April 24 and 5,) which, we regret to say, was a very poor affair. There were, we have been told, but three exhibitors, and the specimens, which we accidentally saw through the window of the room, were quite inferior. We are aware that there is but little attention given to the culture of bulbous flower roots, in this neighborhood. Still we are inclined to believe that if the exhibition had been properly got up, and held in a suitable place, it would have been infinitely more creditable to the Society.

The place selected was one of the smallest business offices in this city, where flowers could not possibly be exhibited to advantage, and where not more than 4 or 5 persons could be admitted at once. This, in our opinion, was a small way for the *Genesee Valley Society* to make its *debut*—ill calculated to create any very favorable impression of its future operations. For our own part we would never think of exhibiting our flowers or fruits in such a manner.

If the Society cannot afford to procure a suitable room for its shows, it is idle to hope for its success. This is our opinion, freely given, with all due deference to the views of the committee of management. We feel a deep interest in the welfare of the Society, and stand ready to give all the assistance in our power to promote its

prosperity and extend its usefulness; but we confess we are vexed and disappointed that such a paltry plan of exhibition should be adopted, after it had been proposed, discussed and rejected at the early meetings of the friends and originators of the Society.

[THE following article was prepared for our April number, but necessarily deferred.]

Transplanting Trees.

DURING this month thousands of trees will be transplanted, and it is a matter of great importance that it be done properly. We must admit that nurserymen are chargeable with a great many breaches of duty and trust, but at the same time we know that they are not unfrequently charged with faults they have not committed. People will sometimes go to the nursery, purchase the trees, and to avoid the expense of two or three shillings for packing, will carry their trees exposed to the weather, perhaps a whole day—and if they perish in consequence, blame the nurseryman. We would not have a tree of ours uncovered two hours, if we could avoid it. As soon as a tree is taken up it should be carefully packed with moss, or some other material, and covered with matting or straw, to keep the roots moist until they arrive at their destination.

The soil should be well prepared—large holes dug for their reception, and well pulverized earth placed among the roots. It is a safe plan to cover the ground around the tree, as far as the roots extend, with litter or rough manure, to the depth of three or four inches; this retains the moisture of the soil, and prevents the necessity of watering. Pruning the heads of trees, before planting, should be done cautiously, and with regard to the condition of the roots. Where there is an abundance of fibrous roots, the heads require little pruning; where they are deficient, the branches should be reduced to correspond.

THE WEATHER, since our last, has been quite cool for the season, and vegetation is remarkably backward. Within the past week we have had severe frosts several nights in succession, cutting off tender sprouts and blossoms that had ventured forth, and rendering the prospects for fruit still more gloomy than before. We observe a few blossoms on peach trees in sheltered places, but it is doubtful whether they can withstand the frosts.

In Western New York, we learn by a letter from John J. Thomas, the prospects for fruit are very little, if any, better than with us; the winter having been very destructive to the buds of peaches and other half-hardy kinds.—*Ohio Cultivator*, April 15th.

As far as our observation has extended, the prospects for fruit were never better in Western New York than at present. Late frosts, such as we had on the first of June last year, may come; but up to this date, April 29, all looks full of promise. Half-hardy trees, and shrubs of all kinds, have passed through the winter with less injury than usual, and so it is with all young trees in the nursery. We have scarcely seen an inch of winter killed wood this spring, except on trees that had been moved last autumn, Apri-

cots have bloomed most profusely, and the fruit appears to be setting well. Peach buds look fine, and are just beginning to expand. Indeed the whole appearance of vegetation, at this moment, is delightful, and well calculated to draw thanks and praises from every heart, to HIM who rules the seasons.—ED.

Mount Hope Botanic Garden.

THE following notice from the Rochester Democrat is so *seasonable* and proper, that we assume the responsibility of publishing it, without the knowledge or consent of the conductor of this department of the Farmer. From our own knowledge of the establishment, and its gentlemanly and enterprising proprietors, we can fully endorse all that is said in the article. Those of our readers who reside at a distance, could not spend an hour more pleasantly, during a visit to our city, than in an examination of the magnificent Garden and Green House of Messrs. E. & B. M.

MR. EDITOR:—There are few places within the limits of our city, where an hour can be spent more profitably and pleasantly than at the Mount Hope Garden. Amateurs and florists, young and old, will find much, *very much*, to interest and admire, while the horticulturist and utilitarian will find a rare, extensive, and choice assortment of fruit and ornamental trees, flowering shrubs, plants, &c., in a condition highly creditable to the worthy proprietors, Messrs. ELLWANGER & BARRY. The indefatigable efforts of these gentlemen, to supply the wants of our citizens and Western New York with reliable varieties of the finest fruits, entitle them to great credit, and we have no doubt, will secure them a liberal patronage. Messrs. E. & Barry have been engaged in their very interesting vocation from early boyhood and are scientifically, practically, and intimately acquainted with their business.

They are, therefore, confident of being able to obviate difficulties of long standing, and that have at *some period* disappointed the expectations, and rendered abortive, the labors of almost every farmer and fruit grower in the State. Indeed, the carelessness of nurserymen has become proverbial and has prevented thousands from cultivating fruit extensively, who, under greater certainty of success, would have grown hundreds of bushels where now one is produced. No pains or expense have been spared to render their assortment complete. They have, in their collection, the finest varieties of fruit found in England, on the continent of Europe and in this country. They import largely from England, France, Germany, and Belgium; and have cultivated and introduced into Western New York some of the finest flavored fruits grown in the world.

They have recently received from Belgium, in fine order, a choice assortment of pears, grafted on the Portugal quince root; also an extensive lot of hardy roses of the most exquisite varieties. These are budded into the sweet briar stalks from four to six feet high, and flower, in beautiful clusters in firm and unyielding supports. Many of these stalks are as large as walking sticks—so firm that the winds and snows cannot break them down, nor the frosts destroy them.

Their green-house department is exceedingly fine. Here may be seen from seven to eight thousand plants in pots, from every land, and of every desirable variety.

The admirer of nature may here witness the ten thousand lights and shades of *her magic pencil*; and such productions of the vegetable world, as the enlightened judgment of man has pronounced most beautiful. Finally, parents can hardly afford their children more interesting, instructive, and useful indulgence, than to let them look in upon this miniature world of roses, blooming amid running vines, aromatic shrubs and sweet scented flowers.

Yours,
J. B. S.

Grain Cradles.—50 superior Grain Cradles, made by Hatch, of Caledonia, and others, for sale at the Agricultural Warehouse, on Front-st., by JAMES P. FOGG.

Acknowledgments.

BELOW we give the names of a few of the numerous persons who have essentially aided in extending the circulation of the current volume of the Farmer. Others are equally entitled to our thanks, and we shall endeavor to publish a list of acknowledgments in our next, comprising all who shall have sent us eight subscribers or more. The list will answer as a receipt, and also exhibit the names of many of the substantial friends and supporters of the Farmer.

H. C. SHESBY, Esq., of Seneca Falls, has sent us over 50 subscribers, and paid 50 cents for each.

The Town Club of Castile, Wyoming Co., per J. L. HOSFORD, Esq., 60 copies—with an expectation of increasing the list to 100.

Gen. R. HARMON, Wheatland, about 40 subscribers.
HENRY FELLOWS, Esq., Pentfield, over 40 subscribers.
D. A. OGDEN, Esq., P. M. Penn Yan, about 50 copies.
MOSES EAMES, Esq., Rutland, Jeff. Co., 26 copies.
L. C. FARGO, Esq., Busti, Chau. Co., 26 copies.
WM. RISLEY, Esq., Fredonia, 25 copies.
Messrs. C. N. KING and H. PAIGN, Alden, Erie Co., about 30 copies.

Messrs. C. ENGLISH and C. N. FULLER, South Byron, (no subscribers last year,) over 30 copies.

Messrs. TOMPKINS and MORGAN, A. S. UPHAM, and C. HOLBROOK, Le Roy, 60 copies.

ERASTUS HURD, Esq., Middleport, 32 copies.
S. WILLIAMS, Esq., Waterloo, 30 copies.
S. C. WRIGHT, Esq., P. M. Oaks Corners, 26 copies.
C. G. RICHARDS, Esq., Putneyville, 25 copies.

The above must suffice for the present. We will try to give a complete list in a future number—when our Michigan and other western friends shall not be omitted.

We respectfully request those of our readers who can conveniently do so, to obtain and forward subscriptions according to our club terms. New subscribers, in sections where the Farmer is not generally taken, will oblige us by introducing it to the notice of their friends and neighbors, and obtaining subscriptions.

AGRICULTURAL IMPLEMENTS.

E. TAYLOR, at his Steam Factory, No. 6 Hill-street, is extensively engaged in manufacturing and dealing in all kinds of AGRICULTURAL IMPLEMENTS. Having during the past year visited all the Agricultural Establishments in Philadelphia, New York, and Boston, and secured the right of many valuable Machines and Implements, he is prepared to furnish, wholesale and retail, all kinds of Agricultural Utensils found in the eastern cities, such as

Grant's Patent Fan-Mills, Corn Shellers, Corn and Coffee Grinders, Corn and Seed Planters, Scythe Snathes, Straw Cutters, Patent Churns, Pitchforks, Patent Parallel Jaw Vices,

together with many other valuable tools, both to Farmers and Mechanics.

He is also extensively engaged in manufacturing *Bate's celebrated Patent Sliding Top Chamber Shower Bath*, to be used in chambers or sleeping apartments, without the least damage to carpets—the nicest article in the world! 1100 sold in four months in New York city the past season.

Farmers in want of tools or implements, of any kind, would do well to call and examine. For sale wholesale and retail at the Factory, No. 6, Hill street; also at the store No. 15 and 17, Exchange street, and at the Genesee Seed Store, No. 10 Front street. E. TAYLOR.
Rochester, N. Y., May, 1846.

Sanford's Straw Cutter.

For sale by RAPALJE & BRIGGS at the *GENESEE SEED STORE*, No. 10 Front St., Rochester. Price \$15.
Rochester, April 1846. [4-1f.]

Branch Peas.—100 Bushels German Branch Peas, a very superior article, just received and for sale at the Genesee Seed Store. [4] RAPALJE & BRIGGS.

Castor Oil Beans.—Just received, and for sale at the Genesee Seed Store, No. 10 Front-st., by [4] RAPALJE & BRIGGS.

MOUNT HOPE BOTANIC GARDEN AND NURSERIES,

Rochester, N. Y.

(South St. Paul st., nearly opposite the Cemetery.)

The Proprietors of this Establishment offer for sale an unusually large and fine collection of

FRUIT AND ORNAMENTAL TREES,
FLOWERING SHRUBS, VINES AND ROSES, HARDY HERBACEOUS PLANTS, DOUBLE DAHLIAS and BULBOUS ROOTS;
GRAPE VINES, RASPBERRIES, STRAWBERRIES,
AND GOOSEBERRIES; ASPARAGUS ROOTS,
RHUBARB, &c.; HEDGE PLANTS,
GREEN HOUSE PLANTS, &c.

The collection of Fruit Trees comprises the most popular varieties cultivated, and has been grown with the greatest possible care to ensure accuracy. The Proprietors are practical and experienced Nurserymen, and wholly devoted to the business;—all the important operations are either performed by themselves or under their immediate inspection.

Experience has fully proved that the trees grown at this point, in addition to being free from diseases, are better adapted to cold climates than those of any other portion of the United States.

The collection of Apples includes several thousands of the famous new American Apple, the "*Northern Spy*."

A large assortment of Pears, of the choicest kinds, are propagated on quince stocks for DWARFS and PYRAMIDS, and will bear the first or second year after planting; they are admirably adapted for garden culture. A lot of these are now on hand, of extra size, for immediate bearing.

The collection of Ornamental Trees is large and fine, comprising several hundred of the splendid *Paenlonia Imperialis*. The catalogue of Roses embraces the most popular new varieties. A great variety are propagated for standard or Tree Roses, 4 to 6 feet high, with fine heads.

Of *Double Dahlias* the assortment is unsurpassed, including the finest show flowers yet introduced to this country, and many that were imported last season at 5 guineas each. A catalogue will be published in April.

The stock of Green House Plants is very extensive, and includes the most beautiful new *Pelargonium* (Geranium), *Fuchsia*, *Camellia*, *Calceolaria*, *Verbeina*, *Cactus*, &c., &c., all finely grown, and will be sold at greatly reduced prices. Trees and Plants packed in the best manner, and shipped to any part of the country agreeable to order.

Priced catalogues sent gratis to all post paid applications. Orders from unknown correspondents should be accompanied with a remittance or reference.

ELLWANGER & BARRY

Rochester, April, 1846.

CHOICE FRUIT TREES.

FOR SALE, at the *Rochester Commercial Nursery*, on Main street, one mile east of the Court House. The subscribers offer for sale nearly 200,000 Fruit Trees of various varieties and sizes, for cash or credit, upon the most favorable terms.

Also—An assortment of hardy Ornamental Trees and Shrubs.

Also—Scions of almost every description of Fruit. The above have been thoroughly tested, and will be warranted of the kinds represented.

BISELL & HOOKER, at the Nursery, or
J. W. BISELL, No. 1, Arcade Hall.

March 1, 1846. 2m.

Plows for Sale.—We have on hand, and intend to keep constantly for sale, the celebrated *Diamond* and *Wilsconsin* Plows, the merits of which have been fully tested. Price, \$7,00 for medium size. The farming community are respectfully invited to give us a call.

RAPALJE & BRIGGS,

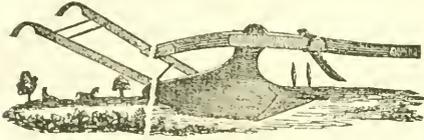
21f. No. 10, Front-st

Colman's Agricultural Tour.—Subscribers to the above work are hereby notified that No. 5 is now in the hands of the agent, ready for delivery, and they will please call for them. JAMES H. WATTS, Agent.

Rochester, April 1, 1846.

Wanted, at the Genesee Seed Store, 500 bushels Timothy and Clover Seed, for which the highest cash price will be paid by the subscribers. RAPALJE & BRIGGS.

American Plow Factory!



[This cut does not properly represent the Plow.]

CODDINGS AMERICAN PLOW.

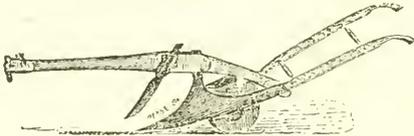
THE UNIVERSAL TESTIMONY of all who have used this Plow, is, that it is the Plow for every farmer to have in his possession. It will draw lighter than any plow now in use to do the same work, thus saving much work for your teams. The following extract from the report of the committee of the State Agricultural Fair will show the difference in this respect between this and some of the best Plows tested.—“Cayuga County 333 pounds draft; Ontario Co., 431 do.; Caledonia, 422 do.; Eagle, (Mass.) 415 do.; Lockline, improved, 433 do.; Iron Beam, 333 do.; Livingston Co., 400 do.; [] Coddings American, 320 do.!” [] Sixty-eight pounds lighter draft than the lowest on the ground. With this plow you can turn your furrows *up hill*—give them the *half lap*, completely shutting in the grass so as to prevent its growing. With it you can plow your stony ground, stubble or clover, and “any thing else.” They are wooded with first rate seasoned white oak timber, in the very best manner, and warranted to be right in every respect. They are ground and polished before leaving the shop, which makes them ready for immediate use.

Call at the Shop and examine the recommendations.—Among others who have used them, we would refer to the Society of Shakers, near Mt. Morris. Orders supplied, at wholesale and retail, to any part of the U. S. or Canada, and a constant supply on hand at the American Plow Factory, on Aqueduct st., rear of No. 17 Buffalo st., Rochester, N. Y., by CAPRON & CURTIS.

* * Also for sale, in this city, by Philip W. Corwell, Frankfort—E. Taylor, Agricultural Warehouse, Hill st.—Z. C. Colvin, South St. Paul st.—and Smith & Gould, corner of Buffalo and Trowbridge sts. By John Reynolds, Pultneyville; W. J. Stoutenburg, Williamson; J. L. Sanford, Palmyra; B. Fish, Sodus Phalax; C. P. Smith, Ontario, and country merchants generally.

N. B. Points always kept in the vicinity where plows are used. [] Wood and Country Produce taken in exchange for Plows. [4-2t]

“Burrall’s Patent Shell-Wheel Plow.”



Saves one-third draft, and works well.

MADE and sold, at Wholesale and Retail, by CURTIS, ROSE & Co., (Geneva, Ontario Co., N. Y.,) manufacturers of Threshing Machines and Separators, Clover Mills, Corn Shelling Separators, (a new and desirable article,) Steam Engines and Boilers, Mill Gearing, Water Wheels, Stoves, Hollow Ware, Potash and Caldron Kettles, &c.

The Wheel Plows and Corn Shellers can also be obtained at the following places:

RAPALJE & BRIGGS, Genesee Seed Store, Rochester.
EDEN FOSTER, Batavia.
HALL, RHODES & SHERMAN, Syracuse.
PETER CROWKHITE, Hallowell, Canada.
B. F. Davy & Co., Bath, Canada. [4-3t]

Peas Wanted.—Wanted, at the Genesee Seed Store, two or three hundred bushels Peas, of the first quality, for which the highest cash price will be paid by

RAPALJE & BRIGGS.

2t. No. 10, Front-st., Rochester.

Eggs.—The subscriber has for sale a few dozen EGGS from the breed of fowls described by Bement as the “*Ostrich Fowls*.” Price, 37½ cents per dozen.

J. W. BISSELL,

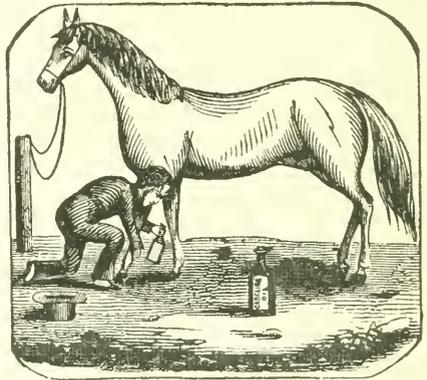
At the Commercial Nursery, Main-St., Rochester.

Agricultural Books.

SAGE & BROTHER, corner of Buffalo and State streets, Rochester, have a large and well selected assortment of the most approved Works on Agriculture, among which are the following:

Johnson’s Farmer’s Encyclopedia—Downing’s Fruits and Fruit Trees of America—Boussingault’s Rural Economy—Johnson’s Agricultural Chemistry—The American Poulterer’s Companion—Stewart’s Stable Economy—Youatt on the Horse—Hind’s and Mason’s Farrieries—Youatt and Clatter on Cattle—Morrell’s American Shepherd—Blacklock’s Treatise on Sheep—Farmers’ and Emigrants Hand Book—Kenrick’s American Orchardist—Buell’s Farmer’s Instructor—Gaylord & Tucker’s American Husbandry—Armstrong’s Agriculture—A Treatise on Vegetable Physiology—Liebig’s Animal and Agricultural Chemistries—Beatty on Agriculture—Falkner’s Farmers Treasure—Smith on Productive Farming—Fessenden’s Complete Farmer—Child on Beet Sugar—Fessenden’s New American Gardener—Johnson’s Gardening for the Ladies—Bridgeman’s Gardener’s Instructor. [4-2t] Rochester, April, 1846.

FARMERS, CURE YOUR HORSES!



GEO. W. MERCHANT’S CELEBRATED GARGLING OIL.

AN Invaluable Remedy for Horses, Cattle and other domestic animals, in the cure of the following diseases:

Fresh Wounds,	Fistula, Siftast,
Galls of all kinds,	Strains, Lameness,
Sprains, Bruises,	Sand Cracks,
Cracked Heels,	Foudered Feet,
Ringbone, Windgalls,	Scratches or Grease,
Poll Evil, Cullus,	Mange,
Spavins, Sweeney,	Horn Distemper.

Also a valuable Embrocation for diseases of the Human Flesh.

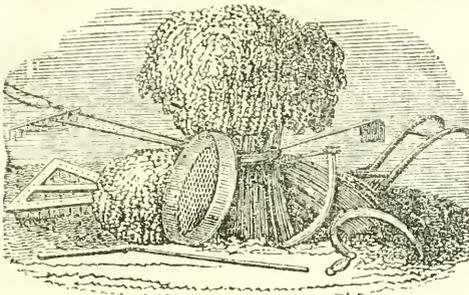
Since the virtues of the Gargling Oil have become so extensively and favorably known to the farmers of the United States and Canada, as a curative oil in diseases of animals, and as a consequence, its demand becoming great—there has not been wanting those whose cupidty has suggested to them that if they could concoct something as nearly resembling in appearance as they could guess, with any hing for a name, they might urge it upon unsuspecting customers as a substitute for the true Gargling Oil. The proprietor would therefore caution those who purchase to be sure the name of G. W. Merchant is blown on the side of the bottle. All others are an ATTEMPT at imitation, and are therefore an imposition.

For testimonials, synopsis of diseases, and mode of treatment, see pamphlet which accompanies each bottle.

[] Sold at the ROCHESTER SEED STORE, and by Druggists and Store-keepers in the United States and Canada.

Rakes—99 dozen I. Stark’s superior Hay Rakes, for sale at the Genesee Agricultural Store, No. 10, Front-st., by RAPALJE & BRIGGS. [4]

Corn Shellers!—A first rate article, price \$10, for sale at No. 10, Front-st. RAPALJE & BRIGGS.



**ROCHESTER SEED STORE,
AND
WARE-HOUSE FOR FARMING TOOLS.**

By **JAMES P. FOGG.**

The subscriber having purchased the interest of Mr. B. F. Smith, in the SEED and IMPLEMENT 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 seedsman 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; while those varieties of foreign growth, which experience has shown are the best, such as Cabbage, Cauliflowers, Brocoli all the varieties of Garden and Field Turnip, Scarlet Short-Top Raddish, Scarlet and White Turnip-Raddish, Dwarf and Early Peas, with Twenty choice varieties of FLOWER SEEDS, have been imported by the subscriber from the long established house of R. WRENCH & SONS, of London.

AGENTS for the sale of Rochester Seeds by the package, &c.—*Attica*, H. D. Gladding. *Amsterdam*, J. W. Sturtevant. *Auburn*, Hudson & Buckbee. *Albion*, Charles W. Perkins. *Batavia*, Lucas Seaver. *Ballston*, E. W. Lee. *Buffalo*, W. & G. Bryant. *Brockport*, A. B. Bennet. *Canandaigua*, L. C. Cheney & Co. *Cazenovia*, Dr. A. Ford. *Castile*, Halsted & May. *Dansville*, H. B. Williams & Son. *Elmira*, Tracy Beadle. *Geneva*, Hemip & Cone. *Geneseo*, L. Turner. *Hudson*, W. & G. Storrs. *Homer*, Wm. Sherman & Son. *Ilwaco*, Lewis H. Culver. *Lockport*, S. H. Marks & Co. *Le Roy*, Tompkins & Morgan. *Lansingburgh*, R. Harrison. *Mumford*, J. Phelps & Co. *Mount Morris*, R. Sleeper. *Oswego*, C. & E. Canfield. *Perry*, R. H. Smith. *Pou Yan*, John H. Lapham. *Palmira*, Hoyt & May. *Port Byron*, S. K. Kendriks. *Scottsville*, Garbutt & Co. *Schevctady*, D. L. Powell. *Syracuse*, Foster & Nott. *Seneca Falls*, C. L. Hoskins. *Troy*, J. Duggett & Co. *Utica*, J. E. Warner & Co. *Union Springs*, Wm. Cozzens. *Warsaw*, Dr. A. Frank. *Waterford*, Wm. A. Waldron. *Waterloo*, T. McClintock. *Wyoming*, Cornwell & Maine. *Pittsfield, Mass.* Isaac L. Cole. *York*, James McPhearson. *Adrian, Mich.* D. K. Underwood. *Brantford*, C. W. J. & R. Curtis. *Chicago, Ill.* N. Sherman, Jr. *Columbus, Ohio*, John Miller. *Detroit, Mich.* J. W. Strong, Jr. *Hamilton*, C. W. S. Kerr & Co. *Jonesville, Mich.* Smith & George. *Kingston*, C. W. Charles Bshah. *London*, C. W. Edward Adams. *Monroe, Mich.* Hosmer Graham. *Marshall, Mich.* A. Callender. *Milwaukee*, W. T. Holton & Goodall—Jackson & Jewell. *Niagara*, C. W. James Harvey. *Pontiac, Mich.* Rogers & Dunklee. *St. Catharines*, C. W. S. L. St. Johns—Boomer, Brothers & Co. *Springfield, Mass.* Chapin & Gunn—Benj. K. Bliss. *Sandusky City, Ohio*, W. T. & A. K. West. *Toronto*, C. W. Robert Love. *Toledo, Ohio*, Raymond & Co. *Westfield, Mass.* Jessup & Co. *Ypsilanti, Mich.* Edmunds & Co.

Rochester, N. Y. **JAMES P. FOGG.**

NEW SEED and IMPLEMENT WAREHOUSE.



GENESEE SEED STORE & 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 of 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.

RAPALJE & BRIGGS.

Rochester, Feb. 1, 1846.

The Imported Horse Alfred,

Which took the first premium at the New York State Agricultural Fair, in 1843, will stand for mares this season, 1846, at the following places, viz:

At WILLIAM GARRETT'S, Wheatland, as follows;—

On Saturday and Monday,	May 2 and 4
“	“ 16 “ 18
“	“ 30 June 1
“	June 13 “ 15
“	“ 27 “ 29
“	July 11 July 13

At JOHN BAKER'S, Macedon, as follows;—

On Saturday and Monday,	May 9 and 11
“	“ 23 “ 25
“	June 6 June 8
“	“ 20 “ 22
“	July 4 July 6
“	“ 18 “ 20

At the American Hotel, in Rochester, on Wednesdays and Thursdays of every week, to the close of the season, commencing April 29 and 30.

TERMS:—Ten dollars to insure a foal, payable 1st of March, 1847. Persons parting with mares before foaling time will be held responsible for the services of the Horse.

GEORGE FORDON.

March, 1846.

JOHN BAKER.

The newly Imported Horse 'Consternation'

Will serve mares at \$20, the ensuing season, at the stables of C. T. ALBOT, Stoke Post, Oneida county, N. Y.

He is sixteen hands high, very powerful, and has splendid action. He was got by Confederate, dam Curiosity by Figaro. He took the First Premium at the State Fair in September last. [4-2r*]

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

RAPALJE & BRIGGS.

No. 10, Front-st.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.			
Wheat,.....	33 a 91	Pork, bbl,.....	12,00
Corn,.....	41 47	Pork, cwt,.....	4,00 4,50
Barley,.....	42 45	Beef, cwt,.....	4,00 5,00
Oats,.....	32 34	Lard, lb,.....	7 8
Flour,.....	4,25	Butter, lb,.....	12 13
Beans,.....	33	Cheese, lb,.....	7 8
Apples,.....	50 75	Eggs, doz,.....	8
Potatoes,.....	37 44	Poultry,.....	7
Clover Seed,.....	5,00 5,50	Tallow,.....	6 7
Timothy,.....	1,75 2,00	Maple Sugar,.....	3 3
Hay, ton,.....	10,00 12,00	Sheep Skins, fresh,.....	1,12½
Wood, cord,.....	2,00 2,50	Green Hides, lb.....	3½
Salt, bbl,.....	1,25	Dry ".....	6 7
Hams, lb,.....	7	Calf Skins,.....	7 8

NEW YORK, May 4.

Flour is 4,56½, with sales 2,000 to 2,500 bbls. for consumption. The market is firm.

Sales corn at 64 a 65 cts., measure. ASHES are \$5,75 and \$4 for pearls and pots, with sales 200 to 250 bbls.

MEAL is dull at \$3,25 a \$3,31½, with large demand.

Sales Rye at 67½, delivered. Receipts of produce by the North River boats, May 2.—Flour 16,535 bbls.; Provisions 624 bbls.; Whiskey 117 bbls.; Butter 436 kegs; Cheese 29 casks; Corn 1,100 bushels; Wool 47 bales.

BUFFALO, May 5.

Several orders for flour are in market, and the inquiry at our quotations of yesterday is very fair indeed. We notice the sale of 300 bbls. mixed Michigan, principally "Waterford Mills" at \$3,75, and 300 bbls. "city mills" Milwaukee flour, a strong baker's brand, deliverable in New York, with inspection guaranteed, at \$4,50. Contracts have been made for the transportation of flour to Albany at 60 cts., which in addition to 10 cts. on the river makes the latter sale equivalent to about \$3,30 here.

We have no transactions in wheat to note—30 cts. is all we hear offered, which apparently does not meet the views of sellers. In corn there is a very fair disposition evinced to operate, and we hear of the sale yesterday afternoon of 1,100 bushels received per the Luther Wright at 43 cts.—For an invoice received per the Daniel Webster this price has been offered and refused, the holder preferring to ship. Mess and prime pork are very dull and declining, and we hear of the sale of a lot of each at \$9,50 and \$7. A moderate business is doing in bacon, and we note the sale of 10 casks smoked hams, (sugar cured and in nice order) at 53. 6,939 lbs. flour, 1,320 beef, 9,043 corn arrived by Lake.—Commercial.

Western New York Agricultural School.

THE undersigned, in connection with Gen. RAWSON HARMON, of Wheatland, Monroe Co., will open on the 1st of May next, at the residence of the latter, an **Agricultural School**, designed to teach in the most thorough and systematic manner, both the Practice and the Science of Rural Economy, in all their various branches.

The Farm is large and under a high state of cultivation, yielding annually some 1400 bushels of wheat, sold at extra price for seed, which is eagerly sought after in all the wheat growing districts of the Union. Gen. HARMON is a working practical farmer, and will devote his personal attention to the instruction of all pupils attending the School. There are now growing on the premises over fifty distinct varieties of Winter Wheat. The undersigned will have a **Chemical Laboratory** for the analysis of soils, plants, and animal substances; and no pains will be spared to make the School the most practical and useful of any in the State. Able Assistants, both in Literature and Science, will be employed, so soon as buildings can be erected to accommodate a large number of students.

TERMS—Twenty-five Dollars a Quarter, or \$100 a Year—including board, washing, tuition, &c. April, 1846.

DANIEL LEE, M. D.

Postage of this Paper!—The 'Genesee Farmer' contains but one sheet, and according to the Post Office Law, is subject to newspaper postage only. In several places subscribers have been improperly charged pamphlet postage. Those Post Masters who are at fault in the matter are requested to make the proper correction.

The Genesee Farmer.

VOLUME VII, FOR 1846.

Each Number of this Volume, (which commenced in January, 1846.) instead of SIXTEEN, contains TWENTY-FOUR LARGE OCTAVO PAGES,—is printed on NEW TYPE, and GOOD PAPER,—and embellished with appropriate ENGRAVINGS. The paper will make a handsome volume of about three hundred pages, suitable for binding at the expiration of the year. No reasonable expense or effort will be spared, but every proper exertion used to make it acceptable to the Farming community, by rendering it at once the *cheapest* and *best* paper of its size and kind in the Union.

ITS EDITORIAL DEPARTMENT will continue under the supervision of DR. DANIEL LEE, its present talented and popular Editor. ITS HORTICULTURAL DEPARTMENT will be conducted by P. BARRY, Esq., an experienced and practical Horticulturist.

TERMS, same as heretofore—FIFTY CENTS A YEAR, *in advance*; 5 copies for \$2; 8 copies for \$3.

Now is the time to subscribe! and those who wish to do so, are requested to send in their orders as soon as convenient. Persons ordering the paper will please write plainly the name of the Post Office, County and State to which it is to be sent—and also state whether they have the January number. Post Masters, and other friends of Agricultural Journals, are requested to obtain and forward subscriptions for the Farmer. Post Masters may enclose money at our risk. Address D. D. T. MOORE, Rochester, N. Y.

To Postmasters, Agents, &c.

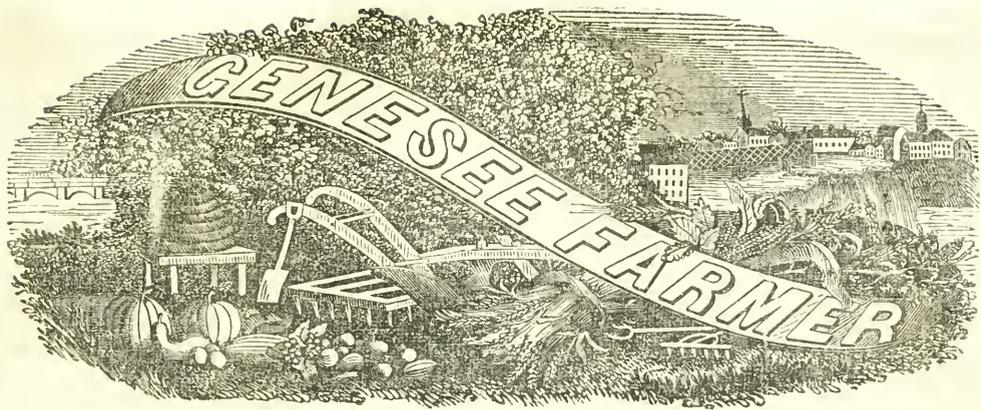
POST MASTERS and others who have interested themselves in obtaining and forwarding subscriptions for the FARMER, will please accept our sincere thanks for so generous an exercise of their influence. We trust they are disposed to continue their valuable aid in behalf of this publication—by extending its circulation, and thus enhancing its usefulness in their various localities.

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 our friends will bear this in mind, and forward the subscriptions of those who want the Farmer.

☞ 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.

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THE GENESEE FARMER:

Issued the first of each month, at 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 over the Rochester Seed Store (2d story,) Front street, nearly opposite the Market.

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. []

Bean and Pea Crops preparatory to Wheat.

GEN. HARMON has five acres in wheat, not far from one half of which was sown after beans, and the other moiety after peas. The field had been cultivated in corn, and was very even as to quality. The seed wheat was sown after the beans, without plowing, and covered with a two-horse cultivator. After the peas the land was plowed once before seeding, and the seed also covered with the cultivator. The wheat growing after the beans is twice as large as that sown on the pea field.

From other experiments and observation, Gen. H. regards a bean better than a pea crop, where wheat is to be sown in autumn. We are about to plant 15 acres in beans, to be followed by wheat, and hope to succeed in drilling them in with a corn planter.

We have not succeeded well in dropping and covering corn with a machine, although we have two different patents.

The Expense of Making Pork.

FEW are aware of the cost of making fat pork, even after the hogs have got their growth. On the 6th September, 1841, M. Boussingault put up 7 swine which weighed 1691.8 lbs., or 241.⁶⁷/₁₀₀ each. After fattening 104 days they weighed

2101 lbs.—making a gain in live weight 409.2 lbs. In the mean time they had consumed 772 lbs. of barley, 1042.8 lbs. of peas, and 9504 lbs. of potatoes, steamed.

Allowing that 3½ pounds of potatoes are equal to 1 of peas and barley, then the tubers were equivalent to 2715 lbs. of grain. By adding the weight of these three several articles consumed by the porkers in 104 days, it gives an aggregate of 4529 lbs. of grain, and its equivalent in potatoes to make 409 lbs. of live weight in pork. If the peas and barley were worth one cent a pound, then the nett gain in live swine's flesh should be sold at 104 cents per lb. to pay for the food!

These hogs had gained on boiled potatoes and sour milk an average of half a pound and a fraction each day since they were weaned.

In 1842, 9 thrifty hogs, between 13 and 15 months old, were put up to fatten on the first of October, and consumed beside dish-water and other slops, Rye, 770 lbs.; Peas, 1302 lbs.; Potatoes, 4796 lbs. They gained 344 lbs., exclusive of blood.

In this instance, by reducing the potatoes to their equivalent at 3½ to 1, it took about 9½ lbs. of grain to make one of pork and lard.

From many experiments it is rendered certain that a farmer can better afford to make 3 lbs. of pig pork than 2 of fat pork in adult hogs. Of course there is a marked difference in the breeds of swine, as to fattening and assimilating powers. The difference arises from peculiarities of organization, and perhaps disparity in vital energy, or constitutional vigor. The reason why one pig will elaborate for its owner more meat from a given quantity of corn, or other food, than another, is a curious, interesting, and useful study. Without understanding the organic structure of the animal, we do not see how the practical farmer is to improve either the symmetry or assimilating power of any one organ, or of the whole together.

WE have several communications on file for publication, some of which were received too late for this number.

Theory of Agriculture.

UNDER this head, Professor EMMONS, Editor of the "American Quarterly Journal of Agriculture," has an able and interesting article in the first number of the present year. The writer enters into an elaborate argument to prove the incorrectness of the theory of LIEBIG, DUMAS, and other distinguished physiologists, in regard to the amount of nourishment which cultivated plants derive from the atmosphere. Prof. E. has made out a pretty strong case against the views of Liebig that plants derive *none* of their carbon from the substance of the soil, or its mold. On the other hand, we think he attributes too much importance to the agency of *crenic* and *apocrenic* acids in supplying plants with the large amount of carbon which they all require to form their stems, roots and seeds. To be understood by all our readers, it is proper to remark that "crenic" and "apocrenic" are terms applied to peculiar acids, formed by decaying vegetables and animals in the soil, and precede the formation of carbonic acid and ammonia from the same simple elements. Both acids contain some nitrogen, but apocrenic more than crenic acid.

These organic acids combine with the alkalis potash and soda, and the alkaline earths, lime and magnesia, in soils to form the class of salts called *crenates* and *apocrenates* of potash, lime, &c.—They are soluble, and of course capable of entering the roots of plants, and supplying to living, growing ones, the elements of dead plants for re-organization. All European Chemists that have written on the subject, whose writings we have consulted, concur with Doctors Emmons and Jackson in regard to the power of plants to imbibe soluble crenates and apocrenates, but most of them deny that plants can assimilate the carbon contained in these acids. They were first discovered by Berzelius in mineral springs, whence their name from the Greek "*krene*," a spring.

In the north of Europe, in times of distress from a scarcity of food, the people eat certain soft minerals, or rotten stones, which abound in crenic and apocrenic acids, derived from the partial decomposition of the bodies of microscopic animals. Petzholt asserts positively that before an organized substance can be re-organized, or nourish a living vegetable, it must be fully reduced to its ultimate elements of carbonic acid, water and ammonia. In other words, that acetic, oxalic, citric, and other organic acids, as well as albumen, oil and sugar, must be decomposed to furnish plants with their natural food or constituents, in an available form.

The facts stated by Dr. Jackson in regard to the value of crenates of potash and lime as fertilizers are not conclusive, because the benefit derived from their application may be due exclusively to the *potash* or *lime* in the salt, and not

at all to the acid. It does not follow, because the acetate of potash benefits a crop, therefore vinegar alone will be advantageous. Nevertheless we do not regard the question as settled, whether organic acids of any kind are capable of nourishing plants or not. It can only be satisfactorily decided by numerous and careful experiments yet to be made.

In 100 lbs. of crenate potash, lime, soda and magnesia, there would probably be some 50 lbs. of mineral bases. The formula of crenic acid, according to Berzelius, is, 1 nitrogen, 14 carbon, 16 hydrogen, and 12 oxygen. This gives 14 of carbon in 43 of crenic acid, and probably not more than 17 in 100 parts of crenate of lime, soda or potash. In forming the seeds of wheat, corn, and oats, nature uses between 40 and 50 times more carbon than of the alkaline bases of the crenates. Hence to supply 100 lbs. of seed wheat or corn with carbon from Prof. Emmons' crenates, at least 250 lbs. of these salts must circulate through the corn or wheat plant; although only 1 lb. in the corn, and $2\frac{1}{2}$ in the wheat, of earthy matter, all told, are ever found in the kernels of wheat and corn.

This view of the subject shows conclusively that there is a great excess of the bases of crenates and apocrenates, i. e. of lime, potash and magnesia in the soil, or a great defect in the "theory" under examination. The more we investigate this subject, the better satisfied we are that nine tenths of all cultivated plants, on a fair average, are made up of constituents derived from water and air. In other words, calling the average quantity of mineral, incombustible elements in our crops at 5 per cent, the soil does not furnish more than a like amount of carbon, nitrogen, and the elements of water. For aught we know to the contrary, nearly or quite all of this 5 per cent of organic matter may be in crenic or apocrenic acid.

As little has been said of these acids in agricultural journals, we thought it not amiss to say thus much concerning them. Dr. Emmons makes out "the amount of available soluble crenates and apocrenates in an acre of soil not to exceed one foot in depth, to be above *twenty tons*." This opinion is founded on personal investigations made by Prof. E. in washing soils with cold rain water, as it falls from the clouds.

These investigations, being *original* and most trustworthily, impart to the Quarterly Journal of Agriculture a peculiar value. Although our "Theory" is a little different from that of the able State Geologist, yet we should do injustice to our agricultural friends not to commend this work to their attention as one that contains much useful information not to be found elsewhere.—Price, \$2 a year.

It is stated that the potatoe murrain has appeared in carrots and onions in England.

Salt as a Fertilizer.

WE have the satisfaction of announcing to our readers that the duty on a barrel of Onondaga salt has been reduced from 30 to 5 cents, or from 6 to 1 cent a bushel. We set this ball in motion some three years since, and have advocated the abatement of this most unequal tax on salt, both in and out of the Legislature, as many of our readers are well aware. The next step in the matter, according to our view of the subject, is to learn how to use salt in the most profitable way as a fertilizer of the soil. We read in the Bible of "salt which is not fit for the dung heap,"—thus clearly indicating that this article was used in an early day, to improve the quality of manure. The value of "the salt of the earth," not merely as a preservative of flesh, and a condiment promotive of the health of man, and his domestic animals, but as a *fertilizer*, was as well known to the ancient Jews, as to the most intelligent nation now living. Chemical science, however, has thrown some new and valuable light on the properties of this compound mineral, and the best manner of feeding it to cultivated plants.—Boussingault found that when salt was applied to a soil containing *lime*, the salt was decomposed. Its *chlorine* uniting with the lime to form the chloride of calcium, and the carbonic acid formerly combined with the lime, leaving it to unite with the soda in the salt, forming an efflorescence of the white carbonate of soda on the ground. This *alkali* thus derived from common salt is of great value in rendering silica (common sand) soluble, so that it can be taken up into the stems of plants. In case there is no *lime* in the soil, or its amount is very small, the chlorine in the salt will not be separated, and no *alkali* will be liberated. To obviate this difficulty, and at the same time form a general fertilizer of great value, in our last Report to the Legislature, we gave the following directions for using salt: "Take ten bushels newly slaked lime, i. e. ten before it is slaked, and mix it thoroughly with twenty bushels of loam or vegetable mold. Add to the heap five bushels of common salt and an equal amount of plaster of Paris; moisten till the mass is like damp earth."

The object of the loam or mold is to form a body in which the double decomposition of salt and carbonate of lime can be effected, as is known to occur in calcareous soils, when salt is sown upon the same. Perhaps ten bushels of loam, instead of twenty, would answer quite as well.

Salt being very soluble, and liable to waste, by running off into rivulets and brooks, it should be applied in small doses and often. On common limestone lands we should use only one bushel of lime to one of salt; but on most soils in this State two of lime to one of salt will be nearer the proper compound than the former.

A few bushels of salt added to a compost manure heap will be of essential service. It is also

a valuable auxiliary when mixed with ashes, whether leached or unleached. Salt, however, is not equal in value to the urine of animals, for the simple reason that the latter contains the elements of ammonia, magnesia, and phosphates, as well as the chloride of sodium. We recommend and use gypsum with salt in order to gain the benefit of the *sulphur* in the gypsum, which plants need, and salt lacks. In a word, we aim to supply each crop with the precise things that nature uses in forming the same, so far as it is wanting in the soil where the crop grows. We have no idea of making bone earth (phosphate of lime) out of pure salt, nor plaster of Paris (sulphate of lime) out of iron, silica, or alumina, or pure sand and clay. According to the analysis of LETELLIER, in 100 lbs. of the ash of Indian corn there are 50 lbs. of phosphoric acid, 30 of potash and soda, and 18 of lime and magnesia.

WASH FOR STONE OR BRICK BUILDINGS.—Take one bushel of unslaked lime; half a gallon of vinegar; 8 lbs. tallow; 8 lbs. alum; 12 lbs salt; 4 lbs. ground rice. Slake the lime with boiling water; then, while hot from slaking, add the other ingredients, (the tallow to be melted, and the rice flour to have been dissolved in boiling water,) and stir till fully incorporated; the longer it stands the better. Apply two coats with a whitewash brush.

Some of the public buildings at Washington have been washed with this composition, and experience has decided it to be the most valuable of any that has ever been employed for such a purpose.

TO PRESERVE PEAS AND BEANS.—To preserve these nutritious and excellent vegetables through the winter as sweet and succulent as when picked from the vines, can be accomplished by plucking them when green, and putting them in vessels filled with a weak solution of sugar, and boiling moderately for ten or twelve minutes, and removing them to an oven moderately warm, where they should remain till perfectly dry. They are then to be bottled and corked tight. In this way they may be preserved for any length of time, and are said to be as sweet in mid-winter, or early spring, as when first taken from the vines.

TO CURE A BURN.—A lady, preacher of the Society of Friends, in New York, was so successful in curing burns, that many supposed her possessed of the power of working miracles. The following is the receipt for the medicine: Take one ounce of beeswax, with four ounces burgundy pitch, simmered in an earthen vessel together, with as much sweet oil as will soften them into the consistency of a salve when cool—stir the liquid after taking from the fire until quite cool. Keep it from the air in a tight box or jar. When used, spread it thinly on a cloth and apply it to the part injured. Open the burn with a needle and let out the water till it heals.—*Ex.*

Agricultural Geology of Onondaga County.

The second number of the Quarterly Journal of Agriculture contains a valuable paper on the Agricultural Geology of Onondaga County from the pen of Prof. EMMONS, State Geologist, in which are embodied many original analyses of rocks, soil and waters. As the strata found in Onondaga County extend west to the Niagara river, giving rise to soils of a like character, with slight modifications, the facts set forth by Prof. E. will apply as well to the counties of Cayuga, Wayne, Monroe, Orleans and Niagara, as to Onondaga. Had we room we should copy the article entire, for we regard it as worth at least five years' subscription to the quarterly, which is but \$2 per annum. As it is, we shall draw largely from the Geological and chemical information first given to the public in this paper, and make such comments as will render the subject intelligible and interesting to unlearned farmers. For the right understanding of this class of our readers, it should be stated that all rocks are naturally divided into two classes. One class, like hard crystalline granite, was formed by the cooling of *melted matter*. The distinguishing fact that such rocks have been melted by volcanic or subterranean heat has secured to them the appellation of *Igneous Rocks*, from *ignis*, fire. The other class is formed by matter broken into small particles like the dust of the earth, soil, and sediment in water, which being deposited in layers—*strata*—and then consolidated by immense pressure and chemical affinities, constitute *Aqueous Rocks*, from *aqua*, water. The latter class is also termed *Sedimentary*, from the circumstance of the deposit of their constituents as sediment at the bottom of oceans, lakes, &c. Most of the rocks in this State are sedimentary—near the centre of which (supposing their layers or strata to be spread out over the surface of the State, like the leaves of a book, one upon another,) are the Onondaga rocks.

The thickness of the sedimentary strata below those found in Onondaga county, is about 3000 feet; while the thickness of the same class of rocks above the Onondaga strata exceeds that estimate. We wish to fix the readers attention on the fact that, the rocks formed by deposits in the bed of an ocean, which once covered, for indefinite ages, this continent, are one mile and a quarter in thickness, according to the Geological survey, and measurement. It would be too great a digression to show how the depth of stratified rocks is measured.

The rock first described by Prof. EMMONS is the *Red Shale*, which underlies the whole northern border of the county. Its greatest thickness is 500 feet. It is properly a red *marl*, of a clayey or argillaceous character, having sandy portions more or less interspersed over its surface. The analyses of this rock and of the soils formed mainly of its *debris*—comminuted fragments—present facts of great interest in practical agriculture.—

The following table shows the composition of both the sandy and argillaceous portions of the rock :

	<i>Sandy.</i>	<i>Marly.</i>
Silex,	68.25	68.86
Peroxide of Iron and Alumina,	6.25	14.98
Magnesia,	5.75	0.40
Carbonate of Lime,	10.25	9.89
Phosphate of Alumina and phosphate of the Peroxide of Iron,	00.00	0.14
Organic matter,	6.00	4.59
Water,	1.00	6.48
	99.50	99.25

The sandy variety was taken from Canastota, in Madison county; the marly from Kirkville, Onondaga county.

The following are the constituents of the soil formed of the sandy variety of red shale :

Water,	1.50
Organic matter,	2.50
Silex,	85.00
Peroxide of Iron and Alumina,	8.12
Carbonate of Lime,	2.17
Magnesia,	0.12
Phosphate of Alumina,	1.00
	100.43

The above analyses reveal the curious fact that the native rock contains more than twice as much "organic matter" as the soil—the latter having only 2½ per cent., and the former 6 per cent.—Although the fact is not so stated, it is probable that this specimen of soil has been cultivated, and a portion of its organic matter consumed by decomposition and the culture of plants.

In the rock there is 5.75 per cent of magnesia. In the soil only .12 per cent., or $\frac{1}{10}$ of one per cent. This shows that, as the salts of magnesia are very soluble, they soon disappear, or nearly so, from the surface soil of cultivated fields. In the rock there is over 10 per cent of carbonate of lime. In the soil only 2.17, or one-fourth the quantity in the parent rock. Lime too, on limestone rocks, goes fast. The silex—sand—being insoluble, has increased, relatively, from 68.25 to 85.00 per cent. In our public lectures, and through the columns of this journal, we have long endeavored to impress on the minds of farmers that the soluble alkalies, and the alkaline earths, as well as the organic elements in their soils, are constantly being dissolved and washed away, by rains and snows, into creeks and rivers. Hence, the stirring of the surface of the earth with the plow, harrow and hoe, without cropping, will exhaust a field of its fertilizing elements.

Prof. E. well remarks that this red shale or marl may be advantageously used as a top dressing, especially for improving wheat lands. It is doubtless to be found in Wayne, Monroe, Orleans and Niagara counties, although we are not sufficiently acquainted with localities to name them. On the Geological Map of the State, the Onondaga "Salt Group" is laid down as extending in a narrow belt up the valley of the Genesee river to Fowlersville, in Livingston county, although Batavia is some miles south of its southern line in Genesee county.

We shall refer to this subject again, and would be happy to see an accurate geological map of Western New York, on a much larger scale than is adopted in the one which embraces the whole State. Western New York has mineral treasures, adapted by Providence to the production of grain, which deserve to be better known and appreciated by its rural population, than they now are.

The second division in the Onondaga rocks is the Gypseous Shales. This rock comes to the surface in this town, (Wheatland,) which we are now studying, and shall report progress in the Farmer for July. In concluding, we again commend the Quarterly Journal of Agriculture to the attention of all Western New York farmers.

Apropos of Farmers.

I know a farmer who has but fifteen acres of land, off of which he supports his family—he continues to get 40 bushels of wheat from an acre, and from 50 to 70 bushels of Indian corn, besides corn fodder in abundance. Instead of impoverishing his lands by these heavy crops, such is his economy in saving, making, and applying his manures, that his farm grows richer. This farmer applies his knowledge of figures to his own calling. He says he cannot afford to grow half a crop, as the deterioration in fences, and the interest of money on hand is the same, crop or half-crop. It is needless to say that this man takes two agricultural papers.

I know another farmer who has 78 acres of land, a fine calcareous clay loam, ameliorated by quartz and limestone pebbles, with a sprinkling of small boulders. He barely subsists his family, in a very *primitive* way, on the avails of his 78 acres. His corn-field is plowed, or rather half plowed, late in the spring, the weeds run a race with the late planted corn, until late in June, when the hoe and the plow give the stunted plants the end of the race. Now comes a drouth—the already enfeebled plants have no organic power to make the extra heat available; hence they are pinched by that very influence which gives fruition to the well-tended and early planted field. But the drouth has at least served this man with an excuse for his short crop of Indian corn; thus saving his pride at the expense of his pocket. His wheat fallow is a little better managed than his corn-field, but his crop is always foul, sometimes short, and the grains generally shrunk. To bring the year around without running into debt, this man pinches his family in the ordinary comforts of civilization; go to his house in a winter's day, ten to one he is asleep on his bed, or sitting cosily by the fire. Ask him to subscribe for an agricultural paper and he is no longer cosy; all the Goth and Vandal in him is aroused. "I want no book to teach me how to farm. Look at my neighbor Progress—he is a book farmer. What use are his Durhams, and Berkshires, and all his big crops? He spends

it all; it only makes his family proud; how mad it makes me to see his children sent by every day to the village school." I do not retort upon this man the fact, that his district school cannot be respectably sustained, because the district contains too many such men as himself. I let him alone in his glory. I assail no man, who, like the hedgehog, is armed at all points.

I know another farmer, a mild, quiet German, who seems instinctively to have that German love of the beautiful and true, which is only an acquired taste with us restless Americans. While we strain after the ultimate good, they quietly improve that which is within their reach. This man's farm gives an earnest of the industry and good sense of its proprietor. Not a thistle, nor a briar, no aldar bound fences; all is neat, clean, and arable. The house rather plain; if it displays no taste, neither is it like too many of our fine farm houses,—a caricature on all orders, and good taste to boot. The barn is large, well ventilated, with painted blinds; the fences permanent and strong; what is lacking about these premises in ornament, is amply made up in neatness, and the appearance of positive comfort.—This man modestly says, "*Ich con night guth Engl'sh lexen.*" Still he takes the papers, and the well thumbed leaves of his last year's Cultivator, show that its contents have been understandingly read by him.

I know another farmer, a gentleman, a scholar, and a christian, so far as the fashionable modification of christianity will admit. He complains that he cannot farm by book, because his hired men object to the drudgery of the prescribed preparations. He speaks twice to his horses, where he condescends to speak once to his men. Yet, strange to say, he boasts of the cleverness of his horses, while he complains of the intractability of his men!

I know yet another farmer, if you please, a new beginner, but an enthusiast in his calling. He soon found that he could do nothing by way of improvement, without awakening in the mind of his head man, or factotum, an enthusiasm akin to his own. This man at first demurred to hauling swamp muck into the barn yard, lest it should spoil the manure. Now he has become an ardent student in vegetable economy, and in the philosophy of vegetable growth and nutrition, as it is taught in the agricultural papers of the day. Here is at least one laboring man, exalted from the character of a mere mercenary drudge, to be a respectable co-worker with the Chemist in his laboratory, and on a grander scale.—*Cultivator*. S. W.

Waterloo, April 7, 1846.

By adding two and a half drachms of carbonate of soda to three pounds of fresh or salt butter, possessing a disagreeable flavor, renders it perfectly sweet.—*Far. Herald*.

Preparing Wool for Market.

THIS is an important matter to the wool grower, and one which is very often sadly neglected. In preference to writing any thing of our own on the subject, we copy the following directions from "Morrell's American Shepherd,"—a work that should be in the hands of every American, whether he keeps a sheep or not, for it is worth twice its cost as a treatise on an interesting branch of Natural History.

ROLLING THE FLEECE.

After the shearer has performed his task, the fleeces must be carefully taken from the floor, and put upon the rolling table, the outside of it uppermost. The valuable loose locks about the shearer's stand must all be picked up, and the useless stuff from the legs, &c., put into a corner, bag, or basket. It should not be swept out of doors, as it possesses valuable properties for manure.

The roller then proceeds to spread out the fleece, which cannot be too carefully done, separates the ragged portions from the skirts and head, and then makes it as compact as possible by pushing from all sides towards the centre.—The loose wool is then thrown upon the fleece, which is followed by turning over the sides and ends so as to form an oblong stripe, say about two or three feet long, and one and a half wide, which is moved to the front edge of the table. He then commences to roll the long side of the stripe, aided by a boy at the other end of it, who lay their arms flat from the elbow to press the wool as the rolling proceeds, till the stripe is reduced to six or nine inches in width, depending on the size of the fleece. The boy then mounts upon the table, and each commences rolling from the ends of the stripe till the parts meet, when the boy rolls his portion on top of his assistant's, firmly pressing it till the twine is passed round both ways and tied, which effectually secures the fleece, no matter how roughly handled. After it receives a slight pressure, it presents somewhat the form of a cheese.

There are other modes of putting up fleeces, performed without any aid; but the writer has yet to see that individual who alone can roll a fleece as firm and solid as it should be, at the same time giving it a symmetrical and attractive form. If it is loosely rolled, the quantity of canvass used for packing is necessarily much increased; and this item of extra expense is more than equivalent to the services of a lad as an assistant.

ARRANGEMENT OF WOOL FOR SALE, &c.

The slovenly manner in which wool is rolled and afterwards prepared for exhibition to the buyer, deserves a passing remark.

The wool-grower should keep before him the motto of the shopman, "goods tidily kept are half sold." This applies with equal propriety to

everything saleable by the farmer, and to nothing with greater force than his wool. They are too prone to get along with this matter in a "rough and tumble" style, doing up the fleeces untidily, and then depositing them in dark and uninviting places for exhibition. If wool has been well cleansed, it will not be ashamed of too much light; if only half washed, a dark corner only aggravates its appearance. There is an art in disposing wool for sale, which enables the flock-master to put his best foot out, and yet be guiltless of artifice to deceive the buyer; on the contrary, increases his opportunity to judge accurately of everything appertaining to condition and quality.

The adoption of the following will carry out the writer's views and practice:—

First, against one, or all sides—if necessary—of the wool-loft, let four or five tiers of fleeces be placed upon top of each other, as nearly alike as to size as possible; the next pile, one tier of fleeces less, and so on diminishing the succeeding piles one tier, till the last is reduced to a single one. In this way, the fleeces represent piazza steps, or perhaps more properly, the ascending seats of an amphitheatre. It will readily be conceived, that if the fleeces have been neatly rolled and adjusted, the whole is not only attractive, but saves the buyer much time in overhauling it, which is unavoidable if disposed of in a bin, or piled in any other form. This constitutes one of those "inviting appearances" which the world delight to gaze on, and which the world are sometimes disposed to pay a *little* beyond the intrinsic value for the sake of possessing. Let the flock-master *honestly* tag his sheep and cleanse his fleeces, and put nothing *within them* but the "clean thing," and the inviting scene before the buyer cannot mislead, or deceive him afterwards.

This leads to an exposure of other "cheating practices" of wool-growers, alluded to by Mr. Samuel Lawrence, under the head of "washing." In a communication to the writer he states the following:—"The practice of inclosing in the fleece clippings, &c., is too common, and should be discouraged by manufacturers. I have known six ounces of this useless stuff taken from one fleece. There is another practice equally disgraceful—the use of five to twenty times as much twine as is necessary. A short time since I took sixty-six feet of large twine from one fleece."

No further comment is necessary, than to say, that any flock-master who will put tag or dung locks, clippings, &c., in the fleece, with a view to increase the weight, for such is the motive, is committing a gross fraud, and in every instance of discovery, his crime should be exposed to the public for reprobation.

In addition to excessive quantity of twine, it is not unusual for the size to be adapted almost as well for rope-traces, as tying of fleeces. It should be about half the size of a pipe's tail, as smooth as possible, otherwise, the fibres of flax,

hemp, or cotton are intermingled with the wool; the carder cannot dislodge them—they receive the dye imperfectly, and consequently deface the surface of the cloth.

SHEARING-HOUSE AND APPENDAGES.

Flock-masters are subjected to many inconveniences for want of an appropriate place for shearing, with the necessary appendages of pounds, &c. The expense of a shearing-house is not large, and will amply reimburse the expense in a few years, as it can be used for the reception of farm implements, &c., when the shearing is over, and wool removed.

The fence for the pounds should be constructed of posts and boards; two are required, and the one contiguous to the shearing-house need not be more than twenty feet square; the other may be much larger.

It is very important that the wool-loft should be well lighted. No matter how well the fleeces may have been cleansed, yet if there is a deficiency of light, they present a dingy aspect.—One window of good size is all that is necessary at the south end, and two will be required at the opposite or north end, for the reason that from that quarter the light is milder, and gives the wool, if fine, a softer and more silky appearance. Wool sorters always give a “north light” the preference.

The trap door for suspending the sacks when packing, should be in a central part of the floor, which leads to the subject of

BALEING WOOL.

The article commonly used for baling is termed by the merchant, *burlaps*, which varies in width from 35 to 40 inches; the latter is preferable. The quantity necessary for a sack is three yards. A truss hoop is used, around the rim of which the mouth of the sack is twisted, and is then placed on a square frame just large enough to permit the rim of the hoop to rest. The elevation should be sufficient to clear the sack from the lower floor, when suspended. Some half dozen fleeces are then thrown in for a layer, followed by a man who carefully adjusts and treads each successive layer, till full. Generally, there is quite too much haste in this matter, and consequently the wool is too loosely packed, and an extra quantity of canvass is made necessary. It will be well before the packing commences, to stuff the bottom corners of the sacks with wool clippings, and tie them, which afford handles for lifting the bales.

Scours in Sheep.

At the suggestion of a friend who has proved its efficacy by experiment, we copy the following remedy for this disease from the *Complete Grazier*, a valuable English work:

“The *Flux* is a diarrhœa, or looseness, that attacks sheep that suddenly come to full feed,

after having been stinted; though it is sometimes occasioned by their eating the plant known by the names of may-weed, maythen, or fetid chamomile (*Anthemis cotula* of Linnæus.) In general, the flux is not attended with any dangerous consequences, and usually disappears in the course of a few days, in dry weather. Should it, however, continue longer than a week, it will be proper to give them some well-dried, sweet hay, and a decoction of clover flowers, with the addition of a little barley meal; allowing them neither any salt, nor to feed on any saline plants near the coast. But it is evidently the farmer's interest to give these useful animals a regular supply of food, as the weakness occasioned by the flux must necessarily reduce their condition.”

TALLOW AND TRAIN-OIL, AS A SALVE FOR SHEEP.—In the *Highland and Agricultural Society's Transactions* for 1844, pp. 271-273, an article appeared, recommending the use of tallow and train-oil, in equal parts, as a salve for sheep; and, in reference to that article, a gentleman in Argyshire, skilled in the management of sheep, writes as follows, under date the 9th July last: “The salve I used for my sheep last autumn (viz. one half tallow to an equal proportion of train-oil,) has in every respect answered the description given of it in the *Society's Transactions*; and one of my tenants whom, with some persuasion, I got to smear thirty of his flock with that mixture, admits that they are in better condition than any of the others; that the wool will weigh as heavy as that done with tar and butter; and that he will get the price of white wool for it. The expense last year was a little greater than tar and butter, as I paid 1s. 6s. a pint for oil, and 6d. a pound for tallow; but this year I shall get oil for 1s. a pint, and if a quantity is required, a lower price.—*Edinburg Journal of Agriculture.*”

MUTTON.—We mean to repeat at least a thousand times, or till what we say has some effect upon our countrymen, that a pound of lean, tender, juicy mutton, can be raised for half the cost of the same quantity of fat pork; that it is infinitely healthier food, especially in the summer season; is more agreeable to the palate when one gets accustomed to it; and that those who eat it become more muscular, and can do more work with greater ease to themselves than those who eat fat pork. We know nothing more delicate than smoked mutton hams of Southdown breed of sheep—venison itself is not superior. Sheep can be kept in fine growing order, where other domestic animals will scarcely exist, and thousands of acres in the State, under an enlightened system of sheep husbandry, may be made to pay a good interest, where now they are nearly dead property in the hands of their present owners.—*Amer. Ag.*

Root Culture.

The following article was received some time since, and intended for publication at an earlier period. We regret that it was overlooked in making up our two previous numbers, but think it will be found interesting, even at this season.

Report of the Committee on Root Crops, read before the Agricultural Society of Pavillion and Corvington, (Wyoming Co.,) on the 16th of October last:—

YOUR Committee feel very sensibly their deficiency in making *such* a report upon Root Culture as the importance of the subject demands; for the very obvious reason, that they, in common with the generality of the agricultural portion of the community, have not bestowed that attention to the culture of roots, which would enable them so to do. Yet, firmly believing that large matters not unfrequently spring from those of a less size, and likewise that we are not to "despise the day of small things," we now proceed to place before this Society the fruits of our research and experience.

Your Committee understands by Root Culture, the raising of Turnips, Beets, and Carrots, in the field, for Stock. This, like other subjects of a similar kind, naturally divides itself into its utility and treatment.

Its utility, we aver, is abundantly manifest, when we consider the great amount of succulent food that can be raised from a quantity of land—the great value that food is, in feeding working, fattening, and milking animals—the conduciveness to health and comfort on the part of the animals which are fed with it during the inclement season of the year—and, as this is a matter of dollars and cents, we would say, its utility pre-eminently appears in the quantity and improved quality of the barn-yard *manure*. These are reasons sufficient, we think, why farmers should be encouraged to give this subject more of their attention.

There is almost an endless variety in every species of roots; but it will answer our present purpose only to notice those which are adapted to our climate and can be profitably cultivated, viz: the Swedish Turnip (or ruta бага,) the long yellow and large white Carrot, the large Sugar Beet, and the Mangle Wurtzel.

Which of these will be most profitable to cultivate, is a quere to be answered by the farmer himself, and must have reference to the soil upon which they are to be propagated, and the animals to which they are to be fed.

The carrot is the most nutritious and best for horses; it is more difficult to raise, and does not yield so much per acre, and is not so profitable to raise for cattle. The long yellow requires a light and deep soil, as they grow under the surface, and generally go to the depth of the soil;

they also produce bountifully in black, mucky ground. The long white requires stronger and firmer ground, as they grow mostly above the surface; they will grow on stiff clay if rich: indeed they will produce well on any *good* wheat land.

For milking animals, and especially cows, whose milk is intended for family use, the beet is much the best. The large sugar beet is more nutritious than the wurtzel, but is more difficult to gather, owing to its roots; and being firmer, is not so easily masticated, and does not generally yield so bountiful a crop. Upon the whole, it is not so profitable as the wurtzel, excepting seasons of intense draught, such as was the past, which affect it more than the beet. Like the large white carrot, they delight in a strong soil, growing mostly above the surface.

The Swedish turnip is an excellent root for fattening animals, and is most productive on light sandy or gravelly soils.

A rich soil, frequently and thoroughly pulverized and kept free from weeds, are the primary essentials for raising a bountiful crop of roots.

The ground should be heavily manured in the fall, the manure spread, and remain upon the surface until spring, when it should be plowed in early, and deep. As soon as dry, harrow it well, and let it remain till near planting time; then harrow thoroughly, and ridge it; the ridges will do at 2½ feet apart; mark on the ridge 2 inches deep with a marker or hoe; drop the seed in the mark thus made, and cover with a rake or hoe. Sow the last week in April or first in May, as it is essential to the vegetation of those seeds, to sow when the ground is moist. Sow 2 lbs. of carrot, or 2 lbs of ruta бага seed to the acre; 4 lbs. of beet or wurtzel, or 3 lbs. beet or wurtzel with half a pound ruta бага seed; the latter mixture is considered preferable, as the turnip supplies the defects (if any) in the beet.

The habits of the sugar beet and wurtzel are the same, and require the same treatment. In preparing the seed, it will be necessary to soak the ruta бага in tanner's oil 48 hours; carrots and beets the same length of time in soft water moderately warm; then pour off the water, keep the seed moderately moist and warm, occasionally moving it until it begins to sprout, which will be in two or three days. Should anything prevent from sowing at the time contemplated, keep the seed cool, stir it twice each day, and it will not sprout to injure it. Roll the seed in plaster or flour to prevent its sticking, and enable the sower to execute his work properly. When the plants come up, care must be taken to keep them clean. When they have acquired some advancement, they must be thinned out; the carrots from 3 to 6 inches; beets 4 to 6; wurtzel from 8 to 12. The beets and wurtzel will do for table use, until the 15th or 20th of August. They should be secured before hard frosts set in—light ones

will not injure them. If not to be kept in a cellar, they must be put in long narrow heaps, with apertures in the top, which must remain open till the weather becomes severe, as they are liable to heat and especially the carrot.

Your Committee has endeavored to point out the reasons why root culture is of general utility, and especially to the wheat growers of Western New York, whose large stacks of straw, unaided by roots, afford very little food for plants. They have likewise endeavored to point out the adaptation of soil, the mode of culture, and likewise how to secure the roots when harvested. Yet, the frequent droughts in summer, the early frosts autumn, the low price of stock, and the high price of labor, are likewise reasons, in the minds of your Committee, why farmers should not go very extensively into the culture of them.

WILLIAM McVEIGH, }
 JAMES CAMERON, } *Committee.*
 WILLIAM HENRY, }

For the Genessee Farmer.

Ladies, Write for the Farmer!

MR. EDITOR:—It gave me pleasure to observe an article, in your May number, from the pen of "A Dairy-woman of Herkimer County"—for, though not originally contributed to the columns of your paper, it is gratifying to learn that there is one female, at least, willing to contribute her influence to sustain the efforts of those engaged in attempts to improve and elevate the business of Agriculture and Domestic Economy. The example is praiseworthy, and deserves imitation.

The idea suggested itself to me, and I venture to express it for the consideration of yourself and your numerous readers, (among whom I conclude there are females of extensive information and cultivated intellect,) that the GENESSEE FARMER might be made more interesting, without detracting from its real usefulness, than it is even now, by the aid of some of the well educated wives and daughters of our farmers. I hazard the opinion, subject to correction if wrong, that the conductors and patrons of the Farmer have no particular desire that its pages should be monopolized exclusively by male contributors. Why should not the female have a voice in matters with which she is so intimately connected? And why should she not feel a just pride in giving her influence to so noble a cause?

It is not for me to dictate, and it is with due deference that I suggest that some portion of the Genessee Farmer, either in the Agricultural or Horticultural, or in both departments, be assigned to female contributors, and they be invited to write for the same. And to them I would say, withhold not your influence in a cause which is among the noblest that can enlist the talents of the sons and daughters of men. While so many are ready to devote days and weeks in the composition of tales of fiction—which, to say the

least, are of doubtful benefit to the world—are there not some to be found, willing to devote an hour or two for the purpose of improving others in domestic and rural economy?—in those real, substantial, every-day duties of life?

AGRICOLA.

West Bloomfield, May, 1846.

REMARKS.—We thank "Agricola" for the above suggestions. It will give us great pleasure to publish in either department of this journal, any article that will be interesting to the wives and daughters of our subscribers, coming from a female mind and hand. Recollect that it is the little things of every day occurrence that most concern us all. Hints on matters of domestic economy, from their universal application, may be of immense value to civilized society.

WATER PROOF GLUE.—We give the following different methods of preparing a strong glue or cement, that will withstand heat and moisture, from the *Scientific American*.

1. Melt common glue in the smallest possible quantity of water, and add, by drops, linseed oil that has been rendered dry by having a small quantity of litharge boiled in it; the glue being briskly stirred when the oil is added.

2. Glue will resist water to a considerable extent by being dissolved in skimmed milk.

3. The addition of finely levigated chalk to a solution of common glue in water, strengthens it, and renders it suitable for signs or other work that is exposed to the weather.

4. A glue, or cement, that will hold against fire and water, may be made by mixing and boiling together linseed oil and quicklime. This mixture must be reduced to the consistency of soft putty and then spread on tin plates and dried in the shade where it will dry very hard. This may afterwards be melted like common glue, and must be used while hot.

FARM SCHOOL BOYS.—Among the interesting events of May Day, was that of a visit to the city of 40 (out of 70, the whole number,) Boys from the Farm School. After visiting several places, they were met at 1 o'clock, by Mayor Quincy, in the area of the Merchant's Exchange. Here they went through various exercises; sung a May morning hymn, much to the gratification of numerous spectators, and were very feelingly addressed by the Mayor, who expressed his high satisfaction at their cheerful, healthy, happy appearance, and encouraged them to be obedient, grateful and good boys, contrasting their favored lot with that of others who were exposed to the corrupting influences of the city.—*Boston paper.*

To feed land before it is hungry—to give it rest before it is weary, and to weed it before it becomes foul, are said to be evidences of good farming.

Agricultural Meeting in Homer.

PRESENTATION OF A SILVER CUP TO MR. WOOLWORTH.

AT a meeting of the farmers and citizens of Homer, at the close of Mr. WOOLWORTH'S course of lectures on Agricultural Chemistry and Geology, in March, it was resolved that, as a testimony of gratitude and esteem, they present him with a SILVER CUP. A committee, consisting of MESSRS. PARIS BARBER and GEORGE W. CHAMBERLAIN, was appointed to select and purchase the cup. A committee was also appointed to prepare resolutions expressive of the sentiments of the meeting, consisting of Dr. E. MUNGER, Mr. AMOS RICE and Dr. C. GREEN.

Pursuant to a call of the committees, the farmers met in the Academy Hall, on the evening of the 14th inst., Mr. PARIS BARBER in the chair.—There was present a large and respectable audience of ladies and gentlemen. The committee on resolutions presented the following report :

Whereas, S. B. WOOLWORTH has, during the past winter, given a course of lectures on Agricultural Chemistry and Geology, in the lecture room of the Academy, and has politely and generously given to the farmers and citizens in the vicinity the privilege of attending the course gratuitously; and whereas we recognize in this first effort, in this country, of imparting to the cultivators of the soil a knowledge of Chemistry as applied to agriculture, an advance towards that eminence to which we believe the farmers of New York will ultimately arrive; therefore,

1. Resolved, That we have been highly gratified in listening to this very able, lucid and practical course of lectures, that we have felt ourselves instructed in the great "art and mystery" of farming, and believe we may by adopting the principles laid down by the lecturer prosecute our high and noble calling with a fairer prospect of success.

2. That this effort of Mr. WOOLWORTH has not been that of an *adventurer*, for knowing the practical bearings of the principles of Agricultural Chemistry, he was willing to become a laborious pioneer in the noble enterprise of imparting chemical and geological science to farmers, and that, therefore, our gratitude is doubly due to him for this course of lectures.

3. That the clear and familiar manner in which these subjects have been presented—rendering them readily understood by those who had not hitherto attended to Chemistry as a science—fully demonstrates the practicability and usefulness of such courses of lectures.

4. Therefore that we earnestly recommend the institution of a similar course of lectures and instruction as that given by Mr. Woolworth in each of the various academies and high schools of our State, believing most firmly that the effect would be a most marked elevation of the condition of farmers, both in point of respectability and wealth.

5. That the objections to "book farming" cannot exist in the minds of those who are acquainted with the principles of Chemistry and Geology and their application to agriculture.

6. That, as a testimonial of our gratitude and esteem, we present Mr. Woolworth with a SILVER CUP, of which, though it by no means measures the extent of our regard for him, we beg his acceptance.

The report was followed by a short but highly interesting address by Mr. A. RICE, on the improvements in agriculture within the last quarter of a century. It was truly gratifying to listen to his account of the rapid progress in every department of farming within the last 10 or 15 years, and contrast it with the comparatively low condition in which it existed thirty years ago. What may we not expect, with the present ratio of im-

provement in the next 25 years? Mr. Rice having been selected by the committee to present the CUP, closed his remarks by a neat and appropriate address to Mr. WOOLWORTH, presenting him a plain but elegant silver cup, bearing on it an appropriate inscription. This was acknowledged by Mr. WOOLWORTH in a few chaste and cogent remarks, stating among other things of interest, that in the course of lectures alluded to, he had presented only some of the leading principles of agricultural science, but that he designed, at the next winter session of the Academy, to enter more fully into the subject and present it in a more extended manner.

We trust that these laudable efforts of Mr. Woolworth will be seconded by a full representation of farmer's sons in the Laboratory, and encouraged by the presence of the tillers of the soil in the vicinity.

A committee was appointed to prepare an account of these proceedings and secure its publication in the papers of the county and the agricultural journals of the State.

By order of the Committee,
Homer, April, 1846. C. GREEN, Ch'n.

CRANBERRIES.—This excellent fruit is very productive, and may be successfully propagated in fields and gardens, and indeed in any place and situation almost, where the soil is moderately humid and secure from the stultifying effects of drought. The most successful methods of transplanting the vines is to take them from the meadow in large tufts, and set them in holes from 3 to 4 feet apart. Manure formed from mud or muck from low humid places, and especially from the meadow or bogs where the plants grow spontaneously, is the most salutary of any in its effects, and is generally to be preferred because easily obtained. The fruit of the Cranberry is highly prized. In most markets it commands readily from one to three dollars a bushel.—*Sci.*

MAHOGANY STAIN FOR WOOD.—1. Linseed oil, 2 pounds; alkanet, 3 ounces. Heat them together and macerate for six hours, then add resin, 2 ounces; bees' wax 2 ounces. Boiled oil may be advantageously used instead of the linseed oil.

2. Brazil wood (ground;) water sufficient; add a little alum and potash. Boil.

3. Logwood, 1 part; water, 8 parts. Make a decoction and apply it to the wood; when dry, give it two or three coats of the following varnish; Dragon's-blood, 1 part; spirits of wine 20 parts. Mix.

MAHOGANY VARNISH.—Dark gum anime, 32 parts; dark oil, 100 parts; lithare, 1 part; sugar of lead, 1 part. Boil until stringy, then add, when cooled a little, spirits of turpentine, 175 parts. Mix, and strain well. }

Experiments on Sowing Corn for Fodder.

It is not often, in these advancing days of knowledge in farming, that we find a series of experiments conducted with more accuracy than were those which follow. I have procured them from the son of the farmer who conducted them, and the notes are the original ones, in the hand writing of the farmer himself. I wish it were more common for our farmers to make accurate memoranda of every thing they do. But to the experiments. They are as follows.

1. On the 1st of June, 1828, S. B. sowed in a drill *bird corn*, very thick, on account of its smallness. The kernels were sown about one inch apart, or, in other words, one kernel to one inch square. The size of the bed sown, was $9\frac{1}{2}$ feet by 3 feet. The produce was cut on the 25th of August, and weighed fifty pounds in the green state. The proportionate produce per acre would be $34\frac{2}{10}$ tons, green fodder.

One month after, say about the twentieth of September, the product weighed, when perfectly dry, $17\frac{1}{2}$ pounds, which would give per acre about 12 tons dry fodder. This kind of Indian corn is called *bird corn*, and half a pint contains 2400 kernels, or 307,200 to the bushel. One quart will sow 66 square feet, and it contains 9600 kernels.

Rhode Island corn is next best, and contains 566 kernels to the half pint. One quart contains 2264, and will sow sixteen square feet.

Eight rowed corn is next, half a pint containing 580 kernels; quart, 2320 kernels, and will sow 16 square feet.

Next is flour corn, half a pint containing 360 kernels; one quart, 1440 kernels, and will sow ten square feet. Southern or gourd seed corn ranks the same as this exactly.

2. Friday, May 29th, 1829. Sowed 19 quarts of flour corn on 150 square feet of ground. It yielded 14 bundles of corn fodder, which weighed 58 pounds. It was cut on the 8th of September, and secured on the 4th of October. Yield per acre, 7 tons, 10 cwt., 1 qr., 15 lbs.

3. Friday, May 29th, 1829. Sowed 8 quarts of southern or gourd seed corn on 150 square feet of ground. It yielded 9 bundles, which weighed 38 pounds. It was cut on the 8th of September, and secured on the 4th of October. The yield per acre was 4 tons, 18 cwt., 2 qrs., 3 lbs.

4. May 30th, 1829. Sowed eight rowed white corn on 130 square feet of ground. Gathered 12 bundles, which weighed 51 pounds. It was cut on the 8th of September, and secured Oct. 4th. Yield per acre, 7 tons, 12 cwt., 2 qrs., 8 lbs.

In this experiment the quantity sown is not mentioned, but was probably the same as in the 2d experiment.

5. June 12th, 1830. Sowed 3 bushels of tall corn for fodder, on a piece of land 92 by 32 feet. Cut on the 1st of September. Gross weight, 1

ton, 10 cwt., 0 qr., 16 lbs. Neat weight, 579 lbs.

The weather was very dry from the 12th of June to the 1st of September, which is two months, eighteen days. I am confident it was not near half a crop. If it had been sown earlier it would have been better.

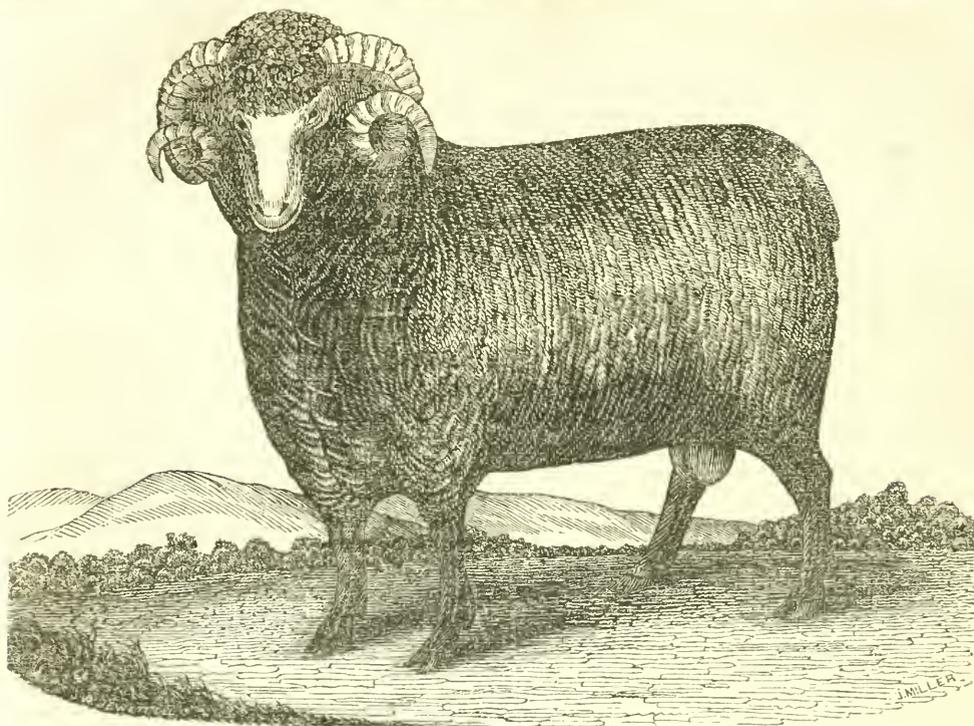
I will here add one thing more from the note book of this farmer, for he seems to have been rather a curious man.

May 3, 1832. Counted the grains or kernels in half a pint of broom corn. They are 4850, or 1,241,600 in a bushel.

Now how easy it would be for every farmer to keep a little note book, in which he could put down any thing he does, and preserve it for the benefit of others. It would produce habits of confidence in himself, and encourage such habits in others. Every boy and girl brought up on a farm, should be obliged every day to note down every thing they do, and at night to make up a full journal of the whole day's operations. By this course they would soon become intelligent and observing.—*Am. Quar. Journal.*

KINDNESS BETTER THAN FORCE.—If you want your horse to work well, you must endeavor to make it happy; happiness increases its strength and energies, and unhappiness diminishes them. When you find it is weak in any particular point, do not press and harass the weakness, but show it indulgence. Do not urge it to do more than it is well able, as the more it is compelled to do to-day the less it will do to-morrow. When you find your horse begins to slacken his speed, do not recklessly compel him to maintain it, but think how *you* yourself would like to be thus urged on beyond your strength. Do not worry your horse by repeated whip strokes; as every blow robs the animal of some of his strength, and continual blows rob it also of the motives to exertion by the violence of the strokes on the skin, and also affect the muscles underneath on which the motions depend. If any person doubts this, a slight blow on his arm or leg will soon convince him of the truth. If you have two horses working together, and one horse is slower or weaker than the other, do not force it to do as much as the other, but rather slacken the speed, if even it is done by keeping the other horse back; and never use *bearing reins*; they are useless to the driver, vexatious to the horse, and are the cause of many falls; but above all, be not too fond of showing them that you are their master and they your slaves; they know it well enough to their sorrow and without this trouble.

It is important to all invalids to know that castor oil may easily be taken mingled with orange juice—a little sugar being added to the juice, if the orange be not ripe and sweet. The difference between this and other modes of taking this valuable medicine is surprising.



Reed Burritt's Paular Merino Buck "Major."

MR. EDITOR:—The accompanying drawing is a very correct portrait of one of my stock bucks. It was taken by S. W. JEWETT, of Vermont, by whom he was bred. It is designed to represent him in his fleece at 10 months growth. He is three years old, and for size, symmetry, heft of fleece, and uniformity of fineness, he is seldom if ever equalled. He took one of the premiums at the New York State Fair, last September, and in October following the first premium at our County Fair. He was shorn when a yearling, but the weight of that fleece I do not know.—At two years old he was not shorn; of course the fleece that is now on him will be two years growth next month, (June.) He will not shear as heavy this year, accordingly, as if he had been shorn last year. It will probably weigh 16 or 18 pounds. His wool is now full six inches long on his sides, and very thick, but not as thick as it would be had he been shorn last year.

When I purchased "Major" of Mr. JEWETT, in April 1845, I also bought of him a yearling buck and 14 ewes, 10 of which were with lamb by his celebrated buck "Fortune." At the same time I bought 13 ewes of J. T. RICH, of Vt., which were with lamb by his noted buck "Consul," the sire of "Major" and "Fortune."—Also, in October last, I purchased of Mr. Jewett five ewes, and five of Mr. Rich, which, with the lambs that I have raised, gives me a flock of

about 60 of pure bred Spanish ewes, and of the Paular stock. The yearling buck that I had of Mr. Jewett last year, sheared 7 lbs. 14 oz., well washed on the back; the ewes gave a fraction less than 5 lbs. each, and were shorn two weeks earlier than they were the year before in Vt.

This Paular variety is allowed to be the largest, best formed, and heavier shearers than any other kind of Merinos. They are a very hardy animal, and always look full and plump, if they can get any thing to eat, and are able to shift on very scanty keep. They are also very tame and docile; a fence three feet high is sufficient to keep them. They are very prolific, fond of their young, and good milkers. Their lambs are strong and easily raised; it is seldom that we lose over 4 or 5 per cent. The weight of my fleeces this year I will give you in time for your July number.

And now permit me to say to the wool growers who wish to obtain good and pure bred Merino buck lambs next fall, that I shall be happy to accommodate them. I have been very careful to obtain not only the *simon pure*, but of the best quality. I gave \$25 per head for the ewes that I bought with lamb, and the expense of getting them here (over 300 miles.) was \$3 per head more. And now if I ask \$10 per head for my buck lambs, that are first quality, I presume no one will think me unreasonable; and as I live

near the Seneca Lake, can ship them to any port to which they may be ordered.

Very respectfully yours,
REED BURRITT.

Burdett, Tompkins Co., N. Y.

A PHILOSOPHICAL AND PRACTICAL TREATISE ON THE POTATO DISEASE. By THOMAS CROFT, Wilkesbarre, Pa.

THE Author of the above has contrived to condense many historical facts connected with the Potato Disease within the small compass of eight pages, and a prescription of appropriate remedies. His theory is that the disease arises from a deficiency of *alkalies*, although he speaks of an excess of *carbonic acid*. In regard to the excess of acid, the evidence is not satisfactory to our mind; but that there is, very generally, a lack of *potash*, *soda* and *lime*, or of alkalies, in all old fields, we entertain no doubt. Wood ashes, salt, lime, and charcoal are remedies mainly relied on as preventives.

The Author copies our prescription for this malady from the Report of the Commissioner of Patents for 1844, and remarks published in the August number of the Cultivator, in 1845. As the substance of those remarks have not been given in the Farmer, we may say that in 200 bushels of potatoes nature uses 63 lbs. of pure *potash* as a chemical agent to transform *carbon*, *oxygen* and *hydrogen* into Starch. The formation of starch and sugar in plants needs to be studied by every practical farmer.

TO DESTROY WORMS ON TREES.—Take six or eight quarts of strong lye in an old pail, and dissolve in it a pint of soap. Nail a stout piece of cloth like the fragment of an old carpet, or quilted coat collar, to the end of a long pole, by wrapping the cloth once or twice around, and leaving a loose, dangling portion, 12 or 15 inches long. The cloth should be strong to prevent its tearing on the spikes of limbs. By weaving this swab in the pail of lye, it can be wrapped about nests of worms in a way that will kill the whole family, if applied early in the morning or near sunset. At these seasons of the day the worms are at home.

No one should permit insects to harbor in his fruit trees and consume their foliage.

NEW YORK STATE AGRICULTURAL SOCIETY.—The following resolution was passed at a recent meeting of this Society:—

Resolved, That no premium shall be given on fine woolled sheep, except the sheep shall have been sheared at the last preceding shearing season; that the fleeces be shown; that the date of the shearing and the age of the fleece be given; that on the sheep and fleece jointly the premiums be awarded; that the committee consist of five, two of whom, at least, as the committee shall be originally constituted, shall be staplers, and if practicable shall be so at the time of the action of the committee; that satisfactory evidence of the age and identity of the fleeces; time of shearing and age of the sheep, be furnished to the committee, or there shall be no premium awarded."

The Wheat Crop.

THE insect, or wheat fly, is doing considerable injury to the wheat crop of this section of country. Indeed the injury has been so great as to induce some of our best wheat growers in Wheatland to plow up their fields and sow spring crops. It is a common remark among the farmers of this town, that they sowed their wheat last autumn ten days too early, beginning to seed about the first of September. Beside the Hessian fly, we have found two worms feeding on the roots of wheat plants.

We are happy to learn from an intelligent correspondent, (a part of whose note we publish below,) that both wheat and fruit are very promising in Michigan.

DR. EDITOR:—The Wheat is looking very finely indeed throughout the State, and the quantity sown last fall far exceeds that of any previous year. Spring wheat, oats, flax, rape and grass give promise of a large yield. Present appearances indicate an abundance of apples, pears, plums, cherries, quinces, &c. Indeed, this portion of the regions of sun-down will have so large a surplus of all the good things of this world, that we can afford to be liberal to any of our eastern friends who will emigrate this year.

O. C. COMSTOCK, JR.

Marshall, Mich., May 18, 1846.

Good Farming.

In a letter enclosing pay for a number of subscribers to this paper, Master JAMES L. INGALSBEE of South Hartford, Washington county—a lad only 12 years old—communicates the following interesting facts:—

"Mr. C. Gregory of this town sowed last season four bushels of oats on an acre of ground.—He harvested and threshed the produce of the acre, and it measured *one hundred and one bushels* and a few quarts. He also planted three acres of the same kind of land with corn, the season previous, and sold of the produce of the three acres *two hundred and forty bushels* of corn, exclusive of a few bushels of unsound ears. Will not this specimen of Old Washington compare well with the far famed Genesee? I ought to say the soil is muck about two feet in depth, resting on a clay pan.

Excuse me, Sir, for this scribbling. I shall read your paper, and do what I can to get my friends to subscribe for it.

I am, Sir, yours most respectfully,

JAMES L. INGALSBEE."

We shall be happy to hear from "James," at all times; and if he wishes to study the analysis of soils *practically*, and the best method of transforming grass, grain and roots, into flesh, fat, milk and wool, we shall be gratified to receive him as a pupil at the Western New York Agricultural School.

From the Providence Transcript.

Butter Making.

THE annexed article is from one of our most experienced and intellectual agriculturists. Of his successful practice we can attest, as we never saw finer butter, not even in Philadelphia, than we have eaten at his hospitable mansion.

Milk Apartments, &c.—The milk cellar should be deep, well ventilated, and dry; the bottom covered with stone flagging. Bricks will absorb milk, and other liquids that may fall upon them, and will soon contract mildew, the smell of which, like the odor of cheese, vegetables, fish, or foul air of any kind, will be imparted to the cream and butter. Over this cellar should stand the dairy room, with shelves to set milk upon in cool weather; the cellar is to be used during the extremes of heat and cold. The temperature of the milk apartment, if possible, should never be above 65° nor below 45°. Set kettles should not stand in the dairy-room; neither should cheese-making, nor cleansing milk-vessels be done there, but in a convenient room near by.

Cream may be kept good much longer, if it be kept in a white oak vessel, with a tight cover, and a faucet or tap near the bottom, to draw off the milk when it settles, before the customary daily stirring. The quality of the butter is much improved by this management. If the milk be not drawn off, and it be churned with the cream, the butter will be longer in coming, and it will show specks of sour curd, taste like cheese, and will soon become rancid. Butter will come quickly at all seasons of the year, if the cream be of a temperature of from 60° to 70°; to this end, use hot water in winter, and ice in summer; *but never add either to the cream, in or out of the churn.*

Salt.—Pure salt chrysalizes into perfect cubes. All other forms of chrysalization found in common salt, arise from impurities; those of a needle shape in Liverpool bag, or blown salt, indicate the presence of lime, magnesia, &c. One great cause of the failure in making good butter, may be traced to the use of impure salt. Rock salt, and the large lumps of Turk's Island, washed, dried, and finely pulverized, are preferable to all other kinds, being highly preservative, and hardening the butter, so that it will be sooner ready to work over in warm weather. The Liverpool bag or blown salt, the Salina salt in small bags from New York, and the fine part of every kind of imported salt, contain a great portion of impurity. Less than one ounce of pure salt, is sufficient for a pound of butter; many put in but half an ounce.

In the manufacture of cheese, a preference is sometimes given to Liverpool bag or blown salt. This contains salts of lime and magnesia, which attract moisture from the air, and have the desirable effect of softening the cheese, and the pun-

gent bitter taste which they impart to it, is an improvement, in the estimation of some.

General Remarks.—The cream should not rise more than 36 hours; it should be sweet when taken off, and sweet when churned; yet there is a degree of maturity to be acquired by keeping.

The kegs for packing butter should be made of white oak, bilging in the form of casks for the more perfect exclusion of air, and convenience of transportation. If the butter is not to be sent to a warm climate, or a foreign market, let the bilging kegs have moveable covers, to accommodate inspection; they should be soaked in strong brine, made also of pure salt, in order that justice may be done to the purchasers in tare, and to save the butter from being spoiled for one or two inches deep all around, from its contact with dry wood. In case the wood is anything but white oak, there is danger of its giving an unpleasant taste to the whole. For the convenience of families, the size should vary from twenty-five to fifty pounds. A keg of butter is exposed to the air for a long time, while on broach in a small family, and the bottom, in consequence, becomes rancid.

The consumer will cheerfully pay an extra price for one hundred pounds of butter, packed in four kegs instead of one. No salt should be put on the sides, bottom, or between the layers. If the kegs are made with covers, put a cloth over the top, and cover that with pure fine salt.—Keep a cloth wet with strong brine over the butter, while the keg is filling, to exclude the air. The practice of washing butter is not approved of in Europe: it destroys its fragrance and sweetness by dissolving the sugar of milk, which it is said is always present in good butter. It is practiced in Holland, when the article is designed for exportation to India; then the operation is usually performed with cold strong limpid brine made of pure salt and pure water; water that has lime in it will not answer, as the lime is readily absorbed by the butter.

To exclude the air more effectually during the process of putting down, let a little melted sweet butter be run into the cavity, where the bottom, head and staves come together, then after each layer is completed, let the dairy-woman pass her finger round so as to press the butter hard and close against the side.

From the Albany Cultivator.

Profits of Poultry.

HAVING seen frequent articles in your paper where the Poland Top-Knot fowls were highly recommended as layers, I was induced in the spring of 1844 to purchase some eight or ten of them in order to test the difference, if any, between them and the common breed. From observation I soon became satisfied that they were rightly called "everlasting layers," from the fact that while the latter were continually annoying

me with a desire to sit, the former showed no signs of it, but continued laying during the whole season. I raised a number of chickens during the summer, and in the fall found my number of Top-Knots had increased to 30, including two cocks. The balance of my poultry I disposed of, and more out of curiosity than any thing else, I concluded to keep an exact account of eggs received for one year, from Jan. 1, 1845. My number averaged but twenty-six, five of them having died during the year. My receipts were as follows :

January,.....	135	July,.....	361
February,.....	142	August,.....	311
March,.....	413	September,....	234
April,.....	549	October,.....	104
May,.....	566	November,.....	51
June,.....	534	December,.....	32

Making..... 3,437 eggs.

Reckoning them at one shilling per dozen, which price they command three months in a year in our market, they would amount to the sum of..... \$36,32
Deduct 13 bushels each of corn and barley, at 40 cts., 10,40

Leaving a balance of..... \$25,92

My yard occupies about one square rod of ground, a part of which is enclosed with rough boards to afford them shelter in stormy weather, and containing their nests and roosts, with an abundant supply of lime, sand, gravel, food and drink, which is always before them. They are not allowed to run out during any part of the season, and their desire for animal food is satisfied with now and then a sheep's pluck, and a supply of sour milk, of which they are extremely fond.

As regards the preservation of eggs perfectly fresh, and with very little trouble, for six or eight months during the year, or from March to December, I would recommend the following, having thoroughly proved it the past season:—For every two galls. water add three pints salt, one quart newly slacked lime, and a table spoonful of cream of tartar. Let the keg stand in a cool part of the cellar, putting in your eggs from time to time, and brine sufficient to cover them. If they are fresh when put in, they will come out so after any reasonable length of time, as fresh and handsome as new laid eggs.

Yours, &c., JOSEPH ANNIN.

Le Roy, Genesee Co., N. Y.

SHEEP.—Among the articles of freight by the Mediator, which arrived on Sunday, were ten full blood merino sheep from the celebrated flock of Lord Weston, England, imported by S. W. Jewett, Esq., an enterprising wool grower of Weybridge, Vt. The origin of Lord Weston's flock was a gift of forty ewes from his Majesty George the third, and they were selected by his lordship from 500 which had been sent by the Cortez of Spain to the king, more than thirty years since. The sheep in question arrived in excellent condition, and were yesterday forwarded north to their owner.—*N. Y. Com.*

Dead Animals.

ANIMAL matter contains every element that is necessary to grow every plant known. In it are phosphate and carbonate of lime, ammonia, carbon, in short, in the best form, all the essentials of vegetable growth. Whenever a fowl, cat, dog, sheep, pig, horse, or cow dies, let the carcase be cut up, and added to the manure heap. The carcase of a single horse will turn loads of useless muck or peat into manure, richer than any ordinary barnyard dung. Why then suffer it to decay uselessly and annoyingly? It is true it is not lost, for the gases that taint the air are appropriated by plants; but the farmer who owned the animal gets but a small portion of what should be all his own. Why will he waste the *dead* energies of the horse, when he has lost the living ones?

If our readers will heed what we say, they will not suffer dead animals to annoy the eye and disgust the nose hereafter. Bury them in the manure heap; add some quick lime to hasten decay, and charcoal dust or plaster to absorb the gases, and much will be gained in the good appearance of the farm and in the quality of the manure. If your neighbor be so improvident as to waste a dead animal, beg it of him, that it may not be detrimental to health and useless to vegetation. Laws should be passed to compel the saving of this most powerful of fertilizers, when common sense and decency fail to do it.

Whenever it is desirable to hasten decay, and rapidly turn animal matter into manure, sulphuric acid may be used. This would be too expensive (although the acid is cheap) for farm purposes, but may be employed for the garden, where expense is not so important. It is frequently desirable to have a rich manure in the garden, and it is not at hand. Animal matter put into sulphuric acid will in a few hours furnish it. Every house will supply much refuse animal matter.—To this, rats, mice, feathers, hair, bones, horns, &c., may be added. If the garbage of a slaughter-house can be got, it should be. All these will soon be reduced to an available state, be inoffensive, and add great fertility to the soil where used. The requisite quantity of acid may be ascertained by experiment—about 10 or 15 lbs. is usually allowed for 100 lbs. of animal matter.—*Am. Ag.*

A NEW ARTICLE OF EXPORT.—Among the cargo of the ship Elizabeth, which was cleared on Tuesday for Liverpool, by J. P. Whitney, says the New Orleans Picayune, were three bales of raw silk. It was sent for export from Ohio, where large quantities are now annually raised and manufactured. The whole valley of the Ohio is well adapted to the production of silk, and much attention is already given to its culture in western Virginia and in Ohio, Kentucky and Tennessee. The price of cocoons and of raw silk is regularly quoted in the Louisville price current.

Indian Meal in Great Britain.

THE Philadelphia United States Gazette speculates in this wise on the introduction of Indian corn among the English and Irish people:

Well, when some thousand bushels of this Indian Corn reach the store houses of England, and are thence distributed into the meal-tubs and kneading-troughs of the laborers, and the swelling heap shows a double quantity, for the same cost, of ordinary flour or meal, who shall tell them of its use? Who shall say to the housewife, "thus shalt thou mix the material, and so shalt thou mould the loaf." Who shall enter into the little laboratory of the workingman's house, and lecture the practical chemist upon the affinities of salt and lard, hot water and Indian meal, and who will tell her how long she must submit her combination to the action of fire, that it may be for the comfort of her household? Alas, she would be as ignorant of all the arts, parts, and processes of that work, as were the uninitiated of the Eleusyan mysteries.

Some time after the introduction of tea into Massachusetts, a citizen from Cape Cod came up to Boston, to trade off his fish. The merchant persuaded him to take a pound of tea among other articles of household requirements. "I've heard of the article," said the Cape Cod man, "but how is it to be cooked?"

"It must be boiled," said the merchant, "and is always used when company comes."

The tea was taken home, and it was resolved to be hospitable. Company was invited to spend the day. At dinner, a fine piece of boiled beef, and another of good fat pork, with an accompaniment of potatoes and carrots, graced the table. "And now," said the host, as he looked in triumph first to his wife, and then to his guest, whom he served bountifully with the viands before them, "help Mrs. Basset to something from that dish."

The pewter spoon was thrust into a dish of well boiled tea leaves, from which the water had been carefully strained, and each, from the arch-trichlinous down to the youngest guest, was served with a quantity of the Chinese weed, real green souchong.

"Taste of that," said the worthy host, "it is tea, such as the quality in Boston and Plymouth make such a fuss about."

Each mumbled a little of the herbage, and carefully rinsed it down with cider, but none ventured to criticise the new addition to the dinner table.

"Will you have some more, my dear?" said the good lady to her husband.

"Not a leaf more—that plateful cost four and six-pence, and if it were not for the name of tea, I would as lief have turnip tops for my greens as that stuff. It is monstrous hard chewing and not over palatable after all."

And so, or even worse, it may be in England, with the corn meal of this country. It may be made up into form, or mixed in dilution, until poverty itself will grow sick of the ingredients.

Would it not be well, as soon as the adoption of Sir Robert Peel's plan shall be known, to send messengers on a mission of love and profit, to England, to instruct housekeepers in the use of Indian corn! The New England Envoy Extraordinary shall teach the people how to build the "lofty loaf of brown bread"—how to mingle the milk, the molasses, and the meal, (luscious alliteration) and to compose the "baked pudding." The messenger from Maryland would instruct in the formation of "pones," and he of Virginia lecture upon the composition and baking of "hoe-cakes," and South Carolina instruct in the fabrication and use of "Johnny Cakes."

And thus the poor, and meagre tribe, that had shrivelled up on oat meal gruel, or been drenched by sour flour and poisoned ale, will grow rugged, red, and rampant upon the blood-warming and flesh giving meal of maize. There, the mountain brown loaf of New England would make the crazy table of the weaver groan by its weight, though it were ever so "light;" here the "pone" and "johnny-cake" would give grace to the tea equipage of the poor woman, while her children would grow ruddy upon hasty pudding and milk. Hasty pudding!

"Oh how I blush
To hear the Pennsylvanians call it mush."

THE WIFE OF THE CHRISTIAN.—Chateaubriand, in his eloquent work entitled "Genie du Christianisme," has this beautiful picture of the wife of a Christian.

"The wife of a Christian is not a simple mortal; she is a mysterious, extraordinary, angelic being; the flesh of the flesh, the blood of the blood of the husband. Man in uniting himself to her regains a part of his substance; his soul as well as his body are incomplete without his wife; he has strength, she has beauty; he combats the enemies of his country and labors in the fields; but he does not understand the details of domestic life; his companion prepares the repast, and her smiles sweeten existence. He has his crosses, and the partner of his couch is there to soften them; his days may be sad and troubled, but in the chaste arms of his wife he finds comfort and repose. Without woman, man would be rude, gross, and solitary. Woman spreads around him the flowers of existence, as the creepers of the forest decorate the majestic oak with their oderiferous garlands. Finally, the christian pair live united, and in death are not separable; in the dust they lie side by side, and their souls are re-united beyond the limits of the tomb."

TO MAKE HARD WATER SOFT—add to 1 bucket of water, warmed, one ounce of carbonate of soda, which renders it soft as rain water.

HORTICULTURAL DEPARTMENT.

BY P. BARRY.

Injurious Insects.

ONE of the greatest drawbacks on the pleasures as well as the profits of gardening, is the continual depredations of insects. Those who have planted and reared up into a fruitful state fine Apricot, Nectarine, and Plum trees, and seen the entire crop of fruit destroyed by the *Curculio*, will readily acknowledge this to be the case. This insect wages a deadly war against the fruits above mentioned, and attacks even the Peach, the Cherry and the Apple. Almost every fruit grower has now become familiar with this insect, and with the remedy considered most effectual, viz: jarring the tree every morning, causing them to drop off on a cloth spread underneath to receive them, when they can be caught and killed. We make a regular business of attending to our trees in this way, and are trying the experiment of syringing the trees frequently with tobacco water and other mixtures: besides, in the spring we salted the ground as strongly as we dare, all around the trees where the insect is supposed to be burrowing during the winter. The most vigilant attention is necessary. We are glad to see the attention of people turned in earnest to these matters. We have never seen so much timely care given to the destruction of caterpillars as we have this spring. This is owing to the spirit of improvement that is now abroad on all matters pertaining to fruit culture, and the spread of information on these subjects.

In a few weeks the leaves of the Pear and Cherry will be attacked with a *slug worm*. These filthy insects, if not instantly destroyed, will strip the trees of their foliage and stop their growth. We have seen Cherry trees in mid-summer look as though scathed by lightning. We find that sifting quick lime or ashes over them proves effectual, and this should be done at once, and repeated until all are destroyed.

Next comes the *Aphis*, or plant louse—a troublesome customer in green houses, but there very easily destroyed by fumigating with tobacco.—Out of doors, on trees, they must be managed differently. Strong soap suds will soon kill them, and can be applied with a syringe or by dipping the tops or branches infested with the aphid into the pail containing the wash.

While on this subject we cannot refrain from adding the following extract from an Address on Injurious Insects, by NOYES DARLING, of New Haven, Ct., which we find published in part in the May number of Hovey's Magazine:—

“Next to be considered is an insect that does not devour the leaves of trees, but sucks out their juices. It is the PLANT-LOUSE, (APHIS.) It is to be seen on the underside of the leaves of almost every species of plant. And there is appropriated to almost every species of plant its distinct species of aphid. Thus the cabbage-louse is wholly unlike

that of the peach; which again is quite different from that of the plum. They exist of every color, green, black, blue, brown, brick-red and crimson—of all sizes from that of a pea-bug to that of a mite just visible—naked, or covered with meal or wool. Trees are not often killed by it, but they are checked in their growth, and made to become crooked and deformed. When the plant-lice fasten themselves upon the roots of herbaceous plants, as some species do, they prove fatal. The ladies may have observed their China Asters in particular, to turn yellow, stop growing and finally perish, without any visible cause. The grower of watermelons, too, sees the leaves of his vines become smooth and glassy, and after a few days die. This is caused by the *aphis* on the roots of the Aster and Melon. The powers of increase, given to this insect, cannot be contemplated without amazement. Reaumur, from the most careful observation, estimated that a single aphid might be the progenitor of near six thousand millions in one summer.—Well might Dr. Darwin fear that ‘their countless numbers might, in process of time, destroy the vegetable world.’—And yet, perhaps, there is no insect so completely in our power as this. We have only to put in practice the great rule of farmers, to do every thing at the proper time, and we protect our plants wholly from this insect with little labor. You see, to-day, a plant-louse upon the leaf of a cherry tree. You neglect to destroy it, and to-morrow there are 25—in 22 days more, there are 50,000, and in one day after that, there are more than 100,000. A touch of your finger, on the first day of the month, may save you, therefore, the labor of a week, with soap-suds and syringes, at the end of the month. Destroy the first that come in spring, and the business of killing plant-lice is finished for the season. We are informed by Huber, that the ants of Switzerland take into their keeping several species of plant-louse, which they tend with the utmost care for the sake of their honey, as a dairyman tends his cows for their milk. We have evidence that the small brown ants which you see courting up and down the stems of cherry and peach trees, with great animation, take charge of some of our plant-lice, in a similar manner, particularly those of the cherry tree, and those on roots—that the ants house them in winter, and place them on leaves at the opening of spring. Accordingly, the aphid generally is first to be found very near the ground. There search them out and destroy them. If unfortunately they escape your attention till they have multiplied to a considerable extent, you may still master them with proper applications. One of the best of these applications for trees, is a strong solution of whale-oil soap. The ends of the branches may be bent over, and held in the soap-water about a fourth of a minute. A small paint brush, dipped in the wash, may be used in some cases, especially on cabbages, and on the branches of pear trees, infested with that species, which collects about the buds, and produces a black rust. Common soap-suds, warm and strong, will serve to kill the aphid, but it is apt to kill leaves also. A decoction of tobacco is a sure destroyer of the aphid. It cannot be used upon leaves; * but nothing, perhaps, is better to pour around the roots of plants, when those parts are infested by the insect. President Dwight preserved his watermelons ‘by frequently drenching the earth immediately round the roots, with a strong decoction of burdock leaves and elder twigs.’ Ladies may call upon their friends who use cigars, to puff the smoke upon the rose-bushes, and thus ‘do the state some service.’ Several insects are appointed by Providence to assist us in keeping the aphid in check. Two only will be noticed at present. One is the speckled bug, about the size and shape of a half-pea, called by children Lady-bird, (COCCINELLA.) The other is a beautiful green fly, (CHRYSOPEPTELA) with eyes of gold and wings of lace, but fetid almost as the squash-bug. The eggs of this fly are hung by threads, about a quarter of an inch long, to the underside of leaves. You will be careful not to harm those useful insects.”

* This is a mistake. We have used it on the leaves of Plum and Cherry trees strong enough to kill the aphid instantly.—ED.

“AMICUS” is informed that the Apple left at our office, under the name of *Rock Apple*,—from the orchard of the late NATHANIEL GORHAM of Canandaigua,—is the Yellow Newtown Pippin.

Sowing Flower Seeds.

WE extract the following article from the London "Gardeners' Chronicle," edited by Professor LINDLEY. Complaints are universal, every year, on the subject of the vegetation of flower seeds. Indeed we have, time and again, experienced serious disappointment ourselves, and felt disposed to blame the seedsman, when the fault was our own. Our hot and comparatively dry climate requires more care in sowing delicate seeds than that of England, and the directions given in the following article are equally and even more important to be followed here than there.

In addition to the mere matter of flower seed sowing, the article below contains suggestions of general practical utility to both the Farmer and Gardener, and is worthy of careful consideration.—Ed.

"How am I to sow my flower-seeds?" "I have had some beautiful seeds given to me, but I have no gardener, and I don't know what to do with them." "I don't know how it is, but my gardener never *can* get his seeds to grow.—What *shall* I do?" "How deep, sir, *would* you advise me to bury my seeds?"

Such are the sounds of woe with which our ears are not uncommonly assailed. That information is much wanted in this matter is most certain; that endless mistakes follow in the train of all vague directions nobody can doubt; that seed-sowing does demand some "knack" and practice we readily admit, and therefore we shall on this occasion utter no *vox ambigua*, but cut the matter short by saying "Don't bury your seeds at all!"

We can quite imagine the surprise that this announcement will occasion in some minds; but we presume to hope that when we have been heard to an end, the recommendation will not be thought so paradoxical as it appears to be.

Let us, in the first place, ask why seeds *are* buried alive under clods of earth? Does Nature thus inter them? And if so, who or what is her grave-digger? When the acorn falls it has no power of wriggling into a hole in the ground, and when the Chickweed scatters its tiny seeds, they lie and grow where they fall. What reasons, then, *can* gardeners have for making themselves seminal sextons?

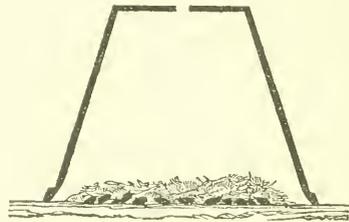
"Reasons!" says the man of learning, "I will give you fifty; firstly, a seed must have darkness and oxide of hydrogen in order to germinate; under these influences its C combines with the O of the latter, and forms CO₂ which is extricated; then diastase comes into play, and the amy-laceous particles are saccharified; thirdly"—but hold—enough of that. "Reasons!" says Mr. POLYANTHUS, the gardener, "Why how are you to keep the birds off if you do not bury seeds? or the mice? or such vermin? How are you to keep them moist when they first chip the shell?

How are they to hold to the soil when they have got a root? Reasons enough are these, I think."

Certainly. But, then, cannot all these objects be secured by other means than burial? Let us see.

We want fine dry soil. First provide that; get the ground level, and press it gently with a piece of tile or glass. If it contains stones or clods remove them. If your seeds are very small, sift over it a little silver sand, or peat; upon this scatter the seeds *thinly*. If they are excessively small, mix them before sowing with dry sand or peat in order to separate them; and again with gentleness press all flat.

Then provide some coarse Moss—any sort will do, but Bog-moss or Sphagnum is the best—having previously soaked it in boiling water to kill insects or their eggs. Press it till its wet-



ness is exchanged for dampness, and then, while warm, scatter it *loosely* over the seeds. Press it down, invert

over the Moss a common garden pot, lay a tile on the hole, and the operation is performed.

But the little apparatus thus contrived must be watched. In a day or two lift up the pot, raise the Moss, and examine the seeds. If the Moss is dry, which is not likely to happen, again damp it with *warm* water. If all is still, have patience. Thus go on until you find your seeds *beginning* to grow. Then remove the tile from the hole in your pot, and leave them for another day.—At the end of that time you will possibly find that the seeds have grown much more; if so, take away a part of the Moss, so as to give the young things more air and light. The next day, raise the pot on one side, so as to open it to the south. This may be done with a stone placed beneath its front edge; but do not raise it all round, because if you do the strong current of air setting over your seedlings and through the hole in the pot will chill them. As soon as you find the seedlings green and plump and stout, the Moss may be entirely removed and the pot raised higher. And very soon that, too, may be quite dispensed with, unless there are frosts at night, or bitter dry easterly winds by day. In the former case, replace the pot every night and take it off again in the morning; in the latter, it is wise to place a little screen between the plants and the wind. For this purpose a pantile is a capital thing, but a piece of board, or any such matter, will do.

In this way you secure all that you want in order to get a hardy seed to grow:—Darkness, moisture, air, warmth; and afterwards moisture, air, light, and shelter.

Let no one say that large seeds cannot thus be raised. The finest Oaks spring from Acorns dropped in the forest and covered by a few leaves. The Sycamore, the Ash, the Beech, the Horse Chestnut will all sow themselves wherever their seeds can stick to the ground until a coverlet of leaves is moistened by an April shower and warmed by an April sun. Neither have such seeds any difficulty in steadying themselves by their roots; a long fang is driven by vital impulse into the earth, and it is to that, and not to a bit of the buried neck of the stem that the seedling trusts for support and nourishment.

We will only add one word. Those who have ever attempted to sow seeds upon rockwork, know to their cost how very difficult it is to make such seeds take root. The method now proposed answers the end completely, and it is the only plan which, in difficult cases, does succeed. *Esperito crede Roberto.*

THE AMERICAN FLORA; or HISTORY OF PLANT AND WILD FLOWERS OF AMERICA. By A. B. STRONG, M. D.

THE study of Botany, as a general thing, is considered, when considered at all, as entirely foreign to the cultivator of the soil, and worthy only of the attention of young ladies at boarding schools who may pursue it a little for their amusement in leisure hours. It requires but a moments reflection to convince every one of ordinary intelligence that this is a false conclusion. Botany consists not only in giving plants their proper names and arranging them under their respective classes and orders, but it includes their organization and the entire phenomena of the vegetable world. This gives another character to Botany and places it in the position it ought to occupy as one of the most important studies which can claim the attention of every farmer and gardener who wishes to pursue his vocation intelligibly.

The enlightened agriculture of the present day is distinguished by the attention which is given to the *organization of soils*. It is believed that the cultivator, to be successful in improving his land, must know its constituent parts: hence we see analysis take the first rank among the investigations of agricultural students. The great object in improving and preparing soils is to facilitate the growth of plants, and if it be necessary, to know the character, organization and constituent parts of the soil. It appears no less so to know the character, structure and habits of plants to be grown. But the cultivator should not only be familiar with the botany of the useful plants, but even of the noxious weeds, in order that he may more easily subdue and exterminate them.

But aside from the *practical utility* of this science in the economy of Agriculture and Horticulture, it is well worthy of general attention. The vegetable world presents a wonderful field for research. No other human study is better calculated to refine and elevate the mind. It seems strange indeed that intelligent, knowledge

seeking people, should spend their entire lives in the country, practically engaged in rural pursuits—surrounded on all sides by the most beautiful productions of the earth, from the humble violet in the grass, to the towering, majestic oak, the emblem of might—without giving a moments consideration to their wonderful and beautiful structure. The man who is contented to plod along mechanically, wilfully blind to the beauties that are spread before him and around him, surely mistakes his destiny, and tramples beneath his feet much of the happiness he might enjoy here. We would not have people become enthusiasts on the subject, or bestow on it attention claimed by other matters of more immediate importance; but we do desire to see every one, whose business is to till the soil, devote a reasonable share of attention to a subject an acquaintance with which cannot fail to promote both their interest and happiness.

We hope the teachers who are now trained at the expense of the State will be qualified to instruct the rising generation in the study of botany. It should be taught, and that properly and practically, in every school in the land. No man should be allowed to go forth as a teacher into an agricultural district, without this qualification.—Boys are required to spend many a valuable hour in trying to remember when such and such a hero was born, and how and when he died, &c., that we know by experience to be time almost lost, while studies of the greatest practical importance and refining influence are wholly neglected.

These thoughts have been suggested by the appearance of "THE AMERICAN FLORA," two numbers of which are before us. It is got up in an attractive and beautiful style, and will be a valuable aid to the botanical student. Each number contains five well executed colored engravings, taken from nature. Scientific and general descriptions, medical properties and uses, botanical and common names, natural order, and class and order according to the Linnæan system,—all are given in a plain, concise manner.

Those who wish a useful and at the same time a beautiful periodical, should immediately subscribe for this. Every number will bring you five fine engravings, and make you acquainted with the names, history, qualities and uses of five new plants. Is not this worth 25 cents? Surely it is. It is published on the first of every month by Strong & Bidwell, New York, at \$3 a year, or 25 cents each number. For sale by D. M. DEWEY, Arcade News Room, Rochester.

Hovey's Magazine announces a new work, entitled "*The Trees of America, Pictorially, Botanically and Entomologically Delineated,*" &c. By D. J. BROWNE, author of the *Sylvia Americana*. The work will no doubt be an interesting one to all who are engaged, less or more, in the cultivation of trees. As soon as it comes along here, we will apprise our readers.

Buffalo Horticultural Society.

The first exhibition of this Society for the season, was held on Wednesday, 20th May.

We had the pleasure of being present on the occasion, and can say that it was, all things considered, quite creditable to the society. The day was unfavorable; being cold and windy, many were prevented from bringing out their best plants, and not a few, we presume, were prevented from coming out themselves. It was early in the season, too, and difficult to make a very large exhibition.

A new and commodious building has been erected, in a cheap, temporary manner, in the rear of Messrs. McArthur's pleasure garden, where the exhibition was held, and where it is designed to exhibit regularly in future. It is quite spacious, and when completed, will make a fine show-room.

Members of the society are admitted free, with their families, to all the exhibitions; others are charged one shilling admission. This, where the exhibitions are held monthly, or, sometimes, semi-monthly, aids in raising a fund to aid the society in carrying out its objects. No premiums are given—all seem to be satisfied with having contributed to the interest of the exhibition. From the taste and activity manifested by the officers of the society, and the interest taken in the matter by a large number of the most wealthy and influential citizens of Buffalo, we have every reason to expect it will be a permanent and useful institution.

The ladies are foremost among its friends.—They constitute the greatest number of exhibitors; and the elegant bouquets were arranged by their own hands. The show-room, too, was rendered attractive by their continual presence.

Among the principal exhibitors we might mention the following:

Mr. Elihu Tyler, Florist, had the largest assortment of house plants, consisting of fine roses, geraniums, cactus, &c.

Mr. A. Bryant, Nurseryman, a beautiful basket of tulips, and a pyramid of miscellaneous flowers, besides house plants and asparagus.

Mr. B. Hodge, Nurseryman, cut flowers, house plants, cactus, &c.; some fine seedling and Tobolsk rhubarb, and a basket of 8 or 10 varieties of apples.

Mrs. Lewis F. Allen, (lady of the President of the society,) several fine bouquets of house plants; and from Mrs. Lewis Eaton, Mrs. Millard Fillmore, Mrs. H. Pratt, Mrs. E. Ford, Mrs. C. C. Bristol, Mrs. Thomas, (lady of the Secretary of the society,) Mrs. S. C. Love and others, beautiful bouquets.

A very pretty wreath from Miss Rogers.

W. R. Coppock, Esq., exhibited a magnificent calla, showing an unusual size of leaf, which he said he watered with guano. Mr. C. is quite an enthusiastic amateur—has a green house and

grapey for his own amusement, and takes much interest in whatever relates to rural affairs.

The President of the society deserves great credit for the personal attention, and real, heart-felt interest which he takes in building up the society.

We found him before the room was open, busy fitting up and making the necessary preparations with his own hands; and during the whole day and evening, he remained encouraging by precept and example.

Why would it not be a good plan for our society to erect such a building? It would cost but a trifle. We have more materials for making fine shows than the people of Buffalo, if we would but concentrate them—get them together at one time and in one place. Our ladies will come forward and assist on such occasions as well as those of Buffalo, and we might have delightful monthly or semi-monthly meetings. Hundreds of our people will give a shilling for the privilege of going into a *garden* where nothing is to be seen, nor nothing enjoyed, but a promenade on a gravel walk. How much more readily would they pay for seeing a fine exhibition of fruits and flowers? The Buffalo Society keeps open in the evening; and at the close, the bouquets presented are sold for its benefit. We hope our society will make immediate arrangements for a grand exhibition in June or July, as may be deemed advisable, and imitate, in union and energy, our Buffalo neighbors.

We give this notice for the benefit of all, and particularly with a view to stir up a proper spirit in Rochester.

FOREST TEACHINGS.

A SCRAP FOR THE SENTIMENTAL.

Afar away in the greenwood shade

There is pleasant company—

The bending elm and the wreathing vine

Each whisper a word to thee—

For every flower has its voiceless lore,

And a lesson it teaches well,

And all we need is an earnest heart,

And to hear and heed the spell.

Oh some they love best their mother earth;

And they creep along as near,

As if a voice on the coming blast

Had gived them cause to fear;

And cling to her like a trusting child,

As no ill could reach them there;

So the lowliest lot, and the humblest heart

Feels least of the storm of care.

And some, oh they leave the earth below

And clamber so far on high,

That they seem to envy the shining stars

That are nearer to the sky!

And long for the breath of autumn's blast

To carry them far away,

To some holy hearts seem drawn to heaven,

Though fettered by mortal clay.

And some—they on the lowly earth

But look to the ray on high,

As thankful they were for home and rest—

But better they loved the sky.

And learn we now in the greenwood shade

The lesson that these have given,

Like children to dwell on our mother earth,

But to keep one eye on Heaven!

Acknowledgments.

We continue the list of acknowledgments commenced last month, but have not room to complete it in this number.

Paris Barber, Homer, 22 subscribers; E. L. Bartholomew, Portland, 17; Dr. E. Bowen, Lyndon, 15; C. L. Button, Newark, 14; Wm. Bristol, jr., Gainesville, 13; H. H. Cole, Wm. Colvill, Hanover, 16; B. F. Chilcott, East Hamburg, 16; Wm. Cozzens, Union Springs, 13; J. J. Dickson, Rose, 24; D. H. Danolds, Elba, 16; S. B. Dudley, East Bloomfield, 13; Robert Evans, Erie, Pa., 20; Wm. Frazer, Fowlersville, 16; H. N. Gerrish, Edinboro, Pa., 18; W. Hadley, Annapolis, Ind., 19; G. W. Hinkley, Leonardsville, 16; N. J. Kologg, South Avon, 20; C. A. Knox, Parma Centre, 14; E. W. Lawrence, Rochester, Mich., 42; T. T. Lake, Hunt's Hollow, 16; O. M. Moore, Harford, 17; A. Langworthy, Gerry, 16; N. Lounsbury, Elk Creek, Pa., 16; E. Miller, Sherman, 13; Thomas Newlin, Paoli, Ind., 14; A. Owen, East Bethany, 14; Silas Pierce, Butler, Pa., 17; T. Riddle, Darien, 24; Alvin Rice, Hannibal, 15; F. P. Root, Sweden, 14; D. M. Smith, West Bloomfield, 22; H. Swan, Mt Morris, 20; Riley Senter, Perry, 16; S. F. Smith, Siloam, 15; L. Strobridge, Trumansburg, 15; J. A. Smith, Vienna X Roads, O., 13; C. P. Stone, York, 15; R. K. Sanford, Fulton, 14; W. Thompson, Alexander, 13; M. Thumb, Dewittville, 13; J. Wickoff, Romulus, 20; A. Wheelock, Moscow, 16; A. D. Winslow, Evans, 16.

The list will be continued next month. Meantime, we would inform our friends that the back numbers will be supplied to all new subscribers. We are now engaged in re-printing the January number.

We respectfully request those of our readers who can conveniently do so, to obtain and forward subscriptions according to our club terms. New subscribers, in sections where the Farmer is not generally taken, will oblige us by introducing it to the notice of their friends and neighbors, and obtaining subscriptions.

Western New York Agricultural School.

THE undersigned, in connection with Gen. RAWSON HARMON, of Wheatland, Monroe Co., will open on the 1st of May next, at the residence of the latter, an **Agricultural School**, designed to teach in the most thorough and systematic manner, both the Practice and the Science of Rural Economy, in all their various branches.

The Farm is large and under a high state of cultivation, yielding annually some 1400 bushels of wheat, sold at extra price for seed, which is eagerly sought after in all the wheat growing districts of the Union. Gen. HARMON is a working practical farmer, and will devote his personal attention to the instruction of all pupils attending the School. There are now growing on the premises over fifty distinct varieties of Winter Wheat. The undersigned will have a *Chemical Laboratory* for the analysis of soils, plants, and animal substances; and no pains will be spared to make the School the most practical and useful of any in the State. Able Assistants, both in Literature and Science, will be employed, so soon as buildings can be erected to accommodate a large number of students.

TERMS—Twenty-five Dollars a Quarter, or \$100 a Year—including board, washing, tuition, &c.
April, 1846. DANIEL LEE, M. D.

Sanford's Straw Cutter.

For sale by RAPALJE & BRIGGS at the **GENESEE SEED STORE**, No. 10 Front St., Rochester. Price \$15.
Rochester, April 1846. [4-tf.]

Branch Peas.—100 Bushels German Branch Peas, a very superior article, just received and for sale at the Geneesee Seed Store. [4] RAPALJE & BRIGGS.

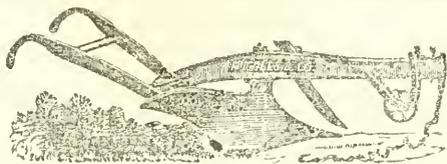
Straw Cutters, of all the most approved kinds, used in Western N. Y., for sale cheap, by
RAPALJE & BRIGGS.

No. 10, Front-st.

Grain Cradles.—50 superior Grain Cradles, made by Hutch, of Caledonia, and others, for sale at the Agricultural Warehouse, on Front-st., by JAMES P. FOGG.

Castor Oil Beans.—Just received, and for sale at the Geneesee Seed Store, No. 10 Front-st., by
[4] RAPALJE & BRIGGS.

Rochester Agricultural Implement Warehouse.



BY THOMAS NOTT.

THE Subscriber having purchased the interest of Mr. JAS. P. FOGG, (late B. F. Smith & Co.,) in the IMPLEMENT BUSINESS, will continue the business as heretofore at the old stand on Front-St., nearly opposite the market. The undersigned has united a *Tin Shop* with the Agricultural Department, where tin ware will be made expressly for the retail trade;—and a good assortment of wooden ware kept constantly on hand.

In his assortment may be found the following articles: FARMERS' IMPLEMENTS, consisting of the most celebrated PLOWS now in use—*Langdon's Corn Weeder and Potatoe Hiller and Digger*; Cultivators; Corn Plows, and a good assortment of all the common Plow Points now used; Japanned and Britanna Ware; Spittoons; Fancy Nurse Lamps; Wash Basins; Match Safes; Candle Sticks; Lamps, &c. Britanna Lamp and Candle Sticks; Tumblers; Coffee and Tea Pots; Ladles, &c. &c.

He also keeps constantly on hand a general assortment of COPPER AND SHEET IRON WARE,

and is prepared at all times to make to order any article in the manufacturing line. Tin Conductors and Eve Troughs made to order.

A good assortment of Log and Trace Chains, Shovels, Spades, Manure Forks, and Harvest Tools from the best manufacturing establishments in the country. New York Premium Grass Scythes.

The subscriber has made and is making a large addition to his stock, and solicits the patronage of all the old customers of the Rochester Agricultural Implement Store; and all new ones that may favor him with a call, will find by dealing with him they will get the worth of their money. He will sell as cheap as the cheapest, if not cheaper,—and those wishing articles in his line will find it for their advantage to call and examine his stock before purchasing elsewhere.

THOMAS NOTT.
[6-1f]

Rochester, May, 1846.

CHOICE FRUIT TREES.

FOR SALE, at the *Rochester Commercial Nursery*, on Main street, one mile east of the Court House. The subscribers offer for sale nearly 200,000 Fruit Trees of various varieties and sizes, for cash or credit, upon the most favorable terms.

Also—An assortment of hardy Ornamental Trees and Shrubs.

Also—Scions of almost every description of Fruit. The above have been thoroughly tested, and will be warranted of the kinds represented.

BISSELL & HOOKER, at the Nursery, or
J. W. BISSELL, No. 1, Arcade Hall.
March 1, 1846. 2m.

Eggs.—The subscriber has for sale a few dozen EGGS from the breed of fowls described by Bement as the "*Ostrich Fowls*." Price, 37½ cents per dozen.

J. W. BISSELL,
At the Commercial Nursery, Main-St., Rochester.

Plows for Sale.—We have on hand, and intend to keep constantly for sale, the celebrated *Diamond and Wisconsin* Plows, the merits of which have been fully tested. Price, \$7.00 for medium size. The farming community are respectfully invited to give us a call.

2tf. RAPALJE & BRIGGS,
No. 10 Front-st

The newly Imported Horse 'Consternation'

Will serve mares at \$20, the ensuing season, at the stables of C. T. ALBOT, Stoke Post, Oneida county, N. Y.

He is sixteen hands high, very powerful, and has splendid action. He was got by Confederate, dam Curiosity by Figaro. He took the First Premium at the State Fair in September last. [4-2t*]

MOUNT HOPE BOTANIC GARDEN AND NURSERIES,

Rochester, N. Y.

(South St. Paul st., nearly opposite the Cemetery.)

THE PROPRIETORS of this Establishment offer for sale an unusually large and fine collection of

FRUIT AND ORNAMENTAL TREES,
FLOWERING SHRUBS, VINES AND ROSES, HARDY HERBACEOUS PLANTS, DOUBLE DAHLIAS AND BULBOUS ROOTS;
GRAPE VINES, RASPBERRIES, STRAWBERRIES,
AND GOOSEBERRIES; ASPARAGUS ROOTS,
RHUBARB, &c.; HEDGE PLANTS,
GREEN HOUSE PLANTS, &c.

The collection of Fruit Trees comprises the most popular varieties cultivated, and has been grown with the greatest possible care to ensure accuracy. The Proprietors are practical and experienced Nurserymen, and wholly devoted to the business;—all the important operations are either performed by themselves or under their immediate inspection.

Experience has fully proved that the trees grown at this point, in addition to being free from diseases, are better adapted to cold climates than those of any other portion of the United States.

The collection of Apples includes several thousands of the famous new American Apple, the "Northern Spy."

A large assortment of Pears, of the choicest kinds, are propagated on quince stocks for DWARFS and PYRAMIDS, and will bear the first or second year after planting; they are admirably adapted for garden culture. A lot of these are now on hand, of extra size, for immediate bearing.

The collection of Ornamental Trees is large and fine, comprising several hundred of the splendid *Pawlonia Imperialis*. The catalogue of Roses embraces the most popular new varieties. A great variety are propagated for standard or Tree Roses, 4 to 6 feet high, with fine heads.

Of *Double Dahlias* the assortment is unsurpassed, including the finest show flowers yet introduced to this country, and many that were imported last season at 5 guineas each. A catalogue will be published in April.

The stock of Green House Plants is very extensive, and includes the most beautiful new *Pelargonium* (Geranium,) *Fuchsia*, *Camellia*, *Calceolaria*, *Verbena*, *Cactus*, &c., &c., all finely grown, and will be sold at greatly reduced prices.

Trees and Plants packed in the best manner, and shipped to any part of the country agreeable to order.

Priced catalogues sent gratis to all post paid applications. Orders from unknown correspondents should be accompanied with a remittance or reference.

ELLWANGER & BARRY

Rochester, April, 1846.

AGRICULTURAL IMPLEMENTS.

E. TAYLOR, at his Steam Factory, No. 6 Hill-street, is extensively engaged in manufacturing and dealing in all kinds of AGRICULTURAL IMPLEMENTS. Having during the past year visited all the Agricultural Establishments in Philadelphia, New York, and Boston, and secured the right of many valuable Machines and Implements, he is prepared to furnish, wholesale and retail, all kinds of Agricultural Utensils found in the eastern cities, such as

Grant's Patent Fan-Mills, Corn Shellers, Corn and Coffee Grinders, Corn and Seed Planters, Scythe Snathes, Straw Cutters, Patent Churns, Pitchforks, Patent Parallel Jaw Vices,

together with many other valuable tools, both to Farmers and Mechanics.

He is also extensively engaged in manufacturing *Bate's celebrated Patent Sliding Top Chamber Shower Bath*, to be used in chambers or sleeping apartments, without the least damage to carpets—the nicest article in the world! 1100 sold in four months in New York city the past season.

Farmers in want of tools or implements, of any kind, would do well to call and examine. For sale wholesale and retail at the Factory, No. 6, Hill street; also at the store No. 15 and 17, Exchange street, and at the Genesee Seed Store, No. 10 Front street.

E. TAYLOR.

Rochester, N. Y., May, 1846.

NEW SEED and IMPLEMENT WAREHOUSE.



GENESEE SEED STORE & 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.

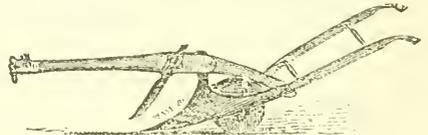
Fruit and Ornamental Trees, Shrubs, Plants, &c., will be furnished to order from one of the best establishments in the country—the well known MOUNT HOPE NURSERIES.

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 of 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.

RAPALJE & BRIGGS.

Rochester, Feb. 1, 1846.

"Burrall's Patent Shell-Wheel Plow."



Saves one-third draft, and works well.

MADE and sold, at Wholesale and Retail, by CURTIS, ROSE & Co., (Geneva, Ontario Co., N. Y.) manufacturers of Threshing Machines and Separators, Clover Mills, Corn Shelling Separators, (a new and desirable article,) Steam Engines and Boilers, Mill Gearings, Water Wheels, Stoves, Hollow Ware, Potash and Caldron Kettles, &c.

The Wheel Plows and Corn Shellers can also be obtained at the following places:

RAPALJE & BRIGGS, Genesee Seed Store, Rochester.
EDEN FOSTER, Batavia.
HALL, RHOADES & SHERMAN, Syracuse.
PETER CRONKHITE, Hallowell, Canada.
B. F. Davy & Co., Bath, Canada. [4-3t]

Peas Wanted.—Wanted, at the Genesee Seed Store, two or three hundred bushels Peas, of the first quality, for which the highest cash price will be paid by

RAPALJE & BRIGGS.
No. 10, Front-st., Rochester.

Colman's Agricultural Tour.—Subscribers to the above work are hereby notified that No. 5 is now in the hands of the agent, ready for delivery, and they will please call for them.

JAMES H. WATTS, Agent.
Rochester, April 1, 1846.

Wanted, at the Genesee Seed Store, 500 bushels Timothy and Clover Seed, for which the highest cash price will be paid by the subscribers.

RAPALJE & BRIGGS.

Agricultural Books.

SAGE & BROTHER, corner of Buffalo and State streets, Rochester, have a large and well selected assortment of the most approved Works on Agriculture, among which are the following:

Johnson's Farmer's Encyclopedia—Downing's Fruits and Fruit Trees of America—Boussingault's Rural Economy—Johnston's Agricultural Chemistry—The American Poultry-er's Companion—Stewart's Stable Economy—Youatt on the Horse—Hind's and Mason's Farrieries—Youatt and Clator on Cattle—Morrell's American Shepherd—Blacklock's Treatise on Sheep—Farmers' and Emigrants Hand Book—Kenrick's American Orchardist—Buell's Farmer's Instructor—Gaylord & Tucker's American Husbandry—Armstrong's Agriculture—A Treatise on Vegetable Physiology—Liebeg's Animal and Agricultural Chemistries—Beatty on Agriculture—Falkner's Farmers Treasure—Smith on Productive Farming—Fessenden's Complete Farmer—Child on Beet Sugar—Fessenden's New American Gardener—Johnson's Gardening for the Ladies—Bridgeman's Gardener's Instructor. [4-21] Rochester, April, 1846.

FARMERS, CURE YOUR HORSES!



GEO. W. MERCHANT'S CELEBRATED GARGLING OIL.

An Invaluable Remedy for Horses, Cattle and other domestic animals, in the cure of the following diseases:

<i>Fresh Wounds,</i>	<i>Fistula, Sitfast,</i>
<i>Galls of all kinds,</i>	<i>Strains, Lameness,</i>
<i>Sprains, Bruises,</i>	<i>Sand Cracks,</i>
<i>Cracked Heels,</i>	<i>Foundered Feet,</i>
<i>Ringbone, Windgalls,</i>	<i>Scratches or Grease,</i>
<i>Poll Evil, Callus,</i>	<i>Mange,</i>
<i>Spavins, Sweeney,</i>	<i>Horn Distemper.</i>

Also a valuable Embrocation for diseases of the Human Flesh.

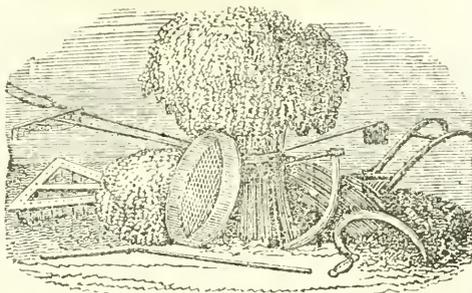
Since the virtues of the Gargling Oil have become so extensively and favorably known to the farmers of the United States and Canada, as a curative oil in diseases of animals, and as a consequence, its demand becoming great—there has not been wanting those whose cupidity has suggested to them that if they could concoct something as nearly resembling in appearance as they could GUESS, with any thing for a name, they might urge it upon unsuspecting customers as a substitute for the true Gargling Oil. The proprietor would therefore CAUTION those who purchase to be sure the name of G. W. Merchant is blown on the side of the bottle. All others are an ATTEMPT at imitation, and are therefore an imposition.

For testimonials, synopsis of diseases, and mode of treatment, see pamphlet which accompanies each bottle.

☞ Sold at the ROCHESTER SEED STORE, and by Druggists and Store-keepers in the United States and Canada.

Rakes—99 dozen I. Stark's superior Hay Rakes, for sale at the Genesee Agricultural Store, No. 10, Front-st., by
[4] RAPALJE & BRIGGS.

Corn Shellers!—A first rate article, price \$10, for sale at No. 10, Front-st., RAPALJE & BRIGGS.



ROCHESTER SEED STORE, AND WARE-HOUSE FOR FARMING TOOLS.

By JAMES P. FOGG.

The subscriber having purchased the interest of Mr. B. F. Smith, in the SEED and IMPLEMENT 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 seedsmen 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; while those varieties of foreign growth, which experience has shown are the best, such as Cabbage, Cauliflowers, Brocoli all the varieties of Garden and Field Turnip, Scarlet Short-Top Raddish, Scarlet and White Turnip-Raddish, Dwarf and Early Peas, with Twenty choice varieties of FLOWER SEEDS, have been imported by the subscriber from the long established house of R. WRENCH & SONS, of London.

AGENTS for the sale of Rochester Seeds by the package, &c.—*Attica*, H. D. Gladding. *Amsterdam*, J. W. Sturtevant. *Ashburn*, Hudson & Buckbee. *Albion*, Charles W. Perkins. *Batavia*, Lucas Seaver. *Ballston*, E. W. Lee. *Buffalo*, W. & G. Bryant. *Brockport*, A. B. Bennet. *Cavadaigua*, L. C. Cheney & Co. *Cazenovia*, Dr. A. Ford. *Castile*, Halsted & May. *Dansville*, H. B. Williams & Son. *Elmira*, Tracy Beadle. *Geneva*, Hemjup & Cone. *Genesee*, L. Turner. *Hudson*, W. & G. Storrs. *Homer*, Wm. Sherman & Son. *Ithica*, Lewis H. Culver. *Lockport*, S. H. Marks & Co. *Le Roy*, Tompkins & Morgan. *Lausburgh*, R. Harrison. *Mumford*, J. Phelps & Co. *Mount Morris*, R. Sleeper. *Oswego*, C. & E. Canfield. *Perry*, R. H. Smith. *Penn Yan*, John H. Lapham. *Pulmyra*, Hoyt & May. *Port Byron*, S. K. Kendriks. *Scottsville*, Garbutt & Co. *Schenectady*, D. L. Powell. *Syracuse*, Foster & Nott. *Seneca Falls*, C. L. Hoskins. *Troy*, J. Daggett & Co. *Utica*, J. E. Warner & Co. *Union Springs*, Wm. Cozens. *Warsaw*, Dr. A. Frank. *Waterford*, Wm. A. Waldron. *Waterloo*, T. McClintock. *Wyoming*, Cornwell & Maine. *Pittsfield*, Mass. Isaac L. Cole. *York*, James McPhearson. *Adrian*, Mich. D. K. Underwood. *Brantford*, C. W. J. & R. Curtis. *Chicago*, Ill. N. Sherman, Jr. *Columbus*, Ohio, John Miller. *Detroit*, Mich. J. W. Strong, Jr. *Hamilton*, C. W. S. Kerr & Co. *Jonesville*, Mich. Smith & George. *Kingston*, C. H. Charles Hsath. *London*, C. W. Edward Adams. *Monroe*, Mich. Hosmer Graham. *Marshall*, Mich. A. Callender. *Milwaukee*, W. T. Holton & Goodall—Jackson & Jewell. *Niagara*, C. W. James Harvey. *Pontiac*, Mich. Rogers & Dunklee. *St. Catharines*, C. W. S. L. St. Johns—Boomer, Brothers & Co. *Springfield*, Mass. Chapin & Gunn—Benj. K. Bliss. *Sandusky City*, Ohio, W. T. & A. K. West. *Toronto*, C. W. Robert Love. *Toledo*, Ohio, Raymond & Co. *Westfield*, Mass. Jessup & Co. *Ypsilanti*, Mich. Edmunds & Co.

Rochester, N. Y. JAMES P. FOGG.

MARKET INTELLIGENCE.

ROCHESTER, May 26, 1846.

OUR Produce and Provision Market is excessively dull.—The recent foreign news produced an unfavorable effect upon the produce market in this city and Buffalo—though the same arrival seems to have produced a favorable effect in New York.

WOOL.—But few lots of this year's clip have appeared in market, and the price is not established. The prospect is that the market will open from 2 to 3 cents less, per lb., than last season.

NEW YORK, May 22—3½ P. M.

Flour.—3000 bbls. sold for exportation at \$4.50 for Michigan and \$4.56 for Genesee. Genesee, for consumption, \$4.56 a 62½. No sale of wheat. Old prices are no longer bid for rye; 500 bush. Tenn. brought 61 cts. 2700 bush. N. O. mixed corn sold at 60 cts. 56 lbs. Corn is heavy; northern oats 43 cts.

Pork is heavy at \$9 and \$11.
 Beef \$6.75 a \$7.50 for mess; city prime \$5.

The foreign news is considered on the whole as favorable. The quotation of 26s for flour in Liverpool nets \$6. The English quotations for pork and beef are quite satisfactory. 15,512 bbls. flour, 15,907 bush. corn, and 3,600 wheat received by the North River boats on Friday.—*Jour. Com.*

BUFFALO, May 25.

There has been a better demand for wheat this morning, but to effect sales holders have been compelled to submit to a decline. The transactions that have fallen under our observation are the sale of 5300 bush. Wabash at 81 cts., and 4500 bush. Milwaukee at 82. The demand for flour for export is also very fair, but here the views of buyers and sellers conflict, the former refusing to offer \$3.75 and the latter evincing an unwillingness to sell under \$3.81. In corn there is not much doing, the inquiry being limited to small lots for city trade, and holders generally being desirous to sell at 40 cts.

24,186 bbls. flour, 32,953 bush. wheat, and 29,549 corn arrived by Lake from Saturday to Monday evening. 11,239 bbls. flour, 31,619 bush. wheat and 1000 bush. corn shipped east by canal Saturday.—*Commercial.*

Rochester Produce Market—Wholesale.

Wheat,.....	38	4	92	Pork, bbl,.....	12	00
Corn,.....	46	48		Pork, cwt,.....	4	00
Barley,.....	42	45		Beef, cwt,.....	4	00
Oats,.....	33	35		Lard, lb,.....	6	½
Flour,.....	4	00	4	Butter, lb,.....	11	11
Beans,.....	38	1	00	Cheese, lb,.....	7	8
Apples, bbl,...		2	50	Eggs, doz,.....	3	
Potatoes,....	37	50		Poultry,.....	7	
Clover Seed,...	5	00	5	Tallow,.....	6	7
Timothy,....	1	50	2	Maple Sugar,...		8
Hay, ton,....	10	00	12	Sheep Skins, fresh,	1	12½
Wood, cord,...	2	00	2	Green Hides, lb	3	½
Salt, bbl,....		1	25	Dry ".....	6	7
Hams, lb,....	7			Calf Skins,....	7	8

Agricultural Societies.

MONROE Co.—The next meeting of the Monroe Co. Ag. Society will be held at the office of the Genesee Farmer, on the second Tuesday in August, for the purpose of appointing awarding committees and making other arrangements for the Annual Fair to be held in October.

MADISON Co.—The fifth Annual Fair of this Society is to be held in the village of Eaton, on the 22d and 23d days of September next. S. B. BURCHARD, President; L. LINCKLEAN and THOMAS A. CLARK, Secretaries.

ALLEGANY Co.—Officers elected at the last annual meeting:—LAURENS HULL, Angelica, President; JOEL KARR and BRYCE KERR, V. Presidents; R. CHURCH, Rec. Sec., and A. B. HULL, Angelica, Cor. Secretary and Treasurer.

SENECA Co.—Fair to be held at Waterloo, Oct. 22, 23—JOHN DELAFIELD, Geneva, President, and J. W. BACON, Waterloo, Rec. Secretary.

LIVINGSTON Co.—We understand that the Livingston Co. Ag. Society is to hold a PLOWING MATCH at Avon, on the 8th of June, instant.

The Genesee Farmer.

VOLUME VII, FOR 1846.

Each Number of this Volume, (which commenced in January, 1846,) instead of SIXTEEN, contains TWENTY-FOUR LARGE OCTAVO PAGES,—is printed on NEW TYPE, and GOOD PAPER,—and embellished with appropriate ENGRAVINGS. The paper will make a handsome volume of about three hundred pages, suitable for binding at the expiration of the year. No reasonable expense or effort will be spared, but every proper exertion used to make it acceptable to the Farming community, by rendering it at once the cheapest and best paper of its size and kind in the Union.

ITS EDITORIAL DEPARTMENT will continue under the supervision of DR. DANIEL LEE, its present talented and popular Editor. ITS HORTICULTURAL DEPARTMENT will be conducted by P. BARRY, Esq., an experienced and practical Horticulturist.

TERMS, same as heretofore—FIFTY CENTS A YEAR, in advance; 5 copies for \$2; 3 copies for \$3.

Now is the time to subscribe! and those who wish to do so, are requested to send in their orders as soon as convenient. Persons ordering the paper will please write plainly the name of the Post Office, County and State to which it is to be sent—and also state whether they have the January number. Post Masters, and other friends of Agricultural Journals, are requested to obtain and forward subscriptions for the Farmer. Post Masters may enclose money at our risk. Address D. D. T. MOORE, Rochester, N. Y.

To Postmasters, Agents, &c.

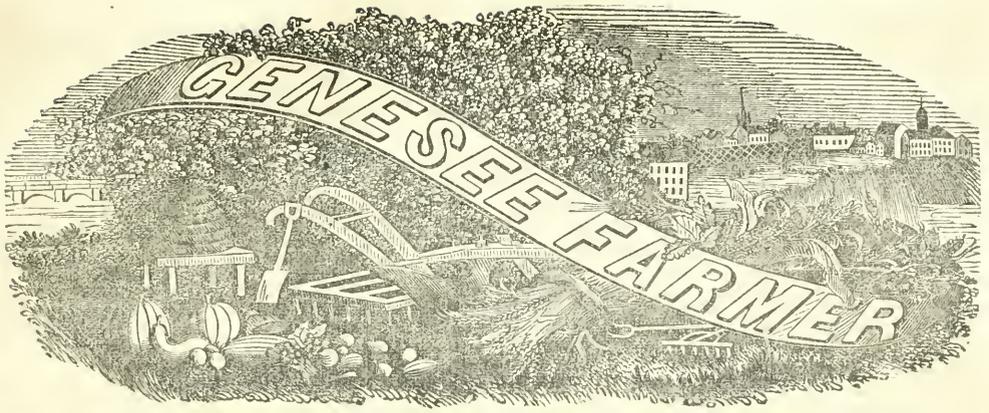
POST MASTERS and others who have interested themselves in obtaining and forwarding subscriptions for the FARMER, will please accept our sincere thanks for so generous an exercise of their influence. We trust they are disposed to continue their valuable aid in behalf of this publication—by extending its circulation, and thus enhancing its usefulness in their various localities.

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 our friends will bear this in mind, and forward the subscriptions of those who want the Farmer.

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.

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THE GENESEE FARMER:

Issued the first of each month, at 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 over the Rochester Seed Store, (2d story,) Front street, nearly opposite the Market.

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.

Agricultural Report for June.

JUNE is a very important month to the husbandman. That of 1846 has been very favorable to the growth of all cultivated plants. Crops have suffered more from insects, than any other injury. The weather last fall, and this spring, has been extremely propitious to the multiplication of those minute predators which most annoy the agriculturist. Peaches, plums, and cherries have suffered very severely—while apple, pear, and other fruit trees have not wholly escaped. Cucumber, pumpkin, and melon vines have been wholly destroyed on many farms, and on all more or less injured. We have tried ashes, salt, soap suds, decoction of tobacco, and killing bugs with the fingers, for the protection of vines. The latter process we find the most effectual.

A large brown grub has been very destructive on corn and beans in this neighborhood, cutting off the stems just below the surface of the ground. The small wire-worm has not been absent, nor idle, in its labor of mischief. Notwithstanding the sad depredations of insects, most spring crops are quite promising. Corn, peas, barley, oats, and potatoes, where unmolested, are forward, and most luxuriant. A number of warm showers has served to furnish a larger growth of clover,

timothy, and other grasses. These should be cut for hay when in full blossom. The reason is that, at such period of their existence, the stems, leaves, and heads of these plants contain the most *sugar*, or saccharine matter, with which to nourish and elaborate their seeds. After a plant has ripened its seed, whether it be clover, timothy, corn, or beet, its leaves and stems are comparatively worthless as food for domestic animals. In transforming the honey in a clover head while in blossom into seed, there is a waste of nutritious matter, by the formation of carbonic acid at the expense of the honey which is given off from the surface of the petals. It is by the consumption of carbon that heat is generated in the matter that forms infant seeds. Grass should not be cut till it gets its growth and is about to form seed, for the reason that its saccharine matter is small before that period.

In applying a mixture of strong hard-wood ashes and salt to the hills of corn, care should be taken not to dust the leaves. We have seriously injured several rows by allowing caustic ashes to fall on the leaves of corn. We mix two parts of ashes to one of salt, and spread around the stems on each hill about a heaping table spoonful at the first hoeing. If our soil did not abound in gypsum and lime, we should add both to our ashes and salt before their application.

Wheat, according to present appearances, will be about an average crop. It would have been unusually large, had not the Hessian fly been more abundant and destructive than common.—The writer has counted thirty-eight of the young of this insect in a single stem of wheat, and many that contained from ten to twenty *larva*. Taking Western New York together, the loss from the fly alone will doubtless be at least 500,000 bushels. In the "Farmer's Dictionary" (a work recently published by the Harpers,) it is recommended "to seed early" as a preventive against injury from the wheat fly. This certainly is bad advice, so far as this latitude is concerned. All wheat growers in Wheatland concur in saying that early sown wheat has suffered

much more from the attacks of the fly than late sown. Mr. WILLIAM GARBUTT, who has plowed up some 14 acres of wheat and sown the field with oats, in consequence of having the wheat destroyed by the Hessian fly, assures us that his loss is mainly owing to *early sowing*, at or near the first of September.

Of the fifty varieties of winter wheat sown by Gen. HARMON, no one has escaped the ravages so well as his Improved White Flint. Mr. ELLSWORTH, late Commissioner of Patents, in a letter published in the recent Report of his successor, makes the following statement in regard to the reluctance with which insects feed on this variety of wheat:—"A remarkable circumstance occurred in my wheat field, where several varieties were sown. The red chaff, bald wheat was attacked by the army-worm, and the stalks completely stripped. When the worms reached the white flint wheat, obtained of Gen. HARMON, of Wheatland, N. Y., *they stopped, and went around the piece without touching a single stalk!*"

Mr. ELLSWORTH cultivates a large farm near Lafayette, Indiana.

The fly does not wholly refuse to deposit its eggs on the stems of the most *flint-like* wheat, nor do its larvæ omit to draw their nourishment from this plant. All that can be said is, that it is less affected than any other variety of which we have any knowledge.

Our early Southern wheat, particularly a variety known as "Alabama Wheat," has been greatly injured by mildew. By the aid of a good microscope, the writer of this, and the pupils attending the Western New York Agricultural School, have been able to see the *spores*, or seeds of this parasite, growing on the leaves of wheat.

The "*Touland Wheat*," brought from England last season by Mr. FULLER, of Cayuga, (some of which he gave Gen. HARMON,) has been nearly destroyed by the fly.

A beautiful specimen of wheat sent from the province of Leon, in Spain, to ISALAH TOWNSEND, Esq., of Albany, by our Consul at Bilboa, and by him given to Gen. H., has stood the winter well. It is but slightly affected by insects. Its straw is small, leaves of a medium size, and slightly attacked by mildew.

We have three varieties of Virginia wheat which have stood the winter well, are early, and promise good returns. They are the "Orange," "Blue Stem," and "Virginia Red Bald." The fly has worked but little among these plants.

Samples received from Leghorn, Germany, and Tuscany, have proved nearly total failures. A specimen from Botany Bay is hardy, has tilled well, and promises a good crop.

To prevent *mildew* and *rust*, land should be well drained, free from weeds and grass, and not contain an excess of vegetable matter. Charcoal, ashes, salt, and lime, are of great service in forming firm straw, and thus refusing a nidus

for the growth of parasites. There is considerable danger of loss from rust, owing to the luxuriance of the stems and leaves of wheat plants, their large size, loose and spongy texture. Of course much will depend on the weather for the next two or three weeks. If this shall be hot, damp, and cloudy, immense injury will be done. To avoid the Hessian fly our best wheat growers regard it as quite early enough to begin their seeding at or after the 16th of September.

Western N. Y. Ag. School, June 22.

Renovation of Soils.

DR. D. LEE—*Sir*: At the last meeting of the Orange Agricultural Club, a resolution was adopted requiring the Corresponding Secretary to send you a copy of a Report on a farm made by a Committee, with the request that you will give your views upon it. In obedience to that resolution I enclose you the following report.—Any communication from you directed to Liberty Mills, Orange Co., Virginia, will be thankfully received.

Very respectfully,

EBENEZER GOSS, *Cor. Sec'y.*

Somerset, Va., May 9, 1846.

REPORT.

THE facts connected with the past and present condition of Farm No. 3 (Mr. Henshaw's,) especially referred to by the committee on farming are of peculiar, and great interest, to all dependent on Wheat as a staple crop.

There is nothing in the appearance of this farm to distinguish it from the Southwestern mountain lands generally, unless it be its comparative exemption from puff or blown land, and its abounding more in rich gravelly slopes, and in some parts the greater adhesiveness of the soils. More than 30 years ago, and before the introduction of any improving system, its reputation was deservedly high for its especial adaptation to *wheat*.—About the year 1815, the five shift rotation, or three consecutive crops in grain—two of wheat and one of corn—with two years of clover intervening, and the liberal use of gypsum, was commenced. Much of the clover of the first years was mowed for hay and seed. That of the second in some instances closely, and in others partially grazed previous to preparation for wheat. This system was steadily adhered to up to 1835, from which time to 1840 but little gypsum was used. The crops of wheat from the commencement of this system progressively improved till 1830 in seasons equally favorable, and 14 bushels to 1 sown was harvested in that year. Since that period the wheat crops have rapidly declined, and with the exception of one year when 8 to 1 was made, it is believed they have not received more than from two to four bushels from one of seed.

Since 1840 no regular rotation has been ob-

served, and the use of plaster has been resumed, and liberally applied, without however, its usual effect on vegetation. During the first ten or fifteen years after its use was commenced *its action upon clover and wheat was truly marvelous*, and from the rich luxuriance of these crops, and the improved aspect of the soil, the highest degree of enduring fertility was anticipated.

More attention, during the whole of this period, was paid to making and applying manure than perhaps on any other farm in the county, and as tobacco has not been cultivated, the manure has been used for the general improvement of the farm, and not on particular fields for the benefit of that crop. While such has been the diminution of the wheat crop, *the capacity of the soil for the production of corn has greatly increased.* Heavier crops of this grain is being now raised than ever before.

Clover also has declined, although not to the same extent of wheat. On an adjoining farm, identical in soil and all its leading characteristics, where clover and plaster have been used only for the last three years, ten bushels of wheat to one sown was harvested the present year. On the farm under review only three bushels of wheat from one of seed was harvested, from land that yields a third more corn than the former. Fields that have not produced a crop of the latter grain (corn,) for six or eight years, if thoroughly prepared and well sown with wheat in due season, produce crops really worth harvesting. Every change of rotation has been resorted to on the farm that fails to bring wheat, without improvement.

That this is not owing to *general sterility* is evident from the fact that, other crops succeed where wheat will not grow. Similar instances of the special exhaustion of the soil have occurred in other districts of our country, and are doubtless to be attributed to the injudicious course of cultivating the same crop too frequently on the same land, instead of alternating unlike crops, and thereby enlarging the interval between crops of a like composition. Our very limited acquaintance with agricultural chemistry would deter us from hazarding an opinion or even a conjecture on so interesting a subject but for the hope of attracting to it the attention of others, whose taste and pursuits may enable them to point out a remedy where the evil already exists, and the means by which it may be avoided where it may yet occur.

JAS. NEWMAN, }
 JNO. WILLIS, } *Com. on Farms.*
 E. HENSHAW, }

ANSWER TO THE ABOVE.

WE omit the speculations of the Committee from a lack of room.

The *facts* in this well authenticated case are of great importance. They elucidate a material,

and by many doubted point in the science of agriculture. Practically they demonstrate, what we have long maintained, that neither ordinary barn yard manure, nor gypsum *alone* is adapted to the production of perfect wheat plants. So long as the surface soil contains, in fair proportions, all the elements of wheat, this crop may be successfully cultivated. But when it fails in that regard, the restitution of the lacking ingredients is a matter more difficult, in *practice*, than most men are aware of. We suppose from the circumstances attending the culture of the farm in question, that the surface soil now lacks the *phosphoric acid* required to form good crops of wheat. In forming 1000 lbs of the seeds of this invaluable plant, nature uses not far from twelve pounds of the acid above named. If a farmer were to feed 1000 lbs. of shelled corn to his swine, and save every particle of their dung and urine to apply to his wheat fallow, and *all* the phosphoric acid in the manure should enter into the composition, not of the stems and seeds of wheat, but of the *seeds alone*, it would furnish phosphorus enough for only 400 lbs. of wheat. We wish to call particular attention to the fact that, it requires 2500 lbs. of corn to furnish the mineral elements necessary to make 1000 lbs. of wheat. Hence, it is obvious that, to make that amount of wheat from manure formed by the consumption of corn, a *large excess of other ingredients* than phosphates—mainly organic elements—must be applied to the soil. This excess will, in practice, be found injurious, if not ruinous to the crop.—The same reasoning will apply with greater force when one attempts to form the seeds of wheat from common barnyard manure, which is itself made up of the elements contained in corn stalks and leaves, timothy, blue grass, oats, buckwheat, &c. As a general rule, we find, on a critical examination, that, it will take six parts of dry barnyard manure to form all the constituents required to make one part of the seeds of wheat. This is true of wheat *straw*. In making the latter into manure and then into potatoes, there is a loss of 50 per cent. of the fertilizing elements contained in wheat straw. But we are digressing.

One reason *why* a fair crop of corn may be grown on land that will not bear wheat is, because the roots of corn are three times longer than those of wheat, and hence imbibe the mineral elements required to form the ash in the stems, cobs, and seeds of this plant, from a depth in the earth quite beyond the reach of the roots of the wheat plant. Hence, too, a soil that has so little phosphoric acid that it will grow only four bushels of wheat per acre, may raise twenty-five of corn. The roots of clover are longer than those of wheat, and of course draw alkaline phosphates from a greater depth than the latter plant.

It is owing to this fact that by plowing in a crop of clover on a wheat fallow, we place in the sur-

face soil valuable minerals which the long tap roots of clover have drawn from the subsoil below. But when even that resource fails, from a lack of *deep plowing*, excessive cropping, or both, then partial sterility is inevitable, unless the agriculturist shall use *bone earth and wood ashes* equal to the demand of his wheat crops. Bones may be reduced to small pieces by boiling a few hours in lie, and can then be sown at the rate of 200 lbs. per acre, with double that weight of unleached ashes. This is our prescription to produce wheat on the farm described by the Committee. We will add that, Mr. Henshaw should plow his land a little deeper than he has hitherto been wont to plow, for wheat. He will find the addition of common salt, gypsum, and lime beneficial, but must not depend on either to yield *phosphoric acid*.

We fully concur with the committee in their remarks as to the importance of having this soil analyzed. Every man accustomed to reason admits, that it takes 100 lbs. of *something* to make 100 lbs. of wheat. Will he not also admit that, the producer of this bread-forming grain should know how much of this "something" he has in his soil? So, too, if a farmer wishes to feed a ton of hay to his cow, and then make her manure into a crop of potatoes, should he not know what elements his potato plants must have? and what the ton of hay *will*, and what it *will not* furnish? It is obvious that no animal can create out of nothing a new element, or add to any one contained in its food and drink. To know the character of any manure, one must understand the precise composition of the food and drink out of which the manure was formed. As the ash of timothy hay contains only 15 per cent. of potash, while the ash of potatoes contains 51½ per cent. of that alkali, it is obvious that it will take 340 lbs. of the natural minerals in timothy to yield that 51½ lbs. of potash found in 100 lbs. of potato ash.

A man might as well attempt to make a pound of solid bone out of the materials in a pound of bread, as to think of making a pound of oat straw into manure, and the manure into a pound of oats. How few practical farmers can tell how many oats 100 lbs. of oat straw will make; and what addition to oat straw manure is necessary to use it up to the best advantage in making it into peas, beans, corn, flax, wheat, rye, apple trees, or any other cultivated, living thing? To make, by artificial means, a large yield of good plump wheat, and at a remunerating profit, requires a knowledge of the science of agriculture. Practical men that despise the aid of science usually apply too much of several ingredients, of which there is no lack in the soil. Like the old alchemists they attempt to transmute a ton of iron into a like weight of pure gold, and of course fail.—They imagine that the sulphur and lime in gypsum can be transformed into bread, meat, butter, potatoes, cabbage, and turnips, with equal facility.

How to make Vinegar.

MANY people find it difficult to make good vinegar. When we moved to Wheatland on the first of May we found two barrels partly full of old cider standing in the sun, in the hope, on the part of the owner, that the cider would become acetic acid. A few grapes, and we believe some yeast had been put into the barrels, but still the transformation would not take place. By the following process good vinegar was made in two or three days, and with closer attention might have been made in 36 hours:

One barrel was set up on end, the hoops started and the upper head taken out. The cider was taken out down below the middle of the barrel, so that the bung could be open to admit the air. Several small sticks were set on end in the barrel, on the upper extremities of which pieces of shingle rested just above the surface of the cider. On these strips of shingle was placed a quantity of clean pine shavings, which happened to be at hand. With these the barrel was loosely filled. A pailful or two of the cider was drawn by tapping the barrel near the lower head, and warmed to blood heat, and made to trickle down over the whole surface of the shavings into the cider below. After this, sufficient heat was generated by the active chemicle action, or acetous fermentation that followed, to keep the shavings at 98°, or thereabouts. So soon as the cider began to turn sour a part of it was made to trickle down a piece of old carpet like an untwisted rope into the bung-hole of the other barrel of cider. This barrel was tapped, and the cider drawn and poured over the shavings, and also converted into good vinegar.

The *rationale* of making alcohol and acetic acid is this:

The alcohol found in cider, wine, beer, fermented milk, whiskey, &c., is made of elements contained in sugar and starch, which are elaborated by living plants in their fruit, like apples and grapes; and seeds, as in corn, rye, and barley. Starch and sugar are composed of elements precisely alike in character and quantity, viz: 12 parts of carbon, 10 of oxygen, and 10 of hydrogen. Before alcohol is formed of these elements, they combine with 2 atoms more of oxygen and hydrogen, and make *grape sugar*. The formula of which is, 12 carbon, 12 oxygen, and 12 hydrogen. The formula of alcohol is 4 carbon, 6 hydrogen, and 2 oxygen. To make *two* atoms of alcohol will require 8 carbon, 12 hydrogen, and 4 oxygen. As *one* atom of grape sugar has 12 carbon, 12 hydrogen, and 12 oxygen, it is obvious that 8 parts of oxygen and 4 of carbon will be left from an atom of grape sugar after 2 atoms of alcohol have been formed. Now in making an atom of carbonic acid, oxygen combines with carbon in the ratio of 2 parts of oxygen to 1 of carbon, or 8 of O. to 4 of C. Hence we see *why* it is that in all vinous fermentations,

whether in the domestic brewing of small beer, raising bread, or in making ale or whiskey in large establishments, fixed air, or carbonic acid gas, is generated.

To understand the transformation of alcohol in cider, beer, whisky, or brandy, into vinegar, the unlearned reader will note the following facts: The composition of alcohol is 4 carbon, 6 hydrogen, and 2 oxygen. That of pure vinegar—anhydrous acetic acid—is 1 carbon, 3 hydrogen, and 3 oxygen. Water is composed of an atom of oxygen united with an atom of hydrogen, although the atom of oxygen is 8 times heavier than that of hydrogen. If 4 atoms of oxygen (which exists in the atmosphere) combine with 1 of alcohol, the composition of the latter will stand 4 C., 6 H., and 6 O.* Three atoms of the oxygen thus derived from the air unite with 3 atoms of the hydrogen in alcohol to form 3 atoms of water, which leaves 4 carbon, 3 hydrogen, and 3 oxygen, or an atom of pure vinegar, *diluted* in 3 atoms of water.

We omit to state the process of forming what chemists term *aldehyd*, intermediate between alcohol and acetic acid, as unimportant to the practical farmer. Practically, it is seen that to convert alcohol into vinegar, we have only to *oxidize* the former. This is done by exposing alcohol to the chemical action of the atmosphere, by spreading it over an immense surface of thin coiled up shavings for a short time. Warmth favors the chemical change. But when the alcohol is confined from the air in a tight barrel, except with an open bung hole, and perhaps the neck of an inverted bottle in that, it may take three or four months to change it into vinegar. Every body knows that a high heat is generated when alcohol is burnt in a spirit lamp. This is owing to the formation of water by the chemical union of oxygen in the air with the 6 parts of hydrogen in 1 of alcohol. For the same reason heat is evolved in the shavings in a cider barrel when the alcohol in cider is transformed in acetic acid.

* C. stands for carbon, H. for hydrogen, and O. for oxygen.

PATENT GRAIN CRADLE.—We have been shown, and requested to notice, "Wood & Loveland's Patent Grain Cradle"—the right of which is now owned by Messrs. FRISBEE & OSBORN, of Rensselaerville, N. Y. The improvement or patent consists in the substitution of hollow metal in place of wood fingers. The extremities (about half) of the fingers of the cradle shown us were made of hollow tin—the wood entering the tin about half way from the foot of the fingers. The proprietors of the patent claim the following advantages over the common cradle: that the fingers are stronger, lighter, not liable to warping, &c. where the grain is wet, and more easily mended.

M.

NEW potatoes have made their appearance in Rochester. So have raspberries.

"Profitable Farming."

UNDER this head, we published in our March number a communication giving the product and profits of ten acres of land owned by Dea. CHAS. TENNY, of Riga. Another correspondent has since furnished us with the following statement of the produce of the same land for *three years*—including that already given, and adding the two previous years:

The produce of 10 acres, for three successive years, by CHARLES TENNY, of Riga, Monroe county:—

40 bushels corn per acre, at 50 cents	.....	\$200 00
30 " wheat, " 7 shillings	.....	262 50
2 tons hay, per acre, at \$10 per ton	.....	200 00
35 bushels clover seed, at \$7	.....	245 00
3 colts wintered on clover straw	.....	25 00

\$932 50

EXPENSE:

Interest of land, at \$50 per acre	.....	\$105 00
Cost of Manure	.....	3 00
Plowing for both crops	.....	20 00
Seed, hoeing, &c.	.....	35 00
Harvesting crops	.....	60 00
Cleaning clover seed	.....	23 00

\$246 00

Nett gain
 | \$686 50 |

Or, per acre
 | \$68 65 |

D. S.

Sun Flower Seed for Oil.

MR. EDITOR:—From a recent experiment made in extracting oil from Sun Flower Seed, and from the quantity obtained from a bushel, I am of the opinion that it may be a profitable crop for the farmer to raise—for the more the oil is used, the greater, we think, will be the demand for it. We have used it for a few evenings past, for burning in lamps, and have no doubt but it will be found a valuable article for that use—as it gives a clear light, with very little sediment, or crust, collecting on the tube of the lamp.

I noticed, in an article on this subject published in the Genesee Farmer for July, 1844, that the oil is found useful for fancy painting, and for druggist's use, and that it will yield from 40 to 50 bushels per acre, and sometimes much more. But taking the smallest estimated yield per acre, 40 bushels, and that at fifty cents a bushel, (which I am inclined to believe it will be worth, at least,) it will make to the farmer a very fair profit on his land and labor. Will the Editor, or some of his correspondents, give the time of sowing and best manner of raising the Sun Flower?
W. M. MORGAN.

Le Roy, 1846.

THE whole crop of apples, in one county of Kentucky, is likely to be destroyed by a species of worm, different from any hitherto seen in that region.

THE farms of Belgium rarely exceed five acres; and yet, by the excellence of their culture, they support a family comfortably.

Wool—Its Prices, Preparation for Market, Exportation, &c.

NUMBER ONE.

AGRICULTURAL ROOMS, }
Albany, May 25, 1846. }

J. M. SHERWOOD, Esq.,
President N. Y. State Ag. Society:

DEAR SIR—My attention has been drawn to the letter of HAMILTON GAY, Esq., of New York, addressed to the Editors of the Journal of Commerce, and published by them on the 21st inst.

To the wool growers of New York this letter is one of deep interest, and should be extensively circulated. Mr. GAY, at great personal and pecuniary sacrifices, has rendered manifest those obstacles which stand in the way of a profitable exportation of American Wool. Our obligations to him are by no means trivial, for giving notoriety to facts which show most conclusively that it is in the power of the American wool grower so to extend the market for his staple as to give it a healthy and reasonable activity—thus securing to present prices a steadiness and permanency which they are not otherwise likely to receive.

It has been more than intimated by the manufacturer that he is desirous of reducing the prices of the incoming clip some four or five cents per lb. below the prices of last year. The announcement has produced anxiety and alarm; but it would seem probable from Mr. Gay's letter that if it is so, the exporter will cause the manufacturer ultimately to regret his temerity. The causes which have chiefly marred the success of Mr. Gay's experiment, are, in his estimation, the unclean condition of the fleeces, as they come from the hand of the shepherd, and the heterogeneous character of the lots of wool as they come from the lofts of the wool collector. There is no doubt that he is perfectly correct in his estimate, and it is equally undoubted that he might have said that the same causes operate injuriously upon the interests of the American grower of fine wool, even in his own market: and unless removed, this department of Agricultural Industry will receive a blow from which it will with difficulty recover.

It is however too apparent, that neither the letter of Mr. Gay, nor the remarks of any one else, will have an efficient agency in correcting the faults of the unwary, or the frauds of the dishonest. The evils complained of can only be cured by making a radical change in the mode of conducting the wool business; they have sprung almost exclusively from this source, and if it is amended, a cure is certain to follow.

Nor is the change requisite, environed by insuperable difficulties. It will be at once secured by a hearty, vigorous, and concerted effort, on the part of those whose interests are most deeply affected; indeed it is more than certain that the

change has already commenced. Had not inspection laws become deservedly obsolete, here would be a legitimate field for their operation. But as it is unwise to revive the absurdities of a by-gone age, we must carefully inquire if we do not hold, in our own hands, a remedy more effective than any that can be furnished by legislative enactments.

Fleece wool is of such a nature, and the mode of transmitting to the manufacturer such, that neither the faults of the wool nor the frauds of the shearer can be detected, until it reaches the hands of the stapler. Were it furnished by each individual farmer, in lots so large that the expense and trouble of stapling each lot separately would not be too onerous, it is apparent that then each lot could be traced to the particular spot from whence it came, and self interest would soon apply an efficient corrective both to faults and frauds.

But wool is now collected in small lots, from an immense multitude, in a way that it is not possible to trace each lot. The collectors for the most part are unable to discriminate properly between their different purchases—or, if able, have not the wisdom or liberality to make that difference in price which simple justice and sound policy demand.

So long as the profits on sheep-husbandry were so excessive as to satisfy the most grasping cupidity, men preferred being careful and honest, to being mean and careless; but after the profits have fallen to that level above which no agricultural business can long continue, it is not to be wondered at, if a rapid and great deterioration takes place in the quality and condition of the article, since there is no fair and equitable discrimination made in the market value. This brings me to a point not touched upon by Mr. Gay—but one to which, it is apparent, the American manufacturer of Broadcloths cannot be indifferent—and which should be at any rate pressed most forcibly upon the notice of the growers of fine wool.

The present mode of purchasing wool has already had the effect to deteriorate the character of the flocks over large sections of the country. There is now an almost universal complaint, that there is no adequate discrimination in price; the evil is most seriously felt, and men are in hot haste to make changes in the character of their flocks, which they, as well as the manufacturer, will ere long, it is to be feared, seriously lament. The changes now being rapidly made would soon be complete and irremediable, were it not that there are some men who, either from the magnitude of their clip, or from business connections, or peculiarity of situation, or some other cause, deal directly with the manufacturer and not with his factor, and thus obtain prices which bear some sort of relation to the stapler's estimate of the value of the wool. If it be important to

the manufacturer of fine cloth to put a stop to the degradation of our flocks, he will surely see that it can be done only by putting an end to the present manner of conducting the wool trade, and will at once lend his effective aid in bringing about a result so desirable to the prosperity of the American Farmer.

As a very large proportion of the wool purchased by the wool-factor is obtained from men who keep but small flocks, and who have therefore no character to sustain as flock-masters, it is very apparent from the laws of trade, that however bad may be the condition of their wool, unless it is separated in the market from that of others, who are truly flock-masters, it will, more or less, according to its quantity, materially affect the price of the other, though a superior article. To show clearly that I am not mistaken in this position, allow me to direct your attention to the unwashed and filthy wool imported last year, costing under 7 cts per lb., and its influence in regulating prices. I was shown imported wool by a manufacturer, which cost him, in the condition it then was, 13 cents per lb. Yet it was equal in appearance to American wool worth 35 cents per lb. Owing to the shrinkage of this wool, however, it took 3 lbs. of it to make one lb. when it was worked into cloth, which therefore was equivalent to 39 or 40 cents per lb.—American wool, worth 35 cents per lb., will shrink about one-third in its preparation for cloth, and therefore cost, when in cloth, about 43 or 44 cents per lb. It is therefore apparent that this filthy foreign wool last year, had a material influence in ruling the market price of American wool of medium quality.

Tag locks, filth, and twine cannot enhance the value of any portion of the wool in market; nor ought a system to be longer tolerated that makes little or no difference in the price of wool thus basely contaminated, and wool wholly free from censurable impurities.

Look at the consequence. The price obtained may adequately remunerate the grower of the one, while to the grower of the other it is utterly ruinous. The one keeps his small flock poorly and cheaply by the road side, or on the refuse of the farm, while the flock of the other consumes the entire or chief product of the farm, and the wool it yields is the only or main crop that its owner carries to market. To each, therefore, the same price will not bring the same returns. The one may and will probably continue to raise wool in his small way, without any material change in its condition, whatever may be the result of any effort to alter the absurd practices of the wool trade. But the other can not and will not long persevere as a wool-grower, unless there is an alteration; and if the present sheep-walks are in consequence turned into plowed fields, the ordinary farmer will in his turn experience the ruinous consequences of neglecting

studiously to foster such modes of marketing wool as will secure to each shepherd an exact recompense for his skill and care. It may be possible for the agricultural products of the country to sink still lower in value than they now are. Perhaps there is margin enough for a great depreciation in prices; but it will sooner or later become necessary for the manufacturer to inquire whether his interests will be promoted or prejudiced, by having the *farmers* of the United States become merely peasantry. May he not so depreciate the value of wool that he will ultimately injure himself? Until the letter of Mr. Gay nothing has ever before been said, that I am aware of, about the necessity of *sorting* fleeces for market. According to Mr. Gay, wool, destined to European markets, must be sorted, else the fullest advantage will not be realized from the venture. Nor is it less certain that an unnecessary loss is annually submitted to by the neglect, or rather by the impossibility, under the present system of doing the same thing with fleeces destined for home consumption. The necessity of sorting in the one case springs out of the division of manufacturing labor. The division of labor, it is true, is not carried as far with us as with foreigners—it nevertheless exists to a great extent—is daily becoming more perfect, and from the necessity of the case, must ultimately be as complete here as elsewhere.—But, even as things now are, it is not difficult to show that the sorting of fleece-wool is requisite to prevent an otherwise unnecessary loss to the wool-grower. One factory that I can name values a certain description of wool only at 35 cents per lb., because it is unsuited to their style of goods, while the very same wool is valued in another factory at 40 cents per lb. for the opposite reason.

Here is the evidence in one case, at least, that in this country, as in England, the manufacturer undervalues the wool brought to his factory for sale.

Again, the Mousselin-de-Laine manufacturers in some instances use wool of precisely the same market value with the satinet maker. But the style of the wool is different—the staple of the one being longer than that of the other.

The interest of both would be promoted by sorting wool, not only as to its quality and the condition of the fleece, but also as to style; and undoubtedly both would be willing to pay a trifle more per lb.—a trifle it is true—but success often depends on trifles.

The staplers of satinet factories, and other manufacturers of coarse fabrics, frequently collect large stocks of wool of a quality used only by the manufacturers of broadcloths. Yet for this superior wool no more has been paid by the satinet maker than for that of inferior quality, which is perfectly well adapted to his purpose.

I have before me the evidence of one case

where an advance of 20 cents per lb. was obtained by a manufacturer of satinets, for wool of a quality too good for his purposes. So also the makers of Mousselin-de-laines purchase large quantities of wool, in order to select from it only that which has sufficient length of staple to suit their purpose. The residue is disposed of to others. A company can be named who annually use 200,000 lbs. to select from.

Those manufacturers that require the best and the finest wool for their goods, are compelled, under the existing practice, to buy vast quantities of wool unsuited to their purpose. An establishment can be named that has 150,000 lbs. of wool thus obtained now on hand, and which they will gladly return to the farmer at cost.—The Middlesex Company use annually one million pounds of wool: what then must be the amount of surplus wool purchased by them?

A Vermont manufacturer of broad-cloths purchased a lot of wool in Dutchess County: among it was some wool brought from his own immediate neighbors, and which he could have purchased before it left home, if it had suited his style of goods, without paying a price for it enhanced by the profits of two factors through whose hands it had passed, and the expense of the journey to Dutchess County and back. The manufacturer must be paid for this useless employment of capital. He is paid: even though unwittingly, he is paid by the flock-master.

I have collected numerous facts to sustain the position I have taken; but one has recently come under my notice so conclusive, that I select it in preference to others for this purpose. A lot of wool amounting to several thousand pounds was put up in the manner complained of, in 1844, but was not sold till 1845, and was then sold without being sorted. The clip of the same flock for 1845 was put up as it ought to be—was also sold—but sorted: a few hundred pounds of the coarser fleeces, amounting to one-tenth of the quantity put up in 1844, being separated. Both lots were purchased by the same manufacturer, in all respects under the same circumstances, except as I have mentioned, and yet the last lot brought 10 cents per lb. more than the former. Both lots were stapled and cleaned, and the real value of each determined by the manufacturer, under circumstances which leave no doubt that the truth was fully and fairly ascertained and stated.

Those who take short-sighted views of things may not see fully and clearly the injurious consequences of the evil here pointed out. They may say that under the present system, quite as much if not more wool is purchased by the manufacturer than would be purchased under any other system—and if one class of manufacturers accumulate large stocks of wool, that they do not want, they can sell them to others who do.

All this is undeniable. But the manufacturers no more desire to be wool merchants, than they

desire to be wool-growers, and thus acquire for themselves the united profits of the farmer, the merchant, and the manufacturer.

The history of commerce shows that, with few exceptions, this jumble of different pursuits is fatal to prosperity.

If the manufacturer, by the force of circumstances, is nevertheless compelled, to some extent, to pursue this course, he will not transfer an accumulation of to him useless wool, to a brother manufacturer, without a profit; and whatever that profit may be, it is so much abstracted from the profit of the wool-grower.

Again—whatever retards the prosperity of the woolen factories, abates measurably the profits of the flock-master; and among the various hindrances to the growth and extension of this description of manufactures, none has been more potent in its baneful influence than the known and acknowledged fact, that an enormous amount of capital is requisite to ensure success. I hope to be able to show, by and by, that it is for the interest of the wool-grower to do all in his power to lessen this evil, and bring the cotton and the woolen manufacturer more nearly to a level.

The 150,000 lbs. of wool referred to has cost the company not less than 52,500, a very nice sum to lie perfectly idle for more than a year.—The bare mention of the fact will convince any one that this company will readily pay more than it now does for the description of wool it actually wants, if he can be saved an outlay so enormous and at the same time so unnecessary.

I remain yours, &c., J. B. N.

IMMENSE NATURAL BEEHIVE.—In a cavern, on the right bank of the Colorado, about seven miles from Austin, there is an immense hive of wild bees. On a warm day a dark stream of bees may be constantly seen winding out from the cavern like a dark wreath of smoke. The stream often appears one or two feet in diameter near the cliff, and gradually spreads out like a fan, growing thinner and thinner at a distance from the cavern, until it disappears. The number of bees in this cavern must be incalculably great, probably greater than the number in a thousand or ten thousand ordinary hives. The oldest settlers say that the hive was there when they first arrived in the country; and it is quite probable that it existed in the same state many years previous to the settlement of this country. It was estimated that there are many tons of honey and wax in this immense hive; and if its contents could be extricated readily, they would doubtless be found far more valuable than the contents of any silver or gold mine that adventurers have been seeking for years in that section.—*Texas Telegraph*.

ONE hundred bushels of strawberries were recently sold in Cincinnati, O., in one day.

Bees.

A method of taking the Honey without destroying the Bees.—The common practice of killing the Bees, in order to obtain the honey, few can witness without some little compunction; and there is a very simple method of effecting the object without any injury to this most interesting little animal, (which on the score of interest, as well as humanity, claims regard.) I beg leave to communicate it through your paper, should you deem it worthy a place in it.

In the evening, when the Bees have retired, take the hive gently from the stand; spread a table cloth on the ground; set the hive on it, placing something under to raise it 3 or 4 inches; then draw up the corners of the cloth, and fasten them tight around the middle of the hive, leaving it so loose below that the Bees will have sufficient room between it and the hive—then raise the lid of the hive a little, and blow in the smoke from a segar; a few puffs of which, as it is very disagreeable will drive them down; continue rising the lid gradually, blowing all around, and in a few minutes it will be found that they have gone out of the hive. You may then take off the lid and cut away as much honey as you may think proper. If the operation be performed the beginning of July, you may take nearly all, as there will be time enough to provide a sufficiency for their support during the winter. As soon as you have taken the honey, put on the lid, loosen the cloth, and spread it out, and in an hour or two the bees will have returned to the hive. It may then be replaced on the stand, and on the following day they will be found at work as usual.

This method is very simple and preferable to that sometimes practiced of driving the bees into another hive as you get all the honey, and moreover the new comb which is still empty, and the young bees, not yet out of their cells, are preserved. There is also danger in driving, of their not liking their new habitation, and, in that case, of their sallying out and making war upon their neighbors.

The above method has frequently been practised by myself and others, and we have always found it to do well.

A. MELLIS.

Washington.

LOCUSTS IN THE WEST.—The "Ohio Cultivator," of June 15th, says that in all the eastern counties of Ohio great injury has been done to fruit trees, particularly young orchards, by these insects. We hope they will keep at a respectful distance from our region; we have insects enough here now.

GUANO POISONOUS.—The Dublin Farmer's Gazette mentions the case of a man who lost his life by holding a corner of a guano-bag in his mouth, by which a portion of the dust was drawn into his throat.

The Check or Bearing Rein.

I AM anxious, in this place, to add my anathema against that inhuman instrument of torture, the bearing-rein. It is no less detrimental to the utility of the animal than it is replete with agony to him. It must have been invented by a savage, and can only be employed by the insensate.—Whence the benefit of unbearing a draught-horse when going up hill? Because the head can then be thrown into its natural position, and materially assist by its weight in drawing the load. If it is beneficial to loose the head at that time, it must also be so on other occasions. Look at the elongated mouths of the unfortunate animals thus so wantonly abused—torn by the bit in their unavailing efforts to overcome this truly barbarous instrument! What produces that dreadful disease, poll-evil, but the action of this cruel strap; constraining the head during the violent exertions of the animal, producing inflammation and ulceration of the point upon which it articulates with the spine? Poll-evil, so generally supposed to originate from blows inflicted on the part, is attributable alone to the gagging-rein. I never saw a horse used entirely for the saddle attacked with this affection. In order to obtain momentary relief from the torment inflicted by the bearing-rein on the poll and mouth, the poor creature is compelled incessantly to toss up his head. By thus strapping down the head you say, practically, "I expect you to draw a certain weight, but I will take away part of your power of doing so." Some have urged that the bearing-rein contributes to the safety of the animal, who, without it, would be more liable to come down. However applicable such an argument may be to those employed in quick draught—though even with them the utility of this instrument is not only exceedingly doubtful, but fast giving way to a more rational method of treatment—it assuredly does not apply to cart-horses, for little fear is ever entertained of their falling; and broken knees, so common among the faster breeds, are rare amongst them.—*The Horse in Health and Disease.*

VALUABLE INVENTION.—A Mr. Richards, an ingenious mechanic of Donaldsonville, has invented a mechanical contrivance by means of which all accidents caused by the running away of horses in harness may be avoided. It is, says the Louisianian, of the simplest construction imaginable—the manner of checking the horses consists of pulling a string inside the carriage, which casts loose the traces, and harness, leaving the carriage perfectly clear of the horses. The invention can be applied to every species of vehicle, and costs only from twenty-five to thirty dollars.

"INQUIRER" is informed that the Sowing Machine figured and advertised in this number of the Farmer, is the only one, to our knowledge, now manufactured in this section of the country.

Burning Straw for Manure.

E. N. PEARSALL of this County, (Seneca,) spreads his straw on his wheat fallow, and burns it, after which the ashes are plowed into the soil. The effect on the next crop of wheat is favorable. He asks "what produces it?" I reply that the ashes of each particular plant, is the best possible inorganic manure for the same plant. Hence the leaves and twigs of the vine, are the best manure for the vine. It is said by some practical vine dressers, that this sort of manure alone can prevent grapes from deteriorating in flavor. If both the wheat berry and stalk were burned on the new fallow, as manure for the next crop, we should hear no complaint of a failure in the soil to produce wheat. But burning straw is a very wasteful sort of combustion; rotting it is more economical, as then the hydrogen and carbon is saved with the inorganic matter, (ashes,) to be employed as the organic elements of the growing plants. Fire is so rapid in its ravages that all the carbon and hydrogen of the burning matter is dissipated in the air, and lost to the crop.

The present unprecedented Early Season.

THE Gardens in this vicinity, Waterloo, might have been planted this season on the 1st of April. We have had no frost since the middle of April seriously to affect vegetation. Pasture has been at least a month earlier than usual: in fact I have not seen a single frost since the 10th of April, which had the effect to retard the growth of grass. It is now the 25th of May; one night last week we had a severer frost than had been noticed before in a month—yet neither were beans nor tomatoes injured in the gardens on the borders of the Seneca Outlet. Last season we had a hard frost on the morning of the 1st of June, which destroyed much of the fruit in this and in all of the neighboring counties; so we have not yet passed the "ides of March." It is now remarkably warm and cloudy. The surface is finely moistened by the recent warm rains. Should a farmer drop from the clouds, into one of our meadows, he would say it was within a week of mowing time, such is the redundant vegetation in May, 1846. S. W.

Stone Fence.—Inquiry.

MR. EDITOR:—Permit me to inquire through the pages of the Farmer relative to the best mode of building stone wall, in order to prevent the earth from heaving. It is a mooted question whether the wall should be laid on an embankment, or the earth thrown up each side. As the matter is one of considerable importance, I should like (as I presume would many other readers of the Farmer,) to hear the opinion of yourself, or some of your intelligent and experienced correspondents upon the subject.

Yours, &c., W.

Wolcott, N. Y., June, 1846.

Weight of Paular Merino Fleeces.

MR. EDITOR:—Agreeable to promise I send you an account of the weight of the fleeces of my Paular flock of Sheep; but I can not give them as heavy as some others have theirs, as I never *smear* my sheep, and I have them washed as clean as they can be, and shear them early.

The first of June my buck "Major," (after sending his wool for samples to about all of the United States,) being thoroughly washed gave a fleece that weighed just 15 lbs.—we think about three fourths as much as if he had been shorn each season. My ewes that have lambs gave from 4½ to 6½ lbs. My ewe lambs (yearlings) gave from 4 to 5½ lbs.; a good share of them gave over 5 lbs.

I am perfectly satisfied that a flock of Paular Merino ewes and lambs, exclusive of bucks and wethers, with right management will average 5 lbs. of washed wool per head. Some, to be sure, have reported higher; but there are a good many ways to get a heavy fleece from sheep, as well as from the people. The Paular Merinos are good enough when the truth is told, as I hesitate not to say that there is no sheep that can be raised and kept with as little trouble and expense, nor any whose fleece will bring as much money. Yet those who live convenient to a meat market can no doubt do better by keeping the Bakewell or Leicester sheep.

Respectfully yours, REED BURRITT.

Burdett, June 5, 1846.

Scours in Sheep.

MR. EDITOR:—Below I give you a recipe to cure the scours in sheep, that I have thoroughly tested and never knew to fail. It is very simple and cheap.

CURE FOR SCOURS IN SHEEP.—First take your sheep shears and tag them, as the filth that adheres to them in such cases seems to augment the disease; and then give from 4 to 6 table spoonfuls of good rennet, prepared the same as cheese makers use it to set their curds for cheese. To a lamb 8 or 10 months old, I give 4 spoonfuls—and if it is not well in twenty-four hours, I repeat the dose; but one dose generally cures. I keep it on hand, in a bottle, at all times. As above stated, I have never known this remedy to fail.

Burdett, 1846.

R. BURRITT.

A CALIFORNIA FARMER.—A gentleman writing from California to the editor of the St. Louis Reville says his stock consists of about 4,000 head of oxen, 1,700 horses and mules, 3,000 sheep, and as many hogs. They all pasture themselves without difficulty in the rich pastures and bottom of the Sacramento, and only require to be attended. This is done by Indians, of whom he employs 400. His annual crop of wheat is about 13,000 bushels, with barley, peas, beans, &c., in proportion.

Inquiry. Preparing Rennet.

MR. EDITOR:—I wish to inquire, through the medium of your paper, respecting a certain weed found to some extent in fields of winter wheat, in this and adjoining counties, called by many *red root*. I am almost entirely unacquainted with it, and would be glad to know in what way and during what season of the year, farmers are most successful in destroying it. In the portion of Wayne county in which I reside, the weed is in its infancy, as it were, and any information or advice respecting it will be very acceptable as well as timely.

In your May number I noticed directions given to the Michigan Farmer, by a Herkimer Co. cheese manufacturer, relative to preparing a rennet. Believing that I can communicate to you a better way (having tried both thoroughly, I think,) of preparing rennet, given me by one of the most successful cheese makers in Wayne County, of more than thirty years experience, is my only apology for troubling you with another communication upon that subject.

After having emptied the stomach, and rinsed it very slightly, saturate it with salt, inside and out. Then put it in a shallow dish, throw in a small handful of sage, and set it in a temperature of say 80°—being careful to turn it daily, that it may absorb all the juices extracted by the salt, which will unavoidably be lost if the rennet is allowed to hang, (as the article alluded to directs.) When thoroughly dried, wrap it in a cloth closely to keep it free from insects.

Yours respectfully, E. C. W.

Walcott, June, 1846.

Making Rennet.

MR. EDITOR:—I noticed in your April number an article on the subject of preparing rennet. Having tried that method as well as the one below given, I am satisfied the latter is far preferable. It is more economical, and will make much better flavored cheese.

To six gallons of water add salt enough to make a brine sufficient to bear up an egg; scald it and skim it. Let it cool and settle, and then turn it off from the settlings. Then add 12 rennets; 6 lemons cut in slices; an ounce each of cinnamon and cloves, unground.

It is better if made the fall previous to using—but will answer if made two or three weeks before used.

A DAIRY-WOMAN OF WAYNE CO.

Walworth, N. Y.

S. LONG, in the Prairie Farmer, says he once lost a number of valuable hogs soon after giving them *sweet whey*. They became swollen and died. Whey if left to sour, or mixed with sour swill, is harmless. He also cautions against giving them brine in which there is saltpetre.

"How to Make Soap."

THE *soft soap* of the farmers is an article of great consequence. The manufacturer commonly successful, especially if the directions copied into the May number of the Genesee Farmer, from some agricultural paper, are followed. Those directions give the true process, always pursued by the farmers of my acquaintance. Unless there is something peculiar in the ashes, the use of unslaked lime is essential. The reason is, that potash in ashes is a salt, or *carbonate*, and that the *carbonic acid is taken from the potash by the lime*; thus *caustic* potash is formed, and unites readily with grease, while the salt or carbonate of potash does not. The lime is of no consequence in *straining the lye*, but of essential importance in obtaining caustic potash, and should be placed at the bottom of the ashes. In this state it will convert shearings of wool, and worn out woolen cloths into excellent soap. The lime should be good, fresh from the kiln, or not having been long air-slaked and exposed to the atmosphere. The lye is sometimes left out, and the labor and materials chiefly lost.

June, 1846.

SOAPY.

VERMIN IN CORN AND GRAIN HOUSES.—I have never yet seen in any papers the way we here prevent rats and mice troubling our corn and grain houses. We raise our building about 20 inches from the ground, by setting posts firmly in the ground, and inverting a common worn out milk pan on the top of each post, and set the building on top of it. There is corn in cribs in this place four years old, that has not had a rat or mouse in it.

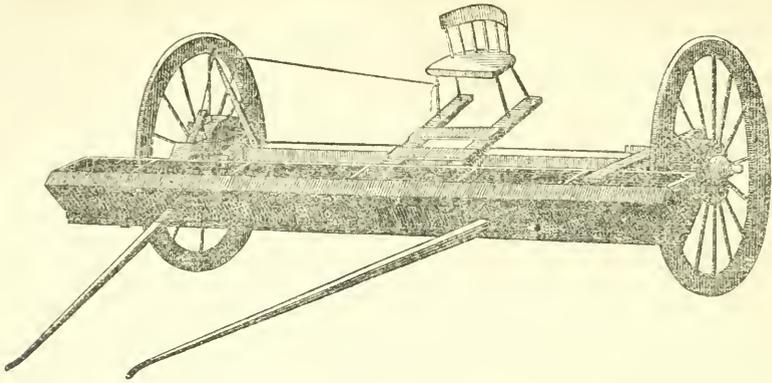
If this is of any service, you are welcome to the use of it, as I presume there are many farmers that have not yet found it out.

A SUBSCRIBER.

A large flat stone, placed as a cap on each post, will answer the same purpose as the 'pans.'—ED.

NEW INVENTION.—The St. Louis Republican of a late date, says:—"Mr. John Lightburn, of Clay county, Missouri, has invented a new press, for the purpose of compressing hay, hemp, tobacco, cotton, &c., which, from the model, appears to be well adapted to the purpose. It is constructed upon the principle of the double lever applied to both sides of the press, and we understand is highly approved by the practical men who have examined it. The facility with which it can be worked, is one of its strongest recommendations; a bale may be pressed in it in about two minutes and a half. The model and specifications have been sent on to secure a patent."

DRAINING low lands will contribute to promote health and profit. Generally speaking, our wet and marshy lands are the richest in organic matters, and become the most profitable to the owner, when thoroughly drained.—*Buel's Far. Com.*



P. Seymour's Patent Broad-cast Sowing Machine.

Seymour's Sowing Machine.

THE above engraving gives a perspective view of *P. Seymour's Patent Broad-cast Sowing Machine*. Although we have not seen it in operation, we are inclined to believe, judging from the testimony of a large number of practical farmers who have tested its merits, that the implement is worthy of the attention of farmers generally.

The inventor states that "this machine will sow correctly (and any quantity desired per acre,) all kinds of grain, &c., which the farmer may wish to sow upon his fields. It will also sow plaster, lime, ashes, limed wheat, &c., as they should be, and better than can be sown by hand—thereby saving time, seed, and "the sweat of the brow," and securing greater crops than can be obtained by uneven sowing. It is drawn by one horse, and may be managed by any boy who can ride in the seat and guide the horse."

For certificates, &c., the reader is referred to an advertisement on page 171. M.

To Correspondents.

COMMUNICATIONS have been received since our last from S. W., E. C. M., Agricola, J. L. H., J. B. N., Reed Burritt, A Dairy Woman of Wayne Co., Mary P., R. D. Palmer, Inquirer, Wayne.

WE are indebted to Hon. E. BURKE, Commissioner of Patents, for a copy of his valuable Report. It is a mammoth document, consisting of 1376 pages, and embracing much information on the agriculture of the country.

WE are indebted to an unknown friend for a copy of the Address of JOHN S. SKINNER, Esq., before the Queens County Agricultural Society.

TO E. C. MILLER for Premium List of Wayne Co. Agricultural Society. Also for a copy of the Louisville Weekly Journal, containing a valuable treatise on the Culture of Silk.

Lectures on Agricultural Chemistry and Geology.

THE Principal of the Western New York Agricultural School will commence a course of Lectures on Agricultural Chemistry and Geology on the first day of October next, to continue through the month, one each day, Sundays excepted.— This course is given at the suggestion and particular request of many Teachers of Common Schools, who are desirous of qualifying themselves to instruct the older classes in their respective schools in these most interesting and important branches of Natural Science. Good board in this vicinity can be had at \$1.25 a week during the term. Lecture fees, \$6. The class will be daily drilled on all the subjects discussed in the lectures, which will be fully illustrated by practical demonstrations, specimens, drawings, &c.

It is respectfully suggested to the friends of intellectual and agricultural improvement, that a public service may be rendered, by urging the teachers of common schools to attend this course of lectures—intimating to them, what is true, that *higher wages* will reward more extended attainments.

The Proprietors of the Agricultural School are happy to inform its friends that the Institution is as well patronized as they anticipated, and that they have secured the services of a gentleman of liberal education to aid in teaching the higher branches of the mathematics and the languages. Arrangements are making to receive a few more pupils, who will be charged nothing extra for the consumption of chemicals in the laboratory, and lecture fees.

In addition to the ancient languages, French and German will be taught.

Persons wishing soils, or mineral waters analyzed, are informed that the charge will be no more than to cover the cost of the ingredients consumed, and to keep good the apparatus. The

object of making these analyses is, to benefit the students attending the institution, and not pecuniary gain.

Wayne County Agricultural Society.

EDITOR GEN. FARMER:—Having seen nothing in your pages relative to the doings of the Wayne Co. Society for the current year, I send you a paragraph or two upon the subject.

The next annual Fair of our Society is to be held in the village of Clyde, on *Thursday and Friday*, the 1st and 2d days of October. The Committee of Arrangements, and members generally, are making such preparations as will undoubtedly render the exhibition creditable to the Society and all interested. We shall endeavor to give the car of Improvement a strong push—and do not mean to be outdone by any Society in neighboring counties. The spirit of emulation and improvement is *onward* in old Wayne, this year—partially owing, we think, to the more extensive circulation of the *GENESEE FARMER* among the cultivators of our hitherto much abused (though naturally rich and fertile) soil.—By the way, speaking of the *Farmer*, our people begin to realize the importance and necessity of sustaining it creditably—many farmers considering your paper far better for Western New York than any other similar publication. For my own part, I would not be without it for five times its subscription price, and can not conceive why it is not taken by every bona fide farmer in Western New York. Each number is worth the subscription price for a year. But I am digressing from the legitimate object of this communication.

The officers of our Society for the current year are as follows:

T. HEMENWAY, *President*.

A. G. Percy, Thos. Barnes, Jedediah Wilder, Joel Hall, Joseph Watson, W. D. Cook, and I. A. Miller, *Vice Presidents*.

John J. Thomas, *Cor. Secretary*.

D. Kenyon, *Rec. Secretary*.

R. H. Foster, *Treasurer*.

Samuel E. Hudson, Wm. P. Nottingham, Wm. R. Smith, Abran Fairchild, and H. G. Dickerson, *Executive Committee*.

The following gentlemen compose the Com. of Arrangements for the Fair: Albert R. Frisbie, Aaron Griswold, S. Salisbury, jr., Henry Goodchild, Zina Hooker. Yours, &c.,

June, 1846.

WAYNE.

MR. JESSE HARROUN of Ogden, in this county, has this season sheared a fleece weighing 15½ lbs. from a three-fourths Merino and one-fourth Leicester buck. He was four years old—had not been previously shorn—but thoroughly washed every season. The only thing worthy of note, is the fact that the sheep has continued in good order, (with no extra care or keep,) and that the fleece was in excellent condition. *

The Science of Mowing.

ALTHOUGH many grass fields have been much hurt by the ice, or winter killed, yet we hope that there will be plenty of mowing by and by. A writer in the *New York Farmer and Mechanic* gave the following rules for young beginners to mow easily and handsomely:

“The first thing,” he says, “is to keep the scythe sharp. No man can be a good mower without it. I had become a good mower,” said he, “when I fell in company with not only a good mower, but a scientific one; and after the second or third day, finding that I could not keep up with him without doing myself an injury, and painful as it was for me to acknowledge it, (for I was ambitious,) yet I was compelled to call my friend to a stand in the midst of a swath. I said, ‘Mr. Picket, if you know any thing which you can communicate to me of the skill of mowing, I beg of you to do so, for I am exhausted, and I may as well confess at once that I cannot keep up with you.’ He stopped, came back, took my scythe and explained to me the main governing principles. I adopted them, and in less than one hour I could keep up with him in perfect ease. Indeed, I had at least twenty per cent. more of physical strength than he had. It was science alone that enabled him to lead me to this extreme.” The rules which this person taught him were the following:—1st. The scythe should hang natural and easy, and be kept in first rate order. 2d. As you approach the standing grass, let the heel of the scythe move to the very point of commencement and let it stop the instant it has done its work. Thus there is nothing lost by a forward or backward swing. If the grass stands up so as to admit of moving on, measure with the eye the utmost capacity forward of your scythe; take a quick easy gait, moving your right foot well up towards the standing grass, and your body with it, though leaning back by bending the knees a little forward, so as to bring your whole weight to bear upon the scythe, without twisting the body from right to left, as many do—thus giving ease to each clip, and ability to repeat it in an advanced position without fatigue.

The above rules we are satisfied are good.—Many who are considered good mowers have no method about them, and hardly know themselves how they mow. They “put it through” by main strength. The operation, like every other mechanical business, is based on certain natural and rational principles, which, when understood, will render the labor less laborious, and of course more pleasant and efficient.—*Me. Farmer*.

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.

Breeding Neat Cattle.

COL. JAQUES, proprietor of Ten Hills Farm, near Boston, who is known as a skillful, and most successful breeder of cows and other domestic animals, gives the following judicious directions in relation to this important branch of rural economy :

“Upon the subject of selecting and breeding domestic animals generally, it has been my object to combine as much as possible all the most desirable properties adapted to the soil, climate, and habits of New England. I wish, however, it may be distinctly understood, that whatever I may say upon this subject, I do not desire to dictate to others, but hope those who are better informed may make known their practice and experience.

“My principles are, that the *blood*—the red fluid, in every living creature, in whose body it flows, is, by the laws of nature, the sole agent and controlling power, in developing the general character; and that by crossing and mixing the blood of the different varieties of the same species, the strongest strains of blood will be found to predominate—and that health or disease—good or bad properties—are transmissible to the progeny and descent, both in the human and animal creation—even the color may be shaded to suit the fancy.

“From over fifty year’s practice and experience upon these principles, I consider the following, among many points, important to be observed in neat cattle generally, but in bulls and cows particularly, viz:—Muzzle fine, with yellow nose; *eyes brilliant*; head and horns light; ears thin, the inside yellow, not unlike as though sprinkled with yellow; neck of cows thin and clean, fore shoulders quite close, and well laid in, giving the fore hand a very light appearance, in proportion to the other parts of the cow; bulls’ necks may project from the breast and shoulders stout, very muscular and strong, but tapering fine, so that the bulls’ and cows’ neck be joined to the head very neatly. Throats clean and free from much dewlap. Bosom or breast, broad and full, projecting well forward; legs straight, with fine bone, and well set apart; the fore arms well covered with muscle, tapering downwards fine; shoulders smooth and well laid in; chine full; back straight and broad; ribs well rounding out, the last rib projecting most, and not too far from the hips; broad in the loins and hips; hips full and globular—neither too close nor ragged, but placed on a level with the back; rumps long and broad—very little, if any, sloping; pelvis, broad and full; tails set on strong, and on a level with the back—tapering down to the end fine, where they should be well covered with long, silky and glossy hair; and on opening the hair here, there should be the same yellow appearance on the skin as is mentioned above on the inside of the ears. Not too full in the twist,

(which is, a fullness between the hind legs or thighs,) nor too thick in the thighs. Flanks quite deep. It is important that the whole skin should be yellow. The color of the hair is pretty much fancy. A good coat of hair, even if it inclines to be long, is not unfavorable; but it should be very silky and glossy. The *elastic handle*, or *touch* of the flesh, with the *silky* and *glossy coats*, are of the greatest importance, as these properties indicate their value as much, in comparison, as in broadcloth of from two dollars to ten dollars per yard. The bag or udder of cows should be capacious, projecting well, both fore and aft; hanging moderately deep, when full, but after the milk is drawn, to be quite the reverse. It is very desirable in a cow that she should have teats well spread apart and of medium size.—Cows possessing most of the above mentioned points I have found generally to be deep and rich milkers—also, neat cattle generally I have found to be of good temper, good spirits, vigorous, active, good walkers, easily kept, taking on flesh readily, and that, too, on the most valuable parts; and the bulls and cows well adapted for good breeders, for the dairy, the yoke, and the shambles.”

We have no doubt that this theory of breeding is original with Col. Jaques. When he first spoke of it in public, some persons thought him a little too enthusiastic, and some thought that his enthusiasm had impaired his judgment; but there are few intelligent breeders of cattle, now, who do not acknowledge the soundness of his theory and admire the success which has attended his efforts. Col. Jaques boasts of nothing, we believe, which he is not able to perform. Since the development of his principles, we have understood that some person has advocated them, and claimed the credit of originating them. But to him alone belongs the credit of their conception, and the first efforts to prove their accuracy by their practical results.

DEEP PLOWING.—The editor of the Visitor tells us that by using the subsoil plow his crops of potatoes were increased last year one third; that where the subsoil followed the other plow, three baskets were gathered to two where it was omitted—the same kind and quantity of manure being used in both cases. At two hundred bushels to the acre, is a gain of three hundred bushels on six acres of land; these at fifty cents per bushel would amount to one-hundred and fifty dollars for subsoiling six acres in a single year—to say nothing of the gain on the crops for the next half a dozen years. The difference upon each farm of any size would in twenty years amount to a fortune.

PLANTING trees in Great Britain, and throughout the continent, is now extensively prosecuted. In some instances thousands of acres are planted on a single estate.

From the American Agriculturist.

Benefit of Guano.

As it may be for the public utility to hear something on the score of Peruvian guano, I will give you my experience on the subject.

Last year I used about three and a half tons of it in various ways, during the spring and summer, and must say I think it the cheapest and most effective manure I have ever tried, particularly as a top-dressing for grass lands. The way I prepare the guano for use is this: I plow a knoll of loamy soil, remove all the sods to the barnyard, harrow the ground to make it fine, then spread a layer of guano half an inch thick, then shovel on fine dirt five inches thick, then a layer of guano as before, then dirt again, till I get the quantity desired. This must lie a week or ten days in compost, to incorporate the guano with the soil; it must then be shoveled over, and all the lumps broken and well mixed; you can then put it in your cart, and spread it from the tail about as thick as you would ashes. I put on at the rate of 500 lbs. Peruvian guano to an acre, which started my grass right ahead, yielding two tons per acre, where I should not have had over 500 lbs. of hay without it.

My potatoes benefited greatly by the use of guano, turning out astonishingly—"the observed of all observers"—and I believe it to be a cure for the potatoe disease, as we had no rot where guano was applied. Applied to corn, I found it equally beneficial. I planted a lot of pasture land, a poor, sandy soil, and mostly grown over to moss. I spread on forty ox-cart loads of stable manure to the acre, and plowed it in; but fearing that would not overcome the inertia of the soil, I applied 500 lbs. of guano per acre, in this way, after harrowing, instead of running my rows with a plow. I did it with a small harrow made for the purpose, not over 14 inches wide, but heavy. The guano was then spread in those drills, and then the harrow run again, to mix it with the soil, and put it in fine tilth for planting.

My corn yielded 70 bushels per acre, whereas some rows with no guano, gave at the rate of 28 bushels per acre. This I think conclusive. I recommend it also for fruit trees.

Seekonk, Mass.

J. W. BOWERS.

Hay and Fodder Crops.

HAY is now quoted in New Orleans at \$26 per ton. In the river towns above, it is still higher. The hay crops in the North and West were very light this past season; so light were they, in many places, that distress amongst the stock must have ensued, had not their agricultural journals pointed out to the farmers the means of remedying the evil—by sowing corn and oats mixed; drilling corn alone, so thickly as to cover the ground; sowing millet, and other fodder crops; and by cutting up all the fodder they feed out, by running it through a cutting-box. Until the

next year's crop comes in, hay will continue to rise in our markets.

We can do much to regulate the price, by doing as our Northern neighbors have done—sowing oats, millet, &c. It is the extreme of folly in any planter to buy hay, or even corn. Bermuda grass will cut double the weight of hay to the acre that any grass in the North or West will. Crab-grass makes excellent hay, and a great deal of it; and a good crop can be had after cutting a crop of oats or millet. Even bitter coco makes good hay. In no part of the world do oats succeed better than in Mississippi; the Egyptian (winter) oats, when sowed in September, afford capital grazing all winter, and will yield, if the ground is suitable, and they have been well put in, forty to sixty bushels per acre of oats, weighing thirty-eight to forty-two pounds per bushel. Millet is an excellent fodder crop.—*New Orleans Commercial Times.*

A GUANO MUMMY.—The recent excavations at Ichahoe for the new fertilizer, have resulted in other freightage save such as could be devoted to Agricultural interests. A *mummy* has been brought to London and deposited in the Egyptian Hall of that city which has been wonderfully preserved by the ammonia of the island. The body is that of a full grown man enclosed in a coffin which is yet perfectly entire as also the trowsers and shirt of the deceased, the former of duck and the latter of cotton, both of which on being tried, retained all the strength of the new fabric. The body itself, says an account in a London paper, seems as if it were tanned leather; the flesh has become in a great measure absorbed with all the softer animal tissues; but the muscular development remains firm, and the veins and tendons of the extremities are curiously shown stretched over the bones. The teeth are still white and sound; and the hair still curls on the head. The color of the body is a dark brown; and the whole exhibition is an interesting one, particularly for those who like anatomical and physiological curiosities. It is impossible to say with certainty how long the body had lain previous to its discovery; but the probability is that a century has elapsed since the mate or one of the officers of a merchant ship running down the African coast, died, and since a party of sailors landed for an hour to bury the body of their shipmate on a lone and nameless island, tenanted only by sea-birds, on the desert coast of Africa.

OLD authors are profuse in their praise of *Sage*, and it is said the Chinese esteem it as superior to the best of their own tea. Philips states that the Dutch send out dried Sage leaves to China, for which they receive four times their weight of tea.

Wit is folly, unless a wise man has the keeping of it.

HORTICULTURAL DEPARTMENT.

BY P. BARRY.

Memorandum for the Season.

STRAWBERRIES.

THE fruit of most kinds will now be gathered, and the beds should be thoroughly cleaned of weeds, and the runners cut off; this is indispensable, in order to have *large, fine fruit*. Where it is intended to plant out new beds—and next month (August,) will be the time for this—the strongest, best rooted runners should be selected. The strawberry is now receiving much attention in our section, and indeed throughout the whole country, and so it should. It is one of the most delicious fruits of the earth—flourishing in our coldest latitudes, and requiring only common care and culture. There should not be a garden in the whole length and breadth of our country destitute of a *strawberry bed* of the finest varieties.

Hovey's Seedling, Ross' Phœnix, Keen's Seedling, Large Early Scarlet, and Stoddard's Improved Alpines, make a fine assortment, and we can recommend them, as we have done heretofore, from a knowledge of their merits. There are, of course, numerous other varieties worthy of the attention of the more extensive growers. Among those above mentioned we are inclined, on the whole, to give the preference to the Ross' Phœnix. It is of the largest size, finest flavor, hardy, and an uncommonly productive and certain bearer. *Hovey's Seedling*, when planted near other prolific varieties, generally sustains its high reputation; but even under such circumstances it sometimes produces but a sparse crop.

J. J. THOMAS, in his "Fruit Culturist," says that "Hovey's" and "Keen's" are both tender, and require covering in winter. We have never known a case where either suffered from the winter; both flourish without protection here and in Canada West, where we have observed them—but Mr. Thomas has, no doubt, some reasons for saying so. We have been told by two of our best amateur growers, that their Hovey's Seedling, in moist heavy soil, suffered from the winter—while Ross' Phœnix, and others, did not sustain the least injury. Mr. T. is pretty severely rebuked in the last number of Hovey's Magazine, for making this charge against Hovey's Seedling, and for suggesting that it be not "exclusively nor very extensively cultivated, till years of trial have thoroughly proved its character and freedom from unforeseen defects." We cannot see that this is very culpable advice, although we think unnecessary. Mr. HOVEY himself would not, with all its high qualities acknowledged, recommend the *exclusive* culture of his Seedling; and few persons are likely to plant *very* extensively of any particular kind at once. Mr. THOMAS seldom errs in adopting hasty conclusions.

Our Fruit Committee at the late exhibition of the Horticultural Society awarded the premium for the best dozen berries to a variety brought here from Montreal, said to be a seedling raised there by Mr. CORSE. The berries, we presume, were in a more mature state, which gave them, in the opinion of the committee, a superior flavor, and the decision was formed on the merits of the berries alone. Since then we have carefully examined this Corse's Seedling, in the only places here where it is growing, and as far as we are competent to judge, is not near equal to Ross' Phœnix, or Hovey's Seedling. In the beds we have seen, we noticed a large proportion of sterile flowers, and the best specimens of the fruit are not so large, nor is the flavor equal to those mentioned—though it is decidedly a good strawberry. We will be glad to see it more fully tested. We have taken measures to ascertain its true origin, &c.

Stoddard's Alpine has been tested in many of our gardens, and as with ourselves, it has proved much larger and more productive than the common—yet we think it has no *fixed* superiority.—We believe it is *purely* a seedling alpine, that will retain its astonishing productiveness only so long as it receives Mr. Stoddard's superior management—but that every grower can and should give.

FRUIT TREES.

Trees that have been grafted the past spring should be examined, and all shoots below the graft removed—except where the whole top has been grafted, of a large tree; in such cases remove only a portion of the side shoots. This is important. We have seen several orchards lately where this has been neglected in the hurry of farm labor. This should not be. After pains have been taken to procure good varieties, and have them grafted, they should not, for the sake of a few hours' attention, be starved and killed by being over run with other shoots. Attend to this at once. Trees transplanted last spring should have the earth around them kept clean and mellow. We have never seen transplanted trees make such fine growth as this season. The troublesome operation of watering has in a few cases, if any, been necessary; but weeds have grown luxuriantly, and require constant subduing: being allowed to grow, they dry up and impoverish the ground, and injure, if they do not destroy, the tree. Remember that *clean culture*, in every department of Horticulture is of absolute necessity to ensure either profit or pleasure.

Insects should be destroyed, as directed last month.

Budding may be performed now. See article on that subject. Roses may be budded all the month.

Grape Vines should receive attention. Young shoots will require to be kept tied up, and superfluous ones removed.

The careful fruit grower will not let a day pass without glancing over his trees; many trifling matters will suggest themselves to him, which we cannot mention here. By constant attention to our trees we become familiar with their habits, and acquire a love for them that makes the matter of cultivating a real pleasure. This is universal experience.

VEGETABLES.

The kitchen garden requires constant care—weeding and hoeing, and in dry weather, watering in the evenings. Some farmers, yes thousands, suppose it almost labor lost to cultivate a good kitchen garden. Indeed, it is rare to find one such as every farmer's ought to be. The importance of a constant and abundant supply of good vegetables is not at all correctly estimated here.

If people generally could be persuaded to cultivate and use more vegetables, it would be an immense saving of animal food, and highly promotive of human health and comfort. Three-fourths of our people are brought up, in a great measure, without vegetable food, and as a consequence have little relish for it. This accounts, in a great degree, for our poor vegetable gardens.—Our markets here in Rochester are miserably supplied with vegetables. We presume it is because good gardeners do not receive encouragement to raise fine articles.

We saw, in the latter part of May, in the Toronto market, a supply of vegetables, Green Peas, Cucumbers, Radishes, Lettuce, Spinach, Asparagus, Rhubarb, &c., that we have not seen equalled in our market this season. We know of no good reason why this should be so. Our soil and climate are both far superior to that of Canada, around Toronto, for growing vegetables, and particularly early ones; but our gardeners are not so thorough in their profession—yet, as we have remarked, it is perhaps from the want of encouragement.

We look to our Horticultural Society for aid in raising the standard of quality of garden vegetables, and diffusing a taste for their more general use throughout community. At our late exhibition, on the 12th of June, when gardens should be teeming with fine vegetables, we had not a dollar's worth exhibited. We took pains to solicit personally several of our best gardeners to send in something; and all that was presented was a single lot of green peas—two or three of cucumbers—two of Rhubarb—one of Radishes—and that was about all, and indeed these all were but ordinary. This is the time for planting out celery. The soil to grow it in perfection should be *deep and moist*. The plants should have been transplanted from the seed bed into nursery rows, so as to make them strong and fit to be taken up now, with balls of earth at the roots. The too common practice is to buy a few plants at the seed store, weak slender things from the seed bed.

These require careful shading from the sun, and great care for some time after planting, and in the end do not make such fine heads. The trenches should be 18 inches deep, and 12 to 15 wide. Old well rotted manure should be used for the bottom of the trench, and should be well incorporated with the bottom earth. The plants should be set out about 6 inches apart. It afterwards requires to be kept clean of weeds, and earthed up now and again, until the process is completed. Good celery, which means *large, white, solid stalks*, is a most delicious vegetable, and now-a-days considered indispensable on a well furnished dinner table.

FLOWER DEPARTMENT.

See that Dahlias are carefully tied up to stakes; water plentifully in case of a drought, and guard them against the attacks of insects.

Tie up neatly all herbaceous plants that require it. Cut off withered flower stems, and keep all places clear of weeds.

Propagate Roses by budding and layering; take up bulbous roots, and put away on a dry shelf, to be planted again in Autumn.

House Plants should now be kept out of doors, in a cool, airy place. The ladies should cut down their Geraniums, so as to have bushy nice plants for next season. Cuttings may be put in where young plants are wanted. Monthly Roses, if not out already, should be placed in the border, and cuttings may be put in for a young stock.—Plants in pots during summer require careful watering. Sometimes they suffer much from being flooded with heavy rains, and then neglected in dry weather till they are parched up.

Budding.

This is an important, though very simple, operation in the business of tree growing. It is much less understood, throughout the country, than grafting, though easier performed. Every person engaged, more or less, in the culture of trees for fruit or ornament, should know how to insert a bud. It is more applicable to the propagation of all stone fruits than grafting; it can be performed, too, on smaller stocks, and as a general thing makes finer trees.

Buds of rare, scarce trees can be more easily procured than grafts, and can be as easily transmitted from one place to another, and particularly now that expresses are in operation in every direction. For the benefit of those who have yet to learn, we give the following directions and illustrations from "Downing's Fruit and Fruit Trees of America:"—

"The proper season for budding fruit trees, in this country, is from the first of July to the first of September; the different trees coming into season as follows: Plums, Cherries, Apricots on Plums, Apricots, Pears, Apples, Quinces, Nectarines and Peaches. Trees of considerable

size will require budding earlier than young seedling stocks. But the operation is always, and only, performed *when the bark of the stock parts or separates freely from the wood*, and when the buds of the current year's growth are somewhat plump, and the young wood is growing firm. Young stocks in the nursery, if thrifty, are usually planted out in rows in the spring, and budded the same summer or autumn.



Fig. 16. A stick of buds.

Before commencing you should provide yourself with a budding knife about 4½ inches long, having a rounded blade at one end, and an ivory handle terminating in a thin rounded edge called the *haft* at the other.

In choosing your buds, select thrifty shoots that have nearly done growing, and prepare what is called a *stick of buds*, (Fig. 16,) by cutting off a few of the imperfect buds at the lower, and such as may be yet too soft at the upper ends, leaving only smooth well developed single buds; double buds being fruit buds. Cut off the leaves, allowing about half an inch of the *foot-stalks* to remain for conveniently inserting the buds. Some strands of bass-matting about 12 or 14 inches long, previously soaked in water to render them soft and pliable, (or in the absence of these some soft woolen yarn,) must also be at hand for tying the buds.

Shield or T budding is the most approved mode in all countries. A new variety of this method now generally practiced in this country, we shall describe first as being the simplest and best mode for fruit trees.

American Shield Budding. Having your stick of buds ready, choose a smooth portion of the stock. When the latter is small, let it be near the ground, and, if equally convenient, select also the north side of the stock, as less exposed to the sun. Make an upright incision in the bark from an inch to an inch and a half long, and at the top of this make a cross cut, so that the whole shall form a T. From the stick of buds,

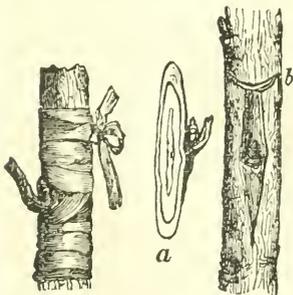


Fig. 18.

your knife being very sharp, cut a thin, smooth slice of wood and bark containing a bud, Fig. 17, a. With the ivory haft of your budding knife now raise the bark on each side of the incision just wide enough to admit easily the prepared bud. Taking hold

Fig. 17. American shield budding.

of the foot-stalk of the leaf, insert the bud under the bark, pushing it gently down to the bottom of the incision. If the upper portion of the bud projects above the horizontal part of the T, cut it smoothly off now, so that it may completely fit *b*. A bandage of the soft matting is now tied pretty firmly over the whole wound, Fig. 18, commencing at the bottom, and leaving the bud, and the footstalk of the leaf only exposed to the light and air.

After treatment. In two weeks after the operation you will be able to see whether the bud has taken, by its plumpness and freshness. If it has failed, you may, if the bark still parts readily, make another trial; a clever budder will not lose over 6 or 8 per cent. If it has succeeded, after a fortnight more has elapsed the bandage must be loosened, or if the stock has swelled much, it should be removed altogether. When budding has been performed very late, we have occasionally found it an advantage to leave the bandage on during the winter."

Horticultural Exhibition at Buffalo.

OUR enterprising friends in Buffalo held their June exhibition on the 17th; and we are happy to learn, from the newspapers and otherwise, that it was grand beyond all expectation. The Commercial Advertiser says:

"THE HORTICULTURAL EXHIBITION yesterday was a most brilliant and pleasing affair. The collection of Flowers and Boquets was certainly most creditable to the several donors, and the general arrangement of the whole matter showed exceeding good taste on the part of the officers and Managers, as well as the Ladies Committee, who were, as we observed, most efficient co-workers on the occasion.—Indeed, we could have hardly supposed it possible for Buffalo to have produced so beautiful an affair in Horticulture, as the exhibition just named."

We may well congratulate the people of Western New York on the Horticultural spirit that seems to animate them at the present time. We now number three societies—one in Aurora, one in Buffalo, and one in Rochester—all in a most flourishing state. The effect which these societies will have, in connection with the efforts of our enterprising nurserymen, in enriching and beautifying the country, cannot easily be calculated. Every man who has the matter of rural improvement truly at heart, will not fail to give them all the support and encouragement in his power.

We will notice the details of the Buffalo exhibition in our next.

Our correspondent "H." of Fairport, will please accept our thanks for his communication on "The Management of Fruit Trees." It was received too late for this number, but will receive attention in our next. The subject is one of great importance to all our readers,—and we will be thankful for facts and suggestions, from any and every quarter, provided they be the result of *actual observation*.

Horticultural Society.

THE following are the official reports concerning the fruits and flowers presented at the recent exhibition of the Horticultural Society in this city. All who feel an interest in the objects of the Society, (and who does not?) will peruse with pleasure the official accounts of its proceedings, evincing as they do a degree of success in its first effort, as unexpected as it is gratifying.

The Committee on Flowers respectfully submit the following report:

Premiums to be awarded at the fall exhibition.

From Mrs. Jas. H. Watts, two fine boquets and a plate of roses, and other flowers, and a pretty rustic basket.

From Mrs. Wm. Pitkin, Mrs. J. T. Talman, Mrs. Isaac Hills, Mrs. James Hawks, Mrs. J. K. Livingston, and Mrs. J. W. Sawyer, beautiful boquets, deserving particular notice, being made up of choice select flowers, and in a tasteful manner.

From Mrs. L. A. Ward, an unique and beautiful mound of roses, including moss and other fine varieties.

From Mrs. Jno. Williams, four vases of very choice and beautiful roses.

From Mrs. Amos Sawyer, a vase of roses, including fine varieties of Bengal, Noisette, and Bourbon, grown and wintered in the open ground.

From Mrs. H. Billings, a neat boquet of miscellaneous flowers, and a plate of fine pansies.

Fine boquets of miscellaneous flowers from the following:

Mrs. James Buchan, Mrs. M. F. Delano, Miss Stone, Mrs. Dr. Matthews, Mrs. D. W. Powers, Mrs. W. B. Williams, Miss Hooker, Mrs. B. F. Young, Mrs. Briggs, Mrs. S. J. Smith, Mrs. Lewis, Mrs. C. C. Lathrop, Mrs. M. Morse, and Mrs. M. G. Warner; Mr. Jno. Donnellan, Mr. Jewell, Mr. Jas. Lennon.

WILD FLOWERS.

From L. Wetherell, two large and splendid boquets, comprising over 30 species—objects of general admiration.

From J. D. Ely and H. C. Bryan, three fine boquets, composed principally of cypripedium spectabile.

From Mrs. Judge Warner, a fine boquet of 8 or 10 species—tastefully arranged.

NURSERYMEN AND FLORISTS.

From S. Moulson, 6 boquets of miscellaneous flowers.

From Wm. King, three fine boquets and floral ornaments, representing a branch composed principally of Roses and Pænies. 40 green house plants including 6 varieties of Fuchsia—the specimens of fulgens and corymbiflora were very fine. 12 varieties of Geraniums, a fine yellow tea rose, a beautiful specimen each of cactus phyllanthus and hydrangea hortensis, &c.

Powis & Goodsell, of the Monroe Gardens, Greece, a large lot of Pænies, Whitejii and Humel. A large collection of roses said to be 50 varieties. (As they were spread promiscuously on a table, and somewhat the worse for carriage, the committee had no means of ascertaining exactly either their merits or the number of varieties.)

Ellwanger & Barry, of the Mount Hope Garden and Nurseries, 72 select varieties of hardy roses, including the Persian Yellow; 4 varieties of Moss besides Madam Lafay, Rivers, Perpetual, Fleur blanche, Du Roi, Queen of Perpetuals, Prince Albert, Queen of the Prairies, Baltimore Belle, &c.

70 green house plants, including a large and beautiful specimen of Abutilon striata, 5 feet high and three feet in diameter, in full bloom. A large, fine specimen of Buonapartia juncea, 12 or 15 years old. A fine Auracaria imbricata (Brazil Pine) 5 feet high. 18 varieties of Fuchsia, in full bloom—all very fine. 20 varieties Geraniums, including some splendid new seedlings, raised by E. & B.—fine plants in bloom. Petunia, Beaute de Tour, and Lady Alice Peel, &c.

Two large and beautiful boquets of Roses and other flowers.

One fine fan shaped boquet of roses and a magnificent pyramid, seven feet high and three feet in diameter at the base, comprising a general collection of flowers of all sorts and sizes.

G. ELLWANGER, *Ch'n of Com.*

The Committee on Fruits respectfully submit the following report:

H. Lieutwiller, for the earliest strawberries, a premium of \$2.

Judge Miller, for the largest variety and best grown strawberries, a premium of \$3.

Amos Sawyer, a premium of \$2 for the best Strawberry, Corse's Seedling.

The thanks of the Society are due to Zera Burr for a dish of the earliest cherries offered—Big-areau de Mai.

The committee beg leave to remind amateurs that the show of Strawberries was not what it ought to have been in number of competitors.—Those presented were fine specimens, the quantity offered exceedingly limited, considering that there are so many fine growers in this vicinity. The committee hope to receive a much larger display, in the greater variety of sorts as well as larger number of specimens, at the next annual show. It is hoped that growers will take into consideration the importance of having their assortment ready at the stated periods for general show, instead of presenting at the Treasurer's office, those general exhibitions being more beneficial, by exciting more competition, and commanding the favor and respect of the public to a much greater extent.

S. MOULSON, *Ch'n of Com.*

Horticultural Society of the Valley of the Genesee.

THIS Society, we are happy to state, may now be considered a *reality*. Its first public exhibition was held on the 12th of June—and although but three or four days notice was given, (and that not extending beyond the limits of our city,) it placed the Society before the community as an institution worthy of support.

The exhibition room was the large and beautiful hall of the Blossom House, gorgeously ornamented with wreaths of evergreens and flowers. The plants, fruits, flowers, &c., were arranged on staging across one end, and up the sides of the room; bouquets were suspended from the chandeliers, and a grand pyramid occupied the centre of the room. At the other end was Barron's famous Brass Band, and Carpenter's Ice Cream and Strawberry fixtures. In the evening the hall was brilliantly lighted up, and thronged with visitors—all apparently delighted with the entertainment. A few *impromptu* remarks were made by JOHN C. NASH, Esq., and the proceedings closed with a sale of the bouquets for the benefit of the Society.

It is proper to state that an apology is due (though not from us,) to many members and friends of the Society in the country, who did not receive a timely notice, and have felt much disappointed in consequence. This accounts for it, we believe:—The officers of the Society did not contemplate a public, general exhibition, until within a week or so of the day when it was necessary to hold it, if at all, to be in the rose season. Besides, some of the officers say they were so fearful that we would have a slim show, that they felt diffident about sending out notices and invitations.

But wait till next time. Our fall exhibition, we predict, will be grand—and ample notice will be given to all. The citizens of Rochester, and conductors of the Daily Press, (who, by the way, are all gentlemen of good taste,) have so far treated the Society well—and every thing has passed off in the most gratifying manner. The reports will be found on preceding page.

A new Horticultural Magazine.

THE last number of the "Cultivator" announces a new magazine, under the title of the "Horticulturist," to be edited by A. J. DOWNING, the well known author and nurseryman of Newburgh, N. Y. The prospectus states that "this periodical may be considered a continuation of the various works on rural subjects, by its editor, which have already been so favorably received by the public." It is to be "issued on the first of each month, (commencing July, 1846,) in numbers of 48 pages, printed on good paper, and embellished with numerous engravings illustrative of the various subject to which it is devoted, making an annual volume of about 600 pages, at \$3 a year, payable in advance."

This will be but the second periodical strictly Horticultural published in the United States, and the only one in the Empire State. The names of the Editor and Publisher, A. J. DOWNING and LUTHER TUCKER, are a guarantee that the new magazine will, in manner and matter, be creditable to themselves and the country. We hail it with great pleasure, and wish it a cordial welcome throughout the Union.

Our friend HOVEY, of Boston, has been long in the field, and has done the state much service. His Magazine, always good, has latterly, to our taste, been very much improved; and the series of articles recently commenced, on Fruits and Ornamental Trees, with engravings—together with the miscellaneous items, including the doings of the great Mass. Hort. Society, give it a value that entitles it to the patronage of all who feel an interest in rural improvement. We wish all the recruits we can get, but we must still bear in mind the *old soldiers*. Success to all.

MR. D. M. DEWEY, who is agent in Rochester, will receive subscriptions and furnish the "Horticulturist," free of postage, at his News Room: or he will supply it, in numbers as they are issued, to those who prefer that mode of taking it.

Notice to Fruit Growers.

NOW that the fruit season has opened, we would renew our request to all fruit growers to forward to us, at the office of this paper, specimens of fine fruits of all sorts, with the names under which they are cultivated, together with their prominent characteristics as to growth, productiveness, &c., &c. It is all important in fruit culture, to have a correct nomenclature, and the fruit committee of our Horticultural Society will direct their labors, henceforward, in a particular manner, to that end.

Any specimens left with us will be presented before the committee, and their reports made known. The name, &c., can be written on a piece of paper enveloping the fruit; or a number can be written on the skin of the fruit, with a pen or pencil, and placed opposite the name on a slip of paper. Send perfect specimens, stem and all, and guard against bruising in carriage.

To Fruit Growers, Nurserymen, &c.

THE Subscribers invite fruit growers, nurserymen, and others interested in Horticulture, to visit their establishment and inspect their bearing specimen trees, and the general arrangement and management of their Nursery.

THE Collection of Ornamental Trees, Shrubs, and Plants is also extensive and interesting, at all times, to persons of taste.

THE establishment is now one of the most extensive and complete in the country, as will be seen by those who will take the trouble to examine.

ELLWANGER & BARRY,

Mt. Hope Garden & Nurseries, near the Cemetery.

July 1, 1846.

Grain Cradles.—50 superior Grain Cradles, made by Hatch, of Caledonia, and others, for sale at the Agricultural Warehouse, on Front-st., by JAMES P. FOGG.

SEYMOUR'S PATENT BROAD-CAST SOWING MACHINE.

PATENTED MAY 7, 1845.

To those Agriculturists who wish to combine Ease, Correctness, Speed, and Profit in their operations:—

The Subscriber wishes to invite your attention to his new PATENT BROAD-CAST SOWING MACHINE, which sows correctly, all kinds of Grain, from Peas to Grass Seed, inclusive; also, Plaster, Lime, Limed wheat, damp Plaster, &c. This Machine is a two wheeled carriage, on which a man or boy rides in an easy seat to guide the horse and govern the Machine when sowing. By a slight motion of the foot or hand he throws the machine out of gear and stops sowing at pleasure, while the carriage is still under motion. It will operate well in windy weather. It is simple in its construction and sure in its operation, sowing any quantity per acre, and is far superior to any hitherto in use.

It was exhibited last fall at the Agricultural Fairs in Ontario, Monroe, and Livingston Counties, and drew a premium at each of those fairs.

As the subscriber has been several years manufacturing those formerly in use, and is the inventor of this, he flatters himself that he will be able to give entire satisfaction, and furnish you with the very thing you want.

He is manufacturing them in East Bloomfield, Ontario County, N. Y., where he will attend to all orders on short notice. Those at a distance ordering machines, may have them forwarded by Canal or Rail-road.

The following Certificates will be satisfactory to all who are acquainted with the persons whose names are subjoined

TO THE PUBLIC.

I have used Seymour's Patent Sowing Machine the past season, and it has done its work to my perfect satisfaction; having sowed my grain more evenly than can be done by any human hand. AZARIAH BICKFORD.

Victor, October 15th, 1845.

This may certify that I have used P. Seymour's Sowing Machine the past season, to my satisfaction, and think it a valuable acquisition in sowing most kinds of grain, plaster, ashes, lime, &c. BANI BRADLEY.

East Bloomfield, January 12, 1846.

We, the undersigned, have fairly tested the utility and convenience of P. Seymour's Patent Sowing Machine, and are highly pleased with its operation.

GUY COLLINS, JOHN H. WHEELER,
WILLIAM CARTER, NATHAN H. WHEELER,
CHAS. H. CHAPIN, BELDEN SEYMOUR.

This may certify that I have used P. Seymour's Sowing Machine in sowing Oats, Barley, Peas, Clover, and Herd's Grass Seed, and it performs to my utmost satisfaction. I sowed thirty bushels of Oats, eight bushels of Peas, and twenty bushels of Barley, in one day, and I think thirty acres a reasonable day's work. JAMES H. GLASS.

Avon, May, 16, 1846.

This may certify that I have used P. Seymour's Sowing Machine, to sow about one hundred and thirty acres of grain and plaster, and am well pleased with the machine. It will sow grain more even than can be sowed by any human hand. It will even sow Clover and Timothy Seed as well as any one can wish. JOSIAH C. TAFT.

West Bloomfield, May, 1846.

We are acquainted with P. Seymour's Sowing Machine, and can recommend it as an excellent article for those purposes for which it is intended. We believe it much superior to any other ever introduced into this country.

MYRON ADAMS, HIRAM STEELE,
F. W. COLLINS, E. W. FAIRCHILD,
AUSTIN AVERY, FREDERICK MUNSON,
SYLVENUS EMMONS, FREDERICK N. TOBEY,
SARTIAL ROOT, HARLOW MUNSON,
BANI BRADLEY, WILLIAM BRADLEY,
PHILO HAMLIN, JOSIAH PORTER,
JOSIAH WENDELL, CALVIN POMEROY.

East Bloomfield, June 21, 1846.

From the Report of the Monroe Ag. Society, 1845.—“P. SEYMOUR exhibited a Wheat and Plaster Sower, which for simplicity, ease of management, and durability, the Committee think nearer the desired implement than any thing yet before the public.”

N. B. The Right for a large amount of Territory yet remains unsold, which may be had on the most reasonable terms. P. SEYMOUR.

East Bloomfield, June 26, 1846.

Valuable Farm for Sale!

SITUATED half a mile south of Ogden Centre, Monroe county,—ten miles west of Rochester, and two miles south of Spencerport on the canal. The main farm contains 130 acres—but 70 acres adjoining will also be sold if desired by the purchaser. On the principal farm the buildings, &c., are good: a large, two story frame house with kitchen and wood-house in the rear; two good barns, one 30 by 40, the other 30 by 75. The 70 acres has a small frame house. There is a good well, and several living springs on the premises; also an excellent Orchard, principally of grafted fruit.

The farm is not considered second to any other in town. 175 acres of it under good improvement—with plenty of fencing timber, &c. It is excellent wheat land. There is 90 acres of wheat now on the ground, and all of the land on which it is growing was well seeded to clover the past spring.

Terms made easy, to suit the purchaser. Inquire of the subscriber on the premises, or of D. D. T. MOORE at the office of the Genesee Farmer.

Ogden, June, 1846.

JESSE HARROUN.

Western New York Agricultural School.

THE undersigned, in connection with Gen. RAWSON HARMON, of Wheatland, Monroe Co., will open on the 1st of May next, at the residence of the latter, an Agricultural School, designed to teach in the most thorough and systematic manner, both the Practice and the Science of Rural Economy, in all their various branches.

The Farm is large and under a high state of cultivation, yielding annually some 1400 bushels of wheat, sold at extra price for seed, which is eagerly sought after in all the wheat growing districts of the Union. Gen. HARMON is a working practical farmer, and will devote his personal attention to the instruction of all pupils attending the School. There are now growing on the premises over fifty distinct varieties of Winter Wheat. The undersigned will have a Chemical Laboratory for the analysis of soils, plants, and animal substances; and no pains will be spared to make the School the most practical and useful of any in the State. Able Assistants, both in Literature and Science, will be employed, so soon as buildings can be erected to accommodate a large number of students.

TERMS—Twenty-five Dollars a Quarter, or \$100 a Year—including board, washing, tuition, &c.

DANIEL LEE, M. D.

Rochester Weekly American.

The Largest and Cheapest Newspaper in Western New York!

TERMS—\$1.50 if paid in advance; \$2.00 if paid at the end of the year.

This splendid Weekly Newspaper is considerably larger than any other printed in the State, and will be sent to subscribers at the above low prices. No postage within thirty miles of Rochester!

The American is an earnest advocate of Whig principles and measures, believing them essential to the welfare of the Nation and the prosperity of Western New York. In its ample columns will be found, at all times, the fullest and earliest news by Magnetic Telegraph and otherwise. Particular attention will be given to furnishing a full and correct report of the Markets, weekly.

The Rochester Daily American, the handsomest and cheapest daily paper west of New York, is afforded at \$5 a year.

Both of these papers are printed on a splendid Napier Power Press, propelled by a powerful steam engine. JOB WORK done at the shortest notice, and in a style unsurpassed in Western New York.

Office of the Daily and Weekly American in Talman Block, No. 21 Buffalo street, Rochester, N. Y.
July, 1846. JEROME & BROTHER.

Plows for Sale.—We have on hand, and intend to keep constantly for sale, the celebrated Diamond and Wisconsin Plows, the merits of which have been fully tested. Price, \$7.00 for medium size. The farming community are respectfully invited to give us a call.

RAPALJE & BRIGGS,
No. 10 Front-st

21f.

Seymour's Sowing Machine for sale at the Genesee Seed Store, by RAPALJE & BRIGGS.

MOUNT HOPE BOTANIC GARDEN AND NURSERIES.

Rochester, N. Y.

(South St. Paul st., nearly opposite the Cemetery.)

The Proprietors of this Establishment offer for sale an unusually large and fine collection of

FRUIT AND ORNAMENTAL TREES,
FLOWERING SHRUBS, VINES AND ROSES, HARDY HERBACE-
OUS PLANTS, DOUBLE DAHLIAS AND BULBOUS ROOTS:
GRAPE VINES, RASPBERRIES, STRAWBERRIES,
AND GOOSEBERRIES; ASPARAGUS ROOTS,
RHUBARB, &c.; HEDGE PLANTS,
GREEN HOUSE PLANTS, &c.

The collection of Fruit Trees comprises the most popular varieties cultivated, and has been grown with the greatest possible care to ensure accuracy. The Proprietors are practical and experienced Nurserymen, and wholly devoted to the business;—all the important operations are either performed by themselves or under their immediate inspection.

Experience has fully proved that the trees grown at this point, in addition to being free from diseases, are better adapted to cold climates than those of any other portion of the United States.

The collection of Apples includes several thousands of the famous new American Apple, the "Northern Spy."

A large assortment of Pears, of the choicest kinds, are propagated on quince stocks for DWARFS and PYRAMIDS, and will bear the first or second year after planting; they are admirably adapted for garden culture. A lot of these are now on hand, of extra size, for immediate bearing.

The collection of Ornamental Trees is large and fine, comprising several hundred of the splendid *Pawlonia Imperialis*. The catalogue of Roses embraces the most popular new varieties. A great variety are propagated for standard or Tree Roses, 4 to 6 feet high, with fine heads.

Of *Double Dahlias* the assortment is unsurpassed, including the finest show flowers yet introduced to this country, and many that were imported last season at 5 guineas each. A catalogue will be published in April.

The stock of Green House Plants is very extensive, and includes the most beautiful new *Pelargonium* (Geranium) *Fuchsia*, *Camellia*, *Calceolaria*, *Verbena*, *Cactus*, &c., &c., all finely grown, and will be sold at greatly reduced prices.

Trees and Plants packed in the best manner, and shipped to any part of the country agreeable to order.

Priced catalogues sent gratis to all post paid applications. Orders from unknown correspondents should be accompanied with a remittance or reference.

ELLWANGER & BARRY

Rochester, April, 1846.

AGRICULTURAL IMPLEMENTS.

E. TAYLOR, at his Steam Factory, No. 6 Hill-street, is extensively engaged in manufacturing and dealing in all kinds of AGRICULTURAL IMPLEMENTS. Having during the past year visited all the Agricultural Establishments in Philadelphia, New York, and Boston, and secured the right of many valuable Machines and Implements, he is prepared to furnish, wholesale and retail, all kinds of Agricultural Utensils found in the eastern cities, such as

Grant's Patent Fan-Mills, Corn Shellers, Corn and Coffee Grinders, Corn and Seed Planters, Scythe Snathes, Straw Cutters, Patent Churns, Pitchforks, Patent Parallel Jaw Vices,

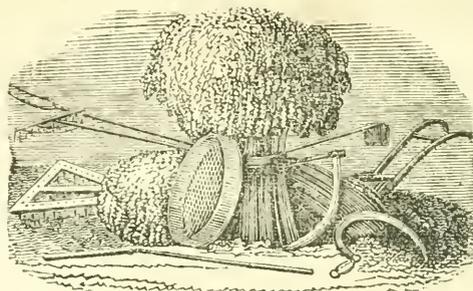
together with many other valuable tools, both to Farmers and Mechanics.

He is also extensively engaged in manufacturing *Bate's celebrated Patent Sliding Top Chamber Shower Bath*, to be used in chambers or sleeping apartments, without the least damage to carpets—the nicest article in the world! 1100 sold in four months in New York city the past season.

Farmers in want of tools or implements, of any kind, would do well to call and examine. For sale wholesale and retail at the Factory, No. 6, Hill street; also at the store No. 15 and 17, Exchange street, and at the Genesee Seed Store, No. 10 Front street.

E. TAYLOR.

Rochester, N. Y., May, 1846.



**ROCHESTER SEED STORE,
AND
WARE-HOUSE FOR FARMING TOOLS.**

By JAMES P. FOGG.

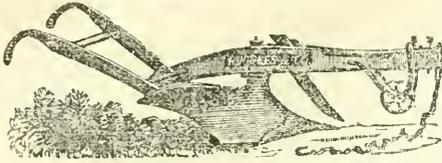
The subscriber having purchased the interest of Mr. B. F. Smith, in the SEED and IMPLEMENT business, will continue the business as heretofore at the Rochester Seed Store on Front street, nearly opposite the market.

The subscriber is well aware of the important relation which the seedsman 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; while those varieties of foreign growth, which experience has shown are the best, such as Cabbage, Cauliflowers, Brocoli all the varieties of Garden and Field Turnip, Scarlet Short-Top Raddish, Scarlet and White Turnip-Raddish, Dwarf and Early Peas, with Twenty choice varieties of FLOWER SEEDS, have been imported by the subscriber from the long established house of R. WRENCH & SONS, of London.

AGENTS for the sale of Rochester Seeds by the package, &c.—*Attica*, H. D. Gladding. *Amsterdam*, J. W. Sturtevant. *Auburn*, Hudson & Buckbee. *Albion*, Charles W. Perkins. *Batavia*, Lucas Seaver. *Ballston*, E. W. Lee. *Buffalo*, W. & G. Bryant. *Brockport*, A. B. Bennet. *Canandaigua*, L. C. Cheney & Co. *Cazenovia*, Dr. A. Ford. *Castile*, Halsted & May. *Dansville*, H. B. Williams & Son. *Elmira*, Tracy Beadle. *Geneva*, Heming & Cone. *Genesee*, L. Turner. *Hudson*, W. & G. Storrs. *Homer*, Wm. Sherman & Son. *Ithaca*, Lewis H. Culver. *Lockport*, S. H. Marks & Co. *Le Roy*, Tompkins & Morgan. *Lausburgh*, R. Harrison. *Mumford*, J. Phelps & Co. *Mount Morris*, R. Sleeper. *Oscego*, C. & E. Canfield. *Perry*, R. H. Smith. *Pow Yan*, John H. Lapham. *Palmyra*, Hoyt & May. *Port Byron*, S. K. Kendriks. *Scottsville*, Garbutt & Co. *Schenectady*, D. L. Powell. *Syracuse*, Foster & Nott. *Seneca Falls*, C. L. Hoskins. *Troy*, J. Daggett & Co. *Utica*, J. E. Warner & Co. *Union Springs*, Wm. Cozzens. *Warsaw*, Dr. A. Frank. *Waterford*, Wm. A. Waldron. *Waterloo*, T. McClintonck. *Wyoming*, Cornwell & Maine. *Pittsfield, Mass.* Isaac L. Cole. *York*, James McPhearson. *Adrian*, Mich. D. K. Underwood. *Brantford*, C. W. J. & R. Curtis. *Chicago*, Ill. N. Sherman, Jr. *Columbus, Ohio*, John Miller. *Detroit, Mich.* J. W. Strong, Jr. *Hamilton*, C. W. S. Kerr & Co. *Jonesville, Mich.* Smith & George. *Kingston*, C. W. Charles Hsath. *London*, C. W. Edward Adams. *Monroe, Mich.* Hosmer Graham. *Marshall, Mich.* A. Callender. *Milwaukie*, W. T. Holton & Goodall—*Jackson & Jewell*, *Niagara*, C. W. James Harvey. *Pontiac, Mich.* Rogers & Dunklee. *St. Catharines*, C. W. S. L. St. Johns—Boomer, Brothers & Co. *Springfield, Mass.* Chapin & Gunn—Benj. K. Bliss. *Sandusky City, Ohio*, W. T. & A. K. West. *Toronto*, C. W. Robert Love. *Toledo, Ohio*, Raymond & Co. *Westfield, Mass.* Jessup & Co. *Ypsilanti, Mich.* Edmunds & Co.

Rochester, N. Y.

JAMES P. FOGG.



BY THOMAS NOTT.

THE Subscriber having purchased the interest of Mr. JAS. P. FOGG, (late B. F. Smith & Co.,) in the IMPLEMENT BUSINESS, will continue the business as heretofore at the old stand on Front-St., nearly opposite the market. The undersigned has united a *Tin Shop* with the Agricultural Department, where tin ware will be made expressly for the retail trade;—and a good assortment of wooden ware kept constantly on hand.

In his assortment may be found the following articles: FARMERS' IMPLEMENTS, consisting of the most celebrated PLOWS now in use—*Langdon's Corn Weeder and Potatoe Hiller and Digger*; *Cultivators*; *Corn Plows*, and a good assortment of all the common Plow Points now used; *Japanned and Britannia Ware*; *Spittoons*; *Fancy Nurse Lamps*; *Wash Basins*; *Match Safes*; *Candle Sticks*; *Lamps*, &c. *Britannia Lamp and Candle Sticks*; *Tumblers*; *Coffee and Tea Pots*; *Laddes*, &c., &c.

He also keeps constantly on hand a general assortment of COPPER AND SHEET IRON WARE, and is prepared at all times to make to order any article in the manufacturing line. Tin Conductors and Eve Troughs made to order.

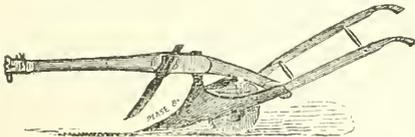
A good assortment of Log and Trace Chains, Shovels, Spades, Manure Forks, and Harvest Tools from the best manufacturing establishments in the country. New York Premium Grass Scythes.

The subscriber has made and is making a large addition to his stock, and solicits the patronage of all the old customers of the Rochester Agricultural Implement Store; and all new ones that may favor him with a call, will find by dealing with him they will get the worth of their money. He will sell as cheap as the cheapest, if not cheaper,—and those wishing articles in his line will find it for their advantage to call and examine his stock before purchasing elsewhere.

THOMAS NOTT.
[4-f]

Rochester, May, 1846.

“Burrall's Patent Shell-Wheel Plow.”



Saves one-third draft, and works well.

MADE and sold, at Wholesale and Retail, by CURTIS, ROSE & Co., (Geneva, Ontario Co., N. Y.,) manufacturers of Threshing Machines and Separators, Clover Mills, Corn Shelling Separators, (a new and desirable article,) Steam Engines and Boilers, Mill Gearings, Water Wheels, Stoves, Hollow Ware, Potash and Caldron Kettles, &c.

The Wheel Plows and Corn Shellers can also be obtained at the following places:

- RAPALJE & BRIGGS, Genesee Seed Store, Rochester.
- EDEN FOSTER, Batavia.
- HALL, RHOADES & SHERMAN, SYRACUSE.
- PETER CRONKHITE, Hallowell, Canada.
- B. F. Davy & Co., Bath, Canada. [4-3]

Sanford's Straw Cutter.

For sale by RAPALJE & BRIGGS at the *GENESEE SEED STORE*, No. 10 Front St., Rochester. Price \$15. Rochester, April 1846. [4-f.]

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

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

Corn Shellers!--A first rate article, price \$10, for sale at No. 10, Front-st. RAPALJE & BRIGGS.

NEW SEED and IMPLEMENT WAREHOUSE.



GENESEE SEED STORE & 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 of 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.

RAPALJE & BRIGGS.

Rochester, Feb. 1, 1846.

FARMERS, CURE YOUR HORSES!

GEO. W. MERCHANT'S CELEBRATED

GARGLING OIL.

AN Invaluable Remedy for Horses, Cattle and other domestic animals, in the cure of the following diseases:

- | | |
|-----------------------------|-----------------------------|
| <i>Fresh Wounds,</i> | <i>Fistula, Sitfast,</i> |
| <i>Galls of all kinds,</i> | <i>Strains, Lameness,</i> |
| <i>Sprains, Bruises,</i> | <i>Sand Cracks,</i> |
| <i>Cracked Heels,</i> | <i>Foundered Feet,</i> |
| <i>Ringbone, Windgalls,</i> | <i>Scratches or Grease,</i> |
| <i>Poll Evil, Callus,</i> | <i>Mange,</i> |
| <i>Spavin, Sweeney,</i> | <i>Horn Distemper.</i> |

Also a valuable Embrocation for diseases of the Human Flesh.

Since the virtues of the Gargling Oil have become so extensively and favorably known to the farmers of the United States and Canada, as a curative oil in diseases of animals, and as a consequence, its demand becoming great—there has not been wanting those whose cupidity has suggested to them that if they could concoct something as nearly resembling in appearance as they could guess, with any hing for a name, they might urge it upon unsuspecting customers as a substitute for the true Gargling Oil. The proprietor would therefore CAUTION those who purchase to be sure the name of G. W. Merchant is blown on the side of the bottle. All others are an ATTEMPT at imitation, and are therefore an imposition.

For testimonials, synopsis of diseases, and mode of treatment, see pamphlet which accompanies each bottle.

☞ Sold at the ROCHESTER SEED STORE, and by Druggists and Store-keepers in the United States and Canada.

Rakes—99 dozen I. Stark's superior Hay Rakes, for sale at the Genesee Agricultural Store, No. 10, Front-st., by RAPALJE & BRIGGS. [4]

MARKET INTELLIGENCE.

ROCHESTER, June 27, 1846.

THERE is little doing in Produce. Our quotations exhibit quite a decline in prices since last month.

Wool.—Buyers estimate the transactions during the past two weeks at about 120,000 lbs. A great proportion of the wool brought in has been of the lower and medium grades—flock-masters having fine wool are probably holding on for better prices. The following quotations will give the present range of prices:—

Full blood Saxony fleeces,.....	20 a 31
Do. Merino do.	26 a 28
Half-blood do. do.	21 a 23
Quarter-blood to common,	18 a 20
Coarse English and bad conditioned wool,....	15 a 18

Rochester Produce Market—Wholesale.

Wheat,.....	75 a 81	Pork, bbl,	12,00
Corn,.....	37	Pork, cwt,	4,00 4,50
Barley,.....	42 45	Beef, cwt,	4,00 5,00
Oats,.....	23 30	Lard, lb,	6½ 7
Flour,.....	3,02 3,87	Butter, lb,.....	9 10
Beans,.....	83 1,00	Cheese, new lb.,	4 5
Apples, bbl,....	3,50	Eggs, doz,.....	8 9
Potatoes,.....	31 37	Poultry,.....	7 7
Clover Seed,....	5,00 5,50	Tallow,.....	6 7
Timothy,.....		Maple Sugar,....	6 3
Hay, ton,.....	6,00 8,00	Sheep Skins, fresh,	12½
Wood, cord,....	2,00 2,50	Green Hides, lb	3½
Salt, bbl,.....	90	Dry ".....	6 7
Hams, lb,.....	7	Calf Skins,.....	7

BOSTON, June 24.

WOOL MARKET.—There has been a good demand for fleece and pulled the past week, and sales have been made of 20 a 25,000 lbs. at quoted rates.

Small sales of foreign coarse at previous prices.

Saxony fleeces, 38 a 40	Com. to ½ breed,	26 a 28
Amer. full blood, 35 a 37	Lamb's superfine,	32 a 33
Do. half do. 23 a 30	Do. 1st quality,	27 a 30

NEW YORK, June 25.

FOUR is feeble; Michigan at \$4; Genesee cannot be quoted over \$4,12.

About 10,000 bushels wheat sold at 85 cts., and about 10,000 bush. corn were shipped from first hands.

A fair business done in Pork; prices from \$8 to 8,12 for prime, and 10,37 for mess.

BEEF, \$4,75 a \$5, and \$6,50 a \$7. Lard, 5 a 6 cts.—Pickled and smoked hams are dull. The stock market is healthy.

BUFFALO, June 26.

The transactions in produce yesterday and to-day have been larger than for weeks previously, and a more animated appearance is consequently discernible among dealers generally. The sales referred to embrace some 1200 bbls. Michigan flour composed of Fayette, Valley Mills, Manchester and Schuyler brands at \$3,31½, and 400 bbls. Monroe at the same quotation. Some 200 bbls. Ohio and Michigan also sold at \$3,25.

In what we hear of the sale of 2,000 bush. Michigan city at 73 cts.—4500 bush. Milwaukee at 72 cts.—an invoice of Racine per schr Baltic, embracing some 1700 bush., at the same—5600 bush. Wabash at 70, and 2300 bush. Chicago at the same.

In corn a very fair inquiry exists, and a sale of 900 bush. was made at 30 cts.; a slight advance on this quotation, however, has been obtained for some superior samples.

7,955 bbls. flour, 16,986 bush. wheat, 8,062 bush. corn, were shipped by canal on Thursday.—Com.

New York State Agricultural Society.

To gentlemen composing the Executive Committee of the New York State Agricultural Society:—

AT our coming meeting, on the Second Thursday in July, much important business will be brought before you; and I hope that every member of the Committee will make it convenient to attend at that time, for it is very desirable that there should be as full an attendance as possible.

J. M. SHERWOOD, President.

Auburn, June 16, 1846.

Agricultural Societies.

MONROE Co.—The next meeting of the Monroe Co. Ag. Society will be held at the office of the Genesee Farmer, on the second Tuesday in August, for the purpose of appointing awarding committees and making other arrangements for the Annual Fair to be held in October.

WAYNE Co.—The Annual Fair of the Society is advertised to be held at Clyde, on the 1st and 2d days of October.

JEFFERSON COUNTY.—The Fair of the Jefferson Co. Ag. Society is to be holden at Watertown, on the 1st and 2d days of September. Address to be delivered by J. B. NOTT.

MADISON Co.—The fifth Annual Fair of this Society is to be held in the village of Eaton, on the 22d and 23d days of September next. S. B. BURCHARD, President; L. LINCKLEAN and THOMAS A. CLARK, Secretaries.

ALLEGANY Co.—Officers elected at the last annual meeting:—LAURENS HULL, Angelica, President; JOEL KARR and BRUCE KERR, V. Presidents; R. CHURCH, Rec. Sec., and A. B. HULL, Angelica, or. Secretary and Treasurer.

[From the Re-print of our January number.]

Re-Print.—A Liberal Offer!

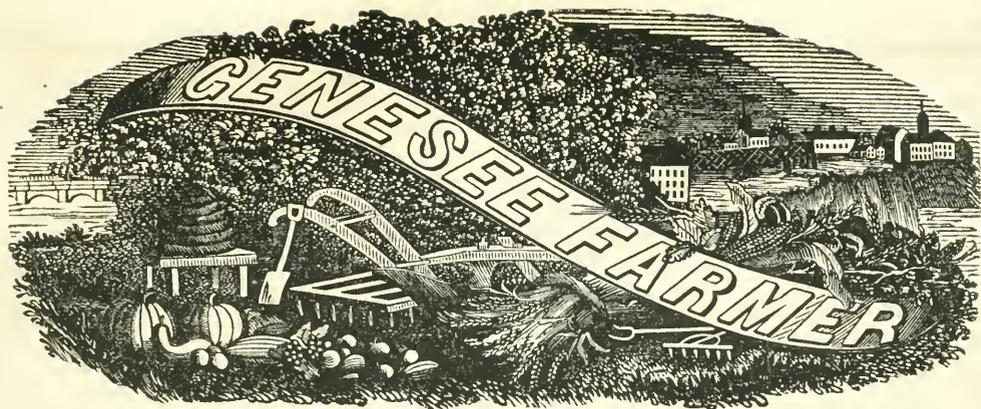
IT being necessary to re-print this and the February number, in order to furnish subscribers, we publish a large edition—and can now supply one thousand new subscribers with all the numbers from the commencement of the volume. We shall be thankful for orders from those who will aid us in disposing of this extra edition—and trust that new subscribers and other friends who receive a copy of this re-print will lend their influence toward extending the circulation of the Farmer. We have been at considerable expense in order to supply this number to those who have recently subscribed, and if they will obtain and forward the subscriptions of their friends it will save us from loss.

To such as are disposed to lend their aid, we make the following offer:—Any person who will send us eight new subscribers to the current volume, and remit \$3, shall receive a ninth copy gratis; and for 16 new subscribers, and a remittance of \$6, we will send an additional copy and a bound volume of last year's Farmer—or, if preferred, a copy of this and the next (1847) volume. June, 1846.

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.

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VOL. VII.

ROCHESTER, N. Y., AUGUST, 1846.

No. 8.

THE GENESEE FARMER:

Issued the first of each month, at 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 over the Rochester Seed Store, (2d story,) Front street, nearly opposite the Market.

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. []

Rust on Wheat.

WE have noticed a few circumstances attending the prevalence of rust on wheat during the present season, which are worthy of being recorded. The circumstances are these:

The earliest wheat, and that growing on dry, gravelly land, with a small stem and leaf, and standing sparsely on the ground, is nearly destroyed by rust; while *later grain*, although standing on low land, with large stems and leaves, has suffered comparatively but little from this blighting malady. The evidence of these facts is abundant and conclusive on the farm where the Editor resides, and on those of his neighbors. Gen. HARMON says that his wheat was scarcely ever, if ever, so badly rusted before, particularly on his dry table lands. He supposes that rust depends less on the character of the soil as to dampness or dryness, clay or sand, than to a particular condition of the atmosphere, and also of the wheat plant as to *maturity*, and not as to the size and sponginess of its stem and leaf. What that condition of the air is, which under favorable circumstances, brings rust on wheat, is not sufficiently known to be well described. It is an atmosphere warm, nearly motionless, and highly charged with watery vapor. Probably it is also loaded with the invisible seeds of a cryptoga-

mic parasite plant, which comes speedily to maturity, and constitutes the substance on wheat known by the name of *rust*. If this be so, it is remarkable that the microscopic seeds of this plant should pass over ten acres of stout wheat on interval land, and hardly take root upon it, while they attach themselves to the hard, bright straw on a gravelly side hill, in the same field, so as to ruin the crop, by shrinking the berry to one-fourth of its natural size. Our present purpose is not to speculate on the nature of the dark, and mysterious origin of a calamity, which falls so suddenly and so severely on thousands of acres of most promising wheat when nearly ready for the harvest. We design to record the fact that our *thinnest* and *smallest* wheat, which was early sown, in good order and on dry land, has suffered most from rust. It has happened that such wheat arrived at the right stage in its growth to be attacked by rust, when the atmosphere was in the proper condition to make such attack most effective.

TRANSACTIONS OF THE N. Y. STATE AG. SOCIETY, FOR 1845.—We have barely room in this number to acknowledge the receipt of a bound volume of the Transactions of the State Agricultural Society for the year 1845, from its Cor. Secretary, J. B. NOTT, Esq. of Albany. It contains more valuable matter than any other from the same source hitherto published—showing that more talent, skill and successful practice are now brought to bear on rural pursuits, in the State, than at any former period in its history. There are several papers in the volume worthy of notice at our hands, which will receive due attention hereafter.

ENGRAVINGS.—In consequence of the illness (and absence from the city,) of our engraver, we are compelled to defer several illustrations intended for this number of the Farmer. We shall endeavor to avoid a like occurrence in future. An engraving and description of "IDEA'S Patent Wheel Cultivator" will be given in our September number.

Study the Soil.

No young farmer should fail to study the nature and properties of each element necessary to form a fertile soil. To cherish a profound ignorance of the things that combine to make his crops, is to court excessive manual toil, covet poverty, and wed self degradation. No practical farmer pretends that he can produce a single plant, out of nothing, by dint of hard work. If it really takes something to form a good crop of grass, grain, or roots, and that something exists in the soil, is it not obvious that its properties, and abundance or scarcity, should be known to every tiller of the earth?

If we analyze the earthy matter contained in wheat straw, or in the stems of rye, timothy, or corn, we shall find more than half of it, to be a mineral called silica, (pure flint.) If we take a handful of surface soil from any cultivated field, and analyze that, it will also be found to contain more than 50 per cent. of the same silicious element. The proportion of silica in the stems of cereal plants varies from 50 to 80 per cent. of all the incombustible matter therein contained. This is about the average range of the proportion of silica in good soils. One of the best that we have lately analyzed, that of Mr. CHAMPION of Rochester, gives the following result:

Water of Absorption,.....	7.30
Organic Matter,.....	7.45
Silica,.....	69.10
Alumina and Oxide of Iron,.....	8.30
Carbonate of Lime,.....	5.00
Magnesia,.....	1.80
Potash and Soda,.....	traces.
Loss,.....	0.55
	100.00

By the above it will be seen that flint sand forms a fraction over 69 parts in 100 of the soil. It will also be seen that the capacity of this sample to hold moisture, at the ordinary heat of a summer's sun, is great—giving off more than 7 grains of water in 100 when thoroughly dried. This water abounds in the proper food of cultivated plants; for on treating the soil with pure rain water, as it falls from the heavens, and evaporating it to dryness, 1.10 grains of organic and mineral elements were obtained. Of this 0.60 was minerals, and 0.50 organic matter. A large portion of the minerals was lime, which was precipitated by oxalate of ammonia. An appreciable amount of magnesia, and traces of potash were found in the watery solution. This soil contains an unusual quantity of *lime*, yielding traces of both the sulphate and phosphate of that alkaline earth.

The application of lime will be of no service, but the use of gypsum to add *sulphur* to the soil, and bones to increase the *phosphorus* in the same, will be advantageous. Of the two fertilizers, bones are more needed than gypsum.

The analysis of Dea. C. TENNY's surface soil gave the following result:

Water of Absorption,.....	2.50
Organic Matter,.....	4.40
Silica,.....	84.23
Alumina and Oxide of Iron,.....	7.19
Carbonate of Lime,.....	1.20
Magnesia,.....	0.44
Loss,.....	0.04
	100.00

This is a good soil, but contains more silicious sand, and only one-fourth as much lime and magnesia as are found in the soil of Mr. CHAMPION. It has a smaller capacity for retaining moisture, and less vegetable mold.

One thousand grains of this specimen infused in pure cold rain-water gave a fraction over two grains of soluble matter, one-half of which was organic, and the other incombustible.

As this soil contains less soluble elements than is desirable, the addition of wood ashes and common salt, in small and repeated doses, will be of great service. We say "small and repeated doses," because the 84.23 parts of flint sand in 100 of the soil, will permit a great waste by the leaching of all fertilizers, if applied in large doses at a time. We are decidedly in favor of feeding cultivated plants as we do domestic animals—first give them such food as they can *assimilate*; and secondly, let them have none to *waste* but enough to form a good growth of bone, muscle and fat. The ash in plants answers to the bone in animals; the gluten, legumin, and cellular tissue of the former, to the muscles, membranes, and tendons of the latter; and the starch and oil of vegetables answers to animal fat.

In our original investigations of the great question: How much of a crop of wheat, corn, or potatoes is formed of matter derived from the substance of the soil? we find, as the mean of many experiments, that rain dissolves about equal quantities of what are called organic and inorganic substances in the surface soil. As the solids in a soil must be dissolved before they can enter into the circulation of plants to nourish them, the study of the action of rain water on any given field is, obviously, quite important. Insoluble vegetable or mineral substances can only operate mechanically in promoting or retarding the growth of crops. To increase the solution of silica, which is nearly insoluble, and check the too rapid solution of the very soluble salts of potash, soda, magnesia, and lime, are the great desiderata in scientific agriculture. On many soils, however, much more may be gained by hastening the too tardy decay of vegetable substances. In nine cases in ten, thorough draining will effect this object. Deep plowing greatly favors the decomposition of organized matter by mixing it with the alkaline minerals lower in the earth, and allowing vegetable and mineral acids to become neutralized. A deep, friable soil that will permit rain-water with its ammonia, nitric and carbonic acids, derived from the atmosphere, to pass down by the roots of plants, themselves deep in the mellow earth, and to ascend around said

roots by capillary attraction, loaded with such minerals and organic elements as are soluble in the soil, is the *thing* of things, in easy and successful farming.

The same imperviousness of subsoil—often too near the sunshine—which prevents the ready descent of rain and roots into the earth, equally forbids the ascent of moisture in dry seasons of the year. If the reader desires a deep, mellow soil, let him plow deep, and *deeper*, till the object is attained. Let him study faithfully, the *whys* and *wherefores* which have made any plowing necessary for the last 3000 years. Let him investigate the action of those elements in the air called oxygen and carbonic acid, on the insoluble minerals, which the plowshare turns up to the light and heat of the sun. Nor should he overlook the influence of frost, electricity, and other meteoric agents, employed by Providence to fulfil the promise that, "Seed time and harvest shall never fail."

Those that may wish to have their surface soil analyzed and not the subsoil, can do so for the small charge of \$3, by sending a pound or two of earth in a strong paper, to the office of this paper, or the laboratory of its Editor, in Wheatland.

Agricultural Geology.

MR. EDITOR.—In perusing your number for June, my attention was drawn to an extract from the Agricultural Geology of Onondaga County, in which is given a synopsis of its valuable mineral productions. Now, Mr. Editor, as I am a farmer of Oswego county, on the north shore of Oneida Lake—only six miles across to Onondaga county, where lime is abundant, and also plaster—I shall be much pleased if you will give a summary of what are the formations of Oswego county, from Prof. Emmons' Geology or any other. In this quarter, and I believe in all of Oswego county, there is no formation of limestone that I know of. The rivers running into Oneida Lake from the north, have no lime stone in their course. But the rivers running north through Jefferson and Lewis counties, both bordering on this county, have lime in abundance.

As lime is the basis of all good agriculture, I pray you to give us what knowledge is in your power, of the formations, and minerals suitable for agricultural purposes in this county. We have all the constituent parts of soil that they have in Wisconsin, only lime which is there, and mixed with the earth. Oswego county lies good for agricultural purposes, having an undulating surface, inclined to the south and west; and at the present appears to have been a deep basin in Ocean times. But whether lime was then formed, and afterwards a deposit of hard pan (part of which is iron ore,) from Mount Marcy in Essex county, time and Geology must develop. I am a small farmer, with small means,

and to have to go from 25 to 40 miles after lime, is rather tough. It might be boated in some places, but that does not seem to do, as it makes it very high in price.

Yours respectfully,
JOHN DICKIE.
Constantia, Oswego Co., June, 1846.

REMARKS.—Constantia, and most of the other towns in Oswego county repose on the Medina Sand Stone. This stratum of rocks lies geologically below the Onondaga Salt Group, having both the Clinton and Niagara groups intermediate between them. It is well developed at the Falls in Oak Orchard Creek at Medina, Orleans county, and hence, it is called "Medina Sand Stone." Being lower, topographically, than the lime and salt groups, (the Clinton, Niagara, and Onondaga groups, south of the Medina Sand Stone,) the soluble minerals of these groups, between the Niagara and Oswego rivers, are made to flow more or less over, and through the soil resting on the Medina Sand Stone, which is contiguous to Lake Ontario. Hence it is that the sandy soils in the north towns of Monroe, Orleans, and Niagara counties are generally good for wheat, by getting the wash of the lime, magnesia, and soda strata in the central and southern portion of said counties. Constantia lies north of Oneida lake, and so high that its water flows southerly into it. Hence, the soil in that town can gain nothing from the wash of water that falls south of the lake on the Niagara and Onondaga lime and salt rocks. There may, however, be local deposits from "drift," or ancient currents, of lime and other minerals, in some portions of Oswego county that lie on the Medina Sand Stone.

Instead of hauling lime in large quantities 25 miles, for agricultural purposes, we should use but little of that alkaline earth, and more leached ashes, gypsum, and particularly, the bitterns, or refuse from salt works. Indeed, we have all confidence in the value of a fertilizer made by evaporating to dryness the whole of the mineral elements found in the saline springs in Onondaga and Cayuga counties. Without any purification the salt obtained would be much better to apply to land than that now used for curing meat, &c.

Of course it could be manufactured considerably cheaper per bushel, in a large way, than culinary salt. This should be done, and we intend to discuss the subject at length, showing the great advantages to accrue to the farming interest of this State by the use of the concentrated minerals that exist in the strata of rocks known as the Onondaga Salt Group.—ED.

WOOL GROWING.—The town of Richmond, Ontario county, is one of the most extensive wool growing towns in the United States. The Repository says that it numbered last year 36,714 sheep, producing 83,416 lbs. of wool. One farmer, Robert L. Rose, shears over 3,000 sheep.

The Farmer's Library, and Journal of Agriculture.

WE have received from the publishers, Messrs. GREELY & McELRATH, New York, the first volumes, handsomely bound, of this valuable work.

The first volume of the "Farmer's Library" contains 551 closely printed octavo pages, on good paper, clear and new type, which can be read with ease. The matter of this volume is a re-print, for the first time in this country, of PETZOLDT'S Agricultural Chemistry, and VON THAER'S elaborate and able work entitled "Principles of Agriculture." It embraces a full and most satisfactory account of the practise and sci-agriculture, at the time it was written, and is still regarded as a standard work, not only on the continent, but in Great Britain. PETZOLDT'S Chemistry is given in a series of Lectures, not so diffuse as those of JOHNSTON, very plainly written, and easily to be understood. It is a valuable and interesting work, and can be read with profit by every one interested in any rural pursuit.

The "Monthly Journal of Agriculture" is edited by JOHN S. SKINNER, distinguished as the founder of the first agricultural periodical in America, and as an able and indefatigable friend to the advancement of agriculture, both as an Art and a Science. The first volume, (which closed with the June number,) contains 612 octavo pages, with double columns, is profusely illustrated and embellished with engravings on wood and steel in the best style of the arts. It is made up of selections from foreign and American agricultural journals, from the writings of correspondents, and those of its veteran editor.

There are, we believe, between nine and ten thousand Common School Libraries in this State, three-fourths of which are designed for the perusal of persons whose lives are to be spent in the practice of some branch or branches of rural industry. Among the million of volumes already deposited in these public libraries, not one in an hundred has the least information on any subject relating to the cultivation of the earth, whether of the field or garden. This should not be; and we are happy to know that many intelligent citizens concur with us in wishing to see good standard works on rural affairs, and the natural sciences connected therewith, placed in these nurseries of popular learning. We cheerfully commend the "Farmer's Library and Journal of Agriculture," as a work worthy of a place in all school and town libraries. It is also admirably adapted to be offered as a five dollar premium instead of money, by all Agricultural Societies. We are decidedly in favor of paying premiums in valuable books relating to rural subjects rather than degrading a high and honorable competition into a mercenary affair of dollars and cents.

MESSRS. GREELY and McELRATH deserve public thanks for incurring the great expense, on not very flattering prospects, of getting into print,

in a form so neat, inviting, and cheap, the most valuable European works on agriculture, not before published in this country. Their liberality and confidence have been great, and their enterprise should be amply sustained—not certainly to save them from loss, but to confer enduringly incalculable benefits on the community at large. The coming volume will contain a reprint of "Stephens' Book of the Farm," at one-fourth of its cost in England.

The Library and Journal are issued together monthly at the Tribune Buildings, New York, at \$5 per annum.

European Agriculture and Rural Economy.

WE have received from the Author, the sixth number of this work. It treats of Paring and Burning; Burning land without Paring; Admixture of Soils; Improvement of Peat Lands; and Drainage, as extensively practised in England, Ireland, and Scotland.

This number is decidedly more valuable than any of its predecessors. Mr. COLMAN has enjoyed abundant opportunity to learn from personal observation all that is known in this important branch of rural labor; and his descriptions are clear and satisfactory. If we speak of the work generally, we must say that it is well written as a literary performance, designed for the perusal of persons of taste, and most admirably printed; but it abounds in blemishes and defects, in point of matter, which injure its character, and will impair its usefulness. It is a serious blemish on this ambitious treatise on "European Agriculture and Rural Economy," that its Author so often takes occasion to depreciate, and ridicule what he calls "the pride of Science," as applied to Agriculture.

That some ardent votaries have over estimated the advantages of science, at present, to the common farmer, we are free to admit. But that fact by no means justifies a friend to rural and intellectual improvement, in systematically depreciating the service of those that investigate with all the light and means at their command, the Natural Laws, which change for the husbandman, earth, air, and water, into cultivated plants, milk, meat, and wool; and resolve these organized products back again into their original elements. This course is unworthy of a man like Mr. COLMAN, whose education and knowledge of men and things give us a right to expect fair treatment, if not a friend to scientific investigations.

The reader is informed on page 51, of the number before us, that Dr. PLAYFAIR had favored the Author with the perusal of a manuscript lecture, in which, speaking of salt as a fertilizer, the lecturer says: "Liebig ascribes its action to a decomposition of the sulphate of lime in the soil, by which the sulphate of soda enters the plant. Without hazarding an opinion as to the truth of this view, I would simply remark that, if

this be so, salt should act more beneficially on the cereals and leguminous plants, because they are the great generators of the constituents of blood, gluten, albumen, and casein; and these are the parts of plants for which sulphur is absolutely necessary."

The above suggestions of Dr. PLAYFAIR evince research, are strictly scientific, and truly important. But the Author of "European Agriculture" seems not to appreciate the fact that, sulphur is an essential constituent in blood and lean meat, and of course in the seeds of cereal and leguminous plants which are so rich in the elements of flesh and blood. Nor does he stop to consider the fact that, sulphate of soda, (glauber salts, formed by adding common salt to a soil that contains gypsum,) is more soluble than gypsum, and hence that the sulphate of soda will convey more sulphur into the circulation of plants that need it, than the sulphate of lime will convey to the same destination. Catching at the guarded manner in which Dr. P. refers to the statement of Liebig as to the mutual decomposition of common salt and gypsum, in the soil, Mr. C. says: "This little word 'if' is certainly one of the most convenient words in the language, and performs in science a similar office to charity in morals—that of covering a multitude of errors."

The assumption of "error in this instance is wholly gratuitous; and the circumstance of perusing a manuscript lecture of Dr. PLAYFAIR is stated by the Author, apparently for no other purpose than to get an opportunity to indulge in a characteristic fling at "Science," for the alleged "multitude" of its "errors."

Agricultural Science is still in its infancy, and far from being perfect. But should it on that account be continually knocked on the head, by a writer of the standing of Mr. COLMAN? If Mr. C. acts in this way from calculation, he may tickle "the ears of the groundlings" and perhaps extend the sale of his book. But the time will come when such conduct will be duly appreciated, even by those that now regard all science as humbug. For ourselves, it is with pain that we make these remarks on a work, whose author has elicited our lasting admiration, by his just sympathy with suffering humanity, and fearless advocacy of the rights of the millions of paupers in England, while surrounded by powerful temptations to speak well of the oppressors and forget the oppressed.

Spontaneous Combustion.

MR. EDITOR:—Riding awhile since in the vicinity of Peterboro, in this county, I passed a barn which had evidently been on fire. I made some inquiries respecting it, and as a like circumstance is of rare occurrence, and thinking an account of it would prove interesting to the farming community, I will give the circumstances as I learned them from a neighboring farmer,

who was present at the time, and helped to extinguish the fire.

The fire occurred in March last, and was the consequence of *spontaneous combustion*. A heap of manure had been for years accumulating under an open shed adjoining the barn. About six weeks previous to the fire, an additional quantity of manure from the horse stable had been thrown upon the heap. The weather had been for three days warm, the wind from the south, with some rain, but suddenly changed to a cold north-west storm. The fire was discovered the day following; it caught to the sills and siding of the barn connected with the manure, but was extinguished before it had made much progress. The fire was dispersed through almost the entire heap of manure, to the depth of three feet below the surface. It could not be ascertained that any person had visited that part of the barn for three days previous, so that the fire could not have been communicated by lantern or otherwise.—The man who gave me the information had disbelieved the possibility of spontaneous combustion, but the evidence in this case was so clear that it could not fail of conviction.

I write the above with the hope of obtaining information for myself and others. I have related the circumstances to a number of farmers who are hardly willing to credit the spontaneous production of fire under such circumstances; and my knowledge of chemistry is far too limited to admit of my giving a proper explanation. If you will give the chemical process by which spontaneous combustion is produced, you will much oblige us. The individual owning the barn is Mr. GEORGE PACKS. One thing is evident—had he been a reader of your valuable paper, and a follower of its precepts, his property would not have been endangered by an accumulated manure heap.

R. D. P.

Clockville, Madison Co., June, 1846.

REMARKS.—All fermentation generates sensible heat; but it is only when a large mass of organized matter is rapidly decomposing, that heat sufficient to *burn* is evolved. The sensible caloric, or heat, is eliminated during the chemical union of oxygen in the air, with carbon and hydrogen in fermenting matter—forming *water* with the latter element, and *carbonic acid* with the former.—In changing diluted alcohol into vinegar, we usually create a temperature of 100 degrees by the direct combination of oxygen in the atmosphere with the hydrogen in the alcohol.

We have heard of one other case of a manure heap taking fire this season, over which a shed was burned. Mix leached ashes and gypsum with the compost, and they will check too active fermentation.—[Ed.]

APRICOTS.—The first Apricots we saw, this season, was on the 11th of July, from the garden of H. N. LANGWORTHY, Esq. Beautiful and rich.

Extract from a Practical Farmer's Letter.

"Your remarks about stirring the earth, instead of complaining of drought, are true. I never saw corn injured by drought in Oneida county, that was early and well tended.

When Noah's Sunday time arrives, I drop the plow handle instinctively; when the mind gets transported with his happy criticisms, it requires an effort to resume the plow.

For three successive years I selected the first ripe ears of Indian corn for seed. The result is that I got roasting ears full two weeks earlier than my neighbors.

Soaking corn in different solutions, was tried in Bridgewater (Oneida,) twenty years ago—but such is our cold moist climate, that it is unsafe to soak corn before planting; even the peas I soaked and planted, on the 10th of April, will not half sprout, while the unsoaked are doing well. By sowing oats early, (4th of April,) I get more oats and less straw than my neighbors; 'tis true they grow slow, and turn yellow at first, but it would seem that this only favors the subsequent growth of the berry.

So short is our warm weather that we must make our corn in 75 days, if we would escape early frosts. If our farmers neglected their corn as yours do in Seneca, we should rarely ever get a sound crop. Wheat is entirely different from corn; the longer it is growing the better the crop. Those extraordinary crops in England are frequently 13 months growing. In the year 1816, my father grew very plump winter wheat in Bridgewater, which was not cut until the last of September. No general rule in farming should be always acted on, as long as seasons, soils, and above all climates, are so variable.

If you could place your manure one or two inches under the surface, which is nearly impossible, it would be preferable to either top dressing or deeper covering.

W. B. for three or four years has sown in unequal proportions, oats, barley, and spring wheat. He gets from 40 to 60 bushels to the acre; the mixture brings a cent a pound for distilling.—Last year, as an experiment, he put with the mixture half a bushel of flax seed to the acre; cradled, raked and bound together. He got 16 bushels of flax seed, without apparently diminishing the rest of the crop in the least.

Agricultural papers generally advise thorough, deep plowing. This may do to bring the wealth of the soil within the reach of the plant; but in cold Oneida we want no corn roots to go more than three or four inches deep."*

* The above was written (under date of April 27, 1846,) by a farmer of Oneida county to our esteemed friend and correspondent "S. W.," of Seneca county.—[Ed.]

The Season and the Crops in Seneca Co.

This has been one of the best growing seasons I have ever witnessed. It commenced full

two weeks earlier than usual. Green peas were eaten at Aurora on the 30th of May. We have had just enough of heat and moisture to suit all crops; even pasture and potatoes have not needed rain until now, the 20th of July. Corn, barley, oats and flax never looked better. Our barley and wheat crop is now being cut. A few weeks ago it was supposed that the yield of wheat would this year be below the average, owing to the ravages of the fly; the result is that the thinned plants have yielded double in length of ear, and size of berry. In the north part of our county the wheat crop is good; one farmer told me he should get more pounds of good wheat this season, to the acre, than he ever got before.

PLUMS.—Our plum trees, Green Gages excepted, are now the victims of a new and fatal enemy which attacks the limbs instead of the fruit.—The hard excrescence which forms, or rather exudes from the poisoned limb, has of late been found to enclose a yellow worm about 5-8 of an inch in length.

POTATOES.—I believe there is no vegetable so difficult to be grown in perfection on our warm, calcareous, clay loams, as potatoes. It is easier to grow a bushel of corn, than a peck of potatoes, on such a soil. The tops grow enormously large, and take the necessary moisture from the tubers. An ordinary summer shower is converted into steam, and escapes from a clay surface, when a sand, or gravelly loam, would be thoroughly saturated by it. S. W.

Stone Wall.

A GENTLEMAN who subscribes himself "W.," asks, in the last number of the Farmer, information on the subject of making "stone wall." Having myself been born and bred in a part of the country where stones and stone-walls abound, I will venture to give an opinion on the subject.

Much will depend on the nature of the soil, and the quality of the stones. If the stones are long, flat, square, &c., as quarried stones usually are, the question will be one of less consequence. Even then, however, I would prefer to bank the wall, rather than to build it "on an embankment." If the soil is of a kind that heaves, we cannot prevent the heaving, but may prevent, in some measure, its effects, by banking the wall, or some other means. If the stones are such as are commonly called "boulders," i. e. common field stones of various shapes and sizes, (as I suppose them to be,) the best method of making them into a wall, is to dig a ditch or trench an inch or two wider than the wall is intended to be, and from six to twelve inches deep, (or even deeper, if the soil is very soft,) according to the nature of the soil; fill it with small stones, and build the wall upon them. The writer has seen walls of various kinds, built in this way, that stood 10 or 15 years, and even more, in situations not very favorable to permanency, requiring but little oc-

casional repairing—and has himself assisted in building them through swamps and marshes.

The best proportions for a low, or *half* wall, (if the intention is to use stakes and rails above,) are, bottom not to exceed two feet in thickness, (unless the stones are large;) top, nine to twelve inches; height, two to two and a half feet. If intended for posts and boards, let it be a little thicker. For a full wall, (i. e. 4 to 4½ feet high,) let the bottom be *two and a fourth to two and a half* feet thick, built double (if necessary,) one-third to one-half its height, (the less the better,) bound together if possible with long stones or pieces of durable wood, and single above, (if the material will admit of it.) It will be seen that a wall of this kind, i. e. ditched, should be built only when it is intended to be permanent.

Fairport, July 4, 1846.

II.

MR. EDITOR:—I notice in the last number of the *Farmer*, an inquiry relative to the best method of building stone wall. Having had considerable experience for many years in the business, I have come to the conclusion that a wall to be durable and profitable must be built on a solid foundation. After clearing the way of rubbish and setting the stakes, draw a line 18 inches from the centre; dig a ditch 3 feet wide, say 10 to 20 inches deep, (which will serve as an under drain;) fill it to the surface with cobble stones, well pounded down with a heavy stone. Lay the wall but 2 feet thick at bottom, over the centre of the ditch; draw in gradually on both sides to about 10 inches at top, which should be full five feet from the foundation. In laying up use plenty of sticks as binders, one-half or three-fourth inch thick, and 3 or 4 inches in width; cedar or chestnut, or even hemlock may do; be careful that the ends do not project beyond the stones. Let the upper tier of stones be heavy and laid even at the top by a line stretched for that purpose.—When the fence is to be built along the road, the earth may be thrown out upon the road-side for the purpose of making a walk. The whole expense of the wall described will be about \$2 per rod, and will stand a long time.

And here, if my brother farmers will bear with me, I would suggest to them to clear the road of stone, rubbish, foul weeds, &c., and stock it well; and thus set an example worthy to be imitated by our small villages, and render the country more pleasant and desirable.

Hannibal, July, 1846.

A FARMER.

Canada Thistles. — A Remedy for their Spreading.

MY DEAR DR.:—I propose that we farmers generally go into committee of the whole, on the subject of Canada Thistles and other noxious weeds. You shall be Chairman—I have the floor.

Mr. Chairman,—I am not going to make a speech; but I am prepared to present to this

large audience a few remarks upon a subject which interests every farmer, either directly or indirectly. It is well known that in this portion of the state, that great pest, the Canada Thistle, is spreading over our land with great rapidity. Almost every farm has a patch, and on many they are allowed to go to seed annually. Good farmers cut them up, and thus, in a great measure, confine them to the ground they occupy.—But there are men who will not do so. Now, I propose that we have a law enacted, next winter, that shall, in an easy and peaceable way, abate this nuisance.

And this is the way we will do it. Allow any man to go and cut down thistles upon his neighbor's land, just before they blossom, and present his account for so doing, properly authenticated, to the board of town auditors by the first day of October of each year. The board shall audit the accounts at a reasonable rate, and make a certificate of the amount to the town collector, who shall have power to add it to the tax roll of the town when it comes to his hands, and collect in the same manner as other taxes are collected.

What say to that, Mr. Chairman? *That won't pass!* Won't pass: pray, if I may ask, why won't it pass? *Because our farmer representatives won't attend to it, and will be led by the nose by the gentleman of a certain other trade or profession.* That won't do, Mr. Chairman.—We are the people, and if we can't have such laws as we want for our own guidance and regulation, we will take those gentlemen by the nose who are so officious in matters they know nothing about. I grant you that we farmers are about as great a set of asses as could well be, for we bear all the burthens of the whole community, and yet have no proportionate share in the law making. But we must not complain. A gabby gassy pettifogger comes among us, sets us all by the ears, fobs our money—and we, kind, easy souls, send him to Congress or the Legislature, to make laws for us. The fellow, ten chances to one, don't know a "*hawk from a hand-saw*" in relation to the wants or the interests of his constituents. No matter, he can make a fine speech, and call us the "*hardy yeomanry*," the "*bone and muscle*," of the country, the "*real hard-fisted democracy*," and all that sort of thing. We shake our long ears, look very wise, give him our votes, and then go home and wonder why our interests are no better served.

However, shall we have such a law? I motion that we take the necessary steps to get it passed next winter. Mr. Chairman, I call for the question—and, until taken, I remain

Truly yours, T. C. PETERS.

Darien, July 10, 1846.

HE is a wise man who learns from every one; he is powerful who governs his passions; and he is rich who is content.

Canada Thistles.

IF a peck of salt will destroy the Canada thistles on a square rod, how much will it require to destroy them on an acre?—And will it pay? As in my case, I have no doubt it will pay *well*. The first of these pests that I discovered on my farm, was in 1844; and thinking to eradicate them at once, (only about a square rod.) I went with a man, cart and oxen, dug them all up, soil, turf and all, carted them to the road, and tipped them into a mud hole. The last season, (1845,) I discovered that either they had all got back again, or I had left roots in the ground, for they were more plentiful than before I dug them up.

As a second effort I applied a peck of salt, scattered on the surface. Result: Not one thistle could be found in September following.

Lockport, 1846.

NIAGARA.

WE owe an explanation to "Niagara," relative to the above, and another article on the Potato Disease. They were written on the same sheet with a business communication, and inadvertently filed with other letters—and thus overlooked for several months.

M.

Deep and Shallow Breaking.

A CORRESPONDENT of the Prairie Farmer, in answer to an article of another writer on the subject of deep plowing says:—

How deep it will do to break burr oak openings I cannot say from experience, having no such land myself, but should judge that deep breaking would answer quite as well as shallow; and here probably is the difference among farmers on deep breaking: the *deep breaking* party having openings, and the *shallow breaking* party prairie. Gentlemen please say what kind of soil you are breaking up, then each person can judge for himself whether it will suit his case or not. Every year has brought additional proof to me that shallow breaking on the prairie is *most decidedly the best for all crops*. Cutting off a plant at the *neck* is always the most fatal to it; shallow plowing will cut the weeds and grass off at or near the neck of the plants and they consequently soon die, decomposition takes place rapidly, and a few weeks after the ground is broken—provided the grass is in a luxuriant state of growth—the turf can be easily pulverized with the harrow, and fine crops succeed. When the old grass can be left and burned off immediately before plowing, it will still increase the crop.

Deep plowing in after culture is most certainly to be preferred. All weeds, foul seeds, and stubble, will then be so disposed of as to keep the soil open and add to instead of diminishing the crops. Many of the small seeds will by subsequent plowings again be brought to the surface and vegetate; but a judicious system of rotation will remedy this to a great extent."

A Farmer's Barometer.

MR. EDITOR:—As the season of haying and harvest will soon be upon us, and to many it will be of importance to know how to predict a storm without the expense of purchasing a Barometer, I send you a description of an instrument which answers every purpose.

Take a small stick about three feet long, a trifle smaller at one end than the other; at the large end tie a viol filled with atmospheric air, tightly corked or sealed. This should then be suspended by a string, so that it will nearly balance in ordinary weather. When the viol sinks down, or the small end rises up, a storm may be expected; and on the contrary, when the small end sinks, fine weather will ensue. The philosophy of it is this: The air in the viol always remaining the same, rises or falls according as the atmosphere is heavier or lighter—acting on the same principle as the mercury in the Barometer tube. This is a very simple instrument.—Any person can make one in a few minutes, and it may save him considerable trouble.

Greece, June, 1846.

F. W. L.

HISTORICAL CHART, containing the prominent events of the Civil, Religious, and Literary History of the World, from the earliest times to the present day. By AZEL S. LYMAN. Philadelphia, 1845.

WE are indebted to Mr. BENJ. MORTIMER for a copy of this work. From a hasty glance at its contents, we are of opinion that it is well calculated to aid and facilitate the student of history. The Chart will be found invaluable to young pupils, and is very valuable and convenient to all as a safe guide for reference. The Chart is accompanied with a Key, with explanations, and questions, designed for the use of pupils.

MR. MORTIMER, the agent, is now on a tour through Western New York, and will probably place the Chart within the reach of all. FISHER & Co., Booksellers, Exchange St., Rochester, have the Chart for sale. Price \$1.50. M.

A WORD TO BUTTER MAKERS.—A Butter dealer suggests through the New York Tribune, that those engaged in the manufacture of this article be careful and not salt their butter too much, keep it in new white-oak firkins of 50 and 100 lbs.—proportioned to the number of cows—which are perfectly air tight. One half inch salt at top and bottom without brine, unless to soak the firkin, is all sufficient; keep it in a cool cellar until frost comes and then forward it to market. It is atmospheric air which ruins butter, and if kept free from it in cool situations it will keep sweet for years.

CATTLE.—Sixty cars filled with cattle, mostly from Western New York, passed through this town over the Western Rail Road to Brighton, on Friday night last. So says the Bay State Farmer of July 15, published at Worcester, Mass.

Agricultural Statistics of New York.

BY S. S. RANDALL.

THE entire population of the state, as returned by the marshals, is 2,604,495 : comprising 1,311,342 males, and 1,293,153 females.

The aggregate number of farmers and agriculturists in the state, is 253,292, or somewhat less than one-tenth of the entire population, and one-fifth of the whole male population. The number of legal voters in the state, (exclusive of persons of color,) is 539,379 ; consequently the number farming to all other professions, is very nearly as one to two.

The whole number of acres of improved land in the state is 11,737,276 : of which 1,013,665 is devoted to the production of wheat ; 1,026,915 to that of oats ; 595,135 to that of corn ; 255,762 to that of potatoes ; 317,099 to that of rye ; 192,504 to that of barley ; 117,379 to that of peas ; 16,232 to that of beans ; 255,496 to that of buckwheat ; 15,322 to that of turneps ; and 46,089 to that of flax ; wheat and oats being the great agricultural staples of the state ; corn and rye holding the next place ; potatoes and buckwheat, in about equal proportion, the next ; and barley, peas, flax, beans, and turneps, following in the order in which they are here named ; the least number of acres being devoted to the culture of the turnep.

The western and northern portions of the state are best adapted to the cultivation of wheat, potatoes, oats, while the southern and eastern portions seem most favorable to corn, barley, peas, beans, turneps, and flax. The middle counties afford the best encouragement to the raising of cattle.

Of the 1,013,665 acres employed in the raising of wheat, the number harvested during the year is reported at 958,234, yielding an aggregate of 13,391,770 bushels, exceeding by 1,438,263 bushels the amount raised in 1840, and averaging a fraction under 14 bushels to the acre.— In the county of Monroe, the average yield is 19½ bushels ; in the county of Kings, 19 ; in each of the counties of Orleans and Niagara, 18 ; in the county of Clinton, 17½ ; in Genesee county, 16½ ; in each of the counties of Cayuga, Ontario, Livingston, and Franklin, 16 ; and in each of the counties of Onondaga, Richmond, Seneca, Warren, and Wyoming, 15. In two of the outer wards of Brooklyn, the average yield was 24 bushels to the acre ; in the town of Wheatland, Monroe county, 22 bushels ; and in Sweden, same county, 21.

From the 1,026,915 acres devoted to the production of oats, the aggregate number of bushels harvested during the year is stated at 26,323,051, exceeding by 5,594,313 the quantity raised in 1840, and averaging nearly 26 bushels to the acre. In the counties of Seneca and Kings, the average exceeding 35 ; in Monroe and Ontario,

32 ; in Onondaga, 31 ; in each of the counties of Cayuga, Dutchess, and Livingston, 30 ; in each of the counties of Orleans, Niagara, and Rensselaer, 29 ; in each of the counties of Chenango, Madison, Oneida, Orange, Wayne, and Yates, 28 ; and in each of the counties of Chautauque, Clinton, Columbia, Jefferson, Queens, Richmond, Suffolk, and St. Lawrence, 27.

From the 317,099 acres devoted to the production of rye, the aggregate number of bushels harvested during the year is stated at 2,966,322, being 18,591 bushels less than were harvested in 1840, or an average of nearly 9½ bushels to the acre. In the county of Kings, the average product is reported at nearly 20 bushels to the acre ; in the county of Richmond, at 14½ ; in the county of Jefferson, 13½ ; in each of the counties of Clinton, Orleans, and St. Lawrence, 12 ; in Chenango, 11½ ; in each of the counties of Erie, Livingston, Rensselaer, and Wyoming, 11 ; in each of the counties of Schenectady, Queens, and Essex, 10½ ; and in each of the counties of Albany, Delaware, Franklin, Fulton, Genesee, Herkimer, Lewis, Monroe, Montgomery, Orange, Warren, and Westchester, 10. In the ninth ward of the city of Brooklyn, 265 bushels were obtained from 16 acres, being an average of 25 bushels to the acre ; and an equal average crop was obtained in the town of Gravesend in the same county.

From 595,135 acres planted with corn, the aggregate number of bushels harvested is returned at 14,722,115, being an increase of 3,636,973 over the harvest of 1840, and averaging nearly 25 bushels to the acre. In the county of New York, the average yield was 40 ; in Kings county, 38½ ; in Richmond, 35 ; in Suffolk 34 ; in each of the counties of Orange and Westchester, 32 ; in Rockland, 31 ; in each of the counties of Monroe and Orleans, 30 ; in each of the counties of Niagara, Ontario, and Seneca, 29 ; in each of the counties of Chemung, Chenango, Jefferson, Oneida, Onondaga, Putnam, and Tioga, 27 ; in each of the counties of Clinton and Wayne, 26½ ; and in the county of Broome, 26.

From 255,762 acres planted with potatoes, the aggregate number of bushels obtained was 23,653,418, or an average of 90 bushels to the acre. In Jefferson and Franklin counties the average yield exceeded 150 bushels ; in St. Lawrence, 145 ; in Clinton and Orleans, 137 ; in Essex and Genesee, 125 ; in Washington, 122 ; in Suffolk and Wayne, 120 ; in Chautauque, 112 ; in each of the counties of Kings, Monroe, and Niagara, 110 ; in each of the counties of Ontario, Cattaraugus, and Cayuga, 105 ; in Allegany, 99 ; in Yates, 98 ; in Seneca, 97 ; and in each of the counties of Lewis and Queens, 95. In each of the towns of Antwerp and Rutland, in Jefferson county, the average yield per acre was 187 bushels. There has been a falling off of the potato crop of upwards of six millions of bushels since 1840.

From 117,379 acres sown with peas, the aggregate number of bushels raised was 1,761,504, or an average of 15 bushels per acre. In the town of Westchester, Westchester county, upwards of 170 bushels are returned as having been produced from 3½ acres, averaging 56 bushels per acre. In the county of Kings, the average crop was 35 bushels; in Richmond, 24; in Putnam, Queens, and Wyoming, 20; in Onondaga and Orleans, 19½; in Suffolk, 18; in each of the counties of Genesee, Madison, Montgomery, and Rockland, 17; and in each of the counties of Albany, Allegany, Cayuga, Chautauque, Erie, Livingston, Monroe, Niagara, Oneida, Ontario, Seneca, St. Lawrence, and Steuben, 16.

From 16,232 acres devoted to the raising of beans, the aggregate number of bushels produced was 162,188, or an average of ten bushels per acre. In the town of Westfield, Richmond county, from 2½ acres 228½ bushels were produced, being an average of 114 bushels per acre; in the ninth ward of the city of Brooklyn, 1960 bushels were raised from 19½ acres, being an average of 100 bushels per acre; in the town of Newtown, Queens county, the average was 91; in the county of Westchester, 20; and in the counties of Cayuga and Chautauque, 15 and upwards.

From 192,504 acres sown with barley, the aggregate number of bushels raised during the year preceding, is returned at 3,108,705, exceeding by 610,535 bushels the crop of 1840, and averaging 16 bushels per acre. From 11 acres in the county of Kings, 360 bushels were raised, being an average of nearly 33 bushels to the acre. In the county of Schoharie the average return exceeded 22 bushels to the acre; in the county of Suffolk, 44 bushels; in the county of Richmond, 25; in each of the counties of Onondaga and Westchester, 20; in each of the counties of Madison, Monroe, Niagara, and Ontario, 19; in each of the counties of Cortland, Oneida, and Schenectady, 18; in each of the counties of Cayuga and Chautauque, 17½; and in each of the counties of Allegany, Chenango, Essex, Franklin, Rensselaer, and Seneca, 17.

From 255,495½ acres of buckwheat, the aggregate number of bushels raised was 3,634,679, exceeding by 12,390,241 bushels the quantity raised in 1840, being an average of upwards of 14 bushels to the acre. In one of the outer wards of New York 300 bushels were obtained from 8½ acres, or an average of nearly 38 bushels to the acre. In each of the counties of Onondaga and Ontario, the average was 21; in Genesee, 19; in each of the counties of Cayuga, Kings, Putnam, Richmond, Schenectady, Seneca, and Wayne, 18; in each of the counties of Chemung, Chenango, Clinton, Livingston, Montgomery, Niagara, Tompkins, and Yates, 17; in each of the counties of Albany, Chautauque, Cortland, Queens, Rensselaer, Steuben, Tioga, and West-

chester, 16; and in each of the counties of Allegany, Broome, Delaware, Dutchess, Erie, Herkimer, Monroe, Oneida, Orange, Schoharie, St. Lawrence, and Ulster, 15.

From 15,322½ acres devoted to the production of turneps, the aggregate number of bushels raised was 1,350,332, being an average of 88 bushels per acre. In the county of Suffolk, however, the average is as high as 240; and in one town of that county (Riverhead) the average yield was 293 bushels. In Kings county the average was 197; in each of the counties of Monroe and Queens, 180; in each of the counties of Niagara and Rockland, 155; in Ontario, 148; in Wayne, 146; in Richmond, 142; in each of the counties of Onondaga and St. Lawrence, 140; in Otsego, 135; in Orleans, 126; in Cortland, 125; in Clinton, 122; in Essex, 121; in Cayuga, 120; in Steuben, 115; in each of the counties of Delaware, Oswego, Saratoga and Schenectady, 110; in each of the counties of Franklin and Jefferson, 108; in each of the counties of Chemung and Montgomery, 107; in each of the counties of Genesee and Seneca, 105; in Chautauque, 104; in Wyoming, 103; in Livingston, 99; in Allegany, 98; in each of the counties of Tioga and Warren, 95; in Washington, 92; in each of the counties of Cattaraugus, Lewis, and Schoharie, 90.

From 46,089 acres of flax, the average number of lbs. produced was 2,897,062½, or an average of 62½ pounds to the acre. In the town of Islip, Suffolk county, 120 pounds were produced from one quarter of an acre; in Poughkeepsie, Dutchess county, 360 pounds from five-eighths of an acre; in the towns of Amenia and Rhinebeck, in the same county, an average of 350 pounds per acre is returned; in Pleasant-Valley, 285; and in Clinton, 275. The average product in the county is 237 pounds per acre. In Jefferson county the average is 190; in Columbia, 187; in each of the counties of Chautauque and Chenango, 180; in each of the counties of Lewis, Queens, and Washington, 175; in each of the counties of Orange and Ulster, 165; in Essex, 164; in each of the counties of Clinton, Cortland, Franklin, Oneida, Putnam, and Rensselaer, 150; in each of the counties of Oswego, Sullivan, and Westchester, 140; in Warren, 139; in Delaware and St. Lawrence, 135; in Broome, 132; and in each of the counties of Greene, Hamilton, Monroe, Onondaga, Richmond, Saratoga, Steuben, Tioga, and Wyoming, 100 and upwards.

The aggregate number of heads of neat cattle in the State is 2,072,330, being an average of upwards of 35,000 to each county, of which there are nearly 86,000 in the county of Jefferson; 85,464 in the county of Oneida; nearly 78 thousand in the county of St. Lawrence; 66,885 in the county of Chautauque; 63,745 in the county of Chenango; 62,555 in the county of

Delaware; 61,706 in the county of Otsego; 59,712 in the county of Orange; 57,506 in the county of Erie; 55,482 in the county of Steuben; 53,440 in the county of Herkimer; nearly 52,000 in the county of Allegany; 49,498 in the county of Onondaga; 47,258 in the county of Dutchess; 45,256 in the county of Cattaraugus; 45,216 in the county of Madison; 43,527 in the county of Washington; 41,584 in the county of Cayuga; and 41,300 in the county of Oswego. The number of neat cattle under one year old is 334,456, and the number over one year old is 1,709,479. The aggregate number of neat cattle is less by about 130,000 than in 1840.

The aggregate number of cows milked is returned at 999,490, or an average of nearly 17,000 to each county. The aggregate number of pounds of butter made during the year was 79,501,733½, or an average of about 1,350,000 to each county, or 79½ pounds to each cow milked; while the aggregate number of pounds of cheese is returned at 36,744,976, being an average of 622,796 pounds to each county, or about 36 lbs. to each cow milked. In the county of Oneida, the number of cows milked is stated at 47,713; from which 3,876,276 pounds of butter, and 3,277,750 pounds of cheese were made, or an average of upwards of 80 pounds of the former and 68 of the latter. In the county of Orange, from 42,256 cows milked, 4,108,840 pounds of butter were obtained, being an average of 97 pounds to each. In the county of Jefferson, from 41,360 cows, 3,080,767 pounds of butter and 2,802,314 of cheese were obtained; averaging 74 pounds of the former and nearly 70 of the latter. In the county of Kings, the average number of pounds of butter made from each cow milked was 110; in the counties of Delaware and Chenango, 100; in each of the counties of Putnam, Sullivan, and Tompkins, 95; in each of the counties of Cortland, Greene, Onondaga, Schenectady, Schoharie, Seneca, Wayne, and Yates, 90; in Livingston, 85; and in each of the counties of Dutchess, Ontario, Saratoga, Steuben, Tioga, Warren, and Washington, 80. In the county of Herkimer, 8,208,796 pounds of cheese were manufactured from the milk of 36,255 cows, being an average of 226 pounds to each; in the town of Fairfield, in the same county, 1,355,967 pounds were manufactured from the milk of 3,910 cows, being an average of nearly 350 pounds. In the county of Madison, 2,022,855 pounds were obtained from 21,513 cows, being an average of 90 pounds; and in the county of Lewis, 1,420,368 pounds from 18,024 cows, or an average of 80 pounds. In the county of Otsego, the average exceeds 50 pounds.

The aggregate number of horses in the State is 505,155, being an increase of over 29,000 since 1840. In Oneida county there are 17,303; Onondaga, 16,968; in Monroe, 16,811; in Jefferson, 16,397; in Otsego, 14,183; in

Cayuga, 13,922; in Erie, 13,527; in St. Lawrence, 13,470; in New York, 13,346; in Steuben, 12,310; in Wayne, 12,258; in Madison, 11,774; in Dutchess, 11,342; in Tompkins, 11,191; in Washington, 11,115; and in each of the counties of Albany, Allegany, Chautauque, Chenango, Genesee, Herkimer, Livingston, Orange, Rensselaer, and Saratoga, 10,000 and upwards.

The aggregate number of hogs returned is 1,584,344, or an average of nearly 27,000 to each county. In Dutchess county there are 66,828; in Orange, 57,265; in Columbia, 54,477; in Jefferson, 53,068; in Onondaga, 52,907; in Monroe, 48,493; in Niagara, 45,723; in Cayuga, 43,546; in Ulster, 42,627; in Washington, 42,189; in Rensselaer, 39,262; in Otsego, 38,485; in St. Lawrence, 38,150; in Erie, 38,087; in Saratoga, 37,882; in Ontario, 36,986; in Steuben, 35,987; in Wayne, 35,873; in Westchester, 35,609; and in each of the counties of Albany, Chautauque, and Niagara, upwards of 30,000. In 1840, the aggregate number of swine in the state was 1,916,953; being an excess of 332,619 beyond that of the present year.

The aggregate number of sheep in the state is 6,443,855, exceeding by 1,062,630 the number returned in 1840, and being an average of upwards of 107,000 to each county. Of this number 1,870,728 are under one year old, and 4,505,369 over one year old. The number in the county of Otsego is 270,564; in Madison, 263,132; in Ontario, 257,821; in Washington, 254,866; in Chautauque, 235,403; in Chenango, 223,453; in Livingston, 218,258; in Steuben, 217,658; in Dutchess, nearly 200,000; in Oneida, 194,589; in Onondaga, 190,429; in Allegany, 184,901; in Jefferson, 184,526; in Cayuga, 175,148; in Monroe, 173,952; in Columbia, 172,959; in Rensselaer, 170,552; in St. Lawrence, 168,314; in Wyoming, 166,365; in Genesee, 156,578; in Erie, 148,732; in Tompkins, 135,787; in Delaware, 135,633; in Wayne, 130,562; in Yates, 130,134; and in Cortland, 108,862. The aggregate number of fleeces obtained is returned at 4,607,012½, comprising 13,864,828 pounds of wool, less by 208,306 pounds than the aggregate fleece of 1840, and averaging about three lbs. to a fleece. In the county of Kings the average is upwards of six pounds.—*Transactions State Ag. Society.*

BUTTER.—The Southern Planter says:—"A proposition was laid before the Virginia Legislature, last winter, to establish an inspection of butter in the city of Richmond; one of the members desired us to say to the people of the Commonwealth that if they would keep the butter-pot with the mouth downwards, so that the putrid fluid might drain from the butter, there would be no need of such an office as the one proposed, far there would be no butter to be condemned."

To Correspondents.

DURING the past month Communications have been received from John Dickie, F. W. L., *, H., A Farmer, T. C. Peters, Observer, An Apianian, A Female Reader, J. H. Hedley, Edward Sayers, and A Subscriber.

BOOKS, &c. have been received since our last, as follows :—

From Messrs. GREELY & McELRATH, the first volumes of the "Farmers Library, and Journal of Agriculture."

From the Author, a copy of "The American Herd Book," by LEWIS F. ALLEN, Esq.

From Mr. JAMES H. WATTS, agent in this city. No. 6 of "European Agriculture and Rural Economy."

From J. B. NOTT, Esq., a copy of the Transactions of the N. Y. State Ag. Society for 1845.

From the Author, a copy of "The American Flower Garden Companion," by EDWARD SAYERS, of Cincinnati.—Also, "A Manual on the cultivation of Live Fences, with a Practical Treatise on the Cultivation of Evergreens, Ornamental Trees," &c., by the same author.

From Mr. BENJ. MORTIMER, agent, a copy of "Lyman's Historical Chart."

From ——— a pamphlet containing Premium List of Oneida Co. Ag. Society, rules and regulations of the Society, &c., &c.

From E. C. WILDER, of Wolcott, Premium List, &c., of Oswego Co. Ag. Society for 1846.

We are indebted to several unknown friends for copies of Premium Lists, &c., of various Agricultural Societies.

EXPERIMENT IN WHEAT CULTURE.—The Transactions of the State Society contain an interesting experiment in Wheat Culture, made by SAMUEL DAVIDSON, Esq., of Greece, Monroe county—for which he was awarded a premium of \$8. We shall endeavor to publish the statement of Mr. D. in our September number. Its publication will be seasonable, and prove valuable to those who are not averse to learning or deriving benefit from the knowledge and experience of others.

FARM PREMIUMS.—We notice in the Transactions of the State Ag. Society for 1845, that of the three premiums on farms, two (the second and third,) were awarded to residents of Monroe county. The first premium, \$50, was awarded to GEO. GEDDES of Fairmount, Onondaga county; the second, \$30, to Wm. BUELL, of Gates, and the third, \$20, to Wm. GARBUTT, of Wheatland.

THE NEW ENGLAND FARMER.—This old, staid, and useful agricultural journal has been discontinued. Its Editor, Mr. JOSEPH BRECK, has become interested in the Horticulturist, which is to be published simultaneously at Boston and Albany. We shall miss the N. E. Farmer, and although not personally acquainted with its conductor, the good sense and taste that characterized his paper have given us a high opinion of the man. He has our best wishes for his success in his new enterprise.

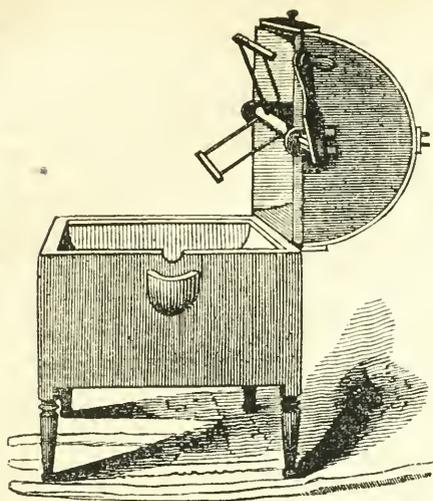
SEVERAL articles from correspondents are deferred, for want of space, till next month.

THE AMERICAN HERD BOOK, containing the pedigrees of Short Horned Cattle. To which is prefixed a concise history of English and American Short Horns; by LEWIS F. ALLEN.

THE appearance of an "American Herd Book" marks another step in the progress of Agricultural Improvement in this country. Its Author is distinguished not less as a skilful and successful breeder of Short Horns, than as one of the earliest and ablest writers on rural subjects in Western New York. In his history of this, his favorite race of neat cattle, as well as favorite kind of domestic animals, he claims for the Short Horns a decided superiority over all other races, for making beef, butter, and cheese. According to Mr. A. the Short Horns are not the product of modern skill in breeding, nor the result of good keep; but a noble stock descended from pure, aristocratic blood, which can be traced back in England 400 years, or through 50 generations. This will do in point of antiquity. But whether a Short Horn can elaborate more *flesh, butter, or cheese*, from 2000 lbs. of any given food, than any other race of cattle can make, under similar circumstances, needs proof by a fair trial, side by side, with perfect weights and measures.—That one cow will give more milk, butter, and cheese, than another, proves nothing, unless she does it by the consumption of less food than another cow requires for producing a like amount, and equal in quality. If a Short Horn will gain 200 lbs. in live weight on a quantity of food, and in a period of time, which will add only 150 lbs. to the weight of a Hereford, Devon, or a good Native, then the story is told. That the powers of digestion and assimilation are alike in all neat cattle, no one pretends. But in what race these functions are performed most vigorously, giving the largest product in rich milk, muscle, and tallow, from any given amount of forage, is a question yet to be decided.

The Author estimates the value of the neat cattle in the United States at one hundred and fifty millions of dollars. There are over one million of cows in this state alone, and about that number annually milked. Mr. A. urges with great force the importance of improving not only the cows, but the whole stock of neat cattle in this vast country which is so admirably adapted to the production of choice beef, and to dairy purposes. As this book is designed mainly for the use of those engaged in breeding Short Horns, and necessarily at a high price from the small number of copies that will be sold, we are happy to notice a promise of another and popular work on the care and management of neat stock, as well as breeding generally. Such a work is greatly needed, and we know of no one more competent to do justice to the subject than the writer of the "History of the Short Horns."

The Herd Book is from the press of Messrs. JEWETT, THOMAS & Co., Buffalo, and does much credit to their taste and skill in the art of book-making.



Gault's Patent Churn.

THIS implement has been in use for several years, and many persons consider it the most approved and convenient Churn now used. The particular advantages claimed for it over other patent churns, are—"the facility with which it can be worked, from its quick and powerful motion; the ease with which it can be cleaned; and that it is not liable to get out of order."

The Churn is manufactured and sold by Mr. E. TAYLOR, No. 6 Hill st., or 17 Exchange st., in this city. It may also be obtained at the seed store of RAPALJE & BRIGGS, Front st. M.

A Chapter on Wool Growing.

MR. EDITOR:—Mr. REED BURRITT of Burdette, states, in your last, that his ram "Major" sheared 15 lbs. of wool, and he says "we think about three-fourths as much as if he had been shorn each season." I infer from this that the fleece was of more than one (probably of two) years growth. If so, does Mr. B. mean to be understood that a two years fleece would not weigh more than three-fourths as much as a single one? I presume he means that had the ram been sheared each year, the aggregate of the two fleeces would have exceeded the weight of his double fleece by one fourth, giving ten pounds as his annual clip, instead of $7\frac{1}{2}$ pounds.

Mr. B. seems to carry the idea that there are artificial methods of increasing the weight of wool, and he alludes to smearing and late shearing. I doubt the efficacy of any of these means, though if a method *could* be discovered whereby we could stimulate the growth of our wool by external applications, feed, or otherwise, as we stimulate the growth of our corn, turnips, &c., it would be one of the greatest blessings ever conferred on the farmer.

At our last County Fair, I heard the President of our County Society, a distinguished sheep

breeder, state to a number of gentlemen that two or three years since, at the strong solicitation of the individual who took charge of his sheep, (who had seen the experiment before tried,) he was induced to smear a portion of his lambs, when they were a week or two old, with refuse lard and other grease. This was done to test the effect in increasing the growth of wool, and in rendering it softer. He said careful comparisons by the steelyards satisfied him that it had no perceptible effect on the growth of the wool, and he could see no improvement whatever in its quality. On the other hand, it caused dirt to adhere to the extremity of the wool along on the back where it was applied, giving the sheep a dirty, *striped*, unsightly appearance.

He further stated that he had made experiments in feeding sheep oil meal, turnips, corn, oats, &c., with a view to increase the growth of the wool, but he had failed to discover any important difference, and none further than each particular feed tended to fatten the sheep—that sheep in good condition carried heavier fleeces than poor ones, irrespective of the feed—but that a medium must be observed, or the ewes would raise fewer lambs. He said that from the alleged experience of various farmers in Madison county, he had formed high expectations of the value of oil meal in increasing the growth of wool, but that thus far his experience was not in accordance with his expectations—that he should give it one more fair trial, and then, unless he found himself mistaken in his previous calculations, abandon it. I have made inquiry of him since the last shearing, and he is now satisfied that it is no better than any other feed which will keep sheep in the same condition—thinks it rather goes to form *fat* than wool, muscle, or bone—and on the whole, thinks oats (about a gill a head a day,) as good and as safe a feed as any which can be given to sheep in winter, besides their hay. He thought perhaps oil meal rendered the wool oilier prior to washing, but this was no advantage—it was washed away in thorough washing, and all fine woolled sheep had enough oil naturally for the growth of the wool.

What influence late shearing can have in increasing the growth of wool, I cannot perceive. If allowed to grow beyond a year, it would only be robbing the next fleece, or the shearing would have to be put off still later the next year, and thus it would soon reach winter! The most celebrated flocks of this county have been invariably sheared within three or four days, or a week, of each other, and generally from about the 15th to the 20th of June.

OBSERVER.

Cortlandville, 1846.

THE POTATO CROP.—We regret to hear that the present crop of this most useful vegetable is in many sections, affected by the disease so prevalent during the past two years.

White's Loudoun Pippin.

DR. D. LEE—*Dear Sir:* While I was in your State last September, at Gen. HARMON'S, in Rochester, or at the State Fair in Utica, I discovered in the people an unbounded desire for knowledge. Whether it related to horticulture, the cultivation of different kinds of grain, or the improvement of sheep, cattle and hogs, it was all the same current, strong and powerful, tending to one point, viz: the acquisition of knowledge that improved the mind, and that made the body comfortable and the purse stronger.

I was speaking of fruit in Virginia, and said to some gentlemen in the cars, on our way from Rochester to the State Fair, that we had an Apple in Loudoun county, Va., that surpassed in quality anything I had met with in the North—not thinking that the remark would elicit so much interest on the part of my hearers. I soon found, however, that I had several questions to answer. The interrogatories related to the size, color, the cavity in which the blossom is set, the depth of the cavity in which the stem is placed, the core, &c., &c. Mr. LANGWORTHY and Mr. ELLWANGER both said I had given the description of a fine Apple. I promised different gentlemen a few grafts, and for the purpose of giving yourself, and others of the kind and hospitable acquaintances I made in the North, an opportunity of judging of the qualities of *White's Loudoun Pippin*, (for that is the name,) I determined to send on as many grafts as I could.

In January I mounted my horse and travelled some twelve miles through the snow, on a piercing cold day, into what is called the Catoclin Mountain, to the house of Mr. White, for the purpose of obtaining grafts—also to get a few of the apples, and to obtain, as far as I could, a correct history of this remarkable fruit. My object in getting some of the apples was to send a sample of them to you and others. In this I failed—Mr. White had disposed of all he had. The origin of them was also designed for your paper, so that all who received the grafts could have a short description of the fruit. The grafts, as I have before stated, were designed for my Northern friends, so you must be on the look out for them.

Now for the description. The Apple is a large, white Pippin, quite smooth, thin skin, small core; it may be said before ripe to be a very delicate green, but ultimately becomes as white as any apple I have ever seen. It varies as little in size as the most uniform apple, being always large. As to the flavor, I can only tell you how good I think it by what an old Dutch friend of ours once told me. He said that a certain article was "so good that it could'n't be good any more." From what Mr. WHITE told me, I should say that the apple is a seedling. Its history he gave me as follows: "I purchased a tract of land (adjoining my farm,) of a Mr. Cruthers;

on this land were the remains of an ancient orchard. Alone stood an old tree that had weathered the blasts of many a winter. The fruit was so fine that I commenced grafting from it, and all these fine trees you see here on the farms of my nephews and myself, are from that tree, the fruit of which is called White's Loudoun Pippin."—This is what I learned from Mr. White. I have no doubt of its being a seedling, from the fact its great age precluded the idea of its being a grafted fruit, for the art was not practiced so far back in this country. The trees have a handsome, erect stalk, do not branch out so near the ground as many trees do. The limbs turn up at a very handsome elevation, and upon the whole it is a splendid looking tree. Mr. WHITE informed me that the heaviest apple he has weighed was 18 ounces—many of them weighing from 14 to 16 ounces. He says that he has frequently sold them in Washington City at an advance of \$1,50 per barrel over all other apples in the market.

Yours respectfully,

THEODORE N. DAVISSON.

Wheatland, Loudoun Co., Va.

The above article from friend DAVISSON was intended for publication in our April number. It was accidentally mislaid and overlooked.

New Variety of Wheat for Sowing Late.

SOME years since Mr. BATEHAM imported from France a species of Wheat called the *Early White Provence*. It is a very large and beautiful white shirred berry, and makes the first best flour. Gen. HARMON commenced experimenting with it, but after several years trial abandoned it—finding it to push out very early, and with a tendency to fall down and crinkle. He gave a quantity of the seed to Mr. WOLCOTT of Bloomfield, who accidentally sowed it after corn, quite late, and found it to do well—ripening at the same time with the White Flint, and producing over 40 bushels per acre. This process he has continued since for several years—once sowing during a January thaw, with the same result; at any rate never having less than 40 bushels to the acre, and sometimes more. L. B. LANGWORTHY of Greece, and THOS. H. HYATT of Rochester, have each 6 bushels, and Gen. HARMON of Wheatland, 12 bushels sown, from which if the result is favorable, those who have a well manured corn field, which they may wish to make a cheap wheat crop from, can we presume procure seed enough to try the experiment.

It is sometimes very desirable to follow corn or potatoes with wheat, but from the lateness of the season our Flint and other favorite wheats are apt to be so far behind in ripening as to rust and be lost; and if a variety is discovered that may be sown late, and yet ripen before the heats of July destroy it, it is a great desideratum, and worthy of being looked after.

State Agricultural Fair at Auburn.

THE N. Y. State Agricultural Society holds its Sixth Annual Fair at Auburn, on the 15th, 16th, and 17th of September next.

The Committees on the Premium List were appointed as follows:—

CATTLE.

CLASS I.—*Durhams*—Judges—Gov. Tremble, Hillsboro, Highland county, Ohio; Henry Parsons, Esq., Ancaster, Canada West; L. Chandler Ball, Hoosick, Rensselaer co.

CLASS II., III., IV.—*Herefords, Devons, Ayrshires*.—Elias Phinney, Esq., Lexington, Mass.; Samuel Hurlburt, Winchester, Conn.; Edward Cox, Black Rock.

CLASS V.—*Crosses of Native and Improved*.—Ira Hitchcock, Oneida county; Lewis G. Morris, West Farnus, Westchester county; John Randell, Norwich, Chenango county.

CLASS VI.—*Native Cattle*.—William Garbut, Wheatland, Monroe county; Thomas Hillhouse, Albany; Samuel Stevens, Preble, Cortland county.

WORKING OXEN.

Sanford Howard, Albany; William Fuller, Skaneateles; John Ayrault, Perrinton, Monroe county.

STEERS.

Gideon Ramsdell, Perrinton; Francis Hibbard, Cortlandville; Hiram Clift, Marcellus.

FAT CATTLE.

John Holcomb, Wilmington, Delaware; Thomas Kirkpatrick, Albany; A. S. Freeman, Jordan, Onondaga co.

FAT SHEEP.

Elias W. Cady, Dryden, Tompkins county; ——— Hayden, Syracuse; Wm. Osborn, Auburn.

STALLIONS FOR ALL WORK—

MARES.

Adam Furguson, Watertown, Canada West; Albert Floyd Jones, South Oyster Bay, L. I.; H. K. Morrell, Caroline Centre, Tompkins co.

BLOOD STALLIONS—3 YEARS OLD STALLIONS.

BLOOD MARES—3 YEARS OLD MARES.

James Batlgate, Fordham, Westchester co.; D. D. Campbell, Schenectady; Gen. David Jones, Cold Spring, Queens county.

MATCHED HORSES AND GELDINGS.

Edward Long, Buskirk's Bridge; Wm. A. Dutcher, Penn Yan; Wait S. Davis, King's Ferry, Cayuga co.

SHEEP.

CLASS I.—*Long Woolled*.—Philip Raybold, jr., Wilmington, Del.; Hon. Samuel Cheever, Bemus' Heights, Saratoga co.; Augustus Rayner, Clarence, Erie co.

CLASS II.—*Middle Woolled*.—Wm. Howitt, Guelph, Canada West; Paoli Lathrop, South Hadley Falls, Mass.; Benjamin Enos, De Ruyter, Madison co.

CLASS III.—*Merinos*.—Robert R. Reed, Washington, Pa.; Edward A. Le Roy, New York; Wm. B. Smith, Woodbury, Conn.; Samuel Lawrence, Lowell; S. Newton Dexter, Oriskany.

CLASS IV.—*Savons*.—Adam Eildebrand, Massillon, Ohio; Daniel Rogers, Hoosick Corners; Homer Blanchard, Kinderhook; ——— Mackay, Salem, Washington co.; J. A. Tainter, Hartford.

SWINE.

G. V. Sackett, Seneca Falls; P. N. Rust, Syracuse; E. L. B. Curtis, Danby, Tompkins co.

POULTRY.

L. B. Langworthy, Rochester; Thos. Hollis, Gilbertsville; Edward Messier, Fishkill.

PLOWS.

C. C. Dennis, Auburn; Enoch Marks, Fairmount, Onondaga; S. N. Wright, Vernon Centre.

WAGONS, HARROWS, &c.

Samuel Greenleaf, Canandaigua; E. P. Beck, Sheldon, Wyoming county; Isaac C. Boies, Homer.

CORN COB CRUSHER, &c.

George Geddes, Fairmount, Onondaga; Kingsbury E. Sandford, Volney, Oswego; Cornelius Bergen, Brooklyn.

PLOWING MATCH.

John Johnson, Geneva; John Hinch, Astoria; David Matthews, Truxton; Henry Bremer, Enfield; Paris G. Barber, Homer, Cortland co.

BUTTER.

Z. Barton Stout, Allen's Hill; Andrew Dickson, Cortland; Aaron Petrie, Little Falls.

CHEESE.

Wm. C. Crain, Warren, Herkimer; Lewis Eaton, Black Rock; Eliza Morse, Eaton, Madison co.

MAPLE AND CORNSTALK SUGAR.

Gen. Otto F. Marshall, Wheeler, Steuben co.; Robert Hadfield, Sheldon, Wyoming; Wm. Blosson, Canandaigua.

SILK.

Joel F. Belcher, Richford, Tioga; Edward Morgan, Aurora; Charles Pardee, Skaneateles.

DOMESTIC MANUFACTURES.

Roswell Randall, Cortlandville; Curtis Moses, Marcellus; Moses D. Burnett, Syracuse.

FRUIT.

John A. King, Jamaica, L. I.; Dr. Underhill, New York; Wm. L. DeWitt, Ithaca.

FLOWERS.

Dr. Herman Wendell, Albany; Wm. R. Randall, Cortland; ——— Tracy, Syracuse.

VEGETABLES.

L. A. Morrell, Lake Ridge, Tompkins; Geo. J. Pumpelly, Oswego; Henry Morgan, Aurora.

MISCELLANEOUS.

R. L. Allen, Buffalo; J. T. Cooper, Albany; Wm. Jackson, Syracuse.

STOVES, &c.

C. N. Bement, Albany; Samuel T. Pratt, Buffalo; Franklin Manning, Syracuse.

PAINTING AND DRAWING.

Francis Roch, Butternuts; ——— Walker, Utica; John A. Grauger, Canandaigua.

ORNAMENTAL SHELL, NEEDLE, AND WAX WORK.

Mrs. B. D. Coc, Buffalo; Mrs. Hausan Cox, Auburn; Mrs. Alvan Warden, Canandaigua; Mrs. Wetmore, Utica; Mrs. W. W. Watson, Geneva.

IMPLEMENTS AND OTHER UNENUMERATED ARTICLES.

J. J. Viele, Troy; J. B. Duane, Schenectady; S. B. Cushing, Ithaca.

COMMITTEE OF ARRANGEMENTS.

J. M. Sherwood, Auburn; J. H. Chedell, do.; C. C. Dennis, do.; Wm. Fuller, Skaneateles; H. S. Randall, Cortlandville; J. B. Nott, Albany; Gen. Brown, Onondaga; A. Thompson, Aurora.

COMMITTEE OF RECEPTION.

Ex-Gov. Throop, Auburn; Hon. A. Conklin, do.; Ex-Gov. Seward, do.; Hon. Christopher Morgan, do.; E. A. Worden, do.; T. Y. How, jr., do.; S. A. Goodwin.

RECEPTION OF STOCK.

Major Dill, Auburn; Wm. Howard, do.; Ira Hopkins.

Committee to make arrangements with the different Railroads, for the transportation of Stock, &c.:—L. F. Allen, Buffalo; G. Vail, Troy; E. P. Prentice, Albany; F. S. Faxton, Utica; M. D. Burnett, Syracuse; C. P. Wood, Auburn; L. B. Langworthy, Rochester.

SCAB IN HORSES.—The Author of the "Hand-Book of Farriery," in the Mark Lane (Eng.) Express, says the following recipe has invariably proved successful in curing this disorder: Take of mild mercurial ointment, 6 oz.; sublimated sulphur, powdered white helebore, of each 1 oz.; palm oil, 4 oz. Mix an ointment. It is essential that it be well rubbed into the affected parts.

NEXT to Health and Virtue nothing is so valuable as Knowledge; nor is there anything so easily attained or cheaply purchased—the labor only sitting still; the expense, time, which, if we do not spend, we cannot save.—*Sterne*.

A WISE MAN will speak well of his neighbor, love his wife, and—pay for his paper.

HORTICULTURAL DEPARTMENT.

BY P. BARRY.

Management of Fruit Trees.

MR. EDITOR :—It is not my design to give you a labored discussion on this subject, but merely to state the results of my own experience, together with a few remarks thereon.

1. *Transplanting.*—I am well aware that a diversity of opinion exists in regard to the time of transplanting ; some preferring the fall of the year, others the spring. My own preference would be this : If I could have my trees taken up with the roots uninjured, I would prefer the former season ; otherwise, the latter. My reason is this : If the roots be much injured, the tree will suffer by evaporation before the growing season commences. In regard to the roots, I consider it important, that all those that are broken and torn be cut smoothly off, that the wounds may heal readily. I believe that the neglect of this is one cause of the premature decay of some trees under circumstances that often seem difficult of explanation. At any rate, a shattered root will necessarily rot and injure the tree. I have seen trees that did not appear to thrive well after having been transplanted a few years, and upon examining the roots, have found them broken and decayed. Having removed the entire decayed portion and replaced them in the earth they have afterwards done well.

Pruning should also be attended to at the time of transplanting. Many, perhaps most, people retain all, or nearly all, the head, or top. On the other hand I cut off all, or nearly all. I reason thus : The root, even at the best, has been considerably injured, having lost many of the small branches. The top, or head, at the time of taking up the tree, was as large as the root uninjured was capable of supporting. Unless, therefore, a considerable portion of the top be removed, the root will not be able to support it, and the tree will not thrive. If the top be cut away, the root will make as much top as it is able to support. Hence I cut off all, or nearly all, the top at the time of transplanting ; i. e., I trim the tree, if small, up to a single stem ; if large, in proportion. Whether my philosophy be correct or not, I not only seldom lose a tree, if it has even a tolerable root, but generally find my trees to grow almost as thriftily as if they had not been removed. Besides, I have frequently restored an apparently dying tree to health and vigor, by cutting off nearly all the top, even in mid-summer. The reason is plain : if the evaporation from the leaves exceeds the supply of unappropriated moisture taken in by the roots, the tree will die, or at least suffer, from mere exhaustion. Hence restrain the evaporation ; i. e., cut off the top, and the tree may be saved.

2. *Annual Pruning.*—On this subject, I am

in favor of pruning in the spring or summer, rather than in the fall or winter, especially for the peach and the pear. My reason is this : I have observed, that wherever a limb has been cut away in the latter season, it does not heal over readily. The bark turns black and dies around the wound, leaving a dead spot two or three times the diameter of the original wound. I do not know that this is always the case, but I believe it is generally. I have observed this effect only on the peach and the pear.

In regard to the manner in which the pruning should be performed, every limb, or branch, that is removed should be cut close to the bilge or swell at its base, and be cut *smoothly* off. The murderous practice of some, of chopping off the branches with an axe, either mangling the body of a tree, or leaving a stump several inches long, split perhaps, and haggled, to rot and injure the tree, cannot be too severely reprehended. I have now in my orchard a valuable apple-tree, which had been *trimmed* in this manner before it came into my possession, every wound of which might have been healed by this time, had the pruning been properly performed. It will now require several years to complete the process, and what is worse, one of the mangled stems has decayed down *into* the body of the tree, and still continues to decay, and also bleeds considerably. (How can I prevent the bleeding and further decay ?)

While on the subject of pruning, allow me to say a few words on the management of trees that have been newly grafted or budded. It is well known that when a branch, or the whole head, of a tree has been cut off, and a graft inserted, a number of young shoots start out on the sides of the stem. This is caused by an excess of sap in the stock, which the graft, even if it grows, is unable to appropriate. I have been asked whether it is proper to remove these shoots as fast as they appear ; I answer, by no means, especially if much of the head of the tree was cut away at the time of grafting, or budding. It may perhaps be safe to remove a few of them, but in general it is far better to let them remain till the tree shall have done growing for the season, or till the season for pruning, when they may be removed. The leaves of a tree serve for the purpose of absorption, digestion, and respiration. They absorb nourishment from the atmosphere ; hence, if the foliage be taken away, the tree will *starve* for want of sustenance. Further, if the food derived from the atmosphere, as well as the sap derived from the root, be not properly digested, (as they cannot be, if the necessary amount of foliage be not present,) the tree will sicken, and perhaps die. Hence these young and apparently superfluous shoots should be left, or but sparingly removed, during the season of growth, and be cut away afterwards. This lesson I learned by experience, having lost a valuable

apple-tree by pinching off all the young shoots as fast as they appeared, leaving only one small graft to receive (as I supposed) all the nourishment afforded by the root. The tree began to decline early in August, and died in a few weeks.*

3. *Cultivation, or management of the trees after being set out.*—To ensure a thrifty growth to the trees, (which may generally be done even the first year after being transplanted,) it is absolutely necessary that the surface of the ground around them be kept loose and moist. Hence frequent hoeing, and, if dry, watering, are all-important. I feel assured, that more depends upon this, than upon almost anything else. Let the soil be kept loose and moist, and there is little danger either of disease or death. I have now two apple-trees which, having been set in a stiff sod, had not grown over two or three inches during the last two years. The last spring I removed the sod around them and loosened the soil, and they have already grown nearly a foot, and I confidently expect a growth of several feet during the present season.

A few remarks shall close this hasty and unsystematic scrawl. And first, in regard to ants. If these prove troublesome, they may easily be destroyed or driven away by the free use of urine (human.) If, however, it is not convenient to apply this, let the ground be dug up to the full depth of their habitations, well mixed together, (to which urine, † or a little ashes, or lime, or all, may be added,) and afterwards tread down hard. Let it remain so a few days and again repeat the process if necessary, (as it sometimes may be,) and the object will soon be gained.—The best time perhaps is the morning, when the ants will generally be at home. When they are found to be destroyed, the ground may be dug up and cultivated as usual.

* Perhaps my ill success in the above instance may have induced me to run into the opposite extreme; and it may be, that the best course would be a medium between the two. Some further observations and reflections on the subject have induced me to modify my statements a little. In regard to grafts or buds, if they were set on a small stock, (the whole top being removed,) some of the shoots that afterwards spring up, may, I think, be safely removed, (those nearest and most in the way;) but, as a general rule, I would not exceed about one-third of them, or one half at most. I am of the opinion, however, that a better method is, to remove a few of the nearest, and to clip the ends of the remainder; and thus preserve to the tree the office of the leaves, while at the same time we should thereby, for a while at least, throw more of the growth of the tree into the other branches, (the grafts.) The clipped shoots might afterwards be cut away when the tree had done growing for the season, or at the time of the annual pruning.

† If the grafts were set on the scattered branches of a large tree, (on which some, perhaps many of the branches remain,) it will doubtless be safe and profitable to remove most, or even all, (?) the young shoots, especially if the stock, or stump, on which the graft is set, have other branches growing on it a little distance below the graft. I would, however, prefer to cut them several times during the season, rather than to remove them in too great a mass at one time.

† I find this to be an excellent application to fruit-trees of any kind. Let the soil be loosened and the liquid poured around the root.

I will only add, that although not a "Farmer," yet I consider your paper worth, even to me, far more than it costs. Indeed I consider each number worth a year's subscription to every "Farmer," and only wonder why any one should be willing to be without it. H.

Fairport, June 19, 1846.

Notice of Fruits of the Season.

CHERRIES.

THE Cherry crop, in this vicinity, was unusually fine this season. We have never seen finer specimens than were exhibited at our Fair—and that have been sold around the streets. The price has been four to five dollars per bushel, paid by the peddlars, and they sold at about double that—some of them earning from four to five dollars a day at selling cherries alone. The thousands of merchants and clerks who are sweltering in the heat and dust of the city in mid-summer find a few fine cherries very refreshing.

Bigarreau de May.—This is the earliest cherry yet cultivated in this region, or at least the earliest brought to our markets, and for these we are indebted to Mr. ZERA BURR, of Perrinton. He usually brings them in about the first week in June, and gets \$6 or \$8 per bushel. It is a nice, tender little cherry. The "Early Purple Guigne" is earlier and better, but it is not yet much grown here. We are cultivating it extensively as it must assume the rank of the best early cherry.

The *Black Tartarian* continues to be the general favorite. It is every way a splendid fruit. It and the *Yellow Spanish* are the oldest settlers of the fine cherries in this region, and are consequently more abundant than any others.

The *Black Eagle* is a most superb black variety, superior in flavor to the *Black Tartarian*, though not quite so large.

Napoleon Bigarreau.—Unrivalled for its size, beauty, and productiveness. We have a small eight year old tree of this that bears the most astonishing crops. There is now a perfect rage for this variety and the prospect is it will soon become extensively cultivated, as it deserves.

Edward's Black Heart.—This is a magnificent, large fruit, resembling very closely, if not identical with the *Black Tartarian*. We got it from WM. KENRICK seven years ago.

Turkish Bigarreau.—Beautiful specimens of this fruit was exhibited in Judge SAMUEL MILLER's collection at our exhibition. They are similar to, and we think identical with, the *Bigarreau* or *Yellow Spanish*.

China Bigarreau.—A medium sized, first rate fruit, of a yellow ground color, beautifully mottled with red, half tender and of delicious flavor.—Last of June and beginning of July.

Mottled Bigarreau, of Manning.—A very fine fruit, firmer and larger than the above. The

trees bear when quite young. We have had fine specimens produced on a three year old tree, first week in July.

May Duke.—A well known old variety, productive and fine, under all circumstances, and particularly valuable for being a long time in use—from the second week in June till the second week in July.

Davenport's Early.—A splendid black cherry, about the size, and somewhat similar to the Black Heart; exceedingly productive and fine flavored. Ripens a week before the Black Tartarian.

We will give notes we have on hand of other varieties in our next.

EARLEY PEARS.

July 24th.—We have this day picked the largest and finest specimens of Madelaine Pear we have ever seen, from young trees in our grounds, only two years planted, on a quince stock. Nice specimens were exhibited two or three days ago by Mr. J. M. WHITNEY of this city. This is the best early pear we have in this region—indeed, it cannot be surpassed. It is very productive, of delicate texture, and fine flavor. It attains the highest perfection on the quince, and in this way trees will bear the second year after planting. No garden, large or small, should be without it. They would command almost any price that might be asked in our market, now. We will give an outline drawing of it in our next for the benefit of those who may not have Mr. Downing's book on Fruits.

GOOSEBERRIES.

We have before us 12 superb varieties of Gooseberries, grown in the Toronto Nursery, a branch of the Mt. Hope Nursery in this city.—They are the finest we have seen in a long time. We will notice them in detail in our next; space will not permit it at present.

Notice of a few choice Hardy Roses.

THE amateur who has not an opportunity to make a selection of roses while in bloom, may find some assistance in the following notes which we have taken during the past rose season. We have never experienced so much real enjoyment in the garden as we have done during the past month of June and part of July among our roses. The weather was as fine as it possibly could be, giving the fullest developement to their beauties. The splendid new classes of hybrids recently produced, including the superb prairie family of our own country, have given a fresh impetus to the culture of the Rose everywhere. In order to gratify the interest which we know to be felt on the subject, among a large portion of the readers of the "Farmer," we will continue this notice through several numbers.

HYBRID CHINESE.

This is a beautiful class, produced by hybrid-

izing the Provence and Chinese Roses. They are of rapid growth, and are consequently well adapted for poles, pillars, &c. They commence blooming before the ordinary Summer Roses, and continue in bloom a great length of time.

Aurora.—Bright crimson, with a purple shade, and delicately striped with white; grows rapidly, and has fine foliage.

Bonne Genevieve.—Rich crimson, shaded light with purple, exceedingly compact, double, and of fine form; one of the most profuse bloomers, from the first to the last of the rose season; shoots long and flexible and very thorny.

Cericette.—Very brilliant light red, with a shade of purple after the flowers are a short time expanded; flowers cupped, and very double; very luxuriant growth, and blooms very early, and in the greatest profusion during the rose season. One of the most showy and desirable sorts.

La Tourterelle, or Parny, or Dove Rose.—A very beautiful and peculiar rose, universally admired; flowers very large, double, perfect in form, and quite fragrant, of a blueish purple or dove color. A very rapid, vigorous grower, fine for a pole. Its unique appearance and other desirable properties entitle it to a place in the smallest collections.

Geo. IV.—Flowers large, of a dark blackish purple, with an occasional tinge of violet. A fine strong grower; shoots purple. A distinct variety, much admired.

Miralba.—A very curious, neat, medium sized flower; quite dark purple, almost black; very double and globular. One of the prettiest "black" roses.

Fulgens.—Flowers globular, and double, fine form; color a fiery crimson of dazzling brilliancy. A most profuse bloomer, and vigorous grower; deserves a prominent place in all collections.—It catches the eye at a great distance.

Celine.—Flowers very large, beautifully cupped, of a pretty delicate blush; blooms in large clusters a long time, in the greatest profusion. Growth very rapid; foliage large and rich. A most admirable variety.

Hybrid Blanche.—Pure white, cupped and double. One of the prettiest whites; blooms very profusely and a long time.

King of Roses, or Jaudour Panache.—Flowers large, double, and globular, of a beautiful rosy lilac, with now and again a white stripe. A fine grower and bloomer.

The above ten Hybrid Chinas, it will be seen, comprise quite a variety of color, from "black" to white, and the various intermediate shades.

(To be continued.)

THE PEARS left at our office by Mr. A. H. NORRIS, of Morganville, Genesee county, are the Madelaine, one of the finest early varieties. See notice in another place..

Review.

THE HORTICULTURIST, AND JOURNAL OF RURAL ART AND RURAL TASTE. Edited by A. J. DOWNING. Published by LUTHER TUCKER, Albany. Monthly; 48 pages, 8 vo. D. M. DEWEY agent, Rochester.

We have received from Mr. DEWEY the first number of this Journal. It is got up in beautiful style, and contains a vast amount of matter of the highest value to all who are interested in the progress of Horticulture. It is embellished with well executed engravings of "The two new Ornamental Trees," the *Pawlonia* and the *Deodar Cedar*, and with designs illustrative of "the improvement of an ordinary country house, besides several outlines of fruits, &c.

The most valuable article in the number is "The five best Winter Pears," by Col. M. P. WILDER, President of the Mass. Horticultural Society. These he considers to be the *Beurre d'Arreberg*, *Winter Nelis* Columbia, *Glout Moreau*, and *Passe Colmar*. Col. WILDER is, without doubt, the most successful and experienced amateur cultivator of the Pear in the United States, and his statements and opinions on this subject are consequently entitled to the highest regard. We shall take occasion to refer to this article at some future time, in our notices of fruits.

"*The Fruits of Western New York*," by W. R. SMITH of Macedon. The sum and substance of this article is, that the "Northern Spy," our celebrated native apple, "deteriorates as the trees grow old," and consequently, Mr. Smith says "however valuable for the garden or small orchard, it is worthless as a market fruit, compared with the Baldwin, Newtown Pippin, or Roxbury Russet."

We respect Mr. SMITH and his opinions very highly, but in this case we think he has made a very great mistake. It is admitted, by all who have examined the "Spy," that it combines more excellent qualities than any other keeping apple. The tree is a rapid, beautiful grower, bears when young, and most abundant crops. The fruit is medium to large size, unsurpassed in beauty and flavor, and with ordinary care in preservation, retains its freshness till mid-summer. We admit that the fruit does deteriorate sooner on old trees of diminished vigor, than many other varieties—such as Rhode Island Greenings, Russets, &c.,—but by no means so much as to render it "worthless as a market fruit." It only renders more careful culture necessary—such as pruning and manuring the trees, and thinning out the crop. The last matter is scarcely ever attended to, and with this it is very important particularly in old trees.

It is much fairer and finer, under any circumstances, than the Newtown Pippin, in Western N. Y. particularly. We think Mr. SMITH must be aware of this. It is altogether superior in flavor to the Baldwin, and is in the highest perfection when the Baldwin is gone; and, as a fine table fruit, it is as far superior to the Roxbury Russet, as the latter is to a Swedish turnep. In fact its excellence must claim for it in every market, where fine fruit is appreciated, the highest price; and no cultivator can fail to discover, that it will yield ample remuneration for that care and culture that all fruit trees should receive. We have investigated the merits of the fruit minutely, in order to estimate its value correctly.

We know of one orchard in Mendon, the property of a very careful fruit grower, which contains a row (14 we think) of young trees, 9 or 10 years old, suckers taken from the original tree. We have never seen a finer row of trees than these, and none of their age we are sure, in this country, have yielded a greater net profit to their owner. One fact which we are bound to consider *conclusive* in regard to the merits of this fruit, is, that all the superb specimens that have appeared in our markets during the last few years, and that have attracted such universal admiration, have been produced in common country orchards, under *very ordinary culture*—such as our good eastern fruit growers, like Mr. PELL, would consider *absolute neglect*. In such men's hands as Mr. PELL the "Spy" would surpass anything Mr. S. or any of us have yet seen.

"*Notes on a few fruits of superior excellence*," by the Editor.—The fruits noticed in this article are the Imperial Ottoman and Jefferson Plums; Crawford's late Melocoton Peach; Belle de Choisy Cherry; *Beurre d'Arreberg*, *Beurre Bosc*, and Dearborn's Seedling Pears.

These, the Editor remarks, "belong to a small class of fruits which seem to have a capacity of adaptation, that fits them for soils and exposures of almost every character.—Hardy, uniformly productive, and thriving in almost every tolerable soil, they become sources of profit to the orchardist and of continual enjoyment to the possessor of small gardens."

We may remark that "Crawford's late Melocoton" in our section will require our best seasons to perfect it; but it is a superb fruit, and should be in all collections large or small. The "Belle de Choisy Cherry," we should not recommend for small collections, except in Canada, or the colder portion of this country, where its hardness would be a consideration. It is but a moderate bearer, and not equal in size or flavor to many others.

"*Culture of the Laurel*," by J. J. THOMAS, of Macedon.—This article, we think, loses much of its value and interest to readers generally, from the fact that Mr. THOMAS, contrary to his usual precision, has not stated what he meant by "Laurel." It might be the common or Portugal Laurels of Europe, or it might be some of the *Kalmia* or *Rhododendrons* of this country, as these are all generally known as "Laurels" by country people. We presume, however, that he means the *Kalmia latifolia* or Mountain Laurel, a beautiful evergreen, native shrub, that grows abundantly on Long Island and the eastern parts of this state. Its natural locality is on knolls by the borders of swamps, and on hill sides, in a thin peaty soil, where little else will flourish.

The fact of Mr. THOMAS' article is, that his father, DAVID THOMAS, has succeeded in cultivating this shrub by planting it in soil obtained from "the banks of gulleys," supposed to be free from the carbonate of lime, when he failed in growing it on common garden soil. This shrub is cultivated with great success in European gardens as well as in this country, but always in a peaty soil.

The character of a soil in which a plant is found flourishing spontaneously, is a correct guide to the cultivator who wishes to move such plants to his grounds—though multitudes of trees, shrubs, and plants will flourish, after being naturalized, in a soil quite different from that in which nature produces them.

"*On the Culture of Peach Orchards*," by Dr. J. W. THOMSON, Wilmington, Del.—This is a very valuable paper, plain, practical, and minute, as one could wish. It has, it appears, been originally written for the "Southern Planter." Many of our readers will remember the account of the prodigious profits of raising fruit in Delaware, that went the rounds of the newspapers last winter—stating the product of one Peach orchard to be *fifty thousand dollars*. Dr. THOMSON contradicts this, and mentions one orchard of 120 acres, that in "the very best season yielded a gross income of sixteen thousand dollars. Peaches then commanded from \$1.25 to \$3.00 per basket of 3 pecks."

The soil recommended by Dr. THOMSON is a rich sandy loam, with clay; high and rolling grounds should be selected being less obnoxious to early frosts.

He recommends the culture of corn among the trees, for three years after they are planted; after that, to be kept regularly plowed two or three times in the season, but no crop whatever, as it affects the fruit and injures the trees.

We are glad to know that the culture of the Peach is now beginning to receive something like reasonable attention in our section, and in a few years we shall have orchards that will not be surpassed by any in the Union. There is no difficulty in the way; our cultivators have but to take the proper steps.

"*Design for improving an ordinary Country House*," by the Editor.—The attention which will be given to Rural Architecture in the "Horticulturist" will be no doubt one of its prominent and most interesting features. Nothing will tend in a greater degree to beautify the country than the introduction of architectural taste in the erection of rural dwellings. Most of our farmers are decidedly averse to adding anything to the exterior of their houses, calculated for mere ornament. We know of hundreds of neat farm houses and cottages around the country, plain and uninviting now, that might be made perfectly beautiful by the addition of a tasteful veranda, a projection of the roof, an ornamental eave board, and a remodelling of the usual clumsy, uncouth chimneys.

These simple additions, tastefully made, would completely transform thousands of our country homes, and throw around them an air of comfort and beauty that could not fail to exercise a happy influence on the feelings and tastes of a

family.* For as Mr. Downing remarks, "Nothing more powerfully affects the taste and habits of a family, especially the younger members of it, than the house in which it lives. An uncouth, squalid habitation, is little likely to awaken that attachment to home, that love of good order, and that sense of propriety and elegance in social deportment, which are so much promoted, so much developed, by that home, where a certain proportion, a certain fitness, and a sense of beauty are everywhere visible."

One remark we wish to add, in this connection. The improvement or alteration of houses requires to be done judiciously and skillfully—harmony and proportion must be observed in all. Without these, every dollar spent is worse than thrown away. Workmen of some architectural skill and taste should invariably be employed, to plan, if not to execute, the work. An ordinary country carpenter, who has had no opportunities for acquiring either, will as certainly spoil it as he is employed. "Improvements" of this kind, now within our view, where we write, are perfect "eye-sores," from the very cause we have mentioned.—Nothing can be an ornament that is out of keeping with the character of the building. This should always be remembered.

We hope to see in future numbers of the Magazine, designs for the improvement of country houses on a still more economical scale than that now before us; or rather, the improvement of a more humble class of dwellings, such as the great bulk of our agricultural population occupy, and are adapted to moderate means. Many farmers could spare \$150 or \$200 in the improvement of their dwelling, that could not nor would not spare \$700. In fine, we want such designs as are calculated to promote "the greatest good for the greatest number."

We have thus noticed, briefly, some of the more important articles of the present number of the Horticulturist, as well on account of the articles themselves, as to bring the Journal before our readers in a manner that may enable them to form some idea of its character. We feel very much inclined, before closing, to make a remark or two on some oddities that appear in the introductory address of the Editor; but, as it concerns Horticulture very little, we will pass it over.

The Journal, on the whole, has been commenced in a manner highly creditable to the editor and proprietor, as well as to the science it advocates, and we trust it will meet with the fullest measure of success.

* The residence of GEO. DAWSON, Esq., Editor of the Daily Democrat, in this city, is a striking instance of what the exercise of taste can do at small expense. Formerly this was a clumsy block of a house. Recently we passed it, and thought we had mistaken our way, it was so completely disguised with such additions as we have mentioned. It is now a house that any editor might live in.

Hovey's Magazine of Horticulture.

WITH the July number of this Magazine, we have received a new prospectus, which we will just refer to for the information of our readers. It says:

"To maintain the high standing it has already attained, no pains or expense will be spared. It will be the same exponent of the science of Horticulture in every department. It will continue to treasure up every thing worthy the attention of cultivators. Engravings of Fruits, Trees, Flowers, and Plants—Illustrations of Modes of Heating—Plans of Green-houses, and Vineries—and Designs for Ornamental and Landscape Gardening, and Rural Architecture, (upwards of 300 engravings of which have already appeared,) will continue to enrich the Magazine, and place in the hands of all those who are turning their attention to Horticultural pursuits, information to be obtained in no other periodical.

The Magazine is published on the first of every month, (commencing January 1,) in octavo numbers of 40 pages each, printed on the finest paper, and in beautiful type, forming an annual volume of 500 pages, at \$3 a year, in advance. Published simultaneously in Boston by Hovey & Co., and in New York by Saxon & Miles, Broadway."

It also announces a list of upwards of fifty, of the best practical and scientific Horticulturists, in the United States, who have contributed, and

will, we presume, continue to contribute to the Magazine. Hereafter a few pages are to be devoted to answering all sorts of inquiries connected with gardening—and all are invited to forward their inquiries, no matter how trifling. This will be an interesting feature in the work. We think there will be no lack of questions, for we are a somewhat noted people for our inquisitive disposition—and there are few engaged in gardening but have reason to ask hundreds of questions daily.

We rejoice to see our Horticultural Journals increase and improve, as every improvement of that kind is so much of a compliment paid to the taste of our countrymen.

FRUITS exhibited in the case of the Horticultural Society, in the Arcade Hall, Rochester, since July 11.

- July 11. Peach Apricots, by H. N. Langworthy.
21. " " by Bissell & Hooker.
Early Harvest Apples, " "
22. Madeline Pears, by J. M. Whitney.
Harvest Pears, " "
23. Belle Magnifique Cherries, by Ellwanger & Barry,
Gooseberries—eleven varieties, " "
White Grape Currants, " "
Myrobolan Plums, by H. Gay.
Early July Pear, by N. Goodsell.
Peach Apricots, by E. Peck.
24. " " by Ira Belden and James Jones.
Early Harvest Apples, by C. L. Pardee.
Remington White Heart Cherries, by E. Huntington.
25. Early Harvest Apples, by S. G. Andrews, J. E. Congdon, and Mr. Woodruff.
Peach Apricots, by E. Peck.
Madeline Pears, by Ellwanger & Barry.
Primitive Pears, by S. Moulson.
27. Peach Apricots, by H. N. Langworthy.
White Nutmeg Peach, " "
Early Harvest Apples, by W. Pitkin, and L. A. Ward.
Pears, Madeline and three other varieties, by W. Pitkin.
Early Orleans Plums, by R. A. Hall.
28. Jargonelle Pears, by L. A. Ward.
Early Red Margaret Apples, by Bissell & Hooker.
Moopark Apricots, by H. Bush, and Mr. Clark.
Sugar Pears, by M. Dyer.
Keswick Codlin Apples, by W. E. Arnold.
Fine ripe Tomatoes on the 24th, by C. F. Crossman.

BUEFALO HORTICULTURAL SOCIETY.—A notice of the June Exhibition of this Society, which we have in type, is unavoidably crowded out.

STRAWBERRIES.

This is the month for making new Strawberry Plantations. The Subscribers will furnish the following well known, standard varieties, at the prices annexed:

Large Early Scarlet,	25 cents per dozen,	\$1,50 per 100.
Keen's Seedling,	" "	" "
Hovey's do.	37½ cts.	" \$2,00 "
Ross' Phoenix,	" "	" " "
Stoddard's Red Alpine,	" "	" \$1,50 "
" White do.,	" "	" " "
Common Alpines,	25 cts.	" \$1,00 "

The leading new kinds, of established merit, can also be furnished at moderate prices. [] Plants packed in the best manner, and forwarded promptly, agreeable to order.

ELLWANGER & BARRY,

Mt. Hope Garden & Nurseries.

Rochester, Aug 1, 1846.

IMPORTANT TO FARMERS!

IDE'S PATENT WHEEL CULTIVATOR AND WIRE GRASS PLOW.

THE Farming Public are hereby informed that Letters Patent have been taken out by the Subscriber for his recent great improvements in the construction and manufacture of Field Cultivators; an improvement so great as to entirely revolutionize the whole system of Farming by reducing the expense of cultivation one-half or more.—Wherever they have been introduced they have met the decided approbation of Farmers, as the following Certificates and Testimonials from the intelligent and practical Farmers whose names are attached, abundantly show.

CERTIFICATES:

.. This may certify that we, the subscribers, have seen and used the Patent Wheel Cultivator, invented by Nathan Ide, of Shelby, Orleans Co., N. Y., and believe it to be, as a labor-saving machine, one of the greatest improvements of the age. By it a farmer can put in from ten to fifteen acres more of wheat in a year with the same amount of team labor: he can also sow it in much better order. By it also CANADA THISTLES, and other noxious weeds may be totally extirpated. The Farmer having only to break up his fallow in the spring and go over it once a week during the summer, when every Canada thistle will be destroyed. Said Machine is so constructed that it can be regulated to go any depth by means of screws on the upper part of the Machine, and thus either plow up the ground thoroughly or only just brush the surface. Upon the whole we think it decidedly the best machine ever invented for pulverizing the ground and facilitating the labor of the Farmer, and as such we cheerfully recommend it to our brother Farmers.

JAMES H. HEDLEY,
ZADOC WHITNEY,
OBED FIELD,
ENOS NEWMAN,
JOHN C. WHEELER,
GARDNER BERRY,
Shelby, April 23, 1845."

JAMES IDE,
JOHN STEVENS,
JOSEPH WESTFALL,
HARTAS HEDLEY,
JAMES P. ANDERSON,
JESSE STEVENS.

The undersigned have just witnessed the operation of Nathan Ide's Patent Cultivator, and we are free to say that we regard it as a decided improvement on all the implements of the kind now in use for preparing land for wheat and other crops.

DANIEL LEE, Ed. Gen. Far.
RAWSON HARMON,
WILLIAM PIXLEY,
PETER SHEFFER, Jr.,
GIDEON MOTT,
LEVI WELLS,
July 3, 1846.

WILLIAM BUELL,
DANIEL F. ALVERSON,
WARREN W. SMITH,
BENJAMIN SMITH,
CHAUNCEY GILLET,
B. T. GILLET,

After these ample Testimonials the Subscriber deems it unnecessary to enter into a long and elaborate description of the implement with its various points and modes of operation. To be fully appreciated it must be seen and used. No farmer who fully understands his interest will be without one, as they are an invaluable implement.

NATHAN IDE, Patentee.

Shelby, Orleans Co., N. Y., July 14, 1846.

Marshall's Western N. Y. Book Bindery.

MUSIC, PAMPHLETS, PERIODICALS, &c., bound in plain and fancy bindings—old books re-bound—blank books ruled in any pattern and bound to order—public and private libraries repaired at short notice—Harper's Illuminated Bibles done in the best manner, cheaper than New York prices—and all kinds of binding done in all its varieties, both plain and fancy, at short notice, with cheapness and durability that cannot be surpassed.

☞ Volumes of the *Genesee Farmer* bound to order.

Packages put up, marked and sent to the subscriber, with directions for binding, will be punctually attended to, at the old stand, Nos. 22 and 24, State Street.

8

FRANCIS H. MARSHALL.

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

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

Prince's Premium Strawberries.

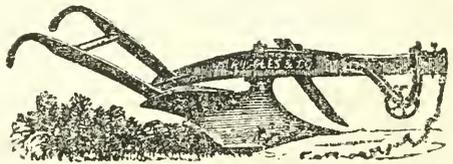
WM. R. PRINCE & Co., Flushing, having devoted great attention to this Fruit, now offer the most estimable collection existing in America or Europe, embracing all the choicest varieties recommended by the London Horticultural Society, and the most estimable of other countries, including several splendid Seedlings originated by themselves and others. The sexuality of every variety has been investigated, and such plants and directions will be furnished as will insure abundant crops. They can be transplanted from August to November. There is no such thing as Strawberries becoming barren when properly managed.—*Primordian*, the finest and most productive early crimson variety, large, and profuse bearer, one of our seedlings, and now first offered, \$3 per dozen. Large Early Scarlet, \$1 per 100. Garneston Scarlet, \$1 for 25, and \$2 per 100.—*Crimson Pine*, large, fine, and prolific, another of our Seedlings, \$2 per dozen, and \$3 for 25. *Crimson Cone*, one of the most splendid, large, bright crimson, high flavor, profuse bearer, unrivalled, \$3 for 50, and \$5 for 100. Prince Albert, (true sort,) Coul late Scarlet, Iowa, and Willay, \$1 per dozen and \$2 for 50. Alice Maude, Deptford Pine, Corse's Seedling, Boston Pine, and Buist's Prize, \$1.50 per dozen. President, and Clara Victoria, \$3 for 6. Swainstone, Black Roseberry, and Victoria, \$1 for 25 and \$2 per 100. Black Prince, Georgian Scarlet, late, and Bishop's Seedling, beautiful and prolific, \$1 for 25, and \$3 per 100. British Queen, Myatt's Eliza, Myatt's Pine, Elton, and Old Pine, all fine flavor but poor bearers, \$1 for 25, and \$2 to \$3 per 100. Hovey's Seedling, Bishop's Orange, Ross' Phoenix or Keen's Seedling, and Roseberry, 50 cts. for 25, and \$1.50 per 100. Dundee, Hudson's Bay, and Methven, \$1 per 100. Royal Scarlet, Old Scarlet, Melon, and Downton, moderate bearers, 50 cts. for 25 and \$1 per 100. Hudson, (of Cincinnati,) great bearer, \$1 for 25, and \$2.50 per 100. Prolific, Large Flat, and Green Hautbois, \$1 for 25, and \$2 per 100. White and Red running Alpine Everbearing, \$1 for 50; and White and Red Bush, ditto, \$1 for 25. Common English Red Wood, (erroneously) called Stoddard's Washington Alpine, \$1 per 100. English White Wood, \$1 per 100.

Very large quantities at a reduction. Orders, not less than \$5, (cash enclosed,) will meet prompt attention.

All orders must be sent direct to us; and no Plants are from us unless our printed bill and signature accompany them.

Flushing, Aug. 1, 1846.

Rochester Agricultural Warehouse.



BY THOMAS NOTT.

THE Subscriber having purchased the interest of Mr. JAS. P. FOGG, (late B. F. Smith & Co.,) in the Agricultural and Horticultural IMPLEMENT BUSINESS, takes this method of informing the Farmers of Monroe and adjoining counties, that they will find it to their advantage to call and examine his Stock of Farming Implements before purchasing elsewhere.

In his assortment may be found the following articles:—Burrall's Patent Corn Sheller, price, \$10.

Cultivators, price from \$5 to \$8.

N. C. Dayton's Gang Plow, for putting in wheat, \$15.

Hatch's Seed and Plaster Sower, \$25.

Delano's Diamond Plow, \$7.

Massachusetts Sward C Plow with extra points, \$7.

“ Eagle and Eagle No. 25 (3 horse) Plow.

“ Side-hill and Subsoil Plows, \$9 to \$15.

Straw Cutters, from \$5 to \$15.

Sanford's Straw Cutter, \$15.

A complete assortment of Plow Points.

I. Grant's Patent Fan Mill, price \$27.

A full assortment of AGRICULTURAL IMPLEMENTS, TIN AND WOODEN WARE, and hundreds of other articles too numerous to mention. For sale cheap, by

THOMAS NOTT,

Front st., nearly opposite the Market.

Rochester, July, 1846.

MOUNT HOPE BOTANIC GARDEN AND NURSERIES,
Rochester, N. Y.

(South St. Paul st., nearly opposite the Cemetery.)

The Proprietors of this Establishment offer for sale an unusually large and fine collection of

FRUIT AND ORNAMENTAL TREES,
FLOWERING SHRUBS, VINES AND ROSES, HARDY HERBACE-
OUS PLANTS, DOUBLE DAHLIAS AND BULBOUS ROOTS;
GRAPE VINES, RASPBERRIES, STRAWBERRIES,
AND GOOSEBERRIES; ASPARAGUS ROOTS,
RHUBARB, &c.; HEDGE PLANTS,
GREEN HOUSE PLANTS, &c.

The collection of Fruit Trees comprises the most popular varieties cultivated, and has been grown with the greatest possible care to ensure accuracy. The Proprietors are practical and experienced Nurserymen, and wholly devoted to the business,—all the important operations are either performed by themselves or under their immediate inspection.

Experience has fully proved that the trees grown at this point, in addition to being free from diseases, are better adapted to cold climates than those of any other portion of the United States.

The collection of Apples includes several thousands of the famous new American Apple, the "Northern Spy."

A large assortment of Pears, of the choicest kinds, are propagated on quince stocks for DWARFS and PYRAMIDS, and will bear the first or second year after planting; they are admirably adapted for garden culture. A lot of these are now on hand, of extra size, for immediate bearing.

The collection of Ornamental Trees is large and fine, comprising several hundred of the splendid *Paulonia Imperialis*. The catalogue of Roses embraces the most popular new varieties. A great variety are propagated for standard or Tree Roses, 4 to 6 feet high, with fine heads.

Of *Double Dahlias* the assortment is unsurpassed, including the finest show flowers yet introduced to this country, and many that were imported last season at 5 guineas each. A catalogue will be published in April.

The stock of Green House Plants is very extensive, and includes the most beautiful new *Pelargonium* (Geranium,) *Fuchsias*, *Camellias*, *Calceolarias*, *Verbena*, *Cactus*, &c., &c., all finely grown, and will be sold at greatly reduced prices.

Trees and Plants packed in the best manner, and shipped to any part of the country agreeable to order.

Priced catalogues sent gratis to all post paid applications. Orders from unknown correspondents should be accompanied with a remittance or reference.

ELLWANGER & BARRY

Rochester, April, 1846.

AGRICULTURAL IMPLEMENTS.

E. TAYLOR, at his Steam Factory, No. 6 Hill-street, is extensively engaged in manufacturing and dealing in all kinds of AGRICULTURAL IMPLEMENTS. Having during the past year visited all the Agricultural Establishments in Philadelphia, New York, and Boston, and secured the right of many valuable Machines and Implements, he is prepared to furnish, wholesale and retail, all kinds of Agricultural Utensils found in the eastern cities, such as

Grant's Patent Fan-Mills, Corn Shellers, Corn and Coffee Grinders, Corn and Seed Planters, Scythe Snathes, Straw Cutters, Patent Churns, Pitchforks, Patent Parallel Jaw Vices,

together with many other valuable tools, both to Farmers and Mechanics.

He is also extensively engaged in manufacturing *Bate's celebrated Patent Sliding Top Chamber Shower Bath*, to be used in chambers or sleeping apartments, without the least damage to carpets—the nicest article in the world! 1100 sold in four months in New York city the past season.

Farmers in want of tools or implements, of any kind, would do well to call and examine. For sale wholesale and retail at the Factory, No. 6, Hill street; also at the store No. 15 and 17, Exchange street., and at the Genesee Seed Store, No. 10 Front street.

Rochester, N. Y., May, 1846.

E. TAYLOR.

NEW SEED and IMPLEMENT WAREHOUSE.



GENESEE SEED STORE & 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 of 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.

RAPALJE & BRIGGS.

Rochester, Feb. 1, 1846.

Rochester Weekly American.

The Largest and Cheapest Newspaper in Western New York!

TERMS—\$1 50 if paid in advance; \$2 00 if paid at the end of the year.

This splendid Weekly Newspaper is considerably larger than any other printed in the State, and will be sent to subscribers at the above low prices. No postage within thirty miles of Rochester!

The American is an earnest advocate of Whig principles and measures, believing them essential to the welfare of the Nation and the prosperity of Western New York. In its ample columns will be found, at all times, the fullest and earliest news by Magnetic Telegraph and otherwise. Particular attention will be given to furnishing a full and correct report of the Markets, weekly.

The *Rochester Daily American*, the handsomest and cheapest daily paper west of New York, is afforded at \$5 a year.

Both of these papers are printed on a splendid Napier Power Press, propelled by a powerful steam engine. JOB WORK done at the shortest notice, and in a style unsurpassed in Western New York.

Office of the Daily and Weekly American in Talman Block, No. 21 Buffalo street, Rochester, N. Y.

July, 1846.

JEROME & BROTHER.

Plows for Sale.—We have on hand, and intend to keep constantly for sale, the celebrated *Diamond* and *Wisconsin* Plows, the merits of which have been fully tested. Price, \$7,00 for medium size. The farming community are respectfully invited to give us a call.

RAPALJE & BRIGGS,
No. 10 Front-st

21.

Seymour's Sowing Machine for sale at the Genesee Seed Store, by
RAPALJE & BRIGGS.

SEYMOUR'S PATENT BROAD-CAST SOWING MACHINE.

PATENTED MAY 7, 1845.

To those Agriculturists who wish to combine *Ease, Correctness, Speed, and Profit* in their operations:—

The Subscriber wishes to invite your attention to his new **PATENT BROAD-CAST SOWING MACHINE**, which sows correctly, all kinds of Grain, from Peas to Grass Seed, inclusive; also, Plaster, Lime, Lined wheat, damp Plaster, &c. This Machine is a two wheeled carriage, on which a man or boy rides in an easy seat to guide the horse and govern the Machine when sowing. By a slight motion of the foot or hand he throws the machine out of gear and stops sowing at pleasure, while the carriage is still under motion. It will operate well in windy weather. It is simple in its construction and sure in its operation, sowing any quantity per acre, and is far superior to any hitherto in use.

It was exhibited last fall at the Agricultural Fairs in Ontario, Monroe, and Livingston Counties, and drew a premium at each of those fairs.

As the subscriber has been several years manufacturing those formerly in use, and is the inventor of this, he flatters himself that he will be able to give entire satisfaction, and furnish you with the very thing you want.

He is manufacturing them in East Bloomfield, Ontario County, N. Y., where he will attend to all orders on short notice. Those at a distance ordering machines, may have them forwarded by Canal or Railroad.

The following Certificates will be satisfactory to all who are acquainted with the persons whose names are subjoined

TO THE PUBLIC.

I have used Seymour's Patent Sowing Machine the past season, and it has done its work to my perfect satisfaction; having sowed my grain more evenly than can be done by any human hand.

AZARIAH BUCKFORD.

Victor, October 15th, 1845.

This may certify that I have used P. Seymour's Sowing Machine the past season, to my satisfaction, and think it a valuable acquisition in sowing most kinds of grain, plaster, ashes, lime, &c.

BANI BRADLEY.

East Bloomfield, January 12, 1846.

We, the undersigned, have fairly tested the utility and convenience of P. Seymour's Patent Sowing Machine, and are highly pleased with its operation.

GUY COLLINS,

JOHN H. WHEELER,

WILLIAM CARTER,

NATHAN H. WHEELER,

CHAS. H. CHAPIN,

BELDEN SEYMOUR.

This may certify that I have used P. Seymour's Sowing Machine in sowing Oats, Barley, Peas, Clover, and Herd's Grass Seed, and it performs to my utmost satisfaction. I sowed thirty bushels of Oats, eight bushels of Peas, and twenty bushels of Barley, in one day, and I think thirty acres a reasonable day's work.

JAMES H. GLASS.

Avon, May, 16, 1846.

This may certify that I have used P. Seymour's Sowing Machine, to sow about one hundred and thirty acres of grain and plaster, and am well pleased with the machine. It will sow grain more even than can be sowed by any human hand. It will even sow Clover and Timothy Seed as well as any one can wish.

JOSIAH C. TAFT.

West Bloomfield, May, 1846.

We are acquainted with P. Seymour's Sowing Machine, and can recommend it as an excellent article for those purposes for which it is in ended. We believe it much superior to any other ever introduced into this country.

MYRON ADAMS,

HIRAM STEELE,

F. W. COLLINS,

E. W. FAIRCHILD,

AUSIN AVERY,

FREDERICK MUNSON,

SYLVENUS EMMONS,

FREDERICK N. TOBEY,

SARTIAL ROOT,

HARLOW MUNSON,

BANI BRADLEY,

WILLIAM BRADLEY,

PHILO HAMLIN,

JOSHIAH PORTER,

JOSIAH WENDELL,

CALVIN POMEROY.

East Bloomfield, June 21, 1846.

From the Report of the Monroe Ag. Society, 1845.—“P. SEYMOUR exhibited a Wheat and Plaster Sower, which for simplicity, ease of management, and durability, the Committee think nearer the desired implement than any thing yet before the public.”

N. B. The Right for a large amount of Territory yet remains unsold, which may be had on the most reasonable terms.

P. SEYMOUR.

East Bloomfield, June 26, 1846.

Valuable Farm for Sale!

SITUATED half a mile south of Ogden Centre, Monroe county,—ten miles west of Rochester, and two miles south of Spencerport on the canal. The main farm contains **130 acres**—but 70 acres adjoining will also be sold if desired by the purchaser. On the principal farm the buildings, &c., are good: a large, two story frame house with kitchen and wood-house in the rear; two good barns, one 30 by 40, the other 30 by 75. The 70 acres has a small frame house. There is a good well, and several living springs on the premises: also an excellent Orchard, principally of grafted fruit.

The farm is not considered second to any other in town. 175 acres of it under good improvement—with plenty of fencing timber, &c. It is excellent wheat land. There is 90 acres of wheat now on the ground, and all of the land on which it is growing was well seeded to clover the past spring.

Terms made easy, to suit the purchaser. Inquire of the subscriber on the premises, or of D. D. T. MOORE at the office of the Genesee Farmer.

Ogden, June, 1846.

JESSE HARROUN.

FARMERS, CURE YOUR HORSES!

GEO. W. MERCHANT'S CELEBRATED

GARGLING OIL.

An Invaluable Remedy for Horses, Cattle and other domestic animals, in the cure of the following diseases:

*Fresh Wounds,
Galls of all kinds,
Sprains, Bruises,
Cracked Heels,
Ringbone, Windgalls,
Poll Evil, Callus,
Spavins, Sweeney,*

*Fistula, Sitfast,
Strains, Lameness,
Said Cracks,
Pounded Feet,
Scratches or Grease,
Mange,
Horn Distemper.*

Also a valuable Embrocation for diseases of the Human Flesh.

Since the virtues of the Gargling Oil have become so extensively and favorably known to the farmers of the United States and Canada, as a curative oil in diseases of animals, and as a consequence, its demand becoming great—there has not been wanting those whose cupidity has suggested to them that if they could concoct something as nearly resembling in appearance as they could guess, with any thing for a name, they might urge it upon unsuspecting customers as a substitute for the true Gargling Oil. The proprietor would therefore CAUTION those who purchase to be sure the name of G. W. Merchant is blown on the side of the bottle. All others are an ATTEMPT at imitation, and are therefore an imposition.

For testimonials, synopsis of diseases, and mode of treatment, see pamphlet which accompanies each bottle.

☞ Sold at the ROCHESTER SEED STORE, and by Druggists and Store-keepers in the U. States and Canada.
☞ Also at the **GENESEE SEED STORE**, Rochester.

Rakes—99 dozen I. Stark's superior Hay Rakes, for sale at the Genesee Agricultural Store, No. 10. Front-st., by
[4] RAPALJE & BRIGGS.

Corn Shellers!—A first rate article, price \$10, for sale at No. 10, Front-st. RAPALJE & BRIGGS.

MARKET INTELLIGENCE.

Rochester, July 30, 1845.

Wool.—The market is inactive. We subjoin the present quotations, as follows:—

Full blood Saxony fleeces,.....	29 a 33
Do. Merino do.	26 a 28
Half-blood do. do.	21 a 25
Quarter-blood to common,.....	13 a 22
Coarse English and bad conditioned wool,....	16 a 18

Rochester Produce Market—Wholesale.

Wheat,.....	75 a	80	Pork, bbl,	10,00	12,00
Corn,.....	37	40	Pork, cwt,....	4,00	
Barley,....	42	45	Beef, cwt,....	2,00	3,00
Oats,.....	23	—	Lard, lb,....	6½	7
Flour,.....	3,50	3,62	Butter, lb,....	10	12
Beans,.....	33	1,00	Cheese, new lb, 4	5	5
Apples, bushel.	50	50	Eggs, doz,....	8	9
Potatoes,....	31	37	Poultry,....	7	
Clover Seed,....	5,00		Tallow,....	6	7
Timothy,....			Maple Sugar,....	6	7
Hay, ton,....	5,00	6,00	Sheep Skins, fresh,	12½	
Wood, cord,....	2,00	2,50	Green Hides, lb 3½		
Salt, bbl,....	90	95	Dry "....	6	7
Hams, lb,....	7		Calf Skins,....	7	

NEW YORK, July 27.

Fair sales of Genesee flour at \$4,12 a \$4,19; Michigan \$4,06; Oswego \$4,12.

Mess pork continues on the advance. Sales from \$9,75 a \$10,06, and closing very firm at the latter price. Holders ask \$10,12. Prime \$8 a 8,12.

Sales of 100 bbls. pot ashes at \$3,50. Pearls \$4. Sales 300 bbls. mackerel, No. 2 at \$7,50; large No. 3 at \$5,25; common No. 3, \$4,12.

Sales of cotton small. Sales of mess pork at \$10,12 and none to be had at that.

CORN is in good supply and droops. Sales of 4000 bush. at 49 cts.; 3000 do. in good order at 50 cts.; and 3000 do. handsome white North Carolina at 50 cts.

RYE is quoted at 67 a 68 cts. in the slip. Sales of mess pork at \$10 a 10,12, and prime \$8,12.

WOOL.—The sales of fleece have been about 20,000 lbs. of various grades, but principally of low and middling qualities, at 21 a 23 cts., cash. In Foreign there is but little doing.

BUFFALO, July 29.

The inquiry for flour is not so good to-day, and holders evince a disposition to sell freely for \$3,25 for mixed brands, and \$3,31½ for straight brands. We hear of but two transactions—the sale of 112 bbls. of mixed Michigan at \$3,25, and 150 do. of Ohio, Indiana, and Michigan at the same.

Very few buyers of wheat are in the market to-day, and we have heard of no sale. Good samples of the better qualities, however, may still be quoted at 69 a 70 cts.

There is no corn in the Market, and the demand cannot be said to be brisk. The article may be quoted at 32 a 34c.

In pork there has been a moderate business doing, the sales amounting to about 120 bbls. In regard to prices no positive change can be noted, although holders in some instances have submitted to a slight concession, with a view of clearing out parcels.

Moderate sales of white fish are made at \$6 for bbls., and \$3,25 for half bbls.

Highwines continue in good request, and a sale of 75 bbls. was made at 19 cts. Salt steady at \$1.

Agricultural Fairs for 1846.

THE State and County Ag. Fairs are to be held, this fall, (in the counties we heard from,) as follows:—

New York State,	Auburn,	Sept. 15, 16, 17.
Jefferson County,	Watertown,	Sept. 1, 2.
Madison "	Eaton,	Sept. 23, 23.
Monroe "	Rochester,	(not determined.)
Niagara "	Lockport,	Oct. 7, 8.
Ontario "	Canandaigua,	Oct. 13, 14.
Oneida "	Whitestown,	Sept. 24, 25.
Onondaga "	Syracuse,	Oct. 1, 2.
Oswego "	Fulton,	Sept. 29, 30.
Orleans "	Albion,	Oct. 1, 2.
Seneca "	Waterloo,	Oct. 22, 23.
Wayne "	Clyde,	Oct. 1, 2.
Yates, "	Penn Yan,	Oct. 1.

To Subscribers in Arrears.

ON the commencement of the current volume we mailed the Farmer to most of the old subscribers, and requested all who did not wish to continue it to return the first number. To those who did not comply with this request the paper has been regularly forwarded—as we presumed they desired to continue it as permanent subscribers. A great majority of those to whom the Farmer was thus sent have forwarded their subscriptions—many sending pay for this and the next volume, and others for clubs of new subscribers. But there are still several hundred from whom we have not heard—probably owing to the inconvenience of mailing 50 cents. To such we would remark that their subscriptions will be very acceptable at the present time—and if they will each send \$1, we will credit them for this and the next volume; or, if preferred, they can remit 50 cents for this year, and the same amount for some friend who may want the paper. As it is necessary for us to settle our accounts soon, preparatory to the commencement of vol. 3, we trust all who are interested in this notice will give it their early attention.

☞ We send (in this or next number,) a printed notice to those who are in arrears. Should any who have paid receive "notice," they will please inform us to whom their subscriptions were paid, and the mistake will be promptly corrected. If properly mailed, \$1 may be sent at our risk, and (in this case,) we will pay postage.

[From the Re-print of our January number.]

Re-Print.—A Liberal Offer!

IT being necessary to re-print this and the February number, in order to furnish subscribers, we publish a large edition—and can now supply **one thousand new subscribers** with all the numbers from the commencement of the volume. We shall be thankful for orders from those who will aid us in disposing of this extra edition—and trust that new subscribers and other friends who receive a copy of this re-print will lend their influence toward extending the circulation of the Farmer. We have been at considerable expense in order to supply this number to those who have recently subscribed, and if they will obtain and forward the subscriptions of their friends it will save us from loss.

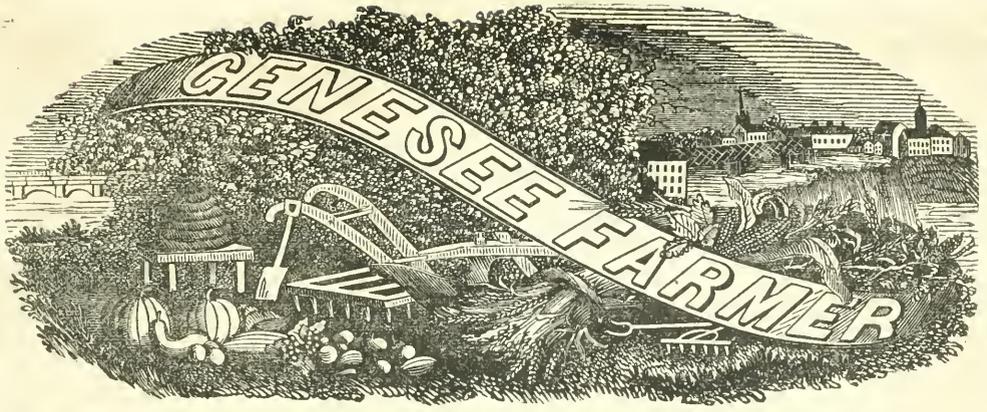
To such as are disposed to lend their aid, we make the following offer:—Any person who will send us eight new subscribers to the current volume, and remit \$3, shall receive a ninth copy gratis; and for 16 new subscribers, and a remittance of \$6, we will send an additional copy and a bound volume of last year's Farmer—or, if preferred, a copy of this and the next (1847) volume. *June, 1846.*

Monroe County Agricultural Society.

☞ The next meeting of the Monroe Co. Agricultural Society will be held at the office of the Genesee Farmer, on the *second Tuesday in August*, for the purpose of appointing awarding committees and making other arrangements for the next Annual Fair. A full attendance of the member is earnestly requested. JOHN H. ROBINSON, *Pres't.*

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THE GENESEE FARMER:

Issued the first of each month, at 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 over the Rochester Seed Store, (2d story,) Front street, nearly opposite the Market.

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. []

Geological Excursion.

DURING the month of August, the editor of this paper and twelve of his pupils made a geological excursion from Lake Ontario, south to Portage Falls on the Genesee river. Our object was to examine, in their natural beds, all the rocks in Western New York up to the Chemung Group, collect fossils and cabinet specimens, with fair samples of the different soils, as modified by each class of rocks. We provided ourselves with a tent large enough to accommodate 15 persons—with a cooking apparatus, and implements for breaking rocks, examining specimens, &c. The enterprize was a pioneer one, planned with reference to economy, for the more thorough investigation and study of the origin, properties, natural and cultivated products of the soil in this part of the State. Many of these soils, and specimens of the several rocks, in place, will be analyzed, to discover how far the composition of the solid strata affects that of the loose matter overlaying them.

The results of our excursion have been alike interesting and satisfactory, as a beginning. The writer of this has long been of the opinion that the agricultural capabilities of this section are far from being duly appreciated, by the public at large. Not only does the sub-soil down ten,

twenty, and even fifty feet, when brought to the surface, yield good crops of wheat, but many of the solid rocks to an unknown depth abound in all, or nearly all the elements, except water and air, used by nature in forming cultivated plants.—The ingredients necessary to make good crops, are more remarkable for their great depth below the surface of the earth, than for their abundance in the soil, which the plow-share turns up to the light and warmth of the sun. The solubility of these minerals, as well as their abundance, deep in the earth, gives rise to a great number of gas fountains, and mineral springs, one or two of which are said to yield pure, but of course diluted, sulphuric acid, and others nitrogen.

Commencing at the southern shore of Lake Ontario and going south, the following are the names of the several groups of rocks as given by the State Geologists:

1. Medina Sand Stone.
2. Clinton Group.
3. Niagara “
4. Onondaga Salt Group.
5. Heldenberg Series.
6. Moscow Shales.
7. Portage Group and Genesee Slate.
8. Chemung Group.

These are only a part of the Sedimentary Rocks, in what is called the New York System. They were deposited in the bed of an ocean, on the bottom of which lived both plants and animals during the whole period. Their aggregate thickness, if restored to their natural position before abrasion took place, would be some five or six thousand feet. Inconceivable as must be the force, deep in the planet, which could rend asunder strata of solid rocks a mile or more in depth, still the power of ancient volcanoes was equal to the task. At their upheaval all the rocks in Western New York were tilted to the south.

It is owing to this “dip,” as it is termed by geologists, that no one rock, like the sand-stone near Lake Ontario, or the lime-stone at Rochester, Lockport, and Niagara Falls, extends horizontally over all the country at its level.—By dipping to the south, all rocks present at the falls of the streams running north, like the Genesee River, the “out-crop” of their northern and

highest surfaces and edges, lying one above another. The Medina Sand-stone extends from the lake south, from five to eight miles, all the way from Oswego to the head of the lake in Canada. It is a very soft, and in some places a shaley rock, which is easily worn down into small particles by the action of water and other elements. It appears on the other side of Lake Ontario, and seems to have been scooped out with a few other rocks, to form its deep basin. It forms a soil of very variable fertility. In some places it receives the wash of water coming from the Clinton, Niagara, and Onondaga groups, which lie above and south of it, and is greatly benefited by the minerals which these waters hold in solution. In other sections, the "drift" or fragments of other strata, containing lime, potash, magnesia, &c., have been mixed up with the sand of the Medina rock, and greatly improved the soil.—These instances of extraordinary productiveness are exceptions to the general rule. So soon as we passed off the Niagara and Clinton lime-stones on to the sand-stone, instead of finding a continuance of wheat fields, those of *rye* were cultivated.

The fruit trees, however, exhibited a cleaner, smoother bark, and a more luxuriant growth than we had seen in going from Wheatland to Greece, a distance of 20 miles, over the Onondaga and Niagara groups. We attributed this improvement in the appearance of fruit trees mainly to the fact that, the sandy soil is more pervious, friable, and deeper than the calcareous and clayey soils south, so that the roots of apple and pear trees can easily penetrate the earth, and spread in all directions—imbibing nourishment from vastly greater surface. If this opinion be well founded, it suggests the importance of digging out a deep and large cavity where a tree is to be planted, and filling the space with earth which will not become compact, and abounds in the elements that nature uses in forming both the tree and its fruit. Place a tree in a deep mellow soil, and supply it with all the things necessary to its growth, and the perfection of its fruit, and the climate must be greatly at fault, or it will pay well for the care and labor bestowed.

We judge from the composition of the crops that grow best on the Medina Sand-stone, (which we have examined in other counties than that of Monroe,) that the use of *bones* and *ashes* will be very serviceable on the soils of that rock, especially in the production of wheat, potatoes, corn, and grasses. The climate along the southern shore of lake Ontario is admirably adapted to fruit culture, which is confessedly the most profitable branch of agriculture at this time. We desire to see it extended in this part of the state.

We found boulders of the Medina Sand-stone scattered all the way over the surface of the ground 60 miles south of where the rock appears in place, or in its natural bed. If there was no other evidence of the fact—of which there is an

abundance—this transportation of fragments of rocks a great distance south, shows that the currents of the ancient ocean set strongly in that direction. The polished and grooved surface of the Niagara and all other limestones, when denuded of the earthy matter that covers them, forms an object of deep interest to the geological student. The direction of these grooves is southerly, or a little west of south, having been cut by bodies which were of great weight, and apparently moved with prodigious force. It is not improbable that the deep and broad valley of the Genesee was excavated more by oceanic currents than by the waters of the river and its tributaries. All the strata have a uniform elevation on either side of the river, showing that their beds have not been disturbed since their deposit, except what has been abraded and washed out by the elements. A large portion of the rocks above the upper stratum of the Niagara group is soft and shaley, yielding readily to the mechanical force of tidal currents. As already remarked, the minerals contained in these strata are quite soluble. A single pint of the water of the middle spring at Avon, contains:

Carbonate of Lime,.....	1.00 grain.
Sulphate of ".....	10.50 "
Sulphate of Magnesia.....	1.25 "
Sulphate of Soda,.....	2.00 "
Chloride of Sodium,.....	2.30 "
	<hr/>
	17.05 grains.
Sulphuretted hydrogen,.....	12.00 cubic inches.
Carbonic acid,.....	5.60 "
	<hr/>
Gaseous Contents,.....	17.60 cubic inches.

Prof. BECK says that the composition of the lower spring is similar to the above, and that it discharges 54 gallons of water per minute. If its strength is equal to the above, then there flows from it, every 24 hours, 768 lbs. of gypsum; 94 lbs. of epsom salts; 253 pounds of glauber salts; 171 lbs. of common salt, and 623 cubic feet of gas, to say nothing of the carbonate of lime held in solution. All the spring and well water in this region contains more or less of these fertilizing salts. We encamped one night on the ground where Sullivan drove the Indians at the point of the bayonet, off the high precipice in Fall Creek, two miles south of Caledonia. In its deep gorge below we found some fine specimens. The shaley rocks crumble rapidly into an impalpable powder, forming a tenacious clay, highly charged with lime, and salts of iron, alum, magnesia, &c. Earth formed by the comminution of these calcareous shales, if taken 500 feet from the surface, at the bottom of a water-fall, produces good wheat and clover. Between the middle and lower fall, at Portage, the rocks present a perpendicular wall on the north side of the gorge of 327 feet by actual measurement. Below the head of the river at this level, and at the lower fall, our associate teacher at the Agricultural School, (Mr. SANFORD,) took from a crevice in the slate rock a root of clover having

many stems, on which we counted 57 heads, many of which had ripe seeds, and others were just out of blossom. To the physiologist, nothing about these romantic Falls is so interesting as the luxuriance of the grass and other plants, growing on the nearly perpendicular walls of solid rock, and bountifully moistened by the spray of the cataracts. The tunnel through a spur of the mountain for the passage of the canal, is an object of interest; while the surrounding scenery is hardly to be surpassed for grandeur and beauty.

Our next excursion will be through Orleans and Niagara counties to the mouth of the Niagara river, up that noble stream to Lake Erie, thence south across all the strata to the Coal measures in Pennsylvania.

No pupil ever reads and studies the volume of Nature, as God has written it on the face of the earth, without becoming a *better* as well as a *wiser* person. There is too much reading of an idle and vicious character, spawned from the steam presses of the day, and placed in the hands of the young of both sexes. If we can aid a little in exciting a taste for the study of natural science, by leading the young men committed to our charge into such paths as display, most strikingly, the works of the Creator, it is hoped some good will accrue to them.

Nitrogenous Matter in Oats.

THE August number of the Cultivator contains the following:

MR. TUCKER:—I notice in the April number of the Genesee Farmer for 1846, mention of some apparent mistakes in Prof. Johnston's comparison of flour from oats and wheat. The table given is as follows:

	Wheat.	Oats.
Muscular matter,	10 lbs.	18 lbs.
Fat,	3 "	6 "
Starch,	50 "	65 "
	63	89

The editor of the Farmer says—"If 100 lbs. of fine wheat-flour contain but 63 lbs. of starch, gluten, (muscular matter,) and fat, all told, what shall we call the other 37 lbs. of something, in 100 lbs. of dry flour?"

I think there is undoubtedly a misprint in the quantity of starch given above. The average quantity obtained by Vauquelin, Zenneck, Payen, and others, is between 60 and 70 per cent. To this is to be added the gum, the ash, and a small quantity of wood fibre, beside from 8 to 14 per cent. of water, which is always to be obtained from what is considered the dryest wheat-flour or oatmeal.

The editor of the Farmer then proceeds to quote the following table from Prof. Johnston:

The grain of wheat contains from 8 to 35 per cent. of gluten.
“ rye “ “ 9 to 13 “
“ barley “ “ 3 to 6 “
“ oats “ “ 2 to 5 “

He then says:—"How wheat, as is well known, can yield from 8 to 35 lbs. of gluten in 100, and oats only from 2 to 5 lbs., and yet oatmeal contain 80 per cent. more *gluten* than wheat flour, passes our comprehension. Indeed the statement is an absurdity."

This paragraph seems entirely founded on a misapprehension of Prof. Johnston's meaning. The above table is intended to show only the proportion of *gluten* alone, not of nitrogenous compounds. It is true that the oat has very little gluten; but it has a body analogous in many respects to the casein of milk, which has been called *avenine*.

The editor of the Farmer must be aware that the proteine of Mulder, forms, as it were, the type of a class of bodies precisely similar in composition, with the exception of cer-

tain proportions of sulphur and phosphorus; among these, are fibrin, vegetable albumen, the serum of the blood, &c. To this class also belong the gluten of wheat, and the casein or *avenine* of oats. Gluten is composed of proteine 10, sulphur 2; casein of oats, proteine 10, sulphur 1. The casein of oats is therefore fully equal to the gluten of wheat, and the mistake in the above paragraph arises from the supposition that gluten is the only body in the oat which goes to the formation of muscle.

As to the quantity of this substance in comparison with that of the gluten in wheat, Prof. Johnston is no doubt nearly correct. I have found it as high as 22 per cent., though I should be inclined to place the average at 16 per cent.—Now though some wheat has been found to yield more than 30 per cent. of gluten, the average of the trials of Vauquelin, and other authorities, is but little more than 10 per cent.; the advantage is therefore clearly with the oat.

Prof. Johnston is also perfectly correct as to the quantity of fat yielded by the oat, many trials having been made in his laboratory during the two past years. My own trials have all given from 5 to 7 per cent. of oil.

As to the comparative value of oatmeal and wheaten flour, I shall perhaps at a future time write more at length; at present I will only say, that experience in Scotland fully bears out Prof. Johnston's analyses.

JOHN P. NORTON.

Farmington, Ct., June, 1846.

REMARKS.

IF "experience in Scotland fully bears out Prof. Johnston's analyses," then 100 lbs. of bolted oatmeal is worth as much to nourish a laboring man as 180 lb. of wheat flour. Or, to make the case still plainer, 18 men can live as well, so far as muscular effort is concerned, on a given weight of oatmeal, as 10 men can live on a like weight of the crushed seeds of wheat.

This statement is so contrary to the common understanding of the relative nutritive properties of oats and wheat, and withal so improbable, that we shall need the evidence of a fair trial in feeding men on both kinds of food, before we credit it. When Western New York was first settled, and before the construction of the Erie Canal, wheat, being only from 25 to 35 cents a bushel, was much fed to road horses in lieu of oats. A pound of wheat, instead of being regarded as less valuable to make good the wear and tear of horse flesh than a pound of oats, was considered more useful for that purpose.

Since the muscle-forming elements in wheat varies from 7 to 35 per cent., and similar elements in oats nearly or quite as much, it is obvious that nothing but a rigid analysis to test the quality of each grain consumed, could ensure satisfactory results. We have no doubt that a pound of oatmeal, rich in nitrogenous matter, is more valuable to feed any granivorous animal than a like weight of wheat flour that is poor in gluten. And it is possible that the soil and climate of Scotland are better adapted to the full development of the seed of the *oat* than of the *wheat* plant. Under such circumstances, Scotch oats may, as Mr. Norton says, yield 60 per cent. more nitrogenous matter than Scotch wheat. The result however, is different in France, and we believe in this country—especially in this portion of it. M. BOUSSINGAULT, (p. 353,) says there is 2.3 per cent. of azote in wheat and 2.2 in oats. This makes wheat a little richer grain-

than oats, pound for pound, which we suppose to be very near the truth of the case.

As there are vast tracts of soil in this country much better adapted to the culture of oats than wheat, it is a question of no small moment to determine the relative value of a pound of oatmeal, and a like weight of ground wheat as food for animals. Leaving out of the account the coarse covering or bran of both seeds, (which are worth something,) two or three pounds of the flour of oats can be produced in many sections cheaper than one pound of the flour of wheat. And in such localities it will doubtless be found that, pound for pound, the flour of the former grain will be more valuable than that of the latter. How much flour 100 lbs. of good oats will yield we do not know with sufficient accuracy to make a statement. According to Boussingault there are four pounds of incombustible earthy matter in 100 of oats; of which 53.3 are silica, (mostly in the thick covering of the seed,) 12.9 potash; 14.9 phosphoric acid; 7.7 magnesia; 3.7 lime; and 1 sulphuric acid.

It would be easy to show that oat meal is inferior to wheat flour to furnish the elements for making good the wear and consumption of *bone* in laboring animals. But we will take another occasion to discuss that part of the subject—barely hinting at the fact that, it is mainly owing to the comparatively small amount of *bone earth*—phosphate of lime—in oats which enables soils poor in that mineral to yield large crops of oats which can grow only small ones of wheat.—[ED. GEN. FARMER.

Lectures on Agricultural Chemistry and Geology.

THE Editor's Fall Course of Lectures on Agricultural Chemistry and Geology will commence on *Monday, October 5*, at 2 o'clock, P. M., and continue, one each day, four weeks, Sundays excepted. The time of commencement has been postponed a few days, to accommodate young men that will not get through with their Teacher's Institutes till the 2d of October, and who wish to attend the course of Lectures to be given by the writer of this.

At the risk of appearing vain, or egotistical, we will say a few words on the subject of these Lectures, and of qualifying the Teachers of Common Schools to introduce the study of Agricultural Chemistry and Geology into these seminaries of learning, which are emphatically the *Colleges* of the people. Great as are the improvements already made in Common School Education, all must admit that the course of studies therein pursued may be extended so as to embrace more than they now do, of the elements of natural science. This can be done without impairing the thoroughness with which any branches of learning now taught, may be pursued. Young men well grounded in a good English education, in

the popular acceptation of the term, greatly desire, as they truly need, that acquaintance with general science which will place them on a level in mental culture, and attainments, with the most favored in the community. The expense of attending the higher institutions of the country, is too great for their limited means. The Common School witnesses alike the beginning and the end of their scholastic career. We have ever felt a lively sympathy for this numerous class, who deserve better opportunities for improvement than they now possess. To such we say, "be of good cheer." The popular Mind is beginning to see the wisdom, and feel the importance of illuminating the four walls of every school house in the State, with the best lights of modern science. Never do we realize so sensibly, our lack of a tongue to speak, and a hand to write as they should do, as when attempting to awaken all sleepers to a just appreciation of what the world may gain, by studying the unerring laws of nature, as established by the Author of our being, and obeying the same. These laws have more to do in bringing annually around, both "seed time and harvest," than many persons are willing to admit. Thanks to the progress already made in Chemistry and Geology, as applied to rural affairs, the apparatus and other means required to investigate, and understand the most important truths of these sciences, are now within the reach and means of every school district in Western New York. No one can say, precisely, what can be done in the way of mental improvement, in advance of a fair trial. A *fair trial* is all that we ask of an intelligent community. In most branches of the mechanical arts, chemistry has more than doubled the products of the skill and labor of the best operatives, as they wrought 25 years ago. Will a knowledge of the elements that form all his crops, fertilize every field, and make the daily food of all that live, be of no value to the practical husbandman? Surely, we need not argue this point to the readers of this journal. It is enough to say that, no reasonable pains nor expense will be spared, to make these Lectures alike useful, interesting, and satisfactory.

Lecture fees \$6., to others than the regular pupils of the Agricultural School. A portion of the time each day will be devoted to teaching the class the *practical details* of analyzing soils, mineral waters, fertilizers, &c. Having been started on the right track, most young men will be able, with the assistance of books, and a cheap apparatus, to pursue their researches with equal pleasure and success.

HE that cannot forgive others, breaks the bridge over which he must himself pass, for every man hath need to be forgiven.

OUR best friends are those that tell us of our faults, and teach us how to correct them.

A few Words about Forests, &c.

Happening, not long since, to take up an old number of a former volume of the "Genesee Farmer," I found in it an article recommending to Farmers along the Erie Canal, and within the distance of 8 or 10 miles, to clear all their tillable lands; assigning as reasons, the unproductiveness of woodlands and the value of the same when brought under cultivation; urging also the (supposed) inexhaustible supply of coal in some of the neighboring states, and the low price at which it may be obtained by transportation. Although I have little fear that the advice will be followed, yet I think the subject worthy of some attention. I am glad that the farmers appear to entertain different views on the subject, from those of the writer. I admit the writer's arguments are *solid*, but it appears to me, they are one-sided. If there were no *dis*-advantages connected with the carrying out of his recommendation, or no evils resulting from it, the aspect of the subject would be entirely different. Unfortunately, however, the reverse of this *may* be true.

If the positions taken in my article on "Forests, &c." be correct, (and I believe it will be difficult to show them to be otherwise,) it will follow that the loss would be at least equal to the gain. The following, I consider, would be some of the evils, all resulting from one cause; viz., a change, or modification of climate: 1st. Irregularity and increased severity of winter. 2d. A corresponding change in summer. 3d. Severe and parching drouths. 4th. Failure of springs and streams. 5th. Loss, or injury, of fruit, crops, &c., or increased labor and expense to secure the same amount; to say nothing of the desolate appearance of a country thus wantonly stripped of its natural covering. Those who wish to see the above considerations expanded, will find the subject treated at some length in the 5th number of the present volume of the "Genesee Farmer," art. "Forests, their influence on Climate."

I might also add, that if the appropriate food of animals (that which springs spontaneously from the untilled earth,) be destroyed, they will turn their depredations upon the labors of man. If we destroy their means of sustenance, they will look to us for support. It is doubtless true, that by cultivating the soil, we may destroy many kinds of insects and small animals, and drive away others. At the same time it is equally true, that many others, and those perhaps more injurious to man, are multiplied by the same means. Hence doubtless one cause of the difficulty of raising many kinds of vegetables, (on account of their destruction by bugs, worms, &c.,) which formerly were easily raised in abundance.

The draining, or *fall*-of the great western lakes, is a subject that has attracted some attention of late, but no satisfactory cause has yet

been assigned. I believe that one cause, perhaps the only one, will yet be found to be, the clearing of the country around the lakes. I do not mean the immediate vicinity, but the whole country drained by the rivers that flow into those lakes; and I may add, many miles beyond. These rivers are generally small, and drain only a comparatively small extent of country, and much of that country has been cleared of its forests on both sides of lakes Erie and Ontario, and also on the south side of lakes Huron and Michigan. Now if we bear in mind that on account of the circulating motion of the atmosphere, the climate, (if affected at all,) is affected to the distance of many miles around, we shall have one reason why, according to the present theory, the supply of water must be diminished along the whole southern border of these lakes, and the northern border of lakes Erie and Ontario. In regard to Lakes Superior and Huron, it is true, the country to the north is still an unbroken wilderness, but the rivers of that country are small, and furnish only sufficient to supply to the lakes the loss by evaporation. This appears the more probable, when we remember, that on account of evaporation, all the great rivers of Southern Europe, Western Asia, and Northern Africa, are but just sufficient to supply to the Mediterranean Sea, its loss by evaporation; and that the Caspian and the Aral Sea, from the same cause, never overflow, though fed by several large rivers.—Hence it is easy to perceive, that the small rivers of the country north of lakes Superior and Huron, can do little more (if any) than supply to the great chain of American Lakes, the loss by evaporation. Consequently, if the quantity of water furnished by any portion of the rivers that supply those lakes, be diminished, (and such I suppose to be the case with the rivers of New York, Ohio, Michigan, and Upper Canada,) the lakes must fall below their former level. Some allowance in regard to evaporation must be made, it is true, for the difference in latitude of the Eastern and the Western lakes; yet this difference is not so great as to affect greatly the results; the Western lakes being in the latitude of the Northern parts of the Mediterranean, the Black, the Caspian, and the Aral Sea. H.

Fairport, Aug. 18, 1846.

INFORMATION WANTED.—Can any one inform us *where* the Recording Secretary of the State Agricultural Society is giving public lectures on agriculture, agreeably to his engagement, and the understanding when the salary of his Office was raised by the Board to something what it should be, to pay for constant official expenses?

NARROW circumstances are the most powerful stimulants to mental expansion; and the early frowns of fortune the best security for the final smiles.

Book Farming.

JUNIUS said, when he saw a Scotsman laugh, he always felt an involuntary impulse to conceal himself from mischief. It would seem that many practical farmers feel a like impulse, when they are asked to subscribe to an agricultural paper. But as Junius was distinguished for great illiberality, if not injustice, towards others, so are those book denouncing farmers, who will not read an agricultural paper, because some of its articles are unintelligible to them, or contrary to the results of their individual experience.

Within the last few days, I read an article on growing Indian corn for fodder, which recommends sowing it as late as the middle of July. Now, had I been moved by the book hating impulse, I should have dropped the paper, without reading another article in it. 'Tis true that I once grew two crops of perfect roasting ears of Indian corn in one season; but never but once. Four times out of five, corn planted or sown in July, will either be slow to sprout, for want of moisture in the soil, or it will be so much pinched by drought after it comes up, that failing to take root strongly, it becomes dwarfish—not growing to one-fourth its usual weight of stalk, before it begins to tassell.

These remarks, the result of many experiments, are made to apply to the warm calcareous soil, and dry climate of Seneca county, N. Y.

On the high lands of Allegany, Otsego, and Oneida counties, where hot warm weather is an exception to the general rule, corn planted in mid-summer for fodder, may often succeed well; but in such a climate grass makes a much more economical fodder, than Indian corn will produce in the same climate. I have taken an ear of corn from a stalk, which had attained only four feet in height, on a very rich soil in Otsego co. The same corn planted the next year in my garden, attained the height of eight feet; the ears increased in like proportion. But on the other hand, when our pastures are dried up in August, and almost every other green thing begins to fade and wither, I have seen the white clover half leg high, in the pastures of Oneida county.

If a farmer would be benefitted, both by the light of science and experience, as set forth in the agricultural papers of the day, he must neither be a man of blind enthusiastic credulity, carried away by the fortunate result of a single experiment, nor yet one of stolid, hereditary, unyielding prejudices. There are but few callings requiring, like that of the farmer, the constant, patient exercise of practical experience, and sound common sense. The regularity of machinery may indeed be applied to mechanical agriculture, but it has nothing to do with the climate or the season. Although all plants contain, to a greater or less extent, the same organic, and the same incombustible elements; yet one plant may be grown successfully in one particu-

lar soil, and fail in another. A warm dry climate is necessary to the perfect growth of many vegetables, while a cool and moist one is necessary to the perfect development of others.

In the last Genesee Farmer, is an article entitled "*Study the Soil*," written by Dr. LEE, the Editor. It should be read understandingly by every young farmer who has any faith of human progress in agricultural science. When I say young farmer, it is because too many of the old ones are like Goethe's hero, so conceited that they are beyond the help of the schoolmaster.

I like Dr. LEE'S plan of setting down the water absorption of the soil he analyses; as this, its mechanical power, is of as much importance as its chemical composition. I hope he will hereafter, when giving the analysis of a surface soil, also give a short detail of the manner in which it has been manured and managed for the preceding five years.

In my next, I will give a detail of the amount of grain, &c., produced this year from a farm of 100 acres in Fayette, Seneca co. Its anglo-German proprietor, practical as such men always are, has the generosity to confess, that he could not have farmed thus successfully, and with so little labor, was it not for the instruction he has received from the pages of the Genesee Farmer.

Waterloo, Aug., 1846.

S. W.

The Farmer—his Position, Responsibilities, and Duties.

NUMBER ONE.

MR. EDITOR:—I propose, in a few articles, to take a cursory view of a subject which to my mind is one of abiding interest to every farmer in Western New York. I would not seek to excite prejudice against any class; I aim not to depress or injure, but to stimulate the great body—to infuse a proper, a necessary pride into the great controlling interest of this country—and to induce them to look to their position as it is, and to what it may and should be. The census of 1815, exhibits to us the fact that the great mass of the people of the State of New York are engaged in Agricultural pursuits. Every body concedes that the farming interest is the great interest—that it is at the head of every other—exercising the greatest influence over the prosperity and happiness of the country. Indeed, it forms the ground work of society in Western New York, and upon it rest all other interests. The inquiry is, then, one of deep interest, as to the condition of this base, upon which so much rests; and nothing is more important than to know whether there be moral and intellectual strength sufficient for the important duties to be performed.

The character of our political institutions, and the character of our laws, and of society in this country, give to the agricultural portion of our people peculiar importance. We differ from

most other nations in this, that our land is divided into *small* parcels or estates, and is *owned* by those who till it. The system of renting, or of tenantry, so universal in most countries, is comparatively unknown with us, and where known is a source of agitation and trouble. And here let me say that I regard this feature of our country one of its chief glories, and the very best evidence in favor of the stability and perpetuity of our free institutions. There can, I imagine, be little doubt of the beneficial influence of a diffusion of landed property. He who owns the soil on which he treads, who calls his home his own, better loves that home, and feels more the spirit and responsibility of a freeman. Not indeed that a tenant or a laborer who has not a title for the land he works, can not or will not be a good citizen; but what I affirm is, that the inducement to become a good citizen—to respect and cherish the laws—to cherish and practice the virtues of good neighborhood, and to make all things about his home cheerful, and as they should be—is greater on the part of him who has a legal interest by ownership in the land he occupies, than he who has not. This point will not be contested. History and experience, in this and other lands, is instructive on this point, and strongly admonish us to guard against large accumulations of land, in the hands of single proprietors. Nor do I think there is much to be feared from this point, for many years, if ever, in this country.

In this country the term FARMER has a different meaning than in the old world. Here the general signification is, one who tills the soil which he owns, and not one who works the land of another. But when I speak of the farmer, I wish to be understood as embracing all who till the soil, and labor in the production of the fruits of the earth—all the men and women who toil and spin, and produce commodities of whatever kind of which mother earth is the immediate cause or foundation.—And this embraces full three-fourths of the population of Western New York—comprehends a large part of the wealth and resources of the State—and, as a consequence, other things being equal, the farmers should exercise a controlling influence in all matters pertaining to the interests of the people.

Do they occupy this commanding position?—Do they, in the Legislation of the State and Nation—in the Educational and Scientific enterprises of the day? And if they do not, what is the reason? In my next I will pursue the inquiry.

D. A. OGDEN.

Penn Yan, August, 1846.

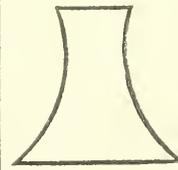
No wonder that we love flowers, for in childhood they are the most cherished gift from those we love; through life they are retouching mementoes of the past; and in death they are dedicated to our bier!

Building Stone Wall.

MR. EDITOR:—In addition to what "H.," and "A Farmer" say (in your August number,) about stone wall, I would remark that if I were going to build a wall five feet high, I should plow five furrows where I wanted the fence to stand. Then take a cast-iron scraper, and go on lengthwise, dipping in as often as possible through the whole length—then back again, and so on until the ditch is of sufficient depth. About eight inches I think sufficient in common soil, that is subject to heave;—less in dry soil. Then haul the largest stones that I can find, and fill the ditch with them instead of small ones, for the reason that frost is the great destroyer of stone wall. If the ditch be filled with small stones, all the vacancies must in time fill with quick sand, and the frost will heave the wall and of course cause it to fall. Lay the large stones in the bottom, and when the wall is finished plow the ground over about three times to the wall, until a bank is raised of sufficient depth to guard the foundation from frost.

If any man will be to the trouble of examining the foundation of a wall that has fallen down, that was laid on top of the earth, he will find the bottom stone pitching out. The reason for this is as follows: the frost had been under repeatedly, and when it comes out in the spring it commences on the outside first, and when past the centre of the stone the earth or mud is so soft that it immediately settles, while the inside is on the frozen ground; this causes them to pitch out, and the small stones in the middle follow up and hold them in that position until the next year, and then go through the same operation again.

The form of a wall five feet high, to suit me would be of this description: Three feet eight inches at the bottom; draw in very fast at first, and slow at the top. This will leave the sides hollowing, similar to the accompanying figure. A wall laid in this manner must press to the centre, and will never bulge; and, if the frost does not get under it will never fall.



If I were going to build half wall, with boards on top, it would be in this manner: Always in a ditch, according to the soil; two feet eight inches wide at the bottom. Take 4 inch scantling for posts; set them on a flat stone on top of the earth; take some pains to bind the wall each side of the post. Build the wall two feet and eight inches high; nail on a board 14 inches wide; stone up each side of the board ten inches. This steadies the whole fence. Bank as before mentioned. I have some fences built in this manner five years ago, and they now look as though they might stand forever. Of course you will want another board on the top of the posts.

Sodus, Aug., 1846.

ELI DICKINSON.

Saving Manures.

MR. EDITOR:—In my humble opinion the obtaining and application of manures constitute the very life of judicious Agriculture, and in no other part is there such lamentable carelessness and inattention shown. Even many who class with the well informed of the farming community seem to care almost nothing about what becomes of the contents of their barn-yards, hog-sty, and privy; but let the liquid drain off through the water courses, and find its way to the bottom of the lake, or it is left in the sun to evaporate, while the precious ammonia, to all intents and purposes, is lost to the owner. I do not say that all farmers are like this, but if I could have a small sum for all I could find, who class themselves, and wish to be classed among the better portion of farmers, I would take an excursion when I had leisure, with the prospect that I should be well rewarded. And even those that try to save their own manure, do not know, or do not think how to add to the heap. I knew one man in this town to send his teams in the winter to the city six miles after manure, while within half a mile of his house was a marsh where he might have obtained thousands of loads of the richest kind of vegetable mold, which, with a very little trouble, might be made into excellent manure, but probably he never thought of this, although he passed by the place half a dozen times a day. There are very few places in this country where marsh mold cannot be obtained, with little trouble and expense; and if farmers would have the foresight of other classes, they might enrich themselves, and improve their soils. Western New York might be the garden of the world. This is equally true of the West, in most parts of which may be found small marshes that at some time of the year are overflowed with water, but at other times admit of transportation over them. Most of these contain, in addition to vegetable substances, carbonate of lime, shell marl, &c., all of which are easily converted into wheat and corn. Near these beds of natural manure I have myself seen fields entirely given up to sorrel; they had been run out so that nothing else would grow. A few bushels of lime burnt from this marsh carbonate, would have neutralized the acid, which is the base of sorrel; and then, by the judicious application of vegetable mold, these sterile fields might have produced crops to any amount.

Probably their owners never thought of this, or thinking, had not energy to leave the old track of their fathers for these "new fangled notions in book farming." Not only should the marsh be made to contribute its stores, but every thing in the shape of vegetable substances should be added to the barn-yard, compost heap, or pig sty, and all ways tried to add to the heap, and increase the fertility of the soil. Very few persons know what a vast amount of vegetable matter is wasted by being left exposed to the action of the sun,

rains, and dews, or scattered promiscuously over the fields where it is of little or no use. I am aware that farms may be enriched by other, and upon large farms, perhaps cheaper methods, by plowing in green crops, by mineral manures, &c., but of these it is not my purpose to speak. The design of this is to urge upon all farmers to adopt all practical methods of increasing their barn-yard and compost manures. No doubt that many soils are deficient in the mineral salts that constitute so important a part of the ingredients of plants, and that a proper application of mineral manures would be in the highest degree productive of fertility; still most farmers are not yet sufficiently learned in Agricultural Chemistry, to know what mineral matters are wanted on such and such soils, and the great mass will still use the old fashioned product of the barn-yard.

Now, Mr. Editor, would it not be good policy to give a larger place to the use, collection, and application of manures, both mineral and vegetable, in your truly valuable paper, and thereby promote the great interest for which we are all seeking, namely, the improvement of Agriculture. Wishing you success in your noble calling,
I remain yours,
Greece, Monroe Co., N. Y. F. W. L.

"A Chapter on Wool Growing."

MR. EDITOR:—Your August number contains an article with the above title, over the signature of "Observer," who appears to be in some difficulty to understand the statement in your July number concerning the fleece of my buck "Major." Perhaps I ought to have been more explicit; but as I had mentioned in the June number that his fleece was two years growth, and supposing that those who read that number would also read the July number, I thought it not necessary to repeat: besides, it has been ascertained, by fair trial, that a Merino sheep going two years without shearing will not add over one-third, or at the most one-half, to their fleece the second year.

"Observer" also says that I "seem to carry the idea that there are artificial methods of increasing the weight of wool." My language was, that "there are a good many ways to get a heavy fleece," which may be done in some cases where the quantity of wool is increased, and in other cases where the quantity is not increased. For instance, lambs dropped the first of April, and perhaps in March, and shorn the last of June; also sheep have been sown late one season, to obtain a heavy fleece, and the next fleece being lighter was not reported. Sheep have been smeared with tar and butter, instead of refuse lard and grease; and although the former will not increase the quantity of wool, it adds to the weight of fleece, as it is not easily removed when the sheep are washed, if indeed they are washed, which in some instances is not the case, and the

dirt that remains in the wool adds to the weight, without increasing the quantity.

The resolution recently passed by the New York State Agricultural Society, concerning fine woolled sheep and their fleeces which are entered for premium at the State Fair this fall, shows that craft has been, and may be, used to increase the weight of fleeces.

The Vermont shepherds think if they have a buck that will give from 9 to 11 pounds of fine wool, well washed on the back, they have an extra. Some that are a little coarser give more; and when on my visit among them, I learned that if they had a flock of ewes that would average 5 pound per head, including lambs, (yearlings,) they were satisfied. Yet I have no doubt but a flock of Paular Merinos may be improved in time, by improving from heavy fleeced bucks, and selling off the lightest fleeced sheep every year and retaining all the heavy shearers, till a whole flock even of ewes would average 5½ or 6 pound per head. But it would be difficult at present to make such improvement, when so many are wishing to obtain them, and every one wants the best.

REED BURRITT.

Lunar Influence on Vegetation.

MR. EDITOR:—As your paper is devoted to the science and art of Agriculture, it should, as it does, treat of all the various ways by which labor may be saved, and yet not endanger the final success of the farmer. We are frequently informed, through the medium of your paper, concerning the best methods of preparing the different seeds, and likewise how to manage the plants, from their first appearance to maturity, in order to secure the most abundant harvest. All this is well, and profitable, so far as it goes. But as we are, to a great extent, dependant on *Nature* for success in the cultivation of grains, why should we not be informed with regard to the probable effect that known and stated changes in our system may have on the growth of our seeds?—Now if, as some pretend, (and I am not certain but justly,) the Moon exerts a direct influence upon some particular seeds—requiring them to be sown at such an age of the lunar orb to ensure a favorable crop—it certainly is a fact of too much importance to be withheld from the farming class. If potatoes must be planted at a particular age of the moon, to grow well and yield abundantly, every one ought to know it, that he may be profited thereby. The same may be said of flax, peas, or any of the seeds affected in this manner. Your opinion on this point would be quite acceptable. Is it the *age* of the moon that works such wonderful changes, causing some seeds to assume a peculiar form, and others to yield more than would have been the case if planted or sown at any other time?—or is it because the season has progressed just far enough to ensure a liberal reward to the efforts of the husbandman? In

other words—does the moon exert a direct and perceptible influence on any plants?—and if on one, why not another, through the entire list?

Hannibal, N. Y., 1846.

AGRICOLA.

REMARKS.—We have never seen nor read of one well authenticated instance where any change in the moon affected in any way a single living thing, whether vegetable or animal, on this planet. Its power of attraction is too small to influence active vital, or chemical operations, to any appreciable extent. Other causes than lunar force produce the natural phenomena attributed to the moon.

Deep Plowing.

I HAD a field of 13 acres, naturally very poor, (so much so, that the first natural production was a poor growth of sheep sorrel, a certain indication of sterility,) which I intended to put in wheat. The summer was something like the last, excessively dry. When the time arrived for breaking up this field, it was so hard that a plow with two horses could not be got into the ground. Four horses were tried without success. A coulter was tried with two horses, but the draft was too great, and four horses enabled the plowman to break up the field.

The weather continued dry, and when it was time to sow the wheat, the plows were put into the field plowed with the coulter, and it plowed well. The wheat was sown; no manure was applied. The wheat when harvested was a very tolerable crop—for such poor land, very good—and there were many places from ten to twenty yards square, covered with *luxuriant clover*. No seed could have been on the land, and how it came to grow, can only be solved by future experiments.

The idea that struck me (which I would like to see investigated by some more scientific experimentalist,) was, that the plow having reached deep into the clay bottom, (the top-soil was decomposed granite, or coarse gravel,) the clay attracted nitre from the atmosphere, and thus caused the growth of clover, which it is believed will only grow on lands cultivated for some time and manured. New land will not produce clover if very rich.—*R. in Southern Cultivator.*

Agricultural Fairs for 1846.

THE State and County Ag. Fairs are to be held, this fall, (in the counties we heard from,) as follows:—

New York State,	Auburn,	Sept. 15, 16, 17.
Jefferson County,	Watertown,	Sept. 1, 2.
Madison "	Eaton,	Sept. 23, 23.
Monroe "	Rochester,	(not determined.)
Niagara "	Lockport,	Oct. 7, 8.
Ontario "	Canandaigua,	Oct. 13, 14.
Oneida "	Whitestown,	Sept. 24, 25.
Onondaga "	Syracuse,	Oct. 1, 2.
Oswego "	Fulton,	Sept. 29, 30.
Orleans "	Albion,	Oct. 1, 2.
Otsego "	Cooperstown,	Oct. 1, 2.
Seneca "	Waterloo,	Oct. 22, 23.
Tompkins "	Ithaca,	Sept. 29, 30.
Wayne "	Clyde,	Oct. 1, 2.
Yates,	Penn Yan,	Oct. 1.

Rust on Wheat.

DR. LEE—*Dear Sir*: I notice your editorial on the subject of "*Rust on Wheat*," in the August number of the *Genessee Farmer*, but am not convinced that the cause is truly *gained*, much *less proven*. Indeed it is no new thing, that the learned, when wedded to a theory, are less likely to account for facts that conflict with such theory, than a common observer. Of late it has been assumed by the savans of the age, that most of the troubles in the vegetable kingdom are occasioned by "*fungi*, or parasitic plants." Now it is a little strange that when these writers, among other things, impute the *potato rot* to the same cause, they do not set about accounting for the absence of every reason why these fungi have not played these *naughty tricks* with that favorite vegetable, until within a year or two of the present period. The *fungi* are not a new creation, and if they are such a *mischievous genus* as represented, what has restrained them in by-gone years?

But to return to the subject of "*Rust on Wheat*." Allow me to meet some of the difficulties you find in your theory, and in this case in particular, by the theory I have assumed, and which was published over my signature some two or three years since in the *Genessee Farmer*. They are difficulties that the ablest of the *fungi* advocates will find somewhat indigestible; and it is very probable they will continue to call it a "*mysterious calamity*," so long as they hold of their present opinion. From observation and inquiry I am fully satisfied that rust on wheat is a natural and not a "*mysterious*" result—an effect following certainly from a known cause—a *moist atmosphere* and a *hot sun*, at a particular crisis. These two causes create a vigorous sap, which rushes rather than flows to the head of the plant; the kernel is filled to its utmost tension, not with rich *chyle*, but limpid sap; every vesicle swollen, the article can contain no more—it bursts, the sap exudes, turns brown in drying, and is then—*rust*. Hence, I conclude that the shrunk or shrivelled kernel owes its leanness to the bursting of the cuticle, which prevents the proper nutriment from reaching it.

I premise that this theory meets the difficulties which you seem to admit headed you, in accounting for the strangeness of the case you report, and which you term "*mysterious*." "The wheat was on dry gravelly land, a side hill, it was sparse, small stem and leaf," open to the direct rays of the sun upon the soil, and "is nearly destroyed," while that on the intervale ground, standing tall and thick, escaped.

Now I think it is evident, that the warm hill side land, "thin crop and small growth," would feel the force of the sun's rays in a three-fold degree, compared with the intervale "thickly covered;" and that the rush of sap in such weather as described, would be felt by the

wheat on the hill side, in about the same ratio.

Observing farmers, familiar with the wheat crop, know that previous to the appearing of the rust spots the scarf-skin is split, and several have assured me that the *click* or noise of bursting is distinctly heard when they visit the wheat field at this critical juncture. I state another fact to sustain my theory: A farmer of my acquaintance had a fine field of spring wheat, the soil was of uniform quality, and the exposure the same, it looked well; upon about six rods he had early spread a good coat of straw, which protected it from the direct rays of the sun,—the soil was common sandy loam, not rich, and the wheat did not stand thick. Warm wet weather came on, frequent showers and sunshine, and the crop became badly rusted, with the exception of the piece which had the straw top-dressing, *this wholly escaped*. The reason seems very obvious—the sun had less power upon that piece, the ground of course was less heated, and there was consequently a less flow of sap.

Once more and I submit the case. If *rust be fungi*, please account for the fact of its seeds filling the atmosphere at this juncture, and its discrimination in selecting, lodging, and growing on a particular part of the wheat stalk, usually a small distance below the head, (mauger all the efforts of the rain to wash it off,) instead of every part of the stalk. Upon the theory I advocate, that rust is the inspissated juice which has flowed from the wound and dried upon the stalk, it is easy to account for this portion of the stalk being rusted, as here is the bursted scarf-skin, and here runs to waste not only the surplus of sap, but the richer matter or chyle which forms the kernel.

I hope many farmers will try the *straw remedy* next year on a portion of their wheat fields, and report to you the result.

J. H.

Rome, N. Y., Aug. 1846.

The Potato Disease.—A Remedy.

MR. EDITOR:—Although the *cause* of the potato disease has not yet been satisfactorily ascertained, yet if there is a remedy or preventive, it is important that it should be known. At our County Fair, in October last, I was surprized to see a neighbor of mine bringing in a basket of as fine Mercer potatoes as I ever saw. I said to him, "Neighbor H., how did you procure such fine potatoes?—mine were almost an entire failure." His reply was, "I cultivated them scientifically."

Some time afterwards I called on my neighbor, reminded him of his statement, and asked him to explain. His reply was, in substance, as follows:

The soil on which the potatoes grew, was a sandy loam—has been under cultivation twenty-five years, but never had a load of manure, (barn-yard manure,) applied to it at all. The crop of 1844 was wheat. In the spring of 1845 the land was plowed once only, about 4 inches in depth—furrowed out 3½ feet apart—potatoes cut small,

and dropped in the furrows 2½ to 3 feet apart; 12 bushels of seed planted on the acre. Before the potatoes were covered, a handful of a compound was thrown upon the seed. The compound or mixture was as follows: Leached ashes, 25 bushels; plaster, 5 bushels; quick lime, 5 bushels—well mixed together. The after culture was only ordinary. They were dug about the 15th of September, carried into the cellar, and put in bins as usual, except what were sold in the field. About the first inst., he told me that not a single diseased potatoe had at any time been found.

In looking over some 30 or 40 articles on this subject, in the various agricultural papers before me, I have not found that any have used the foregoing remedy. To be sure some have used lime—others have used plaster—and others still have used ashes, or at least planted potatoes where a log heap had been burned. The evil referred to is a serious one; and if the aforementioned composition, thrown upon the potatoes before being covered, will prevent the evil on a dry, sandy loam soil, then I shall escape it hereafter. The crop alluded to above, took the first premium—though I do not recollect exactly the number of bushels.

Yours truly,

Lockport, Feb. 1846.

NIAGARA.

NOTE.—We regret that the above article, which we intended to publish in our April number, was mislaid. It is interesting and important, even at this time. If "Niagara" has also tried the same experiment, we should be pleased to learn the result—and promise that his favor shall not be delayed in like manner as above.—[Ed.]

Information Respectfully Desired.

As Chairman of a Committee, appointed at the meeting of the Farmers' and Gardeners' Convention, at New York, in October last, "to collect information," the undersigned respectfully requests the Secretaries of all Agricultural Societies and Farmers' Clubs in the United States, to address to him a note, stating the locality of the Society, and the names of the President and Secretary.

The list, when completed, will be printed, and a copy sent to each Secretary. The object is to establish the means of correspondence, and interchange of information and views, for the better protection of the rights, and more efficient improvement of the practice, of agriculture.

Agricultural and other editors are respectfully requested to give this one insertion. There are nearly 600 such societies and Clubs in Great Britain, all well known to, and in correspondence with each other.

J. S. SKINNER, New York.

THE finer the seed to be sown, the finer should be the soil in which it is placed. The earth must come in contact with the seed.

Bees and Bee-Hives.

MR. EDITOR:—The Bee Culture, which has been so long neglected in this as well as most other counties in our State, appears to have received a new impetus from recent discoveries—judging from the attention that the subject is now attracting. Certain it is that if farmers and bee men could be successful in the management of bees for any considerable length of time, there cannot be found any more profitable branch of rural occupation. But bee men have learned from sad experience that the old fashioned box hives are better than the "bee houses," expensive "bee palaces," and all the patent hives hitherto in general use (which, by the bye, are no improvements in reality,) put together—provided that the old comb be broken out of them every year or two. This process, I am aware, is a dangerous one, not only to the bees, but to the operator; but I am satisfied from long observation, and the experience of bee culturists generally confirms the remark, that bees cannot live and hatch young swarms in the same set of cells for more than one season without each subsequent swarm becoming more feeble or smaller than the previous one, owing to their not having been fully developed in the cells, or part of them not hatching out at all.

These remarks are made because I discover by the papers here that a new hive, called "Kelsey's Alternating Bee-Hive," patented recently, is now offered to the public, which, it is claimed, embraces great advantages over all others now before the public, and to be founded upon entirely new principles, by means of which swarms can be preserved and increased *ad infinitum*.

Now I am one of those who wish to be satisfied before I praise or condemn anything, and I really wish that some of your subscribers or correspondents who may be acquainted with these hives, or the success that has attended their use wherever it may be, (in Yates co. I think the advertisement says,) will inform the farmers of this county, through your columns, of the practical results and management of bees in them, and wherein their principles are entirely new or worthy of attention.

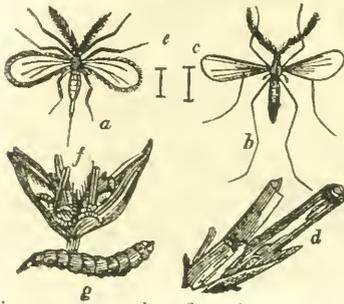
There are so many humbugs and failures in bee-hives now in use, that these hives, if any better, should be adopted, and if not the farmers should not be cheated and induced to buy them. Farmers want no fancy hives;—they want good simple and cheap *stock hives*, such as will be easy of management and control, and will be in some way a preventive to the ravages of the bee-moth. Let us understand what we buy from practical men who know something in regard to the subject.

Respectfully yours,

AN APIARIAN.

Salina, Onondaga Co., July, 1846.

HE that rewards the deserving makes himself one of the number.

The Hessian Fly. (CECIDOMYIA DESTRUCTOR.)

This is one of the most destructive insects in this country. It has a black head, chest & wings, and a brownish body. Two generations are often, if not always, produced

in a year; the first in spring, the second in September. The females lay their eggs on the leaves of young wheat, which hatch in a few days, and the worm descends between the outer covering and inner part of the stem, down to the earth. It is there changed into a gnat of the size and something of the appearance of a flaxseed, as represented at letter *a* in the accompanying illustration. Here the fall generation remain till spring when they are transformed into winged insects. The grubs destroy the plant by sucking its juices, and robbing it of its proper nutriment. The letter *b* is a drawing of this insect.

The *Wheat Midge or Fly*, (*Cecidomyia Triticæ*), fig. *a*, is a severe pest in many sections. It is smaller than the Hessian fly, of a yellow color, with clear wings. They are seen in June when the wheat is in blossom, and the eggs are deposited at dusk in the scales of the chaff. The maggots are of a yellow color, changing to a brown. They eat the young kernel as it is forming. *g* represents one of these worms magnified. The maggots fall to the ground, enter it, and change into chrysalises, and come forth perfect insects in the spring.

Unfortunately, we know of no reliable preventives of the injuries that annually occur from these flies. The wheat growers in the vicinity of the residence of the editor, sow late and feed close with sheep to destroy the nits deposited in the fall by the Hessian fly; and some have tried burning sulphur, at evening, on the windward side of wheat fields, in order to drive off the wheat midge.

To Correspondents.

COMMUNICATIONS have been received during the past month from L., A. H., Isaac Cushman, J. H., Eli Dickinson, S. W., Joseph Pennington, D. A. Ogden, Jason Smith, S. F. S., Reed Burritt, A. Dorsey, H., C.

Books, pamphlets, &c., have been received from various sources. They will be noticed hereafter.

THE engraving of "Ide's Patent Wheel Cultivator," intended for this number, is not yet completed. We shall endeavor to give it, with a description, next month.

State Fair at Auburn.

WE hope to see the farmers in Western New York turn out in their strength, and with their best articles for exhibition, to attend this annual, and truly useful RURAL JUBILEE. The agricultural reputation of this portion of the State is involved in the matter of making the exhibition creditable to the skill and industry of the tillers of its excellent soil.

Although the season has not been so favorable as we could wish, still we doubt not the display will be large, beautiful, and most interesting.—All should attend who can make it convenient to do so. The good people of Auburn, and the worthy President of the Society, Mr. SHERWOOD, will look well to the point of providing ample accommodations, and at fair prices.

American Quarterly Journal of Agriculture.

THE number for July, August, and September of this useful Quarterly is before us. It contains many valuable communications and editorial articles. Our friend H. S. RANDALL, Esq., of Cortland, gives a graphic and interesting sketch of an "Agricultural and Geological trip to Carbondale," during which he entered the coal mines, and collected many specimens of fossil plants. If Mr. R. has any duplicates, we hope he will not forget the geological cabinet now forming in connection with the Western New York Agricultural School.

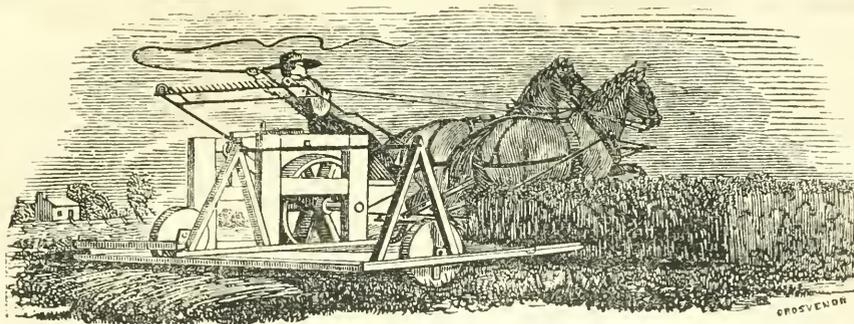
The price of the Quarterly Journal of Agriculture has been reduced to \$2 a year. Published by Huntington & Savage, 216 Pearl street, New York.

Bloody Milk.

MR. WILDMAN of Castile, says:—

"I wish to ask of you, or some of your correspondents, what I can do for a likely young cow I have that came in last spring, and has given bloody milk for the last two or three weeks. I have had recommended garget root and nitre, both of which I have tried, and see no good result. I still continue to milk her, and feed it to the hogs, in hopes that there is something I can do for her that will restore her milk, as she is of a superior breed which I wish to keep on my farm."

Blood in milk arises from the rupture of blood vessels in the lacteal gland, where the milk is secreted from arterial blood. One has to rely mostly on Nature to heal the bleeding vessels. Quack nostrums can do but little good at best, and may injure the general health of a valuable cow. Milk very gently three times a day, and wash the bag in cold water, made colder by the solution of a little salt. The object of frequent milking is to avoid the great distension of the vessels in the gland, and their liability to bleed; while the application of cold water will serve, like applying it to the forehead or back of the neck to check bleeding at the nose, to contract the open mouths of the capillaries which exude blood into the milk.



Cook's Patent Reaping Machine.

THE above engraving represents a Reaping Machine recently invented and patented by Mr. ANDREW J. COOK, of Delphi, Ind. We know nothing of the Machine, except from a hand-bill sent us by Mr. Cook, and can therefore express no opinion as to its merits.

In his advertisement Mr. C. says—"The machine is capable (with the assistance of a boy and two horses,) to perform the labor of eight or ten good cradlers, and in a style too, not to be excelled by the best of reapers. It not only cuts the grain enough cleaner than the cradler to pay the expense of harvesting, but it leaves it in a much better condition for binding than though it were raked after the cradle. It is susceptible of being altered to cut the stubble of various heights, to suit the height of the grain. Where it is smooth, it can cut within four inches of the ground, if required. For grain that is very heavy or very tall, the machine may be raised to cut the stubble as high as fifteen inches from the ground. It being thus arranged, it is capable of harvesting Wheat, Rye, Oats, Barley, Buck-Wheat, Flax, Hemp, and other small grain, with much greater facility than the usual way of harvesting."

Inquiries.

EDITOR GEN. FARMER:—I wish to inquire relative to the best method of applying unleached ashes to wheat. If sown, the best time and quantity per acre?—or, if applied to the land before seeding? Also, how much to the acre, and time of application?

Also should like to know the prices of farming implements that are advertised or noticed; or rather, when you notice or advertise, it would be highly gratifying to us of the west to have the price of such implements affixed. I do not know but that you affix the cost to all that you are allowed—if so, I beg pardon for the suggestion.—If in your power I should like to know the cost of the best seed sower.

I have been a subscriber to your very valuable paper but a short time, (with a club from Spring Arbor,) and think the worth of each number equal to the cost of a volume.

The wheat crop in this section has been materially injured by the frost—one quarter at least. The harvest commenced the first of July, being from ten to fifteen days earlier than usual.

I notice communications in the Farmer relative to besmearing sheep with lard, oil, &c. &c. I should like to know for what purpose it is done.

P. S. I have this season found in the straw of wheat a small yellow worm—most generally in the first joint—but sometimes in the second. The berry did not appear to be affected by it.—Can you give any information respecting it?

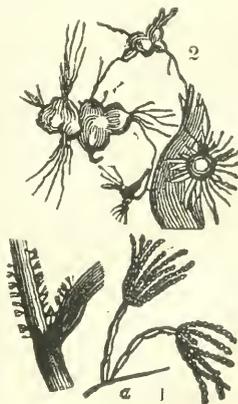
Yours, &c., ISAAC CUSHMAN.

Concord, Mich., Aug. 3, 1846.

REMARKS.—We shall give an article on the subject of using and applying unleached ashes, in our next or a future number, which will fully answer your inquiries. The price of the best seed sower, in this section, (Seymour's,) is \$45. It is for sale in this city, as will be seen by reference to our advertising pages. We generally give the prices of all agricultural implements that we notice or advertise, if permitted. Relative to smearing sheep, see articles by 'Observer' and 'Reed Burritt,' in this and August numbers.

Mildew.

THIS substance which attacks the leaves of the hop, grapevine, pea wheat, grass, fruit trees, and other vegetables, is now regarded as a distinct race of parasitic plants. One of the commonest forms of the white mildew that covers leaves is that of the *Aspergillus*, (Fig. 1:) *a*, is the plant enlarged. The mildew of roots, which destroys potatoes, &c., is usually the *Rhizoctonia*, (Fig. 2.)



Remedies.—Charcoal, ashes, salt, and lime, have all been used successfully as preventives on land much subjected to this calamity. They are sown broadcast.

Experiment in Wheat Culture.

BY SAMUEL DAVIDSON, GREECE.

Secretary of N. Y. State Ag. Society :

SIR—Since the organization of the State Agricultural Society, (as well as county societies,) experiments in that profession have been numerous, and I hope they will redound in much practical good to the agricultural community; and as I have been one of that class of experimentalists, I will take the liberty to give you a few details of one of my own on a field of wheat I harvested last July.

About the middle of June, 1844, I finished breaking up a field containing nine acres, (chained;) harrowed the same about the middle of July, and about four weeks after dragging, I cross plowed the same; after plowing, I harrowed it again, and on the 10th of September I finished plowing the third and last time; after which, I divided the field into six parcels, of which the following is a diagram, and treated as hereinafter mentioned.

No. 6 contains 329 square rods.	No. 3 contains 153 square rods.	No. 2, contains 256 square rods.
106 bushels and 14 pounds.	39 bushels 47 pounds.	42 bushels 32 pounds.
Part flint, and part bearded Tuscany.	All flint.	All flint.
No. 5 contains 315 square rods.	No. 4, contains 126 square rods.	No. 1, contains 210 square rods.
77 bushels.	21 bushels 20 pounds.	37 bushels 20 pounds.
All bearded Tuscany.	All flint.	Part flint and part bearded Tuscany.

No. 1. Sowed as above prepared.

No. 2. I put on sixteen bushels of horn shavings.

No. 3. I put ten bushels of horn shavings and fifty bushels of leached ashes.

No. 4. I put fifty bushels of leached ashes.

No. 5. I put one hundred bushels of leached ashes and one barrel of salt; and on

No. 6. I put one hundred bushels of leached ashes, one barrel of salt, and twenty bushels of horn shavings. The above were all applied to the ground before the wheat was sowed.

On the 19th of September I sowed my wheat, which was all well brined and limed, and all harrowed the day it was sowed; and on the seventh day of July last, I commenced harvesting the above, (which was fully ripe for the sickle,) and in harvesting, putting in the barn, threshing, measuring, and weighing, the several parcels were kept separate—and the product of each

piece is set in its proper place in the above diagram.

The whole expense of salt, ashes, and horn shavings, was eight dollars and forty-five cents, on the ground; two days' work with a team, in spreading the ashes, three dollars—which was done with a shovel, and out of the cart; one day sowing the salt and horn shavings, seventy-five cents. The whole amount of extra expense (from the usual course of fallowing without manure,) does not exceed twelve dollars and twenty-five cents.

The two varieties of wheat, the flint and bearded Tuscany, as marked in the diagram, weighed as follows: Flint 64 pounds to the bushel, and Tuscany 66 pounds.

As much has been said in agricultural journals about guano, and its fertilizing properties, ascertained from analysis, I have come to the conclusion that every farmer may make some tons a year of an equal fertilizer, and at a trifling expense per ton, compared to guano.

Within the last twelve months, I have prepared and applied several tons, with satisfactory results. One instance I will here state, after telling the manner of preparing the above mentioned substitute.

To one barrel of human urine, I add six pounds of sulphate of magnesia; after dissolving the salts, I mix this with as much dry gypsum as will form a mass about the consistency of leached ashes; of this I apply three bushels per acre, to grass or plowed land.

On the first of May last I commenced plastering with dry plaster a field of six acres, (old meadow;) on the first acre I put three bushels of dry plaster; the next two acres I put the above preparation three bushels per acre; on the balance of the field I put dry plaster, three bushels per acre; I then turned the sward over and prepared it with the harrow for corn, and planted it. When the corn came up, I put dry plaster over the whole alike, and tilled it all alike. The last of September I chained off an acre of that which had the compound on, and another beside it of equal quality of soil, and each were husked separate; the first yield was one hundred and twenty-two bushels, and the other ninety. So my thirty-two bushels did not cost to exceed one cent per bushel.

Greece, Monroe co., N. Y.

DROUGHT.—The southern portion of Monroe, and a part of Livingston county have suffered very severely from a lack of rain, in the months of July and August. Potatoes and corn have been much injured, and will not average more than half crops. The dry weather has greatly favored the multiplication of insects, such as grasshoppers, bugs, ants, worms, flies, &c., which have eaten, and otherwise destroyed crops to a vast amount. Misfortunes of this kind seem to be without remedy.

Monroe County Agricultural Society.

Fair to be held in Rochester, on Thursday and Friday, Oct. 15 and 16.

At a meeting of the Monroe Co. Ag. Society, held on the 11th of August, 1846, it was voted to hold the next Annual Fair and Cattle Show in Rochester, on the 15th and 16th days of October ensuing.

The Awarding Committees on the Premium List* were appointed as follows:

CATTLE.

CLASS I.—*Thorough-bred Durhams, Herefords, Devons, and Ayrshires.*—Thos. Weddle, Rochester; Allen Frost, Brighton; Gideon Ramsdell, Perrinton.

CLASS II.—*Native or Grade; Bulls, Steers, and Fat Cattle.*—Samuel Miller, Penfield; Thos. H. Hyatt, Rochester; John Row, Riga.

CLASS III.—*Native or Grade; Working Oxen, Milch Cows, and Heifers.*—Well. Springer, Henrietta; Wm. R. Booth, Gates; Sylvester Tracy, Penfield.

STUD AND MATCHED HORSES.

Gen. Theron Brown, Wheatland; Oliver Culver, Brighton; Henry Paddock, Penfield.

MARES AND COLTS.

Jirah Blackmir, Wheatland; Joseph Christopher, Brighton; Joseph S. Huxford, Riga.

SHEEP.—*Long or Coarse Woolled.*

Mattathias Garritt, Gates; Gen. R. Harmon, Wheatland; Wm. C. Cornell, Henrietta.

SHEEP.—*Fine Woolled.*

Ashbel A. Hosmer, Riga; Komanta Hart, Brighton; Caleb K. Hobbie, Irondequoit; Mr. Robinson, Chili; Robert Staples, Sweden.

SWINE.

S. P. Gould, Brighton; Elishu Kirby, Henrietta; Mills Landon, Ogdens.

FIELD CROPS.

John H. Robinson, Henrietta; F. P. Root, Sweden; C. F. Crosman, Brighton.

BUTTER AND CHEESE.

Alfred Fitch, Riga; H. N. Langworthy, Irondequoit; Elisha Harmon, Wheatland.

HONEY AND SUGAR.

Geo. C. Latta, Greece; Oliver Harroun, Ogdens; Asa Adams, Riga.

HORTICULTURAL.

L. B. Langworthy, Rochester; Asa Rowe, Sweden; J. W. Bissell, Brighton.

NON ENUMERATED ARTICLES.

Geo. L. Beckwith, Henrietta; Hall Colby, Greece; B. Wing, Irondequoit.

AGRICULTURAL IMPLEMENTS.

Wm. Otis, Gates; Roswell Hart, Brighton; B. F. Smith, Rochester.

PLOWING MATCH.

Elisha Harmon, Wheatland; John H. Robinson, Henrietta; Dennis Church, Riga.

LADIES DEPARTMENT.

James H. Watts, D. D. T. Moore, Rochester; H. S. Potter, Pittsford.

Ladies.—Mrs. F. P. Root, Sweden; Mrs. H. S. Potter, Pittsford; Mrs. Dr. Brown, Rochester.

COMMITTEE OF ARRANGEMENTS FOR FAIR.

Jas. P. Fogg, D. D. T. Moore, Jas. H. Watts, Wm. Buell, J. W. Bissell, Nathaniel Hayward.

* The Premium List was published in the May number of the Farmer. In addition to the List then published, the Society, at its recent meeting, determined to offer the same premiums on *Fruits and Vegetables* as were offered last year, as follows:

FRUITS AND VEGETABLES.

For the best 12 varieties of apples, 3 of each,\$2 00
 Second best, do., vol. Transactions.
 Third best, do.,two vols. Genesee Farmer.
 For the best dozen pears, plums, peaches, and quinces, 1 00

For the best new seedling apple, pear, and peach, each, vol. Transactions.
 For the best sample of grapes ripened in the open air, 2 00
 Second best, do., vol. Transactions.
 Third best, do.,two vols. Genesee Farmer.
 For the best two each, of musk melons, water melons, pumpkins, squashes, and egg plants, 1 00
 For the best two heads each, of cauliflower and brocoli, 1 00
 Best six each, of beets, carrots, parsneps, turneps, sal-sify, celery, cabbages, onions, and tomatoes, each kind, 1 00

Washing Clothes.

MR. EDITOR:—I read in your paper a desire to hear from the Ladies—farmer's wives, I mean. I have lately found a new way of Washing, which I think is a great help, although I never saw it in print. It consists in using turpentine.

My mode of using it is, to take the men's week shirts Sunday evening, and put them into cold water to soak until morning, when I place them in a chaldron kettle, with a good suds, and add the turpentine, and set them a boiling till after breakfast, say one hour. I then take them into a barrel and pound them hard; rub them on a wash-board, soap them, and lay them by till their time comes to boil again, and spread them on the grass. I use two table-spoons full of turpentine to three or four pails of water. MARY P.

Batavia, June 21, 1846.

THE Editor is indebted to Mrs. SAMUEL DAVIDSON of Greece, for the following recipe:

Take 2 gallons soft soap; a like quantity of rain water; 2 lbs. sal. soda, and 1 tea-cup full spirit of turpentine: beat them well together.—For suds use 1 tea-cup full of the above compound to a pailful of rain-water, and boil from 15 to 25 minutes, when it is ready for use. This preparation is said to save half the ordinary labor of washing clothes.

Western New York Agricultural School.

THE Proprietors of this Institution have pleasure in announcing to its friends and the public that its second term will commence, under the most favorable auspices, on the 20th of September next. The year is divided into four quarters of 11 weeks each, but no extra charge will be made to permanent pupils staying a year, for board and tuition during vacations, if they remain at the School.

The studies pursued are Chemistry with the practical analysis of soils, fertilizers, &c.; Geology, Botany, Comparative Anatomy with dissections, Physiology, Natural History, Book Keeping, Surveying, Practical Farming and Gardening, beside the study of the Languages and Mathematics, as usually taught in colleges. The undersigned have secured the services of Mr. R. K. SANFORD, of Fulton, a gentleman of high mathematical and literary attainments, to aid them in the Literary Departments of the School.—They have also a Primary Department for giving lessons in all branches of a good English Education. Whatever pursuit the student may wish to follow in after life, it is the purpose of those having charge of this Institution, to qualify him for its duties, to the extent of a thorough, practical education, embracing a liberal range of the Natural Sciences.

When the weather is suitable for out door work, pupils will labor from one to two hours a day, receive instruction in rural affairs. Strict attention will be paid to their morals. They will board in the family of the Principal, and attend church with the same.

TERMS \$25 a quarter, or \$100 per annum including board, washing, tuition, lights, and firewood.

DANIEL LEE,

RAWSON HARMON, Jr.

Wheatland, Aug. 25, 1846.

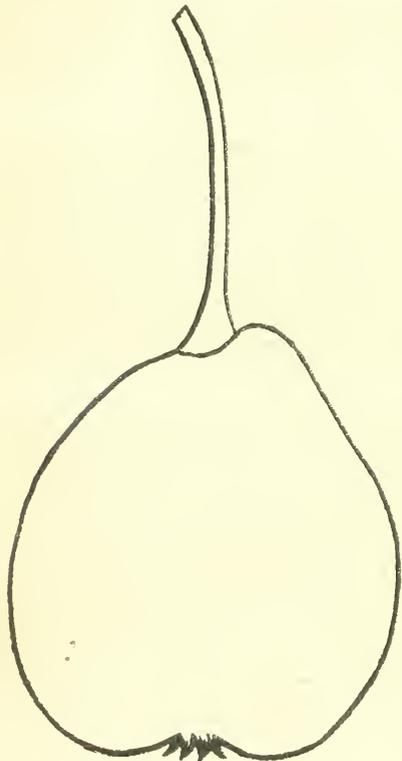
HORTICULTURAL DEPARTMENT.

BY P. BARRY.

Fine Summer Pears.

WE give below figures of four very fine varieties of Summer Pears, which we have tested fully, and recommend with confidence to those embarking in the culture of this delicious fruit. The figures are from specimens of this season's growth, and the notes accompanying were made as the fruit ripened.

The culture of the Pear is but beginning to receive due attention, throughout a great portion of the country. Only in a few of our best gardens a good early pear is to be found; rarely any appear in our markets, indeed, we may say. The one is the "Summer Bell," an inferior coarse variety, which we hope will soon be supplanted by the really delicious sorts, among which are the following:

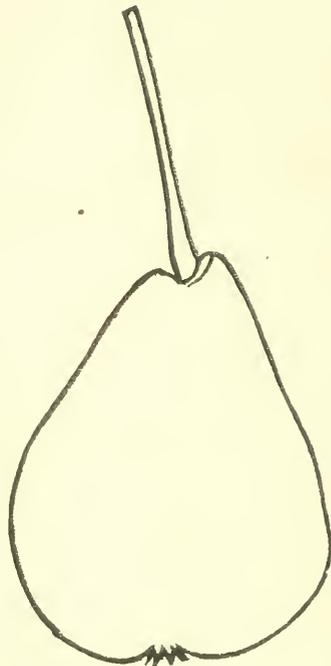
FIG. 19. *Madelaine*.

Madelaine—(Fig. 19.)—This is an unsurpassed early variety, ripening from the 20th to the end of July. Fruit about medium size; regular top shaped, with a little knob on one side at the base of the stalk. Stalk $1\frac{1}{2}$ to 2 inches long, stout, and usually curved. Eye nearly even with the surface of the fruit. Skin pale green, assuming a shade of lemon color when fully ripe—with frequently a slight tinge of red

on the sunny side. Flesh white, delicate, melting, and sweet, with abundance of fine flavored juice. The tree is a vigorous, upright grower, with rich, glossy, flat leaves.

It succeeds equally well on the quince and the pear stock. This season we had a young tree, only two years planted out and four years old, that produced a fine crop. The fruit hung in clusters of 4 to 6 full, well grown specimens in each. Mr. J. M. WHITNEY of this city, has a fine standard tree which has been bearing for many years, and produces, annually, abundant crops.

Skinless—(Fig. 20.)—This is an excellent variety ripening with us about the first of August, immediately after the *Madelaine*. Fruit medium, or rather below medium size; regular pyriform shape—obtuse, and generally somewhat wrinkled at the base of the stem. Stalk slender and about $1\frac{1}{2}$ to 1 $\frac{3}{4}$ inches long. Calyx pretty large, and open nearly even with the surface.—Skin very thin, pale green, becoming light yellow at maturity, with a sprinkling of dull red spots on one side.—Flesh white, juicy, melting, and fine flavored.

Sanspeau or *Skinless*. FIG. 20.

The tree is a rapid, handsome grower, vigorous and erect, with rich shining foliage. The fruit is produced in fine clusters. The specimens before us are from a standard tree some 7 years old. We have not yet tested it on the quince, but think it will succeed well.

Belle de Bruxelles, or Belle d'Aout.—(Fig. 21.)—This is every way a splendid fruit—as yet quite scarce in this country—ripening with us from the 10th to the last of August. Large, pyriform, quite broad at the base and tapering regularly into the base of the stem, where it is usually a little wrinkled. Stalk an inch and a half to 2 inches long, stout and curved, with generally a flesh knob on the extremity next the tree. Calyx quite open, even with the surface. Skin rich yellow at maturity, covered with small green specks and a tinge of red on the exposed

side. Flesh white, fine grained, melting, juicy, sweet, and fine flavored. The tree is a very rapid, strong grower; it bears early, and the most abundant crops, particularly on the quince. The specimens before us are from a tree only 3 years old on the quince, about 5 feet high. It bore this season some 60 specimens, and at the same time made shoots 3 feet long now. All in all we consider this the finest variety we have of its season.

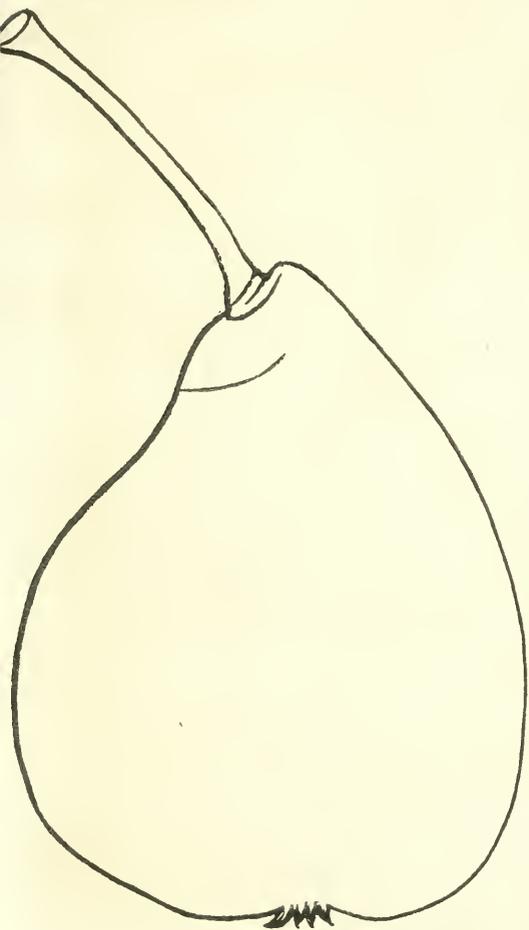


FIG. 21. *Belle de Bruxelles, or Belle d'Aout.*

Dearborn's Seedling—(Fig. 22.)—This fine fruit has already acquired an extensive popularity among pear growers. It is an American fruit, originated in Massachusetts, in the garden of Gen. DEARBORN, one of the early supporters and once President of the Massachusetts Horticultural Society. Fruit rather below medium size; form very regular, top shaped or turbinate. Stalk about an inch long, rather stout, set in a slight hollow. Calyx open in a shallow basin, slightly furrowed. Skin pale green, very smooth, becoming yellowish at maturity, and sprinkled with minute dots—generally a little russet around the base of the stem. Flesh white, melting, with

abundance of high flavored juice. The tree is a rapid upright grower, and is a great bearer as a standard.—

We picked a fine basket of fruit from a graft, inserted on a large tree 3 years ago.

It grows well on the quince, but we have not yet had it bear. Mr. DOWNING says—“It bears the most abundant crops in every soil, and is one of the most

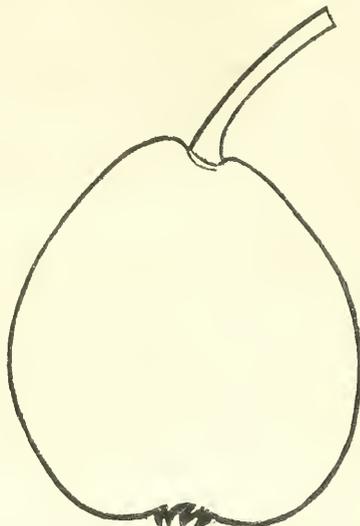


FIG. 22. *Dearborn's Seedling.*
desirable early varieties.”

Acknowledgments.

WE have received from Mr. A. HUDEKOPER, Meadville, Pa., specimens of the fruit and some scions of what he calls the “Mumford” apple, “named after the individual on whose farm it originated.” The specimens are over ripe, and somewhat cracked and bruised by carriage so that their flavor and appearance are changed; but, we are sure they are the “Sweet Bough,” a fine apple extensively cultivated here. The scions were dried up. If they had been wrapped in a little damp moss, they would have reached us in good condition. A scion cannot absorb moisture at the end, from a potato, to keep it fresh an hour, at this season.

From Mr. ZERA BURR of Perrinton, beautiful specimens of “Summer Vergalieu” Pear. This is a fine fruit, and said to have originated here in the West, but we doubt it. We think it is identical with the “Doyenne d’Ete” of the French, though it seems to ripen sooner—at any rate it is a delicious Pear, and quite Doyenne in its appearance.

Also—samples of two very nice early seedling Peaches, “Slocum” and “Arnold,” originated in Perrinton, near Mr. BURR’s. They are both white fleshed, juicy, pleasant peaches, nearly equal in quality to the Early Purple, and ripening about the same season. What we want here, most of all, is a good Peach that will ripen about the 1st of August. The “Tillotson” is said to ripen then, but we think it does not so soon. Will some one who has it bearing inform us precisely?

From Mr. J. S. MOTT of Williamson, specimens of what he calls the “Barrel” apple, but which we believe to be the Porter. If Mr. MOTT will be kind enough to send us riper specimens, we will be better able to determine.

Watermelons.

VERY fine Spanish Watermelons, well ripened, were brought in on the 7th August, by Mr. H. N. LANGWORTHY, of Irondequoit. Mr. L. has a grand bed of melons, which we saw a short time ago.

Imperial Watermelon.—Splendid specimens were presented by Mr. DONNELLAN, of Greece, on the 20th of August.—This is the finest of all watermelons we have ever seen, and are grown by Mr. DONNELLAN in the greatest perfection. We may add that Mr. D. grows the finest vegetables that come to our markets, and they are always secured by connoisseurs.

Notice of Cherries.

(Continued from our last.)

American Amber.—This is a beautiful and wonderfully productive Cherry—roundish, of medium size, amber ground, mottled with red. The flesh is tender and agreeable. It belongs to the Heart cherries. The tree is a rapid, fine, lofty grower, rather irregular in its outline.—We esteem this cherry very highly—ripens latter end of June and beginning of July—picked the last of ours on the 3d July this season.

Gridley.—This is an enormous bearer, and is one of the firmest and best for carrying to market that we know of—hence, it is sometimes called the "Apple Cherry." It is a native of Massachusetts—fruit roundish—not quite so large as the Black Heart. Skin dark brown—black when fully ripe. Flesh purple colored, pleasant and high flavored. Ours were ripe this season during the 2d and 3d weeks of July. It belongs to the Heart cherries, and is a very rapid, upright grower.

Sparhawk's Honey.—This is one of the very finest late cherries, ripening the 2d and 3d weeks of July. Size medium; roundish form, and a beautiful amber red color all over. The skin is very thin, and the flesh delicate and sweet. The tree is a splendid grower, with a conical head, and fine, large, rich looking foliage. To our taste, no othersweet cherry is superior to this.

Belle Magnifique.—A very large and beautiful French cherry; roundish, light red, juicy and acid; very valuable for cooking and preserving. Ripe with us about the last of July, and hangs a long time on the tree. Mr. DOWNING classes it with the Morellos, but we think it more properly belongs to the Dukes. It is similar in growth to the Belle de Choisy, but somewhat stronger.

Carnation.—This is a beautiful and valuable late cherry, ripening the latter end of July.—Form round; color yellowish ground, mottled with red. Flesh tender, abounding with a sprightly acid juice. Like the preceding one it hangs long on the tree, and is not annoyed by the birds. Fine for cooking and preserving, and relished by many for the dessert, when fully ripe. The tree is low and spreading, but vigorous and hardy.

Morello.—There are several sorts of Morello, but the finest of all, and indeed the only one we have seen worthy of cultivation, is what is known as the "Large English Morello." This is really a splendid fruit—large as a May Duke, roundish, dark purple color, nearly black. Tender, and abounding with rich purple juice. Valuable for cooking and preserving, pleasant eaten from the tree when fully ripe. Ripens latter end of July and part of August.

This variety is yet quite scarce in this country. The finest crop of cherries we have seen this season, was on trees of this variety, in the

gardens of Mr. ARNOLD and Mr. JAS. H. WATTS, of this city. Specimens from the latter gentleman were exhibited, in good condition, Aug. 20th. This cherry should be in all collections, large or small.

Notice of Choice Hardy Roses.

(Continued from our last.)

CLIMBING ROSES, FOR COVERING PILLARS, ARBORS, &c.

Queen of the Prairies.—This is one of the very finest of all climbing roses. Its growth is exceedingly rapid and vigorous, making strong shoots in one season 12 to 15 feet and upwards. The foliage large and rich; flowers produced in immense clusters, very large and double, of perfect form, and rich deep pink color, with now and again a delicate white stripe. This is a superb American production, and is already, as it ought to be, in all the finest gardens of this country, and indeed of Europe.

Baltimore Belle.—This is another superb climber, of the Prairie class; grows nearly as fast and as vigorous as the preceding. Flowers pale blush, or rose color—produced in great clusters.

Felicite Perpetuelle.—This belongs to a class designated as "Evergreen," as they hold their foliage until very late in the season. It is a very rapid grower; foliage deep green and glossy.—Flowers of medium size, very double and perfect in form, of a pale delicate blush, and produced in great clusters. It requires slight protection, but is worthy of this care as it is a most exquisite rose.

Blush Boursault.—A most vigorous grower, very hardy, and a fine bloomer. Flowers blush with a pink centre, produced in large clusters; begins to bloom early, and continues a long time.

Maheka.—Growth and habit similar to the preceding. Flowers semi-double, deep purplish pink, with white centre and white veins. A most profuse bloomer; flourishes every where.

Michigan, or Detroit.—This is well known. Flowers single, bright pink, changeable; hardy, of very rapid growth, and blooms in the greatest profusion—and that, too, when the summer roses are gone.

Ayrshire Roses.—The Blush, White, Pink, and Crimson Ayrshires are all fine hardy climbers, and have pretty small, delicate flowers.—They grow from 10 to 15 feet in a season, and will creep over and cover any disagreeable object in a garden or else where with wonderful rapidity.

DRY WEATHER, and swarms of Grass-hoppers, have together completely ruined all our flowers. Not only the buds, but the very leaves are eaten off our fine Dahlias. It is too vexatious, but it can't be helped. It will be unfortunate for the exhibitions. We hope it is not so in many other places.

Fruit Trees—Budding and Grafting.

As it is the season, Mr. Editor, when fruit trees are usually inoculated, I beg leave to say a word or two on the subject of budding. It is so generally said that grafting should be done in the spring, and budding in the summer, that most persons suppose that neither can be done to any good purpose at any other time. I am satisfied, however, from experience, that this is a mistake, and that both can be done successfully, either in the spring or summer, and that whenever the trees are in a fit condition for budding they are also so for grafting. In the spring the buds should be taken from scions cut early, and as there is no foot-stalk of the leaf to take hold of, in inserting the bud, the slice of wood should be made longer above the bud, say three quarters of an inch, by which the bud may be pushed into place, and a part of it then cut off.

When scions are cut in July or August, for grafting, the upper part of the leaf should immediately be cut off, leaving the stem; and, if they are not to be put in the same day, the lower part of the scion should be inserted in a potato to keep it damp. Where grafts can be got in the neighborhood, August is quite as safe a time to insert them as in the spring, and there is less danger of the scions being spoiled by improper methods of preserving them. I have a pear tree in my orchard in which I put ten or twelve buds this spring of the Virgalieu Pear, budding the branches about half way from the tree, and cutting off the limb as soon as the bud had taken; the growth has been very good, and each bud averages now over a foot in length.

Watering.—While speaking of fruit trees, I would say an additional word about the right time to water those that have been transplanted.—Many persons lose their trees by an indiscreet pouring on of water in the morning and evening, during the hot season. From the little attention I have given to the subject, I would suggest as the best time to water trees, that it should be done when it rains. It may seem at first like carrying coals to New Castle to do this; yet it works well in practice, and is probably not wrong in theory. It is a very heavy shower when there falls an inch of rain, and most frequently showers produce but a quarter of an inch, which is quite inadequate to reach the roots of a tree.—Now, if a sufficient quantity of well rotted manure is mixed with the ground at the planting of a tree, it will keep the earth from packing, and the soil will absorb three or four buckets full of water almost as fast as they can be poured on. This, if done when it rains, and when the best kind of water for the purpose can so easily be obtained, will last a tree for some time, generally longer than the interval between rainy days in the summer season. Any person who has watered a newly transplanted tree or shrub, when the hot sun has shone upon the ground immedi-

ately afterwards, must have perceived the bad effects of doing so. By watering during a shower you avoid this, and the top of the tree being wet by the rain and moisture of the air, the flow of sap is increased and the watering of the roots comes at the right time to be of service to the tree.

Our crops here this season, of every kind, are remarkably good, both in the field and garden.

Truly yours, A. H.

Meadville, Pa., July 28, 1846.

Blight in the Pear Tree.

In an article on this subject, in the Aug. No. of the Horticulturist, Mr. DOWNING suggests, as a preventive to the "frozen sap blight," to *whitewash the stems and principal branches of all valuable Pear Trees in the autumn, after the leaves have fallen.* It appears quite reasonable that a coat of whitewash may in some degree prevent that form of blight, induced by sudden freezing and thawing in winter. The "insect blight" is the most annoying in our region. Many fine pear trees have been lost by it within a few years.—The poison is deposited in the tops of the branches, and spreads so rapidly that, if not observed and cut away at once, it is difficult to save the tree. *Cut in time is the remedy for this.* We have been told by many that they have cut nearly all their trees away, and could not arrest it; reason, they did not begin till it was too late.

This summer we had a *Golden Reinette* apple tree, a dwarf, loaded with fruit, attacked with the insect blight, and we saw gum oozing from the place where the branches were stung. We at once cut off, clear below where the least indication of the disordered sap was visible; and we visited the tree daily for some time, repeating the operation, and so we saved it. Vigilance and prompt action in this, as in many other matters, are indispensable. On our way up the valley a few days ago, we saw 3 or 4 beautiful large pear trees, all black and dead; last year the same trees were healthy and luxuriant, and bore a fine crop. A little timely attention would undoubtedly have saved them, and a great saving it would have been. Their owner will probably exclaim, "I will plant no more pear trees. It's no use."

Swainstone Seedling Strawberry.

THE two leading Horticultural journals seem to differ very widely regarding the merits of this celebrated new fruit, of which much has been said. Mr. HOVEY says in his Aug. No., that it has been "grown about Boston these four years, and has proved wholly unworthy of general cultivation." Mr. DOWNING, in the first number of the "Horticulturist" says that a year ago he sat on a "Committee of taste" at one of the exhibitions of the Society there, where all the leading kinds were exhibited, and that "nothing there seen or tasted, surpassed, or even equalled the Swainstone in point of high flavor." He also adds that he has it full bearing himself, and that "it is certainly a strawberry of the highest flavor, of great beauty of appearance, and an excellent bearer." Who is right?

The Fastloff Raspberry.

THIS new and fine fruit is figured in both the "Horticulturist" and Hovey's Magazine" for August. Hovey's figure is more than one-third larger than DOWNING'S. Indeed the difference is so great as to exclude all similarity. The conclusion we naturally arrive at, is that one is wrong.—Who is right? HOVEY says he procured his drawing, which is really a very beautiful one, from Messrs. YOEUELL, of England, who have the credit of introducing the fruit.

It has borne with us the past season. The fruit was very fine, and would correspond with the figure in the "Horticulturist," but they received no extra care or culture. At any rate, it is a valuable fruit, and should be in every good garden. Mr. DOWNING says it proves itself worthy of all the praise that has been lavished upon it.

A YOUNG MAN in Springfield, Mass., was recently fined \$20 and costs, for stealing cherries, and for mutilating the tree in the operation.

Horticultural Society.

The Fall Exhibition of "*The Horticultural Society of the Valley of the Genesee*" will be held on Thursday, the 10th day of this month, in the MINERVA HALL, Rochester. It is the most spacious and beautiful public room in the city, and will afford ample facilities for the exhibition of everything that may be presented, as well as accommodation for the vast number of persons who will naturally desire to be present.

This exhibition should be, and we have reason to expect it will be, the finest, by far, ever witnessed in Western New York—notwithstanding our scanty fruit crop, and the injury sustained by all gardens during a severe and protracted drouth. We do hope and expect to see a popular spirit, in relation to it, manifested by those who ought to be the patrons of Horticulture throughout the Valley. Indeed, every man who has a garden or orchard should feel it to be his duty to contribute something. A little should by no means be withheld because it is *little*; if it were but a *single specimen* of a fine fruit, flower, or vegetable, *bring it in*.

Remember that, on such an occasion, much may be learned by those seeking information on the subjects of fruit growing and gardening—enough to pay any man for a 50 or 100 miles journey. You have an opportunity of seeing the finest productions—of becoming acquainted with the best cultivators, and of collecting facts that may be of infinite service to you hereafter.

It is hardly necessary to make a special call upon the LADIES to interest themselves in this matter. We never yet saw a Horticultural Exhibition that did not furnish beautiful evidence of their taste and services; and we will only express the hope, that, on this occasion, they will be *no less active than usual*.

The State Fair at Auburn.

It is expected on all sides that this Fair will come off in the grandest style, eclipsing all its predecessors. Thousands of persons will be there from distant parts, and will expect great things from a region so famously fertile as Western New York. We should suppose that every man would naturally feel a desire to sustain the high reputation of his soil, and would need no urging to labor a little, for that purpose, on a great public occasion like the present. Not only should samples of the products of our broad and fertile fields, and fine stock be sent there, but the "Horticultural Hall" should be enriched with the fruits of the Garden and the Orchard. On this subject we would address the same remarks to our readers that we have done in relation to the Horticultural Exhibition, and with equal, if not greater emphasis.

SALT, or brine, is good for the Plum Tree, Asparagus, and Onions.

To Correspondents.

MR. JOSEPH PENNINGTON, *Maccon Mich.*—To reply to all your inquiries relative to the best time and mode of transplanting trees, growth of roots of the several kinds of fruit trees, &c., would require more space than we can at present spare for that purpose. We will simply state, however, that transplanting may be done with perfect safety, in your region, both in Fall and Spring. * In fall, from the middle of October or fall of the leaf, till the middle of November, or the approach of severe frosts; and in the spring, from the thawing of the ground, till the opening of the leaf-bud. Several circumstances connected with the matter must be kept in sight. For instance—trees should not be planted in the fall, where the ground is wet, and the situation much exposed; nor should tender or half hardy trees be planted in the fall, except necessity requires it—and then they should be carefully protected from the weather.

We do not recommend *deep* holes for trees, but *wide*, and only deep enough to admit of a few inches of good soil in the bottom, and the tree to stand in point of depth as it did before removal.

The object in putting good soil under the tree is to promote the growth of young roots. There is no danger of it causing the roots to run down into the poor sub-soil; roots will always run in that direction in which they find the most congenial nourishment.

The Apple, Pear, Peach, Plum, and Cherry will all flourish on any good tillable land. When a choice is at hand, you may discriminate in this way: give to the Apple, Pear, and Plum, your heavier and richer soil, and the Peach and Cherry the dryer and lighter. The plum generally succeeds best in a heavy soil. But a week ago, we saw in the garden of H. N. LANGWORTHY, of Irondequoit, one of the heaviest crops of Bolmar's Washington, that we remember to have seen, and his soil is dry, loose, and quite sandy. Here are all the fruits usually cultivated, Apples, Pears, Peaches, Plums, Appricots, Cherries, Grapes, &c., and the finest Melons, all grown in a rare state of perfection, on the same sandy soil. It is, however, well manured and well cultivated every way. We would recommend to Mr. PENNINGTON, and others interested as he is in fruit culture, to procure Thomas' "Fruit Culturist," price only 50 cents, or Downing's "Fruit and Fruit Trees," price \$1.50. They are both good works; the latter, particularly, is very full and complete. We have handed the enquiries about the Squash to the Seedsman, who will give an explanation of the error.

We have made enquiries in relation to the Squash seed, and learn that those sold by the Rochester Seed Store, were raised by Mr. LANGWORTHY, one of the best vegetable growers in this section, but it is almost impossible now-a-days to get pure squash seed of any kind. The Cuslaw of Mr. L., is about 14 inches long, and 10 or so in diameter, striped green and pale yellow, and first rata quality.

MR. ISAAC CUSHMAN, *Concord Mich.* :—Trees can be sent from this place to Michigan with perfect safety, either in fall or spring. The former season, however, is preferable, as in the spring you have to wait for the opening of navigation. As to time for planting, see reply to Mr. PENNINGTON, above.

With regard to the enormous product of the Pear tree alluded to in a previous number, we think you need not doubt the truth of it. We do not, large though it be. The fact was communicated in the following manner, by the Rev. H. W. BEECHER, of Indiana, through Hovey's Magazine a few years ago, and is quoted in Downings Fruit and Fruit Trees: "One of the most remarkable pear trees in this country, is growing in Illinois, about ten miles north of Vincennes. It is not believed to be more than 40 years old, having been planted by Mrs. Ochletree. The girth of its trunk one foot above the ground, is *ten feet*, and at nine feet from the ground, *six and a half feet*; and its branches extend over an area of sixty-nine feet in diameter. In 1834, it yielded 184 bushels of pears; in 1840, it yielded 140 bushels. It is enormously productive always; the fruit is pretty large, ripening in early autumn, and is of tolerable flavor."

Do you longer doubt?

MR. H. PAIGUN, *Hamburg, N. Y.*—Scions can be cut any time after the wood is ripened, say latter part of October, and carried any distance. They may be packed in moss, slightly moistened. Many prefer cutting scions in the fall, on the ground that the buds are saved from the severity of winter, and the risk of being killed.

To Subscribers in Arrears.

On the commencement of the current volume we mailed the Farmer to most of the old subscribers, and requested all who did not wish to continue it to return the first number. To those who did not comply with this request the paper has been regularly forwarded—as we presumed they desired to continue it as permanent subscribers. A great majority of those to whom the Farmer was thus sent have forwarded their subscriptions—many sending pay for this and the next volume, and others for clubs of new subscribers. But there are still several hundred from whom we have not heard—probably owing to the inconvenience of mailing 50 cents. To such we would remark that their subscriptions will be very acceptable at the present time—and if they will each send \$1, we will credit them for this and the next volume; or, if preferred, they can remit 50 cents for this year, and the same amount for some friend who may want the paper. As it is necessary for us to settle our accounts soon, preparatory to the commencement of vol. 3, we trust all who are interested in this notice will give their early attention.

☞ We send (in this or next number,) a printed notice to those who are in arrears. Should any who have paid receive "notice," they will please inform us to whom their subscriptions were paid, and the mistake will be promptly corrected. If properly mailed, \$1 may be sent at our risk, and (in this case,) we will pay postage.

August 1, 1846.

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, September, 1846.

Valuable Farm for Sale!

 SITUATED half a mile south of Ogden Centre, Monroe county,—ten miles west of Rochester, and two miles south of Spencerport on the canal. The main farm contains 130 acres—but 70 acres adjoining will also be sold if desired by the purchaser. On the principal farm the buildings, &c., are good: a large, two story frame house with kitchen and wood-house in the rear; two good barns, one 30 by 40, the other 30 by 75. The 70 acres has a small frame house. There is a good well, and several living springs on the premises: also an excellent Orchard, principally of grafted fruit.

The farm is not considered second to any other in town. 175 acres of it under good improvement—with plenty of fencing timber, &c. It is excellent wheat land. There is 90 acres of wheat now on the ground, and all of the land on which it is growing was well seeded to clover the past spring.

Terms made easy, to suit the purchaser. Inquire of the subscriber on the premises, or of D. D. T. MOORE at the office of the Genesee Farmer.

Ogden, June, 1846.

JESSE HARROUN.

More Paulnar Merino Bucks.

I have procured another lot of Paulnar Merino Bucks from the celebrated flock of S. N. Jewett, of Vermont. For sale by R. HARMAN, jr.

Wheatland, August 26, 1846.

Bags! Bags!! Bags!!!

THE Subscriber, wishing to dispose of his stock of Grain Bags, has reduced the price, and Farmers or others wishing will do well to call, see quality and buy, which I am confident they will do. To be found at E. Watts Hard-ware Store.

Rochester, Sept. 1, 1846.

JAMES H. WATTS.

[9-2t]

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, Rochester, Sept. 1, 1846.

Western Literary Messenger.

VOLUME VII.

ON the eighth of August, 1846, commenced the Seventh Volume of the Western Literary Messenger. Five years have now elapsed since its publication was commenced, and its onward course has been gradual and continual. Though there are seven other weekly publications in Buffalo, its circulation is greater than that of any two of them. Keeping pace with its increase of years and patronage, its reputation has constantly risen; and if we may rely on the opinion of friends who are capable of judging, it now holds an exalted rank among the literary magazines of the day.—Some of the finest talent of the country has been and will continue to be enlisted in its behalf. The sixth volume contains original contributions by ALFRED B. STREET, W. H. C. HOSMER, H. H. CLEMENTS, PROF. A. C. KENDRICK, HORATIO GATES, DR. W. BOWEN, MRS. E. J. EAMES, MISS H. E. GRANNIS, MRS. A. C. CHAMBERLAIN, and several other promising writers of no less talent and scarcely less notoriety than some of those enumerated. In commencing another volume, we are promised the aid of several other able pens, which will enhance the value and interest of the Messenger. Our news department has lately been enlarged, and studying condensation, we shall in future, be able to publish all the important intelligence, both foreign and domestic. As heretofore, the Messenger will be strictly neutral in politics, and, without being sectarian, will maintain a high moral tone. In short, the utmost exertions will be made to render it an entertaining and instructive family magazine.

TERMS.—Single copies, \$1.50 per annum, IN ADVANCE. The following inducements are offered for the formation of Clubs:—For \$4 remitted to us free of postage, we will send three copies for one year to the address of such names as are requested;—for \$5, four copies—for \$6, five copies—for \$8, eight copies—for \$10, eleven copies.

CLEMENT & FAXON, Publishers, Buffalo, N. Y.

Rochester Weekly American.

The Largest and Cheapest Newspaper in Western New York!

TERMS—\$1 50 if paid in advance; \$2 00 if paid at the end of the year.

THIS splendid Weekly Newspaper is considerably larger than any other printed in the State, and will be sent to subscribers at the above low prices. No postage within thirty miles of Rochester!

The American is an earnest advocate of Whig principles and measures, believing them essential to the welfare of the Nation and the prosperity of Western New York. In its ample columns will be found, at all times, the fullest and earliest news by Magnetic Telegraph and otherwise. Particular attention will be given to furnishing a full and correct report of the Markets, weekly.

The Rochester Daily American, the handsomest and cheapest daily paper west of New York, is afforded at \$5 a year.

Both of these papers are printed on a splendid Napier Power Press, propelled by a powerful steam engine. JOB WORK done at the shortest notice, and in a style unsurpassed in Western New York.

Office of the Daily and Weekly American in Talman Block, No. 21 Buffalo street, Rochester, N. Y.

July, 1846.

JEROME & BROTHER.

Seed Wheat.—100 bushels Gen. Harmon's celebrated White Flint Wheat; also, 50 bushels Soule's do., just received, and for sale at the Genesee Seed Store, by [9-tf] RAPALJE & BRIGGS.

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

RAPALJE & BRIGGS.

No. 10, Front-st.

MOUNT HOPE BOTANIC GARDEN AND NURSERIES.

Rochester, N. Y.

(South St. Paul st., nearly opposite the Cemetery.)

The Proprietors of this Establishment offer for sale an unusually large and fine collection of

FRUIT AND ORNAMENTAL TREES,
FLOWERING SHRUBS, VINES AND ROSES, HARDY HERBACE-
OUS PLANTS, DOUBLE PAILLIAS and BULBOUS ROOTS:
GRAPE VINES, RASPBERRIES, STRAWBERRIES,
AND GOOSEBERRIES; ASPARAGUS ROOTS,
RHUBARB, &c.; HEDGE PLANTS,
GREEN HOUSE PLANTS, &c.

The collection of Fruit Trees comprises the most popular varieties cultivated, and has been grown with the greatest possible care to ensure accuracy. The Proprietors are practical and experienced Nurserymen, and wholly devoted to the business.—all the important operations are either performed by themselves or under their immediate inspection.

Experience has fully proved that the trees grown at this point, in addition to being free from diseases, are better adapted to cold climates than those of any other portion of the United States.

The collection of Apples includes several thousands of the famous new American Apple, the "Northern Spy."

A large assortment of Pears, of the choicest kinds, are propagated on quince stocks for DWARFS and PYRAMIDS, and will bear the first or second year after planting they are admirably adapted for garden culture. A lot of these are now on hand, of extra size, for immediate bearing.

The collection of Ornamental Trees is large and fine, comprising several hundred of the splendid *Paulonia Imperialis*. The catalogue of Roses embraces the most popular new varieties. A great variety are propagated for standard or Tree Roses, 4 to 6 feet high, with fine heads.

Of *Double Dahlias* the assortment is unsurpassed, including the finest show flowers yet introduced to this country, and many that were imported last season at 5 guineas each, of which a separate catalogue will be furnished.

The stock of Green House Plants is very extensive, and includes the most beautiful new Pelargonium (Geranium,) Fuchsia, Camellia, Calceolaria, Verbena, Cactus, &c., &c., all finely grown, and will be sold at greatly reduced prices.

Trees and Plants packed in the best manner, and shipped to any part of the country agreeable to order.

A new edition of our descriptive priced catalogue will be published this month, and sent gratis to all post paid applications. Orders from unknown correspondents should be accompanied with a remittance or reference.

ELLWANGER & BARRY.

Rochester, Sept., 1846.

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 autumn. 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.

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 executed and shipped according to direction. Office 36 Front-st. North-st., 3 miles from the depot. Office 36 Front-st. September, 1846. SAMUEL MOULSON.

Gang Plows.—Wiard's celebrated Gang Plow on hand and for sale (price \$12) at the Genesee Agricultural Warehouse and Seed Store, by

[9-11]

RAPALJE & BRIGGS.

IMPORTANT TO FARMERS!

IDE'S PATENT WHEEL CULTIVATOR AND WIRE GRASS PLOW.

The Farming Public are hereby informed that Letters Patent have been taken out by the Subscriber for his recent great improvements in the construction and manufacture of Field Cultivators: an improvement so great as to entirely revolutionize the whole system of Farming by reducing the expense of cultivation one-half or more.—Wherever they have been introduced they have met the decided approbation of Farmers, as the following Certificates and Testimonials from the intelligent and practical Farmers whose names are attached, abundantly show.

CERTIFICATES:

"This may certify that we, the subscribers, have seen and used the Patent Wheel Cultivator, invented by Nathan Ide, of Shelby, Orleans Co., N. Y., and believe it to be, as a labor-saving machine, one of the greatest improvements of the age. By it a farmer can put in from ten to fifteen acres more of wheat in a year with the same amount of team labor; he can also sow it in much better order. By it also CANADA THISTLES, and other noxious weeds may be totally extirpated. The Farmer having only to break up his fallow in the spring and go over it once a week during the summer, when every Canada thistle will be destroyed. Said Machine is so constructed that it can be regulated to go any depth by means of serews on the upper part of the Machine, and thus either plow up the ground thoroughly or only just brush the surface. Upon the whole we think it decidedly the best machine ever invented for pulverizing the ground and facilitating the labor of the Farmer, and as such we cheerfully recommend it to our brother Farmers.

JAMES H. HEDLEY.

JAMES IDE.

ZADOC WHITNEY,

JOHN STEVENS,

OBED FIELD,

JOSEPH WESTFALL,

ENOS NEWMAN,

HARTAS HEDLEY,

JOHN C. WHEELER,

JAMES P. ANDERSON,

GARDNER BERRY.

JESSE STEVENS.

Shelby, April 23, 1846.

The undersigned have just witnessed the operation of Nathan Ide's Patent Cultivator, and we are free to say that we regard it as a decided improvement on all the implements of the kind now in use for preparing land for wheat and other crops.

DANIEL LEE, Ed. Gen. Far.

WILLIAM BUELL,

RAWSON HARMON,

DANIEL F. ALVERSON,

WILLIAM PAILEY,

WARREN W. SMITH,

PETER SHEFFER, Jr.,

BENJAMIN SMITH,

GIDEON MOTT,

CHAUNCEY GILLET,

LEVI WELLS,

B. T. GILLET,

July 3, 1846.

After these ample Testimonials the Subscriber deems it unnecessary to enter into a long and elaborate description of the implement with its various points and modes of operation. To be fully appreciated it must be seen and used. No farmer who fully understands his interest will be without one, as they are an invaluable implement.

NATHAN IDE, Patentee.

Shelby, Orleans Co., N. Y., July 14, 1846.

P. Seymour's Patent Sowing Machine.

The Subscriber is making arrangements to attend the State Fair held at Auburn, on the 15th, 16th, and 17th of September next, with one of his Sowing Machines, where all who wish can see its operation.

Farmers who wish to engage machines to be made next winter, and mechanics who wish to obtain the right to manufacture them, can there have an opportunity.

A few machines are now on hand, and a few more will yet be finished before sowing time. Those wishing to obtain machines for seeding this fall, will do well to order them immediately. P. SEYMOUR.

East 220 South-st., Aug. 29, 1846.

Rakes—99 dozen I. Stark's superior Hay Rakes, for sale at the Genesee Agricultural Store, No. 10. Front-st., by

[4]

RAPALJE & BRIGGS.

Corn Shellers—A first rate article, price \$10, for sale at No. 10. Front-st.

RAPALJE & BRIGGS.

NEW SEED and IMPLEMENT WAREHOUSE.



GENESEE SEED STORE & 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 of 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.

RAPALJE & BRIGGS.

Rochester, Feb. 6, 1846.

Rochester Agricultural Warehouse.



BY THOMAS NOTT.

THE Subscriber having purchased the interest of Mr. Jas. P. Fogg, (late B. F. Smith & Co.,) in the Agricultural and Horticultural IMPLEMENT BUSINESS, takes this method of informing the Farmers of Monroe and adjoining counties, that they will find it to their advantage to call and examine his Stock of Farming Implements before purchasing elsewhere.

In his assortment may be found the following articles:—

- Burrall's Patent Corn Sheller, price, \$10.
- Cultivators, price from \$5 to \$8.
- N. C. Dayton's Gang Plow, for putting in wheat, \$15.
- Hatch's Seed and Plaster Sower, \$25.
- Delano's Diamond Plow, \$7.
- Massachusetts Sward C Plow with extra points, \$7.
- " Eagle and Eagle No. 25 (3 horse) Plow.
- " Side-hill and Subsoil Plows, \$9 to \$15.

- Straw Cutters, from \$5 to \$15.
- Sanford's Straw Cutter, \$15.
- A complete assortment of Plow Points.
- I. Grant's Patent Fan Mill, price \$27.

A full assortment of AGRICULTURAL IMPLEMENTS, TIN AND WOODEN WARE, and hundreds of other articles too numerous to mention. For sale cheap, by

THOMAS NOTT,

Front st., nearly opposite the Market.

Rochester, July, 1846.

FARMERS, CURE YOUR HORSES!

GEO. W. MERCHANT'S CELEBRATED

GARGLING OIL.

AN Invaluable Remedy for Horses, Cattle and other domestic animals, in the cure of the following diseases:

- | | |
|----------------------|----------------------|
| Fresh Wounds, | Fistula, Stiffast, |
| Galls of all kinds, | Strains, Lameness, |
| Sprains, Bruises, | Sand Cracks, |
| Cracked Heels, | Fouled Feet, |
| Ringbone, Windgalls, | Scratches or Grease, |
| Poll Evil, Callus, | Mange, |
| Sjawsins, Sweeney, | Horn Distemper. |

Also a valuable Embrocation for diseases of the Human Flesh.

AVOID DECEPTION.—It is not generally known, that no means have been left unemployed by that class of persons who attempt to counterfeit every good medicine that has acquired public confidence, to mislead the public mind into the belief that their oil is the same as the Gargling Oil. Be not deceived, therefore, by such *knavery*; and be not satisfied except you find the marks of the *genuine* article upon the bottle.

One gentleman informs that he cured a valuable horse of a *Windgall* which had become callous. Another says he has cured a fine horse of a *Sweeney* which nothing else would effect. Another has cured himself by the use of the Oil, of a *Rheumatism*, and in his family has used it for all complaints requiring an external remedy. Another who had it "on hand" says that he relieved himself immediately of *severe* and continued *pain*, resulting from the setting of a dislocated knee joint which every application made for twenty-four hours had failed to perform; he soon obtained sleep.

It has cured *Foulers*, and is a common remedy for *Galls*, *Sjawsins*, *Bruises*, *Strains*, *Cramps*, *Weakness of the Joints and Limbs*, *Frozen Feet*, *Contraction of the Muscles*, *Scalds*, &c., and if all the facts were told they are so remarkable they would probably not be believed.

For testimonials, synopsis of diseases, and mode of treatment, see pamphlet which accompanies each bottle.

☞ Sold at the ROCHESTER SEED STORE, and by Druggists and Store-keepers in the U. States and Canada.
☞ Also at the GENESEE SEED STORE, Rochester.

AGRICULTURAL IMPLEMENTS.

E. TAYLOR, at his Steam Factory, No. 6 Hill-street, is extensively engaged in manufacturing and dealing in all kinds of AGRICULTURAL IMPLEMENTS. Having during the past year visited all the Agricultural Establishments in Philadelphia, New York, and Boston, and secured the right of many valuable Machines and Implements, he is prepared to furnish, wholesale and retail, all kinds of Agricultural Utensils found in the eastern cities, such as

Grant's Patent Fan-Mills, Corn Shellers, Corn and Coffee Grinders, Corn and Seed Planters, Scythe Snathes, Straw Cutters, Patent Churns, Pitchforks, Patent Parallel Jaw Vices,

together with many other valuable tools, both to Farmers and Mechanics.

He is also extensively engaged in manufacturing *Bate's* celebrated *Patent Sliding Top Chamber Shower Bath*, to be used in chambers or sleeping apartments, without the least damage to carpets—the nicest article in the world! 1100 sold in four months in New York city the past season.

Farmers in want of tools or implements, of any kind, would do well to call and examine. For sale wholesale and retail at the Factory, No. 6, Hill street; also at the store No. 15 and 17, Exchange street., and at the Genesee Seed Store, No. 10 Front street.

E. TAYLOR.

Rochester, N. Y., May, 1846.

Plows for Sale.—We have on hand, and intend to keep constantly for sale, the celebrated *Diamond* and *Wisconsin* Plows, the merits of which have been fully tested. Price, \$7,00 for medium size. The farming community are respectfully invited to give us a call.

RAPALJE & BRIGGS,
No 10 Front-st

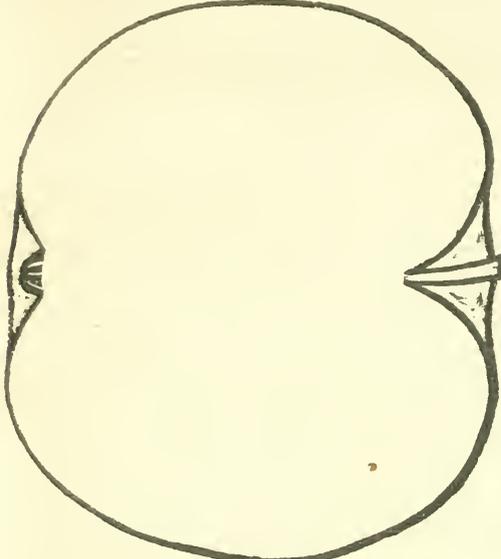
2d.

CHOICE FRUIT TREES!

ROCHESTER COMMERCIAL NURSERY, MAIN ST., ONE MILE EAST OF THE COURT HOUSE, ROCHESTER, N. Y.

Office No. 1 Arcade Hall.

The Subscribers offer for sale, this Autumn and the coming Spring, a large quantity of FRUIT TREES, comprising the choicest assortment of APPLES, APRICOTS, CHERRIES, NECTARINES, PEACHES, PEARS, PLUMS, &c., &c., very thrifty and healthy; and warranted to be of the kinds represented.



TO THE FARMERS.

We have now on hand of APPLE TREES, large enough for transplanting to the Orchard, MORE THAN ALL THE OTHER NURSERYMEN IN ROCHESTER, and can therefore offer greater inducements to purchasers by giving them a selection from such a great number.

Trees grown in this vicinity, are generally more healthy and less infested with insects than those obtained from any other quarter, besides being more hardy.

We do not intend to cultivate any fruits but those of acknowledged superiority, and every variety named in our Catalogue may be depended upon as being FIRST RATE, except when otherwise noted. Persons unacquainted with the character of the different varieties, may leave their selection to us, and depend upon receiving the choicest kinds ripening in succession.

Trees delivered in any part of the city free of expense. When packed so as to insure safe carriage to almost any distance a small charge will be made to cover the expense.

Orders from unknown correspondents must be accompanied by a remittance, or a city reference. Catalogues furnished gratis, and cheerful and prompt attention given to all *post paid* letters requesting information.

Ornamental Trees and Shrubs furnished from our own Nursery; and where we cannot fill the order, we will buy of our neighbors and sell at their prices.

As we anticipate a large sale this season, purchasers will please bear in mind that the earliest orders are always entitled to the preference, and will, of course, be better filled than later ones.

We are happy, at all times, to receive calls from any persons interested in the culture of fruit; and for our trees, challenge comparison with any grown here or elsewhere.

SEEDS furnished to those who wish to graft for themselves or others.

PRICES as moderate as those of any other establishment, and a liberal discount made to those who buy to sell again.

BISSELL & HOOKER.

Rochester, September 1, 1846.

MARKET INTELLIGENCE.

ROCHESTER, Sept. 1, 1846.

The Market is becoming more active. Wheat is selling briskly in the streets at 76 a 78 cents; 1300 bushels of Genesee Valley sold in two parcels to-day at 79 cents.

Wool.—Buyers report the market as quite dull. The present quotations are as follows:—

Full blood Saxony fleeces,.....	29 a 31
Do. Merino do.	25 a 30
Half-blood do. do.	21 a 23
Quarter-blood to common,.....	18 a 20
Coarse English and bad conditioned wool,.....	15 a 18

Rochester Produce Market—Wholesale.

Wheat,.....	75 a 79	Pork, bbl,	10,00 12,00
Corn,.....	37 40	Pork, cwt,.....	4,00
Barley,.....	42 45	Beef, cwt,.....	2,00 3,00
Oats,.....	22 23	Lard, lb,.....	6½
Flour,.....	3,62 3,75	Butter, lb,.....	10 12
Beans,.....	75 88	Cheese, new lb, ..	4 5
Apples, bushel, ..	13 37	Eggs, doz,.....	8
Potatoes,.....	18 25	Poultry,.....	7
Clover Seed,.....	5,00	Tallow,.....	6 7
Timothy,.....		Maple Sugar,....	6 7
Hay, ton,.....	6,00 7,00	Sheep Skins, fresh,	12½
Wood, cord,....	2,00 2,50	Green Hides, lb ¾	
Salt, bbl,.....	90 95	Dry ".....	6 7
Hams, lb,.....	6 7	Calf Skins,.....	7

NEW YORK, Aug. 31.

Flour is better by 6c. Oswego sold at \$4 06, and that price was afterwards refused. Pure new Genesee brought \$4 12. 4000 bu. Michigan wheat sold at 83c. Rye offered at 69c without being taken. A parcel of bright yellow Delaware corn sold at 54c weight. Provisions steady. 170 hds. and bbls. pickled hams sold at 4½c per lb., and shoulders at 3½c. Ashes in demand at \$3 63 and 4 12½. Whisky 21c.—*Jour. Com.*

BUFFALO, Aug. 31.

5300 bush. Milan wheat sold at 66c, and 3000 do. White Massillon, a beautiful sample, at the same.

In flour we notice the sale of 600 bbls. 'Cleveland City Mills' at \$3 45; 517 do. 'Maroe,' 'Waterloo' and 'Fayette,' Mich., at \$3 44; 330 do. 'Tecumseh' and 'Manchester' at \$3½; 240 do. 'Franklin' and 'Hudson' at \$3½; 160 do. Mich. and 280 do. Ohio, (mixed) at \$3 35.

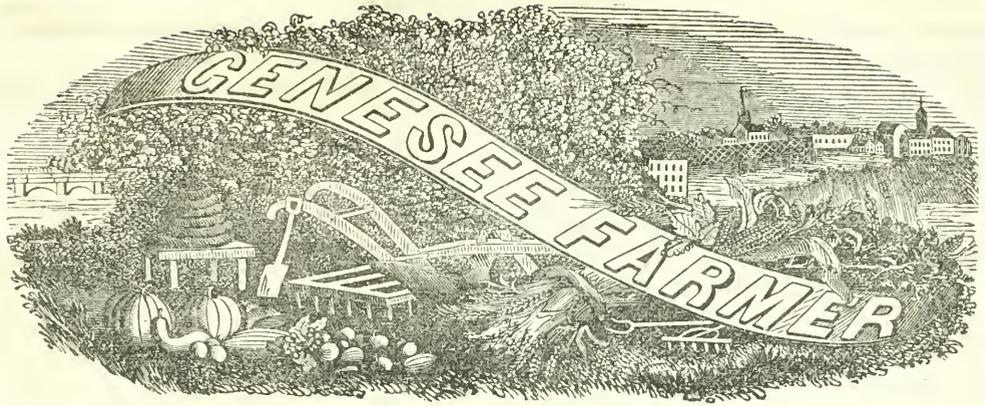
Corn—1800 bush. at 36c, and 2000 do. superior quality, at 36½.

In wool there has been more doing than for the past two weeks, some 6000 lbs. medium quality having been taken at 22c for the clean washed fleece with an equivalent deduction for the unwashed.—*Com. Adv.*

EXPLANATION.—The publication of this number of Farmer has been unavoidably delayed for a few days, in consequence of the severe illness of the publisher.

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THE GENESEE FARMER:

Issued the first of each month, at 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. [P] All subscriptions to commence with the first number of the volume.

PUBLICATION OFFICE over the Rochester Seed Store, (2d story,) Front street, nearly opposite the Market.

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.

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

Agricultural Improvement in England.

WE have received through the Mark Lane Express and other English journals full accounts of the great Fairs held this season in Great Britain. The recent change in the Corn Laws has not the effect to dampen the ardor with which improvements in grain and root culture have been prosecuted. Be the prices what they may, Englishmen will continue to augment their crops and ability to feed their own people, for many years to come. Hitherto there has been a strong popular prejudice against the use of labor-saving machinery, and steam power, in rural affairs.—It was thought to diminish the demand for manual labor. Experience, however, has satisfied the more intelligent portion of laboring persons that instead of lessening the demand for their services, the use of machinery and improved implements has the effect to render their skill and toil more valuable, because they are far more productive. Having seen men in our own Legislature who are truly learned in matters of law, politics, and classical literature, denounce the use of labor-saving machinery as a wrong done to the poor who must work for a living, we will say a word or two on the merits of this question. The service of a man to harvest wheat with a jack-knife would be worth next to nothing. Put a sickle

into his hand and his labor would be worth five times more than it would with a small knife. Give him a good cradle and let him know how to use it, and his labor will be worth as much again as it was with the sickle. Now, let him learn to use a good reaper propelled by horse-power that will cut 20 acres of wheat in a day, and his labor will be twice as valuable as it was with a cradle. In England, a single steam engine reclaims, by pumping out the water, 30,000 acres of waste land, which gives employment to 5,000 persons. Is this engine a *bad* or a *good* thing?

The great improvement of this year is an admirable contrivance to transport manure from the barn-yard to the fields and spread it, without the labor of hauling in any form. It also combines the advantage of a great saving in the fertilizing elements contained in the excretions of animals, and rotted vegetables. These ingredients are composted in a large reservoir, and leached, like tan-bark in a large leather factory, to dissolve out all the fertilizing matter in the manure.—From the reservoir (which is on high ground) the liquid is conveyed under ground in wooden pump-logs or coarse linen hose pitched with tar and rosin, to all the fields. Hose is fastened to the tube containing the liquid in the field, which liquid is distributed over an acre of ground, as water may be over a like surface from the moveable hose of a fire engine.

In this way, it will be seen that the farmer can apply as little or as much, and as often as he chooses, any compound of soluble ingredients to his crops. The expense of putting down cement pipes, in many parts of this state, which will last for ages, can not be great. Indeed, we think the gain in using manure in a liquid state, and having the barn on the highest ground so that it will run, by its own gravity, into every field, will be greater to the husbandman than the advantage to the tanner of leaching his bark in a vast reservoir, and permitting the ooze to flow through ten thousand sides of leather, instead of laying them all away by hand in ground bark.

Who among our readers will refuse to *study*

alike both the ART and the SCIENCE of feeding plants? Unless we study to save labor by every means in our power, and to use our manure to the best possible advantage, the reward for our toil must be degradingly small. If every thing that will aid in making good crops be placed in a water tight vat, and loss of fertilizing gases be prevented, surely a little study and practice will teach us how to use this vegetable nourishment in a better way than we now do. We insist on the point that, no rational farmer will attempt to change wheat straw into wheat, until he takes some pains to learn the things which 1000 lbs. of wheat are made of, and what portion of these things 1000 lbs. of straw can not furnish. Make your straw into compost, and fail not to add the lacking ingredients to form a liberal yield of the seeds of wheat. Many farmers have great success in making wheat straw, but fail in getting it well filled with plump seed. Three-fourths of the earthy matter in kernels of wheat are phosphates of lime, potash, magnesia, and soda.

Do you wish to transform the manure obtained from cattle feeding on timothy hay into a large crop of potatoes? Let us tell you then that 100 lbs. of the earthy elements in timothy contain but 12½ pounds of potash; while a like weight of the mineral elements in potatoes has 51½ lbs. of that alkali. To get the 51½ lbs. of potash for your potato crop, will you apply *four times* more timothy hay manure than you need, or will you add potash to your manure for potatoes, in the shape of ashes mixed with the manure in the compost heap?

Kind reader, if you are a farmer, do think of these things. Don't manure as though you thought oat straw and oats are one and the same thing. Your horses know better than that.

CORRECTIONS.—In a paragraph headed "Information wanted," we used by mistake the word Recording instead of Corresponding Secretary of the N. Y. State Agricultural Society, in our last number. It is the Corresponding Secretary, Mr. J. B. Nott, and not the Recording Secretary, Mr. Luther Tucker, who was employed to lecture on rural topics in different parts of the State, by the Board of the Society. Since we asked for information in regard to these Lectures, we have seen the Cor. Secretary, who informed us that he had been busily engaged in collecting information up to this time, since his appointment, and that he now is ready to respond to any call for his services as a lecturer.

In a notice of our Geological Excursion, we spoke of Fall Creek as being two miles south of Caledonia. It should have been two miles south of Geneseo.

THE APPLE CROP is said to be greatly injured throughout Europe. This will make American apples in greater demand than ever.

Salt and Ashes.

"He that makes two blades of grass grow, where but one grew before, deserves better of mankind than the whole race of politicians."

The above maxim has been repeated, and honored for more than two thousand years. We use it as a text upon which to offer a few remarks on the importance of making efforts to improve one's system of farming every year. No person should permit 365 days to elapse without being conscious of having learned some valuable lessons in the branch of business to which his time and attention are devoted. So long as the practical farmer can not say in truth, "no more blades of grass or grain *can grow* on my farm than now do," he should both study and labor to make improvements. Among other means, that of trying carefully conducted experiments in the use of available substances as fertilizers, can be named as of great importance. We are anxious to see a compound of equal parts of common salt and wood ashes, applied at the rate of from ten to twenty bushels per acre on wheat fields this fall soon after seeding. If the coals and other hard lumps in ashes are riddled out, and the salt made fine, the two can be evenly scattered over the ground by the machines much used in this section for sowing wheat and plaster. The machine is drawn by a horse, and sows ten feet wide about as fast as he can walk. Such an implement is of course equally valuable to scatter broad-cast either ashes or salt alone.

Since the time alluded to in the second book of Kings, when Elisha "healed the waters," and rendered barren land fertile by the use of "salt;" and since the time of St. Luke, who speaks of "salt which has lost its savor, and is neither fit for the land, nor yet for the dung-hill," this invaluable mineral has been known to improve the soil. Having a strong attraction for moisture or water, and from its extreme solubility, being very liable to be washed out of open, sandy soils, it is on light, gravelly, or sandy land that its effects have been signal, and most useful. In England, whose humid climate, and clayey soil would lead us to expect but little benefit from the application of salt, it is regarded as a standard fertilizer in the interior of the island away from the sea shore. It is scattered broad-cast with the hand, or mixed up with manure. The quantity applied varies from 5 to 40 bushels per acre. It is, like other manure, applied to land near the time when the seed is placed in the earth to grow. As a top dressing it is also used with decided advantage.

But as salt contains but *two* of the eight or ten minerals required by Nature to form cultivated plants, and which are always found in their ashes, we earnestly recommend the use of such ashes as the fat of the land gives to forest trees, to aid Nature in forming for the skilful husbandman bountiful crops. Tell us, practical farmer, can you not judge pretty accurately of the quality of

a soil by the character of the timber that grows upon it? And if you take the coal and ashes furnished by the timber, or vegetables of a larger growth, and apply them to your cultivated fields, do you not get the best essence of the soil, which forest trees have been 200 years in extracting? On the borders of their numberless deserts, where little or nothing will grow, the Africans gather an armful of sticks, and burn them preparatory to planting a hill of corn. Without the sticks, whose *ash* contains the identical minerals found in the ash of corn, and which minerals are indispensable to the growth of that plant, no corn can be raised. Whoever has seen crops grow where log-heaps have been burned, need not be told of the value of wood ashes. Any quantity from five to fifty bushels per acre, can be spread to advantage on any land that ever bore plants, or is expected to bear them.

The precise amount of salt, ashes, lime, gypsum, charcoal, or barnyard manure, which one ought to apply to any particular piece of ground, must be left to the good sense of the agriculturist, taking in no account the cost of the substance to be used, the condition of the land, and the value of the crop to be grown.

Who will not try an experiment with salt and ashes, at least to the extent of half an acre, if no more?

Hessian Fly.

In giving a brief notice of this insect in our last, we forgot to urge the propriety of delaying to seed till the danger of injury from the Hessian Fly had passed. On early sown wheat the fly is now busy (20th Sept.) in depositing its eggs on the leaves of plants, at their junction with the stem. These eggs are of a light yellowish color, and almost too small to be seen with the unassisted eye. A large farmer in this town (Mr. SHEFFER,) has just brought us a number of plants having the nits and larvæ of the fly, (*Cecidomyia destructor*,) deposited on them, that we might examine them by the aid of a microscope which magnifies objects 2500 times their natural size.

Under such an instrument one can see the moist, lubricated line, or groove like surface, down which the grub, when first hatched, descends to the lower joint in the stem. Its head and mouth resemble those of a blood sucker; and it evidently takes in its nourishment by suction. Judging from the various sizes of several on a single stem—and we have counted 38 this season—the larvæ grow rapidly to their natural dimensions, and soon change into pupæ, or what is termed among farmers "the flax seed state." In this stage of their existence they are torpid, and do no material injury to the plant. But if we compare the bulk of the nit or young maggot with that of a full grown one, the gain in size is as 50 or 100 to 1. When a number of these blood-suckers, (for they really suck the blood of

the plant,) surround a single stem, they kill it.

Mr. SHEFFER has observed that seeds buried but one or two inches deep send up new stems from their first joint below the one where the grubs lie, after they have nearly or quite destroyed that on which they subsist. If the seed be buried deep, and the first joint far in the earth this second growth rarely takes place, and the plant either dies outright, or in the end comes to little or no account. We saw several wheat plants where the second growth had already commenced this autumn. It is proper to remark that, Mr. S. raises most of his wheat on the Genesee flats, and finds from experience that a thin covering of seed is better than a heavy one. His seed was sown on the last days of August. He says that without a good fall growth, and a deep strong root, the frost heaves his crop out, and nearly destroys it. Hence he seeds early and takes the risk of the fly. As the larvæ of this insect are very soft, and easily killed by pressure, Mr. S. will roll his wheat fields, (some 60 acres) with a heavy roller, to destroy the grubs. This excellent farmer has 25 acres of corn which, so far as harvested, yields at the rate of 80 bushels per acre. The grass-hoppers destroyed his carrots, as other insects did ours, and the rust killed all the leaves on his beets, of which he has nine acres. A second growth has just started out, and the crop may be half the usual amount.

We fear the fly will do unusual injury to the wheat now up, for the weather has been warm.

As most seasons are, the 20th of September, as a general rule, is early enough to place seed in the earth, so long as the fly shall prevail.

Early White Provence Wheat.

Our readers will probably recollect an article, published in the August number of the Farmer under the head of "New variety of Wheat for sowing late." The editor of the Michigan Farmer copies the article, and judging from his remarks we think the seed of the Early White Provence will prove a valuable acquisition to our Michigan friends. He says: M.

A farmer who has raised the White Provence wheat in this country for four years past, confirms the statement above made in regard to its valuable property of producing well with late sowing. He has sown it as early as the first of September, and as late as the first of October, and found the latter do as well as the former. It springs up and tillers out with great rapidity, covering the ground sooner with less seed than any other variety with which our informant is acquainted. He has not experienced here the objection met with by Gen. Harmon, that of a tendency to fall down and crinkle. It stands as well as any wheat.

In the town of Hanover, in this county, it has been raised the present season by several farmers, with all of whom it has entirely escaped the rust, and has produced a plump, handsome berry. It has been grown where it could be compared with the Red Chaff Bald, the Improved White Flint, and the Hutchinson varieties, and has proved itself superior to either. The Hutchinson has been next in excellence.

For the convenience of any that may wish to procure the seed of the Provence, we have ascertained that it may be had of Ruben Heath, of Hanover."

On the Use and properties of Wood Ashes.

ACCORDING to the analyses of Dr. Sprengel, 100 parts of the Ash of Oak contain :

Silica.....	28.95
Oxide of Iron, Alumina, and Manganese....	8.14
Lime.....	16.39
Magnesia.....	1.44
Potash.....	16.29
Soda.....	6.73
Sulphuric acid.....	3.36
Phosphoric acid.....	1.92
Chlorine.....	2.41
Carbonic acid.....	14.47
	165.60

On examining the above table the reader will find that oak, and the same is true of other hard wood, contains all the mineral elements found in any plant grown in this latitude. By way of comparison, we give the constituents of the ash of wheat, both straw and seed, according to the analyses of Boussingault :

	Straw.	Wheat.
Silica.....	67.6	1.3
Lime.....	8.5	2.9
Potash.....	9.2	29.5
Magnesia.....	5.	15.9
Chlorine.....	.6	traces
Soda.....	.3	traces
Phosphoric acid.....	3.1	47.
Sulphuric acid.....	1.	1.
Carbonic acid.....	0.	0.
Iron and Manganese.....	1.	1.4
Charcoal and loss.....	3.7	1.
	100.0	100.0

It is particularly worthy of note that, while 100 lbs. of oak ash contain a fraction less than 2 lbs. of phosphoric acid, a like weight of the ash of wheat has 47 lbs. of this valuable acid. Conceding that 100 lbs. of ordinary hard wood ashes will yield 2 lbs. of phosphoric acid, how many pounds of dry ashes must be applied to an acre, to give a crop of wheat, both straw and grain, equal to 30 bushels, and supply it with all the phosphorus it needs? Mark well the solution of this problem.

Thirty bushels of wheat at 60 lbs. per bushel will weigh 1800 lbs. In 100 pounds of this there are usually 24 lbs. of ash having, as above stated, 47 per cent. of phosphoric acid in its composition. At this rate, 1800 lbs. of wheat will contain 40½ lbs. of ash, in which there will be 18 lbs. and a small fraction of the acid above named. To one pound of wheat there is usually 2½ lbs. of straw. (The relative proportion of wheat and straw varies exceedingly, as every wheat grower knows. Nor is the quantity of ash left in wheat straw when burned always the same. It varies from 3 to 16 per cent. of the weight of dry straw. The average is not far from 7 per cent.) To produce 30 bushels of wheat one must have on an average 4,500 lbs. of straw, containing 315 lbs. of incombustible minerals, which if the straw is burned will be left in the form of ash. As 3.1 per cent. of this ash is phosphoric acid, 315 lbs. will contain 9.76 lbs.—From these figures it is seen that the ash of wheat and straw together contain 27.76 lbs. of phos-

phoric acid. To furnish this amount by applying wood ashes that have only 2 lbs. in 100, the husbandman must spread 1400 lbs.—about 26 bushels of ashes on an acre. It is particularly worthy of note that, 4,500 lbs. of wheat straw contain only one half as much phosphoric acid as 1800 lbs. of wheat. As a matter of economy, instead of applying 1400 lbs. of ashes to an acre, where we wish to harvest 30 bushels of wheat, 100 lbs. of bones can be boiled to a coarse powder in strong lye, and mixed with ten bushels of ashes to be used for the same purpose. This is a most valuable compound to aid in forming the seeds of all cultivated plants.

When a wheat-field is covered with a light snow, so that a team may go over it without injury, ashes may be evenly spread from a sled box, at any rate per acre which their cost, and the circumstances of the case may require. To all spring crops they may be applied broad-cast, or in the hill at the time of seeding. Care is necessary to mix caustic ashes with the earth, to prevent injury to the young and tender plants, when they first start. By carelessness in this regard, we have injured them.

We are greatly in favor of a compound made by the union of ten bushels of ashes, five of gypsum, and three of common salt, to which we would add ten of lime, did not our soil abound in that mineral. This compound has all the purely earthy elements that exist in all crops. It may be regarded as an universal fertilizer, applicable to all soils. Its quality, however, will be much improved, by adding to it one or two hundred pounds of bones boiled to powder in strong lye.

We met several farmers at the State Fair recently held at Auburn, who have used the above compound on our recommendation, and they expressed the highest satisfaction at the result. If used broad-cast, there is no danger of putting on too much—for ten bushels of ashes, ten of lime, five of gypsum, and three of salt, may be spread on an acre, if not a fourth of it, without injury, except waste of material. Our motto for feeding plants is : "Give them just what they need, and that, *little and often.*"

We have satisfied ourself that it is bad economy to apply to any farm soil a large amount of manure of any kind *at once*. In all cases a great waste of soluble ingredients is inevitable. Dissolve common salt or other mineral in water, pour it on the ground, and wherever the water runs, the dissolved salt goes with it. The more soluble the fertilizer, the more sparingly should it be applied at any one time, and the oftener the application should be renewed. *Water* itself is a powerful fertilizer as every body knows. How great the advantage of having this important element in all plants frequently applied in gentle showers—in moderate doses! Be wise, and add to the dews and rains of heaven, such other elements as Nature uses in forming all your crops—

carefully saving all these elements by strict economy, and using them to the very best advantage. If lime and gypsum are high in price at your residence, add only five of lime and two and a half of gypsum to ten bushels of ashes when you apply the latter to your wheat, corn, or potato crop.

Swamp Muck.

WE have devoted some attention to the investigation of the properties of Swamp Muck.—Dried in the open air, one pound will take up three and a half of urine or water. If thoroughly dried in a stove, an ounce of muck will absorb five ounces of liquid. It makes capital bedding for horses, cattle, and other animals, being soft and elastic, as well as absorbent. Saturated with urine and mixed with manure, it ferments and rots and adds greatly to the value of the products of the barn-yard.

One hundred pounds of muck or peat contain more nitrogen and carbon than a like weight of the plants from which these organized substances were derived. This arises from the circumstance that in the process of changing from green, or perfect plants into muck, the elements of water—oxygen and hydrogen—are given off, leaving of course an excess of carbon, which makes the mass black; and an excess of nitrogen. 100 parts of dry muck leave, when burned, 16 parts of ash, of which 20 per cent. is soluble in cold rain water and 80 insoluble. In the 20 parts of soluble minerals there is one of silica, or 5 per cent of the whole. We have not yet completed the analysis, but find gypsum, and a large percentage of lime, (chloride and carbonate) as well as potash, magnesia, soda, and iron.

This muck covers from 25 to 30 acres on the farm where we reside, is from one to three feet in depth, and rests on a bed of marl. On analysis this marl proves to be nearly pure carbonate of lime. We are now examining the large deposit of muck for *creu'c* and *apocrenic* acids.—We propose to neutralize all organic acids in this substance with caustic ashes and lime, and then excite decomposition by a mixture of stable manure. The skilful manufacture of manure is not so well understood as it should be. It is our purpose to study this important subject with great care, and give our readers the benefit of any knowledge we may acquire by experience or otherwise.

TENNESSEE FARMER.—We have received the first number of a periodical with the above title, published at Nashville, edited and illustrated by Mr. CHAS. FOSTER. Judging from the specimen before us, we think the Farmer a valuable auxiliary to the agricultural press of the South. The planters of Tennessee should see to it that their own agricultural paper does not fail for want of adequate support. Published as above, at \$1 a year, in advance. M.

SKETCHES OF NIAGARA FALLS AND RIVER, BY COUSIN GEORGE. Illustrated by numerous Engravings and correct Maps. Buffalo: Published by W. B. & CHAS. E. PECK.

THE publishers of Buffalo seem to be busy, just now. We have seldom read a more pleasing and interesting book for young people than this is. If, as editors of an agricultural journal, we aimed only at teaching men how to raise fat pork or good corn, without their having any ulterior object, we should think less highly of our efforts. In agricultural pursuits, properly followed, there is much to "make life beautiful and gay." And though "COUSIN GEORGE" says nothing about farming, he says much, in a very interesting and winning way, to cultivate the taste for nature—teaching or reminding us that

— "round about us every where,
Almighty power and goodness are."

The subject is the world-renowned scenery of the western part of our own State—the book is written with classical accuracy and elegance—the matter is full of moral truth and poetical beauty. We will say no more, for we do not wish to overpraise, even where high praise is due.

The following is a fair specimen of the work.

"When winter has done its worst, and covered the earth with its pure snow mantle, and bound up with icy fetters all common streams, the untameable Niagara scoffs at its power, and rushes from Lake Erie to the Falls, exulting in its freedom, and thunders from the precipice, and sends into the frosty air perpetually its canopy of mist. The mist sinks slowly down and settles on the island; covering and moistening every thing; and, as it falls, winter asserts its power, and freezes it into a pearly or crystal covering of every twig and leaf. The trees are cased in ice. Their boughs are bent by the weight, and droop down in arches. Long icicles, assuming oft fantastic forms, are pendent from the rocks. The groves wear a lustrous splendor, but somewhat of the awfulness of desolation,—for they are still, and lifeless. No living thing is visible in them. Not a sound is heard but the crashing of our foot-steps through the icy snow, save when the gentle air sighs through the wood, and the stirred branches touch each other, and emit a tinkling sound. And then, the light! It is oppressive in its splendor, like the garments of the "Shining Ones" who do God's bidding near His throne. And when the Sun throws his beams aslant into the wood, they are caught and broken by the silver branches, into all the colors of the rainbow, which dance through and fill the air. Believe me, Cousins!—all you've read of magic gardens, and of fairy land, fictitious though they be, do fall far short of real Niagara in winter."

SHEEP HUSBANDRY.—Those that wish to improve their flocks by a cross of pure Paular Merino blood, will do well to examine a lot of Bucks belonging to Gen. HARMON. No man has been at greater pains, regardless of expense, to procure and raise the very best animals to be found in the sheep line, taking into account both quality and quantity of wool. A lamb of his, when 13 months old, clipped *nine pounds* of well washed wool—which, under the microscope, compares favorably with any Merino that we have examined, as to fineness of fibre.

If you wish to be happy, keep busy; idleness is harder work than plowing, a good deal.—There is more fun in sweating an hour than there is in yawning a century.

Root Culture.

DEAR EDITOR:—There has been so much written on the cultivation of roots, that it would appear needless to say anything more on the subject. Yet I think that farmers generally do not realize the value of roots for winter feeding, nor their great benefit in the improvement in the quantity and quality of the manure. Every farmer ought to raise at least two or three acres per annum, and especially grain growers who have plenty of straw and chaff. The principal art of raising roots is, to make the ground rich, and well pulverized; and the fall is much the best time to do it. Apply at the rate of 40, or even 50 wagon loads of well rotted manure; 5 bushels of plaster, and 5 or even 10 bushels of ashes per acre; spread them evenly over the surface, plow it 7 or 8 inches deep, and *narrow furrow* not over 10 inches wide. In the spring, as soon as the ground is sufficiently dry, harrow or cultivate thoroughly until the ground is well pulverized and the manure well mixed through it.

Be sure to plant *early*, before the ground gets too dry to germinate the seed; the last week in April or first of May, is generally the best time for planting. Ridge the ground $2\frac{1}{2}$ or three feet apart, and plant immediately. The greatest difficulty in the beet crop is, the ground becomes dry before the seeds germinate, which prevents them from coming up. Put in plenty of seed—4 or 5 lbs. per acre—of the Beet or Wurtzel; the expense of seeding at 5 lbs. per acre is not equal to the cost of planting potatoes.

For further particulars on root culture I would refer the readers of the Farmer to a valuable article on the subject published in the June number of the present volume.

Yours respectfully, W. GARBUTT.

Wheatland, Sept. 10, 1846.

REMARKS.—Our neighbor, Mr. G., has the best field of roots we have seen this season. He seldom fails of a good crop. Short as is his communication on Root Culture, it is worth more to practical farmers, than the price of five volumes of this journal. In regard to the use of wood ashes, we will suggest that, on most soils, "10 bushels per acre spread evenly over the surface," just before ridging and planting, will be more useful than to apply only five bushels.

REPRODUCTION OF THE POTATO.—We learn from the Buffalo Commercial that the Rev. N. S. Smith of that city has succeeded in producing from potato balls by an unusual process a superior kind of this tuber. His practice was to replant for several succeeding crops not only the small potatoes procured from the seed each year, but the seeds also of every crop. By this process the seeds as well as the tubers were progressively renovated; and it is believed that strong vigorous plants capable of withstanding the rot or blight have been obtained.

Stone Walls, Snow Drifts, &c.

EDITOR GENESEE FARMER:—I wish to call the attention of your readers to the subject of walls and snow drifts. I suppose it matter of common observation in a time of deep snow, the north and south roads are usually a good deal blocked up, and the traveling impeded in consequence. But where stone fence (whole wall) is erected on the west line of the road, it is seldom if ever materially obstructed by drifts on the track, or pitch holes, as against rail or board fences. The reason is obvious to all. The slightest observation will tell the cause. Now I suggest that farmers living on such north and south roads build wall, if they have stone to build such fence any where on their farm, on the west side of the road in a continuous line as much as may be. Could this be pretty generally gone into through the country, it would save a great inconvenience in travelling in seasons of deep snows, which are usually in this section of country attended with high south-western winds; and deep drifts and high ridges are the consequences opposite rail fences. The east and west roads are seldom if ever thus obstructed, because the same westerly winds sweep them more lengthwise.

I would build the wall as follows: Level the earth's surface for the reception of your bottom, which should be of your largest sized stone.—Lay your bottom on a straight line both sides: from 30 to 34 inches in width. Level up and lay on a course of cedar sticks, say from $\frac{1}{4}$ to $\frac{1}{2}$ inch in thickness, as wide as your timber will make—to reach just across the top of this course of stone. Proceed with your next sized stone, and lay on one or two courses of stone, according to your choice and supply of stick timber—selecting out at the same time and laying back stone of suitable length and size for topping stone. Thus proceed till your wall is of the desired height to receive the last course of sticks, which should be at least four feet. Lay your wall pretty straight up, i. e. with little slant. Cut this last course of sticks so they will project over each side of the wall from four to six inches, say six. Split them $\frac{1}{2}$ or $\frac{3}{4}$ of an inch thick. Put them on and your selected stone top of them, snugly placed and chinked on each side.—Boards are as good for this course as sticks, and flat stone better than either, if you have them. Plow two furrows each side and quite near the wall—bank it up against the wall and it is done.

You may ask, "What is the use of these long sticks in the top course?" It is to turn sheep. Wall is the best fence against every other animal but sheep. A naked wall is but a small obstacle in their way, and this is the cheapest and best preventive against them that I have ever tried. The reader may see, if he will take the pains to turn to the "Transactions of the N. Y. State Agricultural Society," for 1842, (p. 374.)

that there is a slight difference in the plan recommended here, and the description of that on which I drew the premium that year in this county. The chief difference consists in the top fixtures for turning sheep. The latter I think much preferable for common farm fence. The former was topped with posts and boards, though I see nothing is said about it in the published description.

While on this subject of roads let me suggest another thought. Our roads are, a great majority of them, two narrow—much within the lawful width. I suggest that the officers in the several towns in Western New York, whose business it is, should see to this long neglected but quite important subject; and not only see to, but make thorough work of it. Individuals have had the land that belongs to the public long enough.

C. ROBINSON.

Clarendon, Orleans Co., 1846.

P. S. A word on another subject. I have read considerable in the Farmer recently of the good effects of ashes applied to corn. I wish some of your correspondents would publish their experience about quick lime for the same use; for that article is as cheap, per bushel, as ashes in some sections, and especially in Clarendon. Tell how and when to apply it, and all about it—its relative strength, utility, &c. C. R.

WE owe an apology to Mr. R., for having, at the time of its receipt, misplaced the above article. It was received last winter, and should have appeared in our March number.—[PUB.]

Monroe Co. Ag. Society.—Its next Fair.

DR. LEE—*Dear Sir*: Permit me once more, through the medium of your valuable journal, to say a few words to my fellow farmers on what I consider will promote their true interests, extend their social intercourse, and increase their rational enjoyment.

The time of our Annual Festival (Agricultural Exhibition,) is at hand, and it will depend upon us, whether it will prove a benefit, be interesting, or otherwise. It is very much to be regretted that so many of the practical cultivators of the soil are so much opposed to agricultural associations, which might be made so eminently useful, if we could but give them our united support.

I am aware of the numerous objections that many of you have against societies and their management; but, fellow laborers, reflect for a moment and see how few there are of those objections that cannot be removed, if you will but give the society your active support. The institution and its management are purely our own, and if it is not rightly directed, *the fault is ours*. The great difficulty with us is, that we do not duly appreciate the value of our societies. We too generally estimate them as a matter of mere dollars and cents, and when we think that we

have not a good chance for a premium, we deem it not worthy of our attention; and, when we are confident of success, pay our dollar and attend. If we are not successful, then we are mortified, blame the judges, and condemn the society. Now, my dear friends, this is not the right way to do; the few dollars as premiums are not the object of the society, any more than the school-master's tickets are the motive for attending school. The premiums, like the tickets, are only intended as prompters to action, and never ought to be the motive for attending.

The expense of keeping up the society is too trifling to deserve notice, by farmers who are the owners of the soil they cultivate; and as for the time necessary for performing all the duties of the society, and attending the exhibitions, there are few of us but what spend more time on things of much less importance.

Try it, fellow farmers—give the society your cordial and united support,—attend the Fair, and let each one contribute something towards the exhibition, and be sure to encourage the youth, both male and female, to attend and take an active interest in the business of the day. It will be a valuable school, one of practical utility to them; seeing what can be done, and what others are doing, will arouse their active energies, and awaken their laudable emulation, extend their social intercourse, and increase the social and friendly feelings of society.

Try it, fellow laborers,—*try it*,—turn out unanimously, and Western New York will not be second in the State, *nor in the Union*, in industry and skill *in productions and exhibitions*. Rest assured that you will not regret the time and money thus spent.

To the Artists and Mechanics:—Fellow laborers, think not because our association is called agricultural, that you are excluded. No, far otherwise—our interests are mutual; without us you could not exist, and without you, we could not be prosperous nor successful. All productive industry adds to the wealth of the world, increases the comforts of life, and promotes the happiness and general weal of society. Come on, my fellow laborers, *come on*, exhibit the various fruits of your industry and skill; encourage us, and we will patronize you.

LADIES, we would earnestly solicit your patronage, knowing that your united exertions are *always successful*. Honor us with your presence at the Fair, and ornament the display with the varied and numerous works of your skillful hands.

Let us enjoy, at least once a year, the happiness of social intercourse, unmarred by party strife, or sectarian discord; and be assured that it will extend and strengthen the social bonds of society, and increase the rational enjoyment of social life.

A SINCERE FRIEND AND
LOVER OF SOCIAL INTERCOURSE.

Monroe County, Sept. 15, 1846.

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

NUMBER TWO.

IN my last number I alluded to some of the peculiarities which distinguish the position of the American Farmer. I continue the inquiry, for, in determining the position of the farmer, we also discover his responsibilities and duties. I remark, then, that our political institutions are of such a character as to give a distinctive and elevating importance to the laboring men of the country. The absence of aristocracy, and the emphatic recognition of equality in man, which are so clearly acknowledged in our constitution and form of government, are peculiar to our country, and has necessarily a controlling influence in determining the position of individuals and classes. A laborer in England may be a mere dolt, with no intellectual culture, no mental development, and yet be a tolerable farmer, a first rate laborer, and a good Englishman—while in this country, where every man is not only a citizen but a part of the sovereignty of the nation, he would be totally disqualified and unfit to discharge, intelligently and safely, the responsibilities of an American citizen. We have no titles of nobility—no artificial distinctions created, and preserved by laws—no peculiar favors for a few, and which the many are forever barred by statute from aspiring to. The result is that with us all classes and all men are honored and respected, without particular regard to their condition. Cast does not obtain, and labor is not dishonored, and the laborer despised. So strong and decisive has been this feeling, in the Northern states of the Union at least, that labor is dignified; and he who holds the plow and reaps the grain with his own hand, is respected and trusted above him who looks upon labor as disgraceful, and who refuses to perform it; and, in my view, there is no feature so characteristic of the real greatness of this nation, as this respect for labor, and it is this fact, this inspiring stimulating fact, which has so elevated the social condition of the agricultural population of New York, and made it, in point of intelligence and enterprise, so much beyond the farming population of any other country.

Democratic institutions, when they have an enlightened people to rest upon, are not only the best but the only ones to develop the full energies and provide for the just and necessary wants of all the people of a country. Such institutions we have in this land. The political power of the nation reposes upon, or resides in, the whole body of the people, and each has his portion of responsibility as well as privileges—all the duties, as well as rights, to perform and look after. It has been said a thousand times, but cannot be too often said, that intelligence, wide spread and pervading all classes, is the only guaranty we have for the perpetuation of our republican gov-

ernment; and the farmer in this country, as a constituent part of the civil power—a part and parcel of the body politic—has more to do than simply to cultivate the soil. He is more than a mere indweller in the country—has other acts to perform than merely to expend physical force; he is above a hewer of wood and drawer of water; he is a citizen equal in power and privilege with every other citizen. In him resides a portion of the sovereign power of the State and nation,—upon his conduct depends the stability of society, the justice of, and the due administration of the law, the preservation of his individual rights, and the happiness of self, family, and neighbors. The American farmer has more to do, and to learn, than how to till his farm, and how to sow and reap and thresh his grain; he is one among a great community of sovereigns, and upon whose good conduct depends all that is dear and to be prized by man in his social and political relations. The tenure by which he holds his lands, the security of his person and property, the sweet and heavenly influences of home, are all dependent upon the right discharge of the duties which are incumbent upon him as a citizen and a free man.

I do not wish to be misunderstood here, nor in anything else I may say in this connection hereafter; I have no feeling, and would utter no sentiment of the demagogue. While I would stimulate farmers to become high-minded, intelligent politicians, I would warn them to shun partisanship when, as is too often the case, it assumes a mere petty struggle for the elevation of ambitious and designing men, without regard to principle or thought of the public good. It is unworthy the honest, upright citizen—beneath the attention of the high-minded farmer—to mingle in the dirty strife for power and office, which too often disgrace the political action of the American people; to become a party politician, in this sense, where truth and principle and good government is entirely overlooked, is a positive evil to the farmer. It is corrupting to the morals, and prejudicial to the business interests, of the people, and ought to be frowned down by the honest farmer every where. The evil is alarming; already party spirit, instead of purifying, as it would do if pursued on the basis of principle, and for the discovery and maintenance of truth, has become a festering source of political corruption, and which the strong good sense of the agricultural portion of the people ought to remove. The farmer must cultivate his intellect, enlighten his judgment, add to his knowledge, assert his independence, and with manly indignation cast off the designing ambitious demagogue who would make him his dupe, for the purpose of obtaining power and place. In this country there is no avoiding politics; men must, if they would discharge all their duties, become in one and the true sense politicians. The enlightened and

honest politician is to be respected, while the mere party brawler is to be despised. Parties in this country, where they stand as the embodiment and representative of principle, are not only necessary but useful; but when they become the instruments used to elevate men, and to secure office, without regard to measures, they cease to be useful and become pernicious. This subject I regard as vastly important, and one which deserves the candid and thoughtful attention of the farmers of this country—their rights and interests are intimately connected with it, and it may well claim our notice in another number.

D. A. OGDEN.

Pen Yan, Sept., 1846.

National Importance of Agriculture.

MR. EDITOR:—There is no business of life which conduces so highly to national prosperity, to general and individual happiness, as the cultivation of the soil. It is truly our nursing mother, which gives growth and wealth, and moral and physical health to our country. It may be considered the great wheel which moves all the machinery of society, and that whatever gives to this a new impulse or energy communicates a corresponding impetus to the thousand minor wheels of interest which it propels or regulates. Providence seems wisely to have ordained that, because this is the most necessary employment towards the subsistence and comfort of the human family, its labors shall receive the highest and most substantial reward. While the other classes of society are directly dependent on agriculture for a regular and sufficient supply of the means of subsistence, the agriculturist is enabled to supply all the absolute wants of life from his own labors, though he derives most of his pleasures and profits from an interchange of the products of labor with the other classes of society. Agriculture has been called the parent of arts, not only because it preceded all others, but because the other arts are its legitimate offspring, and cannot continue long to exist without it. It is the great business of civilized life, and gives employment to a vast majority of every people.

The substantial prosperity of a country is always in proportion to its agricultural wealth and industry. Commerce and manufactures may give temporary consequence to a State, but these are always a precarious dependence. Venice, Genoa, Portugal, Spain, each rose to wealth and power from commercial enterprise. But they all now exhibit melancholy evidence of fallen greatness. Their population degenerated under the enervating influence of commercial wealth, and having no suitable agricultural basis to rest upon, they have fallen in succession from their high standing, victims to the more robust energies of rival powers, or to the enervating influence of private cabals. The Spanish South

American Colonies, in visionary anticipations of golden wealth, overlooked the teeming riches of their soil, and now present a melancholy picture of mental imbecility and political degradation.—They exhibit nothing now in their political or social institutions—in their agriculture or in the condition of their population, that can be admired or coveted by the freemen of America.

A city may flourish by foreign commerce, by becoming the carrier of other nations, till foreign aggression or foreign rivalry or the opening of new channels of commerce, (contingencies of no unfrequent occurrence,) consign it, like Persepolis, Petra, Tyre, and other ancient cities of the east, to ruin and oblivion. A country can be long prosperous and truly independent only when it is sustained by agricultural intelligence and agricultural industry. Its foreign commerce may be swept from the ocean—its manufactures may perish—yet still, if its soil is tilled and well tilled, it can be made to yield all the absolute necessities of life—it can, when misfortunes abate, like the roots of a trunkless tree send forth a new stem, new branches, new foliage, and new fruit—it can rear again the edifice of the manufacturers, and spread again the sails of commerce—and it will yet retain the germ and the spirit of independence.

The preceding observations will show the importance of agriculture to a Nation in sustaining its prosperity and independence, and in supplying the wants, and multiplying the comforts, of its population. The same reasoning that applies to a nation applies to a State, a country, a town, a neighborhood, or an individual. Agriculture constitutes the basis of their prosperity, directly or remotely, and the blessings which it confers are always in the ratio of the intelligence, skill, and industry which control its operations.

Is there an individual, then, who cannot see and appreciate the advantages to society from a high state of agricultural improvement? Is there one who does not see personal interest promoted by this certain influx of wealth, drawn from the soil prolific in the bounties and blessings of a wise and beneficent Creator? He has spread everywhere the means to make man wise and happy. He has given him the capacity to apply these means to his own good. He has commanded him to bring his capacities into constant and active exercise, and he has promised to reward, and he will reward all who prove faithful to the command. W. S.

Wheatland, N. Y., 1846.

NOTE.—On page 224 of this number, speaking of the use of wood ashes and common salt it is remarked: "We are anxious too see a compound of equal parts of common salt and wood ashes, applied at the rate of from ten to twenty bushels per acre, this fall soon after seeding."

In the haste of writing, the above was not well considered. Although so much as ten bushels of salt per acre will do no harm,—40 being often sown in England—nevertheless, we regard five bushels as a full dose at one time. Two or three bushels have often been used in this country to advantage.

Importation of Cattle.

Few men have had advantages equal to those enjoyed by the Editor of the American Agriculturist to become well acquainted with the whole subject of cattle and cattle breeding, both in this country and Europe. He expresses very clearly and ably our own views in regard to the bad policy of sending constantly abroad, and depending on foreign nations, for our choice domestic animals. We have the materials, and the capacity to supply ourselves with neat cattle equal to any in the world. And it is due to the character of American Agriculture that the capital, skill, and enterprise, already embarked in the laudable work of improving our domestic animals, should be sustained. It is only by encouraging home industry in this matter that our farmers generally can learn the art and science of good breeding. Without this knowledge all high bred animals must deteriorate in our hands, and the races soon lose their peculiar excellence. A superior animal in the hands of a man that knows nothing of its habits, constitution, and wants, is like a fine musical instrument in the possession of one that has no knowledge of the concord of sweet sounds. Although valuable to another, it is worthless to him. The way to make general improvements is to sustain those that set the example among us, and show by practice at home what can and should be done. The subjoined article is from the Agriculturist :

FOREIGN CATTLE.

About eight months since, we noticed the following paragraph in the New England Farmer: "The Massachusetts Agricultural Society have recently imported from England and Scotland, one bull and four cows of the North Devon, and a bull and four cows of the Ayrshire breeds; all said to be good of their several kinds, at a cost of \$3,000."

It was with great pleasure and satisfaction that we read the above paragraph, and it was our intention at the time to have made some remarks upon it, but such has been the demand upon our columns, that we have not been able to find a place for them till now. It is importation, together with a subsequent one by Mr. Webster, of Massachusetts, shows that the good old Bay State is alive to the improvement of its neat stock, and that a reviving interest pervades this as well as many other sections of the country. We trust that while these imported bulls are judiciously bred to native cows, the imported cows may be bred to none but these bulls, or others of pure breed fully equal to them, so that the stock will be kept pure and perpetuated with a view of improving that of the country at large, for generations yet to come, and not be neglected and suffered to run out, as has been the case with pretty much all, heretofore imported. We admire the liberality of the Massachusetts Agricultural Society; \$3,000 for ten animals—\$300 each—is a pretty high price though to send abroad these times for neat cattle, and we hope, before any more importations are made, that the Scotchies and people of this country will cast about a little, and see if they cannot supply themselves equally well at home, and at a much cheaper rate; for we hold it the duty of every good citizen to expend his money in his own country, when it is possible to get anything like the value for it, rather than send abroad. Upwards of four years ago we came to the conclusion, after a pretty thorough personal inspection of the different breeds of neat cattle in England, that we only wanted now and then a very superior bull or so, to give fresh blood to our stock, and that we already have about as good materials for all necessary improvement as Great Britain can furnish us; and to this opinion we still adhere.

Let us now look about a little, and name a few enterprising persons who have imported and are breeding Devons

and Ayrshires, saying nothing of the numerous and widespread Durlhams, and the choice breeds of Herefords scattered over the country.

Mr. Patterson, of Maryland, has a herd of pure Devons, the originals of which were imported upwards of thirty years ago, from the best herds in England. These he has continued to breed with great success ever since, improving their blood with continued fresh importations whenever it could be of the least advantage for him to do so. His herd numbers more than one hundred, all thorough bred, and we believe as good animals as England can produce. He raises many steers annually of the purest blood, and most faultless forms, for the simple reason that the demand for his young bulls is far short of the increase. So fastidious has he been in his breeding, that for several years after he commenced, he steadily refused to part with a single animal to breed, until he got his herd to suit him in their general excellence, and he had made his third trial of imported bulls from England, the last one, from Bloomfield's herd, the same from which the Massachusetts bull was taken. At length, when he opened his herd for sale, he placed the choicest of them except the selections for his own immediate breeding, at the moderate price of \$100; and neither more did he demand, nor less did he ask. Would it not have been quite as well for the Massachusetts Society to have purchased of Mr. Patterson at \$100 each, rather than in England at \$300?

Mr. Colt, of New Jersey, has some beautiful Devons the Messrs. Hurlbut, of Connecticut; Mr. Washburn, of Otsego County, this State, has a fine herd imported by Mr. Rotch, and crossed in with Mr. Patterson's stock; Mr. Allen, of Black Rock, has a choice herd, made up from Mr. Patterson's stock and recent importations from England.—Messrs. Garbutt & Breck, of Genesee County, have been breeding superior Devon cattle for years, and last October advertised a public sale of 40 to 50 head. With all their efforts, they could only sell 14 head, at an average price of \$60 each. The Massachusetts importation cost \$300 each, as before remarked, and those who have seen both, say, they are in no respects superior to Messrs. Garbutt & Breck's, when for the same money they could have got five for one!

A few years since, a young Englishman imported into the western part of this State, a very superior young bull and two heifers, pure North Devons, from the herd of Mr. Davy, of North Moulton, Devonshire, one of the best breeders of this sort of stock in England—his animals generally taking the first prizes wherever exhibited. These he found it difficult to dispose of at \$100 each. They fell into hands that appreciated them, and are now highly valued. A majority of the cows composing the above herds, are good milkers, giving from 16 to 22 quarts per day, making rather more than an average proportion of butter, thus showing the superior quality of the milk.

Now, as to Ayrshires. Mr. John P. Cushing, of Watertown, near Boston, some ten years since, or more, imported eight or ten cows and one or two bulls, which he ordered to be selected from the very best breeds, without regard to cost, in Scotland. These he has bred ever since, and, with his accustomed munificence, has given away, as we understand, several young animals every year, both to Agricultural Societies, and to individuals, for the benefit of the public. Of this liberality the Massachusetts Society have, very unwisely, as we think, declined to avail themselves.

Capt. George Randall, of New Bedford, some years ago, imported several Ayrshires of great excellence, from which he has bred many young animals of equal pretensions, and sold at moderate prices. Mr. Griswold, of Connecticut, and Mr. Patten, of New York, have also imported the best animals that money could procure; several other individuals in different parts of the country have done the same. In September, 1844, we saw standing in the Ayrshire quarter of the State Cattle Show, at Poughkeepsie, an excellent bull, imported into Montreal two years previously, and sent there for sale, with full pedigree, and approved descent, for which the owner could not obtain \$100! Two or three recently imported cows were there also, which could have been bought for that sum each. And yet, with all these fine animals before the public, from several different herds of unquestioned excellence, the Massachusetts Society sends to Scotland, at an expense of \$1,500, to buy five Ayrshires, in no way superior to what they could at any time obtain at home for one-third the money.

Let us be understood. We have no wish, in the slightest degree, to discourage the promotion of the highest excellence in all that appertains to our agricultural advancement. We

advocate improvement in its greatest extent, and in nothing more than in our domestic animals. Numerous individuals in our country, with a spirit and liberality nowhere surpassed, have invested thousands of dollars in the importation of foreign cattle of the most approved quality, and from them have bred herds equal in value, and in all desirable points, to their originals. But how have they been rewarded? In nine cases out of ten, they have suffered the deep mortification of finding their efforts and their enterprise unappreciated, by those who, approving their value, are about to adapt them to their own uses; and of seeing them, like this instance of the Massachusetts Society, "pass by on the other side," telling them in effect, that this stock, though of acknowledged excellence, has deteriorated in their hands, and that they have no confidence in American-bred cattle? Is this fair? Is it just?

We insist upon it, that there are as good and as careful breeders in America as in England, for all practical purposes. We know several cases where imported stock have actually become improved in their progeny by American breeders; although we consider that those extraordinary instances of individual skill in occasionally producing uncommonly fine animals, have not been developed here as frequently as in England. But let it be remembered, that such animals as astonish Englishmen or Scotchmen at home, do not come to America. We cannot afford to pay for them yet. But we have got the blood of these superior animals, and will soon be in the way of producing it equal to themselves.

Let us now sustain each other—at least, until our domestic demand shall carry prices up to something like a compensating amount for the heavy capital already invested in our improved stock; or until the reduced cheapness on the other side of the Atlantic shall be a sufficient reason for passing by animals and herds of equal excellence on this.

Canada Thistles, &c.—Discussion.

THE annexed "speeches" are in reply to the remarks of Mr. PETERS, published in our August number.

MR. CHAIRMAN:—I am glad to see discussion elicited on so important a subject as that of destroying Canada thistles, and other noxious weeds. Since that ball has been put in motion, let every farmer who can wield a pen put forth an effort to keep it rolling.

In reply to the gentleman last on the floor, Mr. PETERS of Wyoming, I would say I have little confidence in Legislative enactments, unless there is a disposition among the people to see that they are enforced. There is a very good law on the subject now in force, which stands as a dead letter on our statute books—that is, a law requiring the path-master in each road district to cause all noxious weeds within the bounds of their respective districts to be cut during the summer season.

An individual, *although he lives in a land of liberty*, has no right to cultivate or suffer any thing to grow on his premises to the injury of his neighbor. If a tree falls from my premises into my neighbor's field, and kills some of his cattle, I am liable to him for the damage, although I was not instrumental in causing it to fall. The Canada thistle spreads both from the roots and seeds, but mostly from the roots. It is a mistaken notion which some have imbibed that the seeds do not vegetate at all, yet it is a happy thing for this country that so small a portion does come to maturity. If they were as prolific in seed as the pigeon-weed, the country would be entirely overrun with them in less than five years. There must be a united effort among farmers to eradicate these pests, or we shall, ere long, like the southern planter, be obliged to abandon our farms as *old fields*, and seek a new home on the virgin soils of the far west. There are many among us who occupy more land than they can cultivate to advantage. The price of produce is so low that they think they cannot afford to hire; they will therefore run over large fields, plowing and cultivating just enough to promote the growth of noxious weeds. They get less than half a crop, and then burn up their straw and chaff to kill the seed. A curse will constantly follow such farmers—the curse at least of a barren and sterile soil—of empty pockets, and of cattle and sheep so thin that it would require three to make a shadow—and of swine so emaciated that they would be obliged to brace themselves against the fence in order to squeal.

The best method that ever I found to destroy the thistle, is, to keep the field infested with them to grass, mow them

frequently, and salt my cattle and sheep on them; and when they become few and scattering, go over the ground frequently, and cut every one that makes its appearance. In this way I have entirely eradicated several large patches, and ere this time might have been entirely clear of them, if my neighbors had not suffered theirs to go to seed, thereby keeping my grounds continually seeded.

I perfectly agree with him in his assertions of our being *led by the nose, &c.* We think it is our province to drudge and toil, and leave the management of pecuniary and political affairs to the *knowing ones*. A learned farmer is looked upon as a nondescript, or creature of fancy, rather than a reality. If we educate our sons, we think that, in order to make men of them, we must put them into some of the learned professions, which are already overstocked.

Tyre, N. Y., August, 1846.

JASON SMITH.

MR. CHAIRMAN:—With interest I have been listening, with my long ears, to the remarks of friend PETERS on the subject of Thistles, Farms and Farming, Laws and Lawyers, and have come to the conclusion that he is wrong—wrong—and with your consent I will give you my reasons. Thistles, and all other noxious weeds, (I reckon,) should not be cut until the seed comes as near the point of germination as may be, and not attain it. The cutting is then more fatal than when cut in bloom or before. Again—if my friend's wishes were realized, it would come to pass that all the laws needed for a single State would be found in a book not exceeding in size the New Testament, and those needed for the United States would be printed in a book no larger than the old fashioned Bible. Now, Mr. Chairman, it would take a great long while to think up and name the ills and woes that would betide us in such a case, and I will only mention a few. Thousands would be thrown out of their present employment, and perhaps would be found hooting "taters."

Again, if our laws were thus short, comprehensive and simple, there would be but little lawing going on; but if the peaceable and quiet were driven into it, by those whose bumps of combativeness perchance were large, why we could defend ourselves in the majority of cases without the aid of counsel, if the new Constitution will admit, and we jacks would soon take the place of that more noble animal, the horse, and all these changes would be new and wrong. Perhaps my neighbor will see it in the same light, if he will but give the subject a second look. As a proof of the position I have taken, or in other words, to show how much may be comprehended in a few words, I will call the attention of neighbor Peters to the law defining the legality or illegality of using the district school-house for other purposes than for the school on such days and hours as it shall not be occupied for that purpose, and the source from which such decision must come. But to conclude, since my hand is in, I would put in for a law that \$50,000 be assessed to each county in this state, to be dealt out by men appointed for the purpose, to the indigent tillers of the soil, in implements of husbandry and other things as they have need. The Chairman says that wont go, for it would be taking directly from the strong and giving to the weak. I admit it, and would say that my notion is to have the tables turned, and I will venture to guess that the nation would be benefited equally as much as if members of ——— should appropriate to themselves \$70,000 for a private library.

Your friend, down east,

Silvanus Madison Co., Aug. 1846.

S. F. S.

CHICKEN SALAD.—Boil a chicken that weighs not more than a pound and a half. When very tender, take it up, cut it in small strips, and make the following sauce and turn over it: Boil four eggs three minutes—take them out of the shells, mash and mix them with a couple of table-spoonfuls of olive oil, or melted butter, two-thirds of a tumblerful of vinegar, a tea-spoonful of mixed mustard, a tea-spoonful of salt, a little pepper, and essence of celery, if you have it—if not it can be dispensed with. In making chicken salad, the dressing should not be put on until a few minutes before the salad is to be eaten; as by laying in it the chicken and celery will become hard.

Fair of the State Agricultural Society.

THE ANNUAL FAIR of this Society took place at Auburn, agreeable to previous arrangements. In several respects the exhibition was inferior to that of the two or three preceding years. This remark applies to the products of the Dairy, and the show of Durham cattle. The exhibition of Horses, Sheep and Swine was only passably good. MESSRS. SHERWOOD and WADSWORTH had each a splendid team of ten yoke of working oxen on the ground.

In Farming Implements the display exceeded any thing ever before witnessed at a State Fair. The demand for good tools of every kind, is, we are happy to perceive, largely on the increase. We must write an article on the waste of strength, and the loss of time and money incurred by using bad farm implements.

Floral Hall, and all the fixtures erected for the exhibition of Fruits, Vegetables, Flowers, Domestic Manufactures, &c., were superior in workmanship and taste, as well as convenience, to any before made on similar occasions. The display of these articles was very creditable, as a whole—while there were specimens of needle work of extraordinary beauty.

After all, the most extraordinary thing to be seen at these State Fairs is the immense number of people that attend them. No passion is so strong as that of sight-seeing; and no business equals that which sells amusements to gratify this morbid appetite. Had there been twenty Circuses, instead of two at the Fair, all would have been full.

The citizens of Auburn generally deserve much credit for their efforts to accommodate the unnumbered thousands that thronged their village, with lodgings and food. In hundreds of instances these efforts were attended by no small personal sacrifice, for no compensation was charged or received. The keepers of public houses, however, did not forget to charge a round sum for whatever they furnished. There was much cause for complaint in that regard at Utea last year; and while we exerted ourselves to have the Fair this year at Auburn, at the meeting of the Society last winter, we did hope that the Inn-keepers of that town would give the public no just cause of complaint. Before the next Fair is located—which will be done in January—we shall insist that ten or twelve keepers of public houses at the place selected pledge themselves not to exact from their guests at the Fair more than ordinary prices. There is always a fierce scramble at Albany to get the Fair at different places, apparently for no other purpose than to make money in the operation. This mercenary system, which has fastened itself on our great Agricultural Jubilees, must be severed, or our rural exhibitions will soon become a by-word, and as odious as they are now popular.

Having the good of the great farming inter-

est at heart, we must notice another capital error: It is the constant practice of getting *Lawyers* to deliver the annual addresses before the State Society. Is it true that not one man among the four hundred thousand farmers in the State can be found, capable of making an *Agricultural Address*?

MR. STEVENS, of Albany, is an excellent lawyer, an unexceptionable man, and made a good speech of its kind. But it cost him time and labor, as he assured us, worth to him in his profession some three or four hundred dollars. We hope this practice will be discontinued.

County Fairs.

WE have favorable accounts of the Exhibitions which have been held in Livingston, Jefferson, Madison, Oneida, Erie and other counties, during the past month—and regret that we have not room for details in this number.

We trust the Fairs to be held the present month will be well attended, and prove highly creditable to the Societies and Counties. Let *each* Society strive to excel, and all will have good exhibitions. A good article on the subject of Agricultural Fairs will be found on page 229. Although more particularly addressed to the citizens of Monroe County, yet it will apply well to those of other counties in which exhibitions are to be held. We annex a list of Fairs for the month, so far as heard from—regretting that we have not been furnished with information from other counties in which Ag. Societies are in successful operation: M.

Allegany	“	Angelica,	Oct. 1 and 2.
Genesee	“	Batavia,	Oct. 3 and 9.
Monroe	“	Rochester,	Oct. 15 and 16.
Niagara	“	Lockport,	Oct. 7, 8.
Ontario	“	Canandaigua,	Oct. 13, 14.
Onondaga	“	Syracuse,	Oct. 1, 2.
Orleans	“	Albion,	Oct. 1, 2.
Otsego	“	Cooperstown,	Oct. 1, 2.
Seneca	“	Waterloo,	Oct. 22, 23.
Wayne	“	Clyde,	Oct. 1, 2.
Yates,	“	Penn Yan,	Oct. 1.

DR. LEE is to deliver the Annual Address before the Genesee Co. Ag. Society, on the 8th inst.—first day of the Fair.

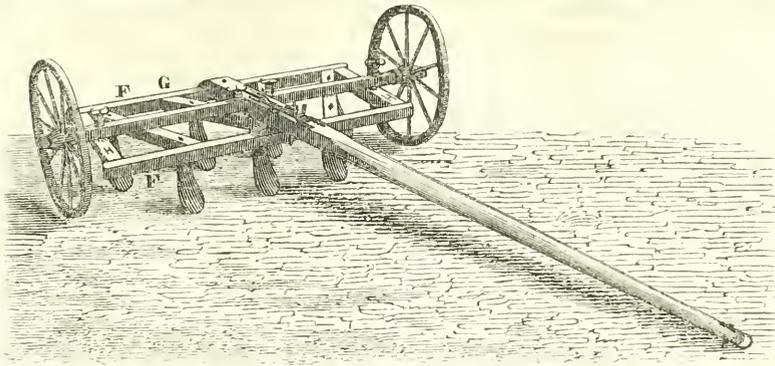
To Correspondents.

COMMUNICATIONS have been received since our last from Wm. Garbutt, H. A sincere Friend and Lover of Social Intercourse, D. A. Ogden, James Putnam, A. G. M., Andrew J. Cook, R. J. Jones, Seth H. Higby, L., E. L.

Books, Pamphlets, &c., have been received from various sources—for notices of which see other pages.

ARTICLES intended for publication in the Farmer should be *accompanied* by the name of the writer—although only a signature be attached when published. Our East Winfield and Webster correspondents are informed that their essays are inadmissible, because anonymous—and for other cogent reasons. “A word to the wise.”

M.



Ide's Patent Wheel Cultivator.

THE above engraving represents a perspective view of a new Cultivator invented and patented by NATHAN IDE of Shelby, Orleans county, April 18th, 1846, (for a more particular account of which see his advertisement.) The labors of the wheat growing farmer will by it be considerably abridged, and the raising of wheat greatly facilitated. This implement is in reality one of the real improvements of the age, and as much superior to the ordinary cultivators in use, as Hall's Threshing Machines and Separators are to the old rope-wheel threshing machines, or McCormick's Reaper to an ordinary cradle. The wheels are 31 inches in diameter, with tire and bushes like an ordinary carriage wheel, and turn on two short axletrees, which are capable of being raised or lowered at pleasure. The body of the cultivator is a stout frame, with two rows of teeth, 3 before and 4 behind, and so graduated as to exactly balance on each side of the axle-trees; a tongue completes the whole, which is firmly attached to the frame, and serves to guide and steady it when in operation. The teeth are each 16 inches long, pointed with steel, and so formed as to wear sharp. Every part of the machine is built in the most strong and durable manner, with substantial braces behind each tooth; and with ordinary usage will last a farmer twice as long as cultivators with cast teeth.

The advantages of this cultivator are manifold. 1st. By means of the wheels the machine runs easy, and the teeth go to a uniform depth; they also afford a ready means of transportation, not only to the implement itself, but other things—as when turned over it becomes a low cart capable of carrying 8 or 10 bushels of grain. 2d. The axle-trees are so graduated as to rise or fall 4 or 5 inches, by means of inch blocks between them and the frame. 3d. The teeth are so long that the machine never chokes, the ordinary cobble stones and boulders rolling readily between them. And 4th. The tongue guides the implement with accuracy and precision.

Such are some of the most prominent advantages of this unrivalled instrument. It is a tool

that must come into general use, and one destined to effect great changes in the farming world. Upon the boundless prairies of the west its use must become universal. Let the farmers of Western New York bestir themselves, and improve their deteriorating lands, for a new era in the production of wheat is dawning.

To Mr. IDE the thanks of the farming community are due. Month after month he toiled and experimented before he brought his machine to perfection. That he will realize a fortune from a sale of the patents seems highly probable—nor can any one doubt its worth, since the judge at Washington, who issued it, pronounced it the best patent that had been issued from the office for the last twenty years.

J. H. HEDLEY.

Orleans Co., 7th month, 1846.

CLARK'S INTELLECTUAL ARITHMETIC AND ALGEBRA: Arranged and taught on the universal principle of Increase and Decrease, to which all questions are referred, and by the application of which they are solved.

THE above is the title of a new School Book, which has the commendation of such competent teachers as Prof. DEWEY of this city, and others. Mr. CLARK has acquired considerable reputation by the popularity of his "Prusian Calculator," or new system—at least, new in this country—of solving questions in arithmetic. These books can be had at the book-stores in Rochester.

"THE GENESEE EVANGELIST" is the title of a handsome weekly paper, published in this city, by Rev. JOHN E. ROBBE, at \$1 a year. It is "devoted to Religious, Literary and General Intelligence, and the Family Circle." The Evangelist is ably conducted, and should be well sustained. We commend it to the patronage of the Religious Community—with the remark that so cheap a publication of its class, merits a large list of substantial (paying) subscribers. M.

SYSTEM and perseverance in agricultural pursuits, never fail to reward the husbandman for his labors, his anxiety, and his capital invested.

Sil. Medal—2d. C. Burnet, Lyons, Dip.—3d. Geo. Catspole, Geneva, Vol. Trans.

Thrashing Machine and Separator—1st. To J. A. Pitts, Rochester. Silver Medal—2d. E. Hicks, Wyoming, Dip—3d. Buell & Nichols, Cazenovia, Vol. Trans.

Drill Barrow, or Corn Planter—A. M. Badger, Rochester Diploma.

Straw Cutters—1st. To E. Lockwood, Norwalk, Ct., Sil. Medal—2d. J. C. Rich, Dip.—J. W. Webb, Ledyard, V. Tr.

Corn cob crushers, &c.—J. A. Pitts, Certificate.

Horse Rake—L. M. Whitman, Wyoming, Dip.

Cradles—J. Starks, Genoa, Dip.

Hay and Manure Forks—Barton & Belden, Dip.

Axes—Barton & Belden, Rochester, Dip.

Hoes—R. M. Hine, Throopville, Dip.

Greatest collection of Ag. Implements manufactured by one person—F. Waters, Westfield, Silver Medal.

Corn Sheller—T. D. Burrall, Geneva, (discretionary) Dip.

BUTTER.

From 5 cows, made in 30 days—1st. To E. R. Evans, Marcy, \$25—2d. O. C. Crocker, Union, \$15.

Best 25 lbs. made in June—1st. To Joseph Baker, Otisco, \$10; 2d. Wm. Outley, Phelps, Col. Tour; 3d. Elisha Sheldon, Homer, Vol. Transactions.

Best 50 lbs. made at any time—1st. To Joseph Baker, \$15; 2d. O. C. Crocker, Col. Tour; 3d. Abram Adams, Preble, Sil. Medal; 4th. Elisha Sheldon, Dip.; 5th. John G. Wheeler, Sennet, Vol. Trans.

CHEESE.

Best 100 lbs. one year old and over—1st. and 2d. No award; 3d. Robert Eels, Onida co., Sil. Medal, 4th. Wm. Otley, Dip.; 5th. H. N. Washburn, Otsego county, Vol. Tr.

Less than one year old—2d. To Robert Eels, Col. Tour; 3d. Wm. Outley, Sil. Medal; 4th. Isaac Bucklin, Brutus, Dip.; 5th. Anthony Shaw, Scipio, Vol. Tr.

SUGAR.

Best 25 lbs. Maple—1st. To Benj. Goss, jr., Ontario co., \$10; Moses Eames, Rutland, Jeff. co., \$5; 3d. Erastus Bigelow, Sangersfield, Dip.; 4th. U. E. Talman, Onondaga, Vol. Trans. No corn-stalk sugar offered.

SILK.

Manufactured—To C. Avery, Perryville, \$15.

Sewing—1st. To C. Avery, \$10; 2d. Joseph Belsher, \$5; 3d. David Irish, Dip.; 4th. N. M. Coburn, Vol. Trans.

Reeled—1st. To Joseph Belsher, \$5; 2d. N. M. Coburn, Dip.; 3d. David Irish, Vol. Trans.

Cocoons—1st. N. M. Coburn, \$10; 2d. J. Belsher, C. Tr.

DOMESTIC MANUFACTURES.

Woolen Blankets—1st. To Wm. Outley, \$5, 2d. F. P. Brown, Elbridge, \$4, 3d. Geo. W. Henry, Lewis co., \$3. Flannels—1st. To Albert L. White, \$5; 2d. C. Avery, \$4; 3d. Wm. Outley, \$3.

Woolen Cloths—1st. To M. W. Priest, Little Falls, \$5; 2d. and 3d. O. Kellogg, Skaneateles, \$4 and 3.

Woolen Carpets—1st. To Jona. Congor, Groton, \$5; 2d. No. 474. (unknown,) \$4; 3d. D. C. Monroe, Elbridge, \$3. Tow Cloth—A. Shaw, Scipio, \$3.

Linen—1st. To A. Pine, Pittstown, \$5; 2d. F. P. Brown, \$4; 3d. E. W. Bateman, Venice, \$3.

Linen Diaper—1st. To A. Pine, \$5; 2d. Margaret Jeffry, Truxton, \$4; 3d. G. W. Henry, Martinsburg, \$3.

Hearth Rugs—1st. To Heichkiss & Smith, Auburn, \$5. 2d. J. Barbour, Auburn, \$4; 3d. Miss A. R. Smith, Vernon, \$3.

Double Carpet Coverlets—1st. To Caroline Jones, Onida co., \$4; 2d. C. R. Nichols, Darien, \$3; 3d. C. Britt, Perryville, \$2; 4th. J. Congor, Groton, Vol. Trans.

Knit Woolen Stockings—1st. To Margaret Jeffry, \$2; 2d. Mrs. Greenleaf, Watertown, Vol. Tr.; 3d. David Thomas, Aurora, Diploma.

Wove Woolen Stockings—Miss L. C. Morris, Auburn, \$2. Linen Thread—R. S. Ransom, Perryville, \$2.

Kersey—1st. To C. Britt, \$3; 2d. R. S. Ransom, \$2; 3d. A. Pine, Vol. Trans.

Linen Knit Stockings—1st. To C. Gridley, Sennet, \$2; 2d. E. W. Bateman, Vol. Tr.; 3d. J. L. Eastman, Lodi, Dip.

Knit Cotton Stockings—1st. 2d. and 3d. L. C. Morris, Auburn, \$2, Vol. Trans. and Diploma.

Bed Quilts—1st. Rebecca Johnson, Syracuse, \$5; 2d. L. C. Morris, \$3; 3d. B. F. Hawks, Phelps, \$2.

Rag Carpets—1st. Wm. Ranney, Elbridge, \$3; 2d. Geo. Hawley, Auburn, \$2; 3d. A. Adams, Preble, Vol. Trans.; 4th. Jonathan Paddock, Aurelius, Vol. Trans.

FRUITS.

Table Apples—1st. Benj. Hodge, Buffalo, \$5; 2d. A. Bryant & Sons, Buffalo, \$3; 3d. C. Powis, Greece, Vol. Tr.

Best 12 Sorts—J. C. Hastings, Clinton, \$3;

Seedling Apple—Isaac Hildreth, Geneva, \$3.

Table Pears—1st. Ellwanger & Barry, Rochester, \$3; 2d. Benj. Hodge, Vol. Trans.

Winter Pears—Ellwanger & Barry, Vol. Trans.

Quinces—Geo. Underwood, Auburn, do.

Native Grapes—Edw. Thomas, Geneva, do.

Foreign Grapes—C. Parsons, Skaneateles, do.

Peaches—Bissell & Hooker, Rochester, do.

Plums—G. F. Pratt, Buffalo, do.

FLOWERS.

Greatest Variety—1st. Jas. Wilson, Albany, Sil. Medal; 2d. J. W. Jackson, Schenectady, Dip.; 3d. Ellwanger & Barry, Rochester, Vol. trans.

Seedling Dahlias—1st. and 2d. Edw. Thomas, Dip. each.

Best 25 varieties Dahlias—1st. Jas. Wilson, Silver Medal

2d. Ellwanger & Barry, Dip.; 3d. I. W. Jackson, Vol. tr.

Floral Ornament—Jas. Wilson, Silver Medal.

Boquets—1st. Jas. Wilson, Col. Tour; 2d. and 3d. L. Marnard, Albany, Dip. and Vol. Trans.

Green House Plants—1st. Mrs. M. Miller, Auburn, Dip.

2d. Miss H. C. Moses, Skaneateles, Vol. Trans.

German Astor—I. W. Jackson, Vol. Trans.

Best 12 Roses—1st. Jas. Wilson, Dip.; 2d. Ellwanger & Barry, Vol. Trans.

DISCRETIONARY. Floral Ornaments—Diplomas awarded as follows: To Mrs. E. T. Throop Martin, Willow Brook. Elihu Tyler, Buffalo; Ellwanger & Barry, Rochester; Prof. Coppock, Buffalo; Wm. Webb, Buffalo; Benj. Hodge, rare and beautiful roses, Buffalo. Henry Morgan, Aurora.

VEGETABLES.

Water Melons—H. N. Langworthy, Rochester, ... Col. Tr.

Musk Melons—Geo. Cooper, Irondequoit, ... Vol. Trans.

White Carrots—C. F. Crossman, Rochester, ... do.

Field Carrots—Joseph H. Osborn, Mentz, ... do.

Beets, (Long Blood,)—C. F. Crossman, ... do.

White Parsnips—George Cooper, ... do.

White Table Turneps—do. ... do.

Cabbages—do. ... do.

Tomatoes—C. F. Crossman, ... do.

Egg Plant—do. ... do.

Sweet Potato—H. G. Dickinson, ... do.

Lima Beans—Ira Hopkins, Auburn, ... do.

Parsley—Geo. Cooper, ... do.

Squashes—H. G. Dickinson, 1 weighing 80 lbs. do.

H. Hubbard, Canandaigua, six from one seed do.

weighed 574 lbs., one of which weighed 146 1/2 do.

Pumpkins—C. Moses, Skaneateles, ... do.

Seed Corn—Chester Gridley, Sennet, ... do.

Dr. John Thompson, Ledyard, ... do.

Joseph F. Osborn, Mentz, ... do.

Mangel Wurtzel—Jas. Rattle, Sennet, ... do.

Sugar Beets—Joseph F. Osborn, ... do.

Dis. premium for beets, carrots and millet, Thos. do.

Ogden, ... do.

do. sweet corn, red pepper, A. Custin, do.

Wheat—R. Harmon, 3 varieties, Wheatland, do.

Martin Smith, white flint, do. \$5.

Best Table Potatoes—1st. C. R. Nichols, Mercers, Darien, \$2; 2d. C. F. Crossman, (Long Pink Eye,) Vol. Trans.; 3d. Joseph F. Osborn, Vol. Trans.

Seedling Potatoes—N. S. Smith. (Pink Eye,) Buffalo, \$5.

do do. 4 varieties, Col. Tour.

Teazles—Richard Abbey, Seneca county, ... Vol. Trans.

Red Peppers—do. 5 boxes, several varieties, do.

BEE HIVES.

Aaron Colton, Pittsfield, Vt., \$5; Wm. R. Kelsey, Stackey, Yates county, Vol. Trans.

STOVES.

For Cooking—1st. Jackson & Phelps, Syracuse, (Buck, No. 3,) for Hotels, Dip.; 2d. D. E. Stafford, (Telegraph,) Silver Medal; 3d. Anthony Davy & Co., Troy, six sizes, (Washington air tight,) Dip.

Parlor Air Tight—1st. Atwood, Cole & Crane, Sil. Med.; 2d. Wager & Dater, Dip.; 3d. J. S. & M. Peckham, Dip.

Stove Hollow Ware—Houg, Schenectady, (five pieces,) Vol. Trans.

PAINTINGS AND DRAWINGS.

W. M. Beauchamp, jr., Skaneateles; Pencil Drawing by Miss Cov, Dip.; Crayon by Miss Conkling, Dip.

IMPLEMENTS AND MACHINERY.

Reaping Machine—C. H. McCormick, Virginia, \$5.
 Stump Machine—R. H. Hall Oswego, \$10.
 Grain Planter and Ash Sowing Machine—P. Seymour, East Bloomfield, \$5.
 Sowing Machine—W. H. Jones, Bridgeport, Conn., Dip.
 Flax Pulling Machine—H. Hill, Dip.
 Bells—A. J. Meneely, West Troy, Dip.
 Door Locks and Bell Pulls—Dana & Price, Utica, \$5.
 Rockaway Buggies—Allen & Carpenter, Groton, \$5.
 Buggy Wagons and Sleighs—J. Gould & Co., Albany, Dip.
 Double Acting Force Pump—1st. Phelps & Messenger, Oneida, \$3. 2d. H. G. Madison, Syracuse, Dip.
 Fire Engine—Calvin Young, (16 years old,) Auburn, \$5.
 Balance slide Farm Gate—1st. H. White, Kirkland, \$3; 2d. S. Benham, Camillus, Dip.
 Portable Bedstead—Jas. Hazlitt, Utica, \$3.
 Refrigerator, and a Shower Bath—E. Taylor, Roch., \$5.
 Horse Yoke—E. H. Danforth, Busti, \$3.
 Leather-creasing Machine—S. Wilson, Dansville, \$3.
 Imitation Graining—F. Van Doorn, Rochester, \$3.
 Smut Machine—Wilson & McCullough, Syracuse, Dip.
 Buckwheat Cleaner—Daniel Pease, jr., Dip.
 Mill for sawing Siding—Nelson Peck, Lyons, Dip.
 Portable Grist Mill—J. H. Bristol, (Fitzgerald's Pat.) Dip.
 Hay Scales—J. F. Keeler, Cazenovia, \$5.
 Ox Yoke—Eton Sheldon, Sennet, Dip.
 Rock Drilling Machine—Richard Dibble, Rochester, Dip.
 Buggy Wagons and Chariotees—J. W. Bates, Utica, Dip.
 Wagon Wheel—J. S. Royce, Cuylerville, Dip.
 Compound carriage Wheel—Norman Rude, Onon., \$3.
 Self-acting Cheese Press—W. C. Pratt, Weedsport, Dip.
 Seraphines—Upton & Miller, Rochester, Dip.
 Whips—Wm. R. Strong, Rochester, Dip.
 Sofa and Card Tables—Chas. Rust & Son, Syracuse, Dip.
 Portable Hunting and Fishing Case—William Gardner, Geneva, Dip.
 Stove Pattern Carving—J. F. Seymour, Utica, Dip.
 Boot crimping Machine—J. H. Ladue, Cato, \$3.
 Mustard and Paste Backing—D. Murdock & Co., Dip.
 Saddlery Hardware—Kasson Frazer, Syracuse, \$7.
 Harness and Brilles—1st. P. Williamson, Skaneateles, Dip.; 2d. F. A. Keeler, Albany, Dip. 3d. C. H. Wheaton, Homer, Diploma.
 Butter Firkins—Abram Sherman, Summer Hill, \$2.
 Model Steam Engine—D. D. R. Ormsby, Homer, Dip.
 Card Printing Press—F. A. Marsh, Dip.
 Hand Power Planing Machine—A. Parker, Auburn, Dip.
 Morticing Machine—Benj. H. Otis, Syracuse, Dip.
 Revolving Bellows—Jerome Darling, Adrian, Mich., Dip.
 Drill Sowing Machine—Panno-k & Pierce, Penn., Dip.
 Sculpture in Wood, (very interesting, and showing great promise.)—J. Sangster, Buffalo, a boy 14 years of age, \$5.
 Sash Lock—James Jones, Rochester, Dip.

MISCELLANEOUS FANCY ARTICLES.

Shell Work—Miss L. C. Morris, Auburn, \$3.
 Wax Work—Miss L. C. Morris, \$5 and Dip.; Miss Mary F. Snow, Auburn, \$3.
 NEEDLE WORK. Fire Screens—Delia M. Colvin, Syracuse, \$5; Lydia S. Russell, Syracuse, \$5.
 Otoman Covers—Delia M. Colvin, \$3; F. E. Thornton, Fleming, \$3. Mrs. N. M. Stephens, Elbridge, \$3 and Dip.
 Table Covers—Mrs. Geo. W. Patterson, Chautauque county, \$4 and Dip.
 Group of Flowers in Worsteds—Mrs. John Porter, Auburn, \$3.
 Lamp Mats—Mrs. W. G. Pierce, Auburn, \$3.
 Mrs. Brockway, Brockport, for variety of worsted work, Diploma.
 Worsteds Rugs—Mrs. Lucas, Auburn, \$4; Mrs. R. C. Huston, Buffalo, \$2 and Dip. Mrs. Cornelius Walcott, Elbridge, (uncut,) \$3.
 Fancy Chairs—Mrs. Sarah Harbottle, Auburn, \$1, Mrs. Joseph Sabin, Syracuse, Dip.; Ladies of Utica Female Academy, \$3 and Dip.
 Handkerchiefs, Caps, &c.—Mrs. V. R. Voorhies, Amsterdam, \$3. Miss Abby Allen, Camden, \$2, Miss Green, Jordan, (child's dress,) \$1.
 Fancy Painting and Needle Work—Mrs. Wm. A. Dutcher, Milo, \$3 and Dip.
 Embroidered Shawls—Mrs. Alanson Benson, Skaneateles, \$3; Mrs. J. G. Wheeler, (Thibet cloth,) Sennet, \$3.
 Embroidered and Stuffed Quilts—Mrs. Joseph Beach, Auburn, \$3; Mrs. Rebecca Johnson, Syracuse, \$2; Mrs. Roxana C. Huston Buffalo, Dip.; Mrs. Hiram Hubbard, (white),

Canandaigua, \$3; Mrs. Eliza Harmon, (white,) Wheatland, \$2; Miss Mary J. Patty, (silk patch,) Auburn, \$2 and Dip.; Mrs. D. C. Monroe, (patch,) Elbridge, \$3; Mrs. Eliza Harmon, (patch,) \$2; Mrs. Wm. C. Sheer, do., helps, Dip.; Mrs. C. A. Frost, do., Delhi, Dip.; Miss L. C. Morris, do., Auburn, \$1.

Silk Patch Piano Cover—Miss Harriet A. Williams, Rochester, \$2 and Dip.

Embroidered Silk Suspenders—Mary C. Van Buren, Albany, \$3 and Dip.

Ornamental Bead Bell Rope—Mrs. Millard Fillmore, Buffalo, \$5 and Dip.

Fringe Mittens—Mrs. S. T. Stebbins, Homer, \$1 and Dip. Lace Veils—Miss Abbott, Auburn, \$3.

Worsted Card Portfolio—Miss Matilda Davis, Buffalo, \$2.

Ornamental and Domestic Needle Work—Mrs. V. R. Voorhies, Dip.; also for table cover, \$2 and Dip.

Bonnets—Mrs. Cook, Syracuse, \$3 and Dip.; Mrs. T. F. Graham, Auburn, Dip.; Miss Atwood, (straw,) Salem, \$5 and Dip.

Lace Caps and Capes—Mrs. Cook, Syracuse, \$3 and Dip. Fancy Worsted Chair—Miss Mary F. Snow, Auburn, Dip.

Lamp Stand (Worsted)—Mrs. B. F. Hawks, Phelps, Dip.

Silver Ware, Pens, &c.—Willard, Hawley & Co., (silver ware,) Syracuse, \$5 and Dip.; F. W. Maffit, (silver ware,) Syracuse, \$5 and Dip.; B. R. Norton, (gold pens,) Syracuse, \$5 and Dip.; Washburn & Robinson, (pen nibs,) Taunton, Mass., Dip.; S. N. Smith, (dental work,) Auburn, Dip.

Weather Strip for Doors—Wm. Gennett, (Gifford's patent,) Syracuse, Dip.

PLOWING MATCH.—10 ENTRIES.

1st. To Davis Cossit, Onondaga,	\$15 00
2d. Azariah Letts, Ulyssus,	12 00
3d. Henry Willard, Cayuga,	10 00
4th. L. C. Pratt, Salina,	Vol. Trans.
5th. J. B. Gaylord, Auburn,	Col. Tour.

A special Committee on Flour was appointed, but did not report. JOSEPH ALLEYN, *Assistant Sec'y.*

FOREIGN DEMAND FOR GRAIN.—On examining our files of English papers, we see no reason to doubt that the crop of wheat on the Continent is short; and that the failure of the potato crop, in Ireland, is greater this season than last. If this be the condition of things in Europe, both wheat and corn must command unusual prices in this country, until after the next harvest. Nevertheless, it is always unsafe to hold on for the last stage of the market, in any season.

MICHIGAN SUB-SOIL PLOW.—We have used one of these implements, had of Mr. ALVA JEFFERSON of Darien, Genesee Co., in this State, and like it. The plow we have is not wooded precisely as it should be—a defect that can easily be remedied. These plows are on sale at the Seed and Agricultural Implement Store of Messrs. RAPALJE & BRIGGS, Rochester.

A GEOLOGICAL PHENOMENON.—The Worcester Spy records the following singular occurrence: A pond of fifty acres in West Springfield has recently undergone a change, from a pure and transparent color, to that of a dirty yellow hue. By the application of muriatic acid, the coloring matter rises to the top, with a slight scum. It is stated that no fish have been caught in it since the change of appearance, though there were a plenty before that time. It is supposed that some gaseous spring has burst forth into it. N. B. This change took place previous to the late earthquake, though by some supposed to have heralded its approach.

HORTICULTURAL DEPARTMENT.

BY P. BARRY.

The State Fair.

THE building set apart for the exhibition of Fruits and Flowers here, was, itself, worth going a long journey to see. It was appropriately designated—"Floral Hall." The taste displayed in its architecture and decorations was admirable, and reflects the highest credit on Dr. THOMPSON of Aurora, who, we believe, was the chief architect—and who, we know, spared no exertion to make it, what it really was, *magnificent*. The finest structure of the kind ever got up in this country.

For the *State Fair*, the show of Fruits, Flowers, and Vegetables, was decidedly *meagre*.—Most of the eastern fruit growers and nurserymen preferred patronizing the Exhibition of the Massachusetts Horticultural Society, which, unfortunately, was held at the same time. The people of Auburn and vicinity contributed nothing worthy of notice. Buffalo was very well represented. Messrs. B. HODGE, and A. BRYANT & SONS had large and fine collections of fruits. Mr. TYLER and Mr. WEBB, Florists, had nice collections of fruits and flowers. LEWIS F. ALLEN, Esq., the President of the Buffalo Horticultural Society, would have had a fine collection of fruit, but it was accidentally left behind. Professor COPPOCK, Vice President of the Society, presented a Floral Design, in the form of a banner, 9 feet by 5, with "Buffalo Horticultural Society" and a *spread eagle*, wrought with German Asters, Dahlias, and other flowers, on a ground work of moss. It was a tasteful and beautiful thing—an honor to the Society and to Mr. COPPOCK and his pupils who assisted in working it. Col. COIT, of Cleveland, a Member of the Buffalo Society, presented a fine collection of fruit. On the whole, the Buffalo people did well, and contributed largely to the interest of the exhibition.

Rochester did her part creditably. She sent in the greatest quantity, and the finest fruits—some flowers, and the best vegetables. JAS. WILSON, of Albany, sent a large quantity of flowers. Mr. MENARD, of Albany, two exquisite bouquets. Prof. JACKSON, of Schenectady, quite a collection of miscellaneous flowers; and Mrs. E. T. THROOP MARTIN, of Willow Brook, a pretty pyramid. There was no fine collection of Dahlias. The unfavorable season was no doubt the cause of that. It was a great loss to the show.

Considerable fault was found by visitors, in regard to the great distance at which they were kept from the fruit stands—preventing them from being able to see anything satisfactory of the fruit, or even its name. This we know was a bad arrangement, and we mention it now that it may be guarded against in future.

We think it would be judicious in the State Society to be more liberal in the encouragement of Horticulture. "Floral Hall" may be made, and was in this case, one of the most attractive features of the exhibition, and a great source of revenue. Fruit culture should be encouraged, as well by offering respectable premiums as by appointing proper committees, who are *capable* of discharging the duties devolving on them, and willing to do it. For details, see Premium List published in other pages of this paper.

Reviews.

REMARKS ON THE CULTURE OF THE GRAPE, and the Manufacture of Wine in the Western States. By MALZER FLAGG, Cincinnati.

This pamphlet contains the substance of a Report on "*The Vineyards of Hamilton County*," made to the Cincinnati Horticultural Society, by a committee of which Dr. FLAGG was Chairman. The committee seem to have made a careful and thorough investigation of the subject, and the facts which they have collected, and the deductions they have made, are worthy of consideration.

It appears from the tables appended to the Report, that there are some 350 acres devoted to the culture of the Vine in that county, mostly cultivated by Germans. We should have known it without seeing the report, because no other people could be found who would undertake such an enterprize in a country like this. To embark in the culture of rocky hill sides, and waste, barren looking lands, where millions of fertile acres are spread out on all sides, requires German endurance, industry, and economy—and requires, too, a love for that pursuit, that must be *bred in the bone*.

N. LONGWORTH, Esq., of Cincinnati, has the credit, and no doubt deserves it, of making great efforts to introduce the culture of the Vine to that vicinity. But we are disposed to give some credit to those patient toiling Swiss, who have lived on "hominy and sour crout," and have endured privations that no American would endure in establishing those Vineyards. We hope they will be amply rewarded.

Whilst we should rejoice to see our hill sides, in all favorable localities, devoted to the culture of the Grape, we have no desire to see our people embark in the production of wine for "a common beverage." There is no country in the world where wine, or any other strong drink, is used as "a common beverage," but presents a sad spectacle—a large proportion of the population in a state of moral and intellectual degradation from the very effects of that beverage. We have heard much about the temperance of the people of wine districts in Europe, but from what we have ever seen we have no very high opinion of it. We should prefer a higher standard of excellence, in this respect, for America; and we think as long as we live, we shall not attempt

to prevent the use of brandy by encouraging the use of *wine*. We would advise sincerely, the use of *neither*; but we are satisfied to have every man do, in this matter, as he thinks *best*. We only allude to this topic, here, because it is dwelt upon at considerable length in this report.

Aside from wine making, the Grape is worthy of extensive culture in every district of our country adapted to it. It is a most delicious, healthy fruit, and easily grown. It should be on the tables of every family in the land. If we had an abundance of Grapes, and other fine fruit, we believe it would greatly diminish the thirst for intoxicating drinks, of every sort; and we think every philanthropist should aid in promoting their culture. We subjoin the following extract from the Report, which has a practical bearing on the mode of cultivating the vine:

The soil most congenial to the growth of the Vine, and the perfection of its fruit, is a rich, light, calcareous loam, with a dry, stony, or rocky bottom: no sub-soils can possess too great a quantity of these materials, as the roots of the vine will run thoroughly into their interstices. In these dry and warm situations, the fibres lie secure from that excess of moisture which accumulates in more compact soils. One chief cause of the grape's not ripening, is the great depth the roots are allowed to run, below the influence of the sun's rays; they thus acquire too great a quantity of moisture; vegetation is carried on until late in the season, and the ripening process does not commence until there is a want of solar heat to perfect the fruit. The roots require not only earth, but sun and air also, which are as necessary to them as to the leaves and branches. That the vine requires the soil above described, is evident from the fact, that its roots soon become dry by evaporation, and are always free from an injurious excess of moisture. Hence it is evident that it will not succeed well in a cold, wet, heavy, clayey soil. In the early part of the season, it was observed that in all the vineyards where the vines were not injured by the frost, the fruit looked remarkably well, promising a great crop; but when the ripening season came on, in most of them, much of the fruit remained green and shrivelled, and decayed and dropped. This, no doubt, resulted from the soil's being too wet and adhesive, into which the sun and air could not penetrate. The cropping of vineyards, as now practiced by many, I consider injurious, as it not only impoverishes the soil, but keeps it damp, and shaded from the influence of the sun and air, so necessary for the perfection of the grape.

After a vine has been planted three or four years, its roots will begin to grow up towards the surface, being attracted by the sun and air. My own experience suggests that these surface roots ought never to be disturbed by digging or plowing, but great care taken to preserve them, as they contribute in a high degree to improve the flavor of the fruit and insure its ripening. After a vineyard has become well rooted, instead of plowing the ground, it should be occasionally stirred, to the depth of two or three inches, and kept free from weeds and all kinds of vegetation, and the surface loose and open to the air. A few years since I had a portion of my ground well-spaded and the surface roots cut off from fifty fine bearing Catawba vines; but from this experiment they have never fully recovered. One of our most experienced vine dressers also informs me, that on a new piece of vineyard of 1500 vines, that in the early part of the season, looked more promising than any in the vicinity, he bestowed extra pains by plowing and cultivating; but two rows necessarily remained without any other attention than a light dressing with a hoe; the result was, the neglected vines ripened their fruit perfectly, while the others were badly injured by the rot, not yielding half a crop.

It is hardly possible to plant a vine in any situation in which it will not thrive, provided the roots can push into a warm, dry place, and the aspect is such as to afford sufficient solar heat to elaborate its drought; but great loss is often witnessed from too much wet. When the ground is worked too freely, particularly with a plow, the upper roots are injured, and, in wet seasons, the rain soaks down about the

roots, preventing the fruit from ripening, so that they afford only a weak and watery wine, which will not keep. I have been rather minute on the subject of soils, for the reason, that unless more attention is paid to it, many new beginners will be disappointed, and abandon the business.

In commencing new vineyards, the usual method is to select a hill-side, without any regard to exposure or soil, it being considered sufficient, if it is only a hill; the ground is then trenched about two feet deep, and terraced, with either stone or sod, (the latter is becoming general, being cheaper, and answering quite as well.) In this operation, the top soil is removed to one side, and the sub-soil thrown up, where it remains until required to fill up the trench, by which time, from exposure to the atmosphere, with the addition of a little light manure, it becomes nearly as good as the top soil. The cuttings are generally planted in nurseries, and after a year or two, the most vigorous are planted in trenches 2½ or 3 feet apart, by 5 or 6 feet wide; the top black soil is filled in and around the vines first, and the remainder after the trench is full. By this time the vines become strong, and well rooted, and in favorable seasons, in the fifth year will produce a good crop. Each vine has a stake from 6 to 8 feet high and is trained by either "bowing" at the top, or at right angles and tied to the opposite stake with a willow twig. The former plan is more general, as it is thought the vine will last longer, and bear better, probably because bowing allows the sap to flow more freely than bending at right angles. The vines are generally trimmed in the autumn and winter, down to three stalks, two for bearing fruit, and one for the next year's wood. It is thought our vine dressers trim too close, and that it is wrong to adhere so strictly to the European mode of cultivation, where the difference in soil is so great. In our new, rich soil, vines have a strong and rapid growth, and yield great crops without injury; but in Europe, vines grow slowly, are feeble, and yield small crops.

THE AMERICAN FLOWER GARDEN COMPANION. Revised and enlarged: third edition. By EDWARD SAYERS.

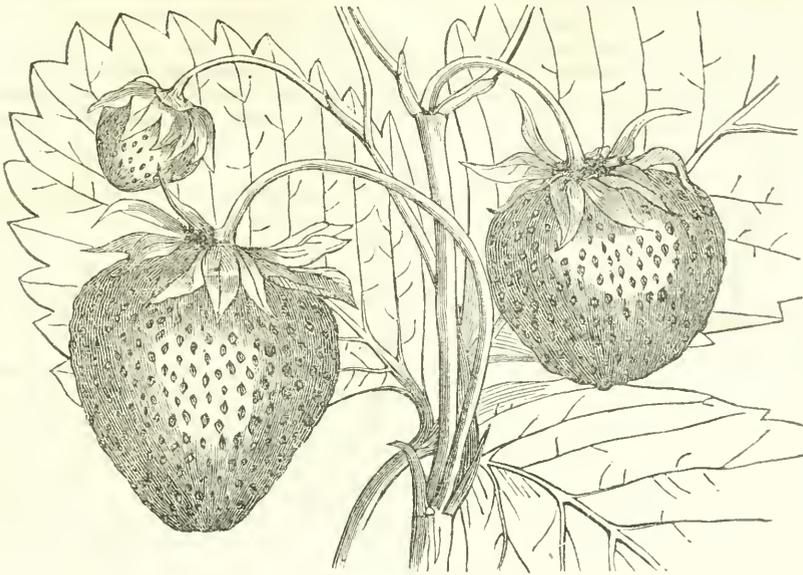
A MANUAL ON THE CULTIVATION OF LIVE FENCES; with a practical treatise on the cultivation of Evergreens, Ornamental Trees, &c. By E. SAYERS.

A TREATISE ON THE CULTURE OF THE DAHLIA AND THE CACTUS. By the same.

WE are indebted to Mr. SAYERS, of Cincinnati, for a copy of each of these works.

The "Flower Garden Companion" contains a great amount of useful information on the subject of Ornamental Gardening. Each branch of the subject is treated of in a separate chapter, in a brief but practical way—beginning with the laying out of the flower garden, and going through the whole routine of propagating, planting, and managing plants and shrubs. It also treats of the construction and management of Green Houses, and the propagation and culture of Green House Plants; and contains descriptive lists of plants, with their time of flowering, which will be found of great service to many. On the whole, it is a judiciously compiled little book, and would be a saving of more than 10 times its price in one season to many who are making and improving gardens without much practical knowledge of gardening. It can be had of Mr. D. M. DEWEY, Arcade Hall, Rochester, for 50 cents.

The "Manual on Live Fences" is a pamphlet not larger than a common Almanac, and yet it touches upon a great variety of subjects besides "Live Fences," viz: *Seeds and roots of Plants—Increase of inoculation and grafting—Culture of hardy Evergreen trees and shrubs—Culture of the Grape—Culture of fruit trees in general, &c., &c., besides an Appendix on*



SWAINSTONE'S SEEDLING STRAWBERRY. (FIG. 23.)

"Transplanting trees in towns and cities." It cannot be supposed that Mr. SAYERS, admitting him to be a man of *rare genius and accomplishment*, could do justice to all these subjects in such a small space. Still he has brought them together, and said something on each that every body does not know. The subject of live fences begins to attract a good deal of attention, and information on the subject is highly desirable. Many valuable hints may be gleaned from Sayer's Manual, and it costs next to nothing—only 12½ cents. Mr. DEWEY has it.

The "*Treatise on the Culture of the Dahlia and Cactus*" was published in Boston, in 1839, and is now, we believe, out of print. We presume it was good in its day; but it is dead now, and we will not disturb its repose.

Mr. SAYERS, the author of these books, is a clever man, and has had considerable experience in gardening; and he seems to be determined on giving the public the benefit of it. When we had the pleasure of seeing him, he was bound for Boston, the "emporium of literature"—there, as he informed us, to revise and enlarge his "*Fruit Garden Companion*," in order to make it a fit accompaniment to his "*Flower Garden*." We wish Mr. SAYERS success, and we congratulate the public on the rapid increase of Horticultural intelligence, and bright prospects ahead.

COMPLAISANCE pleases all, prejudices none, adorns wit, renders humor agreeable, augments friendship, redoubles love, and, complying with justice and generosity, becomes the sacred charm of the society of mankind.

Swainstone's Seedling Strawberry.

THE fruit of this strawberry, with us, is of average large size: from three to four inches in circumference are the ordinary dimensions.—The foliage is very large and rich in appearance, and the foot-stalks of the leaves are long. The fruit is borne in large clusters on high and pretty strong foot-stalks. The berries are very regular in shape, varying from ovate to conical. The seeds are very slightly sunk; the surface of the fruit is rather even, glossy, and of a beautiful light scarlet, a good deal lighter in color than that of most pine strawberries. The flesh is solid, and very high flavored. The season of ripening is about midway between early and late, but it continues ripening for a good while.

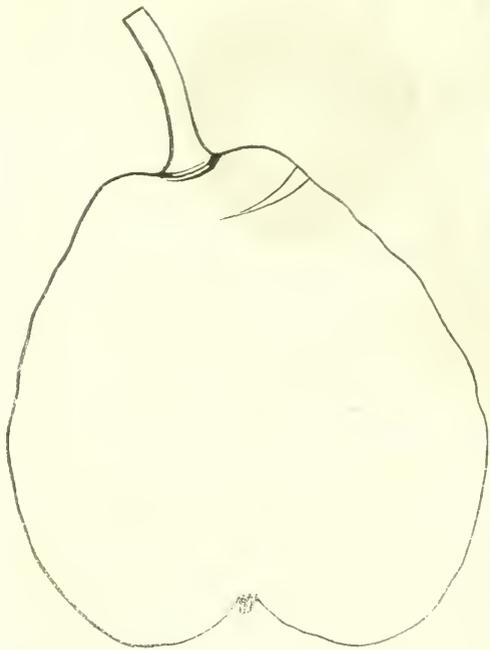
Last winter is the first in which we fairly tested the *hardiness* of this variety. With us, it has so far proved perfectly hardy, much more so than some of the old Pine strawberries. But as it is yet comparatively new in this country, it remains to be proved how far it will answer for general cultivation in all parts of the country.

In England, Swainstone's Seedling bears a very high character. It is placed among the few which rank as of the first quality, in all respects, in the garden of the Horticultural Society of London. Dr. Lindley recommends it as one of the six very best sorts for cultivation in that country. Our own experience, thus far, leads us to believe that it will prove, on the whole, one of the very finest of Pine strawberries for this climate.—*Horticulturist*.

PRUDENCE in promises is a fair guarantee in the redemption of them.

Ananas Pear. (FIG. 24.)

AMONG upward of twenty of the finest Autumn Pears, lately presented by us before the Fruit Committee of the Horticultural Society here, the ANANAS was unanimously pronounced *superior*. To our taste it is decidedly so.



The above outline is from a medium sized specimen, produced on a young tree imported from France in 1844. It bore a fine crop this season for the first time. The tree is a vigorous grower, with light olive colored branches, and glossy leaves inclined to fold. Fruit medium sized, form irregular obovate, sometimes roundish; surface somewhat uneven, like the Bartlett. Skin greenish yellow, with specks and blotches of russet, becoming quite yellow at maturity, with sometimes a tinge of red on the sunny side. Stalk usually about an inch long, rather stout and thickened at the base. Calyx small, closed in a narrow, slightly plaited cavity.—Flesh white, melting, abounding with a delicious high flavored juice. The core is very small, and it ripens and keeps well in the house. Specimens picked on the 10th of September are now gone, (28th.) Those we picked a few days ago will keep 3 weeks, or perhaps through the whole of October.

This is the "Ananas" mentioned in Downing's "Fruits and Fruit Trees," p. 349; and not the Ananas d'Ete figured on the next page. We consider this one of the very best of all the new Pears recently introduced to this country, and worthy of a place by the side of the Seckel.

It is stated that the disease which affects potatoes has appeared in carrots and onions in England.

Horticultural Exhibition.

THE Exhibition at Rochester, on the 10th of September, was very good. Minerva Hall was respectably filled. A range of shelves occupying one end was filled with pot plants, bouquets, &c. The other end and one of the sides were occupied with the fruits, and the other side with vegetables.

The arrangement was complete and satisfactory, presenting a beautiful sight to the spectators, and affording to all an opportunity of examining and comparing the articles on the tables as minutely as they chose. The specimens exhibited were very fine, creditable to the Society, as well as the exhibitors. We regret that so few of our friends from the country were present. The loss was theirs, however; if they choose to stay away from such exhibitions, knowing they would be greatly benefited by attending, we can have no objections. We would refer to some of the finest things presented, but as some might feel disposed to accuse us of partiality, we will refer our readers to the General Report, in next number.

Longevity of Peach Trees.

THERE is no part of the United States where the Peach Tree is more healthy, or attains a greater age, than in Western New York. It is only improper soil or culture, and bad treatment, that has caused early decay where it has occurred.

The best orchards in this section, now in full vigor, are bordering on 20 years old. We have just been shown a collection of various fruits, by Col. COLBY of Ogden, and among others a fair-looking natural Peach, from a tree *forty years old*, yet healthy and productive.

To Correspondents.

E. L. LEAVENWORTH, *Volcott*. We regret that the Peaches sent us by stage were not received, owing to the neglect of the driver, until they were all decayed. We inquired about them at the Stage Office, but could hear nothing of them until a week or more after we accidentally learned that they were at one of the hotels.

We know of no particular remedy for the rotting of fruit, which has been so extensive this season. It has no doubt been caused by the unusual hot weather, which has also brought forth extraordinary swarms of all sorts of injurious insects. The serious evils suffered from both causes, which no human foresight can well guard against, may not again be experienced here for many years to come.

A. DORSEY, *Maryland*. We shall endeavor to procure the desired information in respect to "Ribbon Houses." The Catalogues have been forwarded.

Thomas' "Fruit Culturist" is published by M. H. Newman, 199 Broadway, New York, and sold by D. M. DEWEY of this city, and no doubt by the booksellers in all large towns.

The idea of a grafting "Mart" is not bad; it would be convenient in many respects, but there are serious and insuperable objections to it. Grafts require to be very carefully kept, after being cut. Few nurserymen or fruit growers would be willing to cut grafts of rare, scarce fruits, until ordered; and the fewer hands such things pass through the better. When you want grafts, order them from a nurseryman or fruit grower of experience and reputation; then you will get them, most likely, *fresh and genuine*. This is the way we do.

SETH H. HIGBY, *Port Byron*. The box of Fruits has been received, in good order—but too late to be noticed in this number. They will be duly attended to in our next. Your requests have been complied with.

Work for October.

ABOUT the middle of this month, or as soon as there has been a pretty severe frost, transplanting may be commenced. Fall planting may be recommended for all hardy *fruit and ornamental trees, shrubs, and plants*, where the soil is dry and not too much exposed; in cold, wet, and exposed situations, planting had better be deferred till spring.

Persons wishing to send trees to the west should attend to it in good season. On this subject we made some remarks, in reply to correspondents, in our last number.

Bulbous Flower Roots, such as Tulips, Hyacinths, Narcissus, Crocus, Lilies, &c., &c., may be planted all the month, and even into November. It may be well to give the beds a covering of pine branches or leaves. Before winter sets in fully.

Dahlia Roots must be taken up after the first frost that kills the tops. They should be well dried in the open air, and laid away on a dry shelf in a safe cellar.

Herbaceous Plants of all hardy kinds may be taken up, divided and replanted. Tender ones should be protected in due season by a covering of leaves, litter, or an inverted sod.

Chinese Roses, Fuchsias, and other tender border plants should be taken up and potted.

Between this time and the setting in of winter, manure should be applied to all sorts of trees and plants that require it. The late fall rains and spring thaws dissolve and prepare it to be taken up by the roots as soon as vegetation commences. There is also more leisure generally in fall than in spring.

Storing winter fruit will require unusual care and caution. Gathering, in the first place, should be done well. No bruised or unsound fruit should be put in a barrel or elsewhere among that which is intended for keeping. It should be kept dry, cool and airy as possible until winter sets in, before it is placed in the cellar. The unusual tendency to rot which exists amongst fruit this season, will render extraordinary attention necessary. A gentleman of experience in these matters informs us that he invariably puts his keeping fruit away in dry sand, and in this way he can keep it two or three months after its usual time, with flavor and freshness unimpaired in the least. It is perfectly reasonable, and we would recommend it, or any other method known to be equally as good, to be very generally adopted this season. Kiln dried bran has been recommended, and we have no doubt will answer well.

Plum Stones Wanted.—Persons having Plums or Plum Stones, or common Pears with good seeds to dispose of, will be paid the highest price in cash at the Mr. HOPE NURSERIES, or at the office of the "Genesee Farmer," No. 34 Front St., next door to the Rochester Seed Store, *up stairs*.

Rochester, Oct. 1, 1846.

AFRAID TO LEARN.—It is related that Galileo, who invented the telescope, with which he observed the satellites of Jupiter, invited a man who was opposed to him, to look through it that he might observe Jupiter's moons. The man positively refused, saying,—"If I should see them, how could I maintain my opinions, which I have advanced against your philosophy?"—This is the case with many. They will not look at the truth—they will not hear it, for fear that the arguments they have framed will be destroyed, and that they may be obliged to give up their opinions and practices. *Quere.*—Are not the preceding remarks truthfully applicable to thousands of farmers who will neither *subscribe* for, nor *read*, an agricultural paper? *

THE Boston Cultivator says the potato crop of New England is good, notwithstanding the alarm about the rot early in the season.

Monroe County Cattle Show and Fair,

To be held at Rochester, Thursday & Friday, Oct. 15, & 16.

GENERAL Exhibition and Cattle Show on Thursday—all animals and articles to be in their places, ready for inspection, at 11 o'clock. *Plowing Match* to commence precisely at 10 o'clock, on Friday. Annual Address on Friday at 2 o'clock, P. M.

The Fair will be held on the COLLEGE LOT, near Bull's Head, in Rochester. The Premium List offered this year, in Money and Books, is about \$500. Shall the reputation of Monroe County be sustained? If so, the farmers must turn out, and present their best animals and other articles for exhibition.

Western New York Agricultural School.

THE Proprietors of this Institution have pleasure in announcing to its friends and the public that its second term will commence, under the most favorable auspices, on the 20th of September next. The year is divided into four quarters of 11 weeks each, but no extra charge will be made to permanent pupils staying a year, for board and tuition during vacations, if they remain at the School.

The studies pursued are Chemistry with the practical analysis of soils, fertilizers, &c.; Geology; Botany, Comparative Anatomy with dissections. Physiology, Natural History, Book Keeping, Surveying, Practical Farming and Gardening, beside the study of the Languages and Mathematics, as usually taught in colleges. The undersigned have secured the services of Mr. R. K. SANFORD, of Fulton, a gentleman of high mathematical and literary attainments, to aid them in the Literary Departments of the School.—They have also a Primary Department for giving lessons in all branches of a good English Education. Whatever pursuit the student may wish to follow in after life, it is the purpose of those having charge of this Institution, to qualify him for its duties, to the extent of a thorough, practical education, embracing a liberal range of the Natural Sciences.

When the weather is suitable for out door work, pupils will labor from one to two hours a day, receive instruction in rural affairs. Strict attention will be paid to their morals. They will board in the family of the Principal, and attend church with the same.

TERMS \$25 a quarter, or \$100 per annum including board, washing, tuition, lights, and firewood.

DANIEL LEE,

RAWSON HARMON, Jr.

Wheatland, Aug. 25, 1846.

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

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

Wanted.—100 bushels Peach Stones, at the old Rochester Seed Store, nearly opposite the market.

Oct. 1, 1846.

JAMES P. FOGG.

AGRICULTURAL IMPLEMENTS.

E. TAYLOR, at his Steam Factory, No. 6 Hill-street, is extensively engaged in manufacturing and dealing in all kinds of AGRICULTURAL IMPLEMENTS. Having during the past year visited all the Agricultural Establishments in Philadelphia, New York, and Boston, and secured the right of many valuable Machines and Implements, he is prepared to furnish, wholesale and retail, all kinds of Agricultural Utensils found in the eastern cities, such as

Grant's Patent Fan-Mills, Corn Shellers, Corn and Coffee Grinders, Corn and Seed Planters, Scythe Snathes, Straw Cutters, Patent Churns, Pitchforks, Patent Parallel Jaw Vices,

together with many other valuable tools, both to Farmers and Mechanics.

He is also extensively engaged in manufacturing *Bate's celebrated Patent Sliding Top Chamber Shower Bath*, to be used in chambers or sleeping apartments, without the least damage to carpets—the nicest article in the world! 1100 sold in four months in New York city the past season.

Farmers in want of tools or implements, of any kind, would do well to call and examine. For sale wholesale and retail at the Factory, No. 6, Hill street; also at the store No. 15 and 17, Exchange street., and at the Genesee Seed Store, No. 10 Front street. E. TAYLOR.

Rochester, N. Y., May, 1846.

FARMERS, CURE YOUR HORSES!

GEO. W. MERCHANT'S CELEBRATED
GARGLING OIL.

An Invaluable Remedy for Horses, Cattle and other domestic animals, in the cure of the following diseases.

*Fresh Wounds,
Galls of all kinds,
Sprains, Bruises,
Cracked Heels,
Ringbone, Windgalls,
Poll Evil, Callus,
Spavins, Sweeney,*

*Fistula, Stitfast,
Strains, Lameness,
Sand Cracks,
Foundered Feet,
Scratches or Grease,
Mange,
Horn Distemper.*

Also a valuable Embrocation for Diseases of the Human Flesh.

AVOID DECEPTION.—It is not generally known, that no means have been left unemployed by that class of persons who attempt to counterfeit every good medicine that has acquired public confidence, to mislead the public mind into the belief that their oil is the same as the Gargling Oil. Be not deceived, therefore, by such *knavery*; and be not satisfied except you find the marks of the *genuine* article upon the bottle.

One gentleman affirms that he cured a valuable horse of a *Windgall* which had become callous. Another says he has cured a fine horse of a *Sweeney* which nothing else would effect. Another has cured himself by the use of the Oil, of a *Rheumatism*, and in his family has used it for all complaints requiring an external remedy. Another who had it "on hand" says that he relieved himself immediately of *severe* and continued *pain*, resulting from the setting of a dislocated knee joint which every application made for twenty-four hours had failed to perform; he soon obtained sleep.

It has cured *Founders*, and is a common remedy for *Galls, Sprains, Bruises, Strains, Cramps, Weakness of the Joints and Limbs, Frozen Feet, Contraction of the Muscles, Scalds, &c.* and if all the facts were told they are so remarkable they would probably not be believed.

For testimonials, synopsis of diseases, and mode of treatment, see pamphlet which accompanies each bottle.

☞ Sold at the ROCHESTER SEED STORE, and by Druggists and Store-keepers in the U. States and Canada. ☞ Also at the GENESEE SEED STORE, Rochester.

Plows for Sale.—We have on hand, and intend to keep constantly for sale, the celebrated *Diamond* and *Wisconsin* Plows, the merits of which have been fully tested. Price, \$7.00 for medium size. The farming community are respectfully invited to give us a call.

RAPALJE & BRIGGS,
No. 10 Front-st

24f.

NEW SEED and IMPLEMENT WAREHOUSE.



GENESEE SEED STORE & 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.

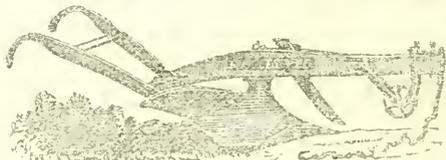
Fruit and Ornamental Trees, Shrubs, Plants, &c., will be furnished to order from one of the best establishments in the country—the well known MOUNT HOPE NURSERIES.

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 of 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.

RAPALJE & BRIGGS.

Rochester, Feb. 1, 1846.

Rochester Agricultural Warehouse.



BY THOMAS NOTT.

THE Subscriber having purchased the interest of Mr. JAS. P. FOGG, (late B. F. Smith & Co.) in the Agricultural and Horticultural IMPLEMENT BUSINESS, takes this method of informing the Farmers of Monroe and adjoining counties, that they will find it to their advantage to call and examine his Stock of Farming Implements before purchasing elsewhere.

In his assortment may be found the following articles.—
Barrall's Patent Corn Sheller, price, \$10.
Cultivators, price from \$5 to \$8.
N. C. Dayton's Gang Plow, for putting in wheat, \$15.
Hutch's Seed and Plaster Sower, \$25.
Delano's Diamond Plow, \$7.
Massachusetts Sward C Plow, with extra points, \$7.
" Eagle and Eagle No. 25 (3 horse) Plow.
" Six-hill and Subsoil Plows, \$9 to \$15.
Straw Cutters, from \$5 to \$15.
Sanford's Straw Cutter, \$15.
A complete assortment of Plow Points.
I. Grant's Patent Fan Mill, price \$27.

A full assortment of AGRICULTURAL IMPLEMENTS, TIN AND WOODEN WARE, and hundreds of other articles too numerous to mention. For sale cheap, by

THOMAS NOTT,

Front st., nearly opposite the Market.

Rochester, July, 1846.

NURSERY OF J. J. THOMAS,

MACEDON, WAYNE CO., N. Y.



A FINE COLLECTION OF FRUIT TREES are offered for sale at this Nursery, all of which have been propagated from BEARING TREES, whose genuineness or excellence, and fitness for the climate of Western New York, have been thoroughly proved by the personal examination of the proprietor. It has been a principal object to avoid the confusion resulting from a numerous list of varieties, and to present only a moderate collection of the very finest kinds. To accomplish this, many years have been occupied, and selections have been made from several hundred sorts in bearing, none but the best being chosen, after thorough examination and trial.

The Ornamental department contains some of the very finest Shrubs and herbaceous perennial Flowering Plants, suited to open ground culture.

The new Catalogue of this Nursery will be sent gratis by mail, or other information furnished, on every post-paid application. 10-2m

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 autumn. 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.

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. Office, East North-st., 3 miles east of Rochester. Office 56 Front-st. September, 1846. SAMUEL MOULSON.

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, September, 1846.

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, Rochester, Sept. 1, 1846.

More Paular Merino Bucks.

I have procured another lot of Paular Merino Bucks from the celebrated flock of S. N. Jewett, of Vermont. For sale by R. HARMON, jr.
Wheatland, August 26, 1846.

MOUNT HOPE BOTANIC GARDEN AND NURSERIES,

Rochester, N. Y.

(South St. Paul st., nearly opposite the Cemetery.)

THE Proprietors of this Establishment offer for sale an unusually large and fine collection of

FRUIT AND ORNAMENTAL TREES, FLOWERING SHRUBS, VINES AND ROSES, HARDY HERBACEOUS PLANTS, DOUBLE DAHLIAS and BULBOUS ROOTS, GRAPE VINES, RASPBERRIES, STRAWBERRIES, AND GOOSEBERRIES; ASPARAGUS ROOTS, RHUBARB, &c.; HEDGE PLANTS, GREEN HOUSE PLANTS, &c.

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Of *Double Dahlias* the assortment is unsurpassed, including the finest show flowers yet introduced to this country, and many that were imported last season at 5 guineas each, of which a separate catalogue will be furnished.

The stock of Green House Plants is very extensive, and includes the most beautiful new *Pelargonium* (*Geranium*), *Fuchsia*, *Camellia*, *Calceolaria*, *Verbena*, *Cactus*, &c., &c., all finely grown, and will be sold at greatly reduced prices.

Trees and Plants packed in the best manner, and shipped to any part of the country agreeable to order.

A new edition of our descriptive priced catalogue will be published this month, and sent gratis to all post paid applications. Orders from unknown correspondents should be accompanied with a remittance or reference.

ELLWANGER & BARRY.

Rochester, Sept., 1846.

Ba s! Bags!! Bags!!!

THE Subscriber, wishing to dispose of his stock of Grain Bags, has reduced the price, and Farmers or others wishing will do well to call, see quality and buy, which I am confident they will do. To be found at E. Watts Hardware Store. JAMES H. WATTS.
Rochester, Sept. 1, 1846. [9-2t]

Seed Wheat.—100 bushels Gen. Harmon's celebrated White Flint Wheat; also, 50 bushels Soul's do., just received, and for sale at the Genesee Seed Store, by [9-tf] RAPALJE & BRIGGS.

Gang Plows.—Wiard's celebrated Gang Plow on hand and for sale (price \$12) at the Genesee Agricultural Warehouse and Seed Store, by [9-tf] RAPALJE & BRIGGS.

Straw Cutters, of all the most approved kinds, used in Western N. Y., for sale cheap, by RAPALJE & BRIGGS.
No. 10, Front-st.

Corn Shellers!—A first rate article, price \$10, for sale at No. 10, Front-st. RAPALJE & BRIGGS.

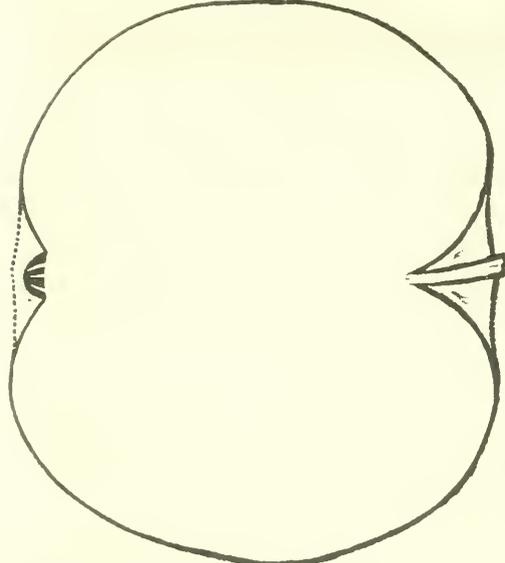
Breed's Canal Wheel-Barrow.—A large lot just received and for sale very cheap, at the Rochester Agricultural Warehouse, by [10] THOMAS NOTT.

CHOICE FRUIT TREES!

ROCHESTER COMMERCIAL NURSERY, MAIN ST., ONE MILE EAST OF THE COURT HOUSE, ROCHESTER, N. Y.

Office No. 1 Arcade Hall.

The subscribers offer for sale, this Autumn and the coming Spring, a large quantity of FRUIT TREES, comprising the choicest assortment of *APPLES, APRICOTS, CHERRIES, NECTARINES, PEACHES, PEARS, PLUMS, &c., &c.*, very thrifty and healthy; and represented to be of the kinds represented.



TO THE FARMERS.

We have now on hand of **APPLE TREES**, large enough for transplanting to the Orchard, **MORE THAN ALL THE OTHER NURSERYMEN IN ROCHESTER**, and can therefore offer greater inducements to purchasers by giving them a selection from such a great number.

Trees grown in this vicinity, are generally more healthy and less infected with insects than those obtained from any other quarter, besides being more hardy.

We do not intend to cultivate any fruits but those of acknowledged superiority, and every variety named in our Catalogue may be depended upon as being **FIRST RATE**, except when otherwise noted. Persons unacquainted with the character of the different varieties, may leave their selection to us, and depend upon receiving the choicest kinds ripening in succession.

Trees delivered in any part of the city free of expense. When packed so as to insure safe carriage to almost any distance a small charge will be made to cover the expense.

Orders from unknown correspondents must be accompanied by a remittance, or a city reference. Catalogues furnished gratis, and cheerful and prompt attention given to all *post paid* letters requesting information.

Ornamental Trees and Shrubs furnished from our own Nursery; and where we cannot fill the order, we will buy of our neighbors and sell at their prices.

As we anticipate a large sale this season, purchasers will please bear in mind that the *earliest orders are always entitled to the preference*, and will, of course, be better filled than later ones.

We are happy, at all times, to receive calls from any persons interested in the culture of fruit; and for our trees, *challenge comparison with any grown here or elsewhere.*

SECTIONS furnished to those who wish to graft for themselves or others.

Prices as moderate as those of any other establishment, and a liberal discount made to those who buy to sell again.

BISSELL & HOOKER.

Rochester, September 1, 1846.

MARKET INTELLIGENCE.

ROCHESTER, Oct. 1.

THE late foreign news has created considerable activity in this market—having advanced the prices of Flour, Wheat and Corn. Holders of Flour ask \$4 75 a \$5. Wheat and other grain is selling at the quotations given below.

Rochester Produce Market—Wholesale.

Wheat,.....	94 a	96	Pork, bbl,	10,00	11,00
Corn,.....	53	54	Pork, cwt,.....	4,00	
Barley,.....	37	40	Beef, cwt,.....	2,00	3,00
Oats,.....	23	25	Lard, lb,.....	6½	
Flour,.....	5,00		Butter, lb,.....	10	12
Beans,.....	75	1,00	Cheese, new lb.,	4	6½
Apples, bushel.	12	31	Eggs, doz,.....	9	
Potatoes,.....	20	25	Poultry,.....	7	
Clover Seed,.....	5,00		Tallow,.....	6	7
Timothy,.....	1,50	2,00	Maple Sugar,...	6	7
Hay, ton,.....	6,00	7,00	Sheep Skins, fresh,		12½
Wood, cord,...	2,00	2,50	Green Hides, lb	3½	
Salt, bbl,.....		1,00	Dry ".....	6	7
Hams, lb,....	6	7	Calf Skins,.....	7	

[By Magnetic Telegraph.]

NEW YORK, Oct. 1.

FLOUR closed at \$5,62½ for good brands, and they were selling at that figure, but no less. The entire sales for export do not exceed 3000 bbls., including 1000 Oswego last night. These sales were all at \$5,62½. About 1000 bbls. fancy sold at \$5,81½ a \$5,87½. The Eastern and home trade demands have not been large—a rapid advance causing buyers to take only for immediate want. Southern descriptions are held at \$5,62½ a \$5,75.

The market for grain is well sustained in prices, but with the exception of wheat, the transactions have been light. The sales of wheat are 17000 bushels. White western at \$1,15, and 5000 red at \$1,10 all for export. Of corn the sales are small in consequence of the high rates demanded. About 3000 white sold at 89 cts.; 1000 do. 83 a 85, and 10,000 northern yellow and white at 80.

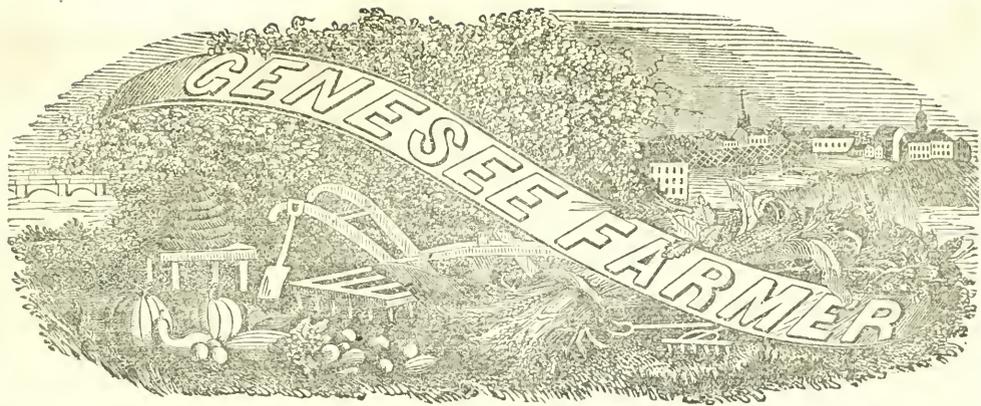
BUFFALO, Oct. 1.

After the receipt of the foreign news yesterday afternoon, buyers were extremely desirous to operate, but as a general thing holders were unwilling to name a price. Sales 10,000 bush. Sandusky wheat, to arrive, at 87½; 1500 bush. Cleveland about at 85 cts.; 1000 bbls. Michigan flour, in two parcels, at \$4,75, and 6000 bush. corn, to arrive, at 60c. This morning buyers were less desirous to operate, from the fact that the Telegraph was out of order, and no communication could be had below Rochester. Sales 5700 bush. Southport wheat, to arrive, at 87½; 2000 bush. Cleveland at 90, and 4000 do, at 92 cts. In flour we hear of the sale of 200 bbls. Napanee' Michigan, at \$4,75; 685 bbls. Ohio and Indiana at the same, and 500 do. two brands Michigan, at \$4,78. The market closed firm at the latter quotation.

PORK has advanced: good mess is held at \$10 a \$10,50, and prime at \$7 a \$7,50.—Com.

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VOL. VII.

ROCHESTER, N. Y., NOVEMBER, 1846.

No. 11.

THE GENESEE FARMER:

Issued the first of each month, at 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. ☞

Do varieties of Plants have a period of Natural Existence, and cease to live, like Individual Plants and Animals?

THIS has become a question of great practical importance, as well as one of much scientific interest. A majority of Physiologists regard the existing Potato Malady, which prevails so alarmingly in Ireland and Great Britain, as the effect mainly of constitutional weakness, in varieties of the plant, indicative of the approaching extinction of such varieties, on the face of the earth. The loss of vital energy has been increased, and hastened, it is believed, by the practice of an unnatural, and injurious course of cultivation. Mr. ROGERS of Dublin, whose researches are published in the Mark-Lane Express, and received with respect and commendation, attributes the decay, and wide spread dissolution of potatoes, to the general custom of allowing them to germinate, and form sprouts, of greater or less length, which are broken off before planting. The production of these germs, or rather their growth, and waste, consumes a portion of the vital force, as well as nutritive elements of the tuber, which are utterly lost to the succeeding generation.—In any single crop, the loss is of course not great; but carried through many successive generations,

the injury can hardly fail of being very disastrous, to the constitutional vigor of the emasculated, or mutilated race. As the disease prevails to some extent in our own immediate neighborhood, and has received attention and study at our hands last season, and the year before, we venture a few suggestions in addition to those made by the distinguished Irish chemist.

When the germ of a seed or tuber begins to organize the elements that surround it, and fully develop a new living being, Nature provides it with a peculiar nitrogenous substance called *diastase*. This substance is not unlike the fluid found in the stomachs of young animals, called gastric juice, or rennet, which aids in dissolving their food. It has the remarkable power of converting 2,000 times its weight of *insoluble starch* in potatoes, or the seeds of grain, into a *soluble gum*, to nourish, and build up the embryo germ into a perfect plant. After the first leaves are formed, nature having no farther use for diastase, it ceases to exist. To sprout a potato in a warm cellar or pit, and break off the sprout, is to waste this vital agent, so indispensable to the healthy nutrition of a new living being. Mr. ROGERS has found by experience that potatoes are exempt from rot, if planted late in autumn, and never disturbed in the spring, but cultivated as if planted at the latter season.

It has long been a source of deep regret to us that the study of vegetable physiology, and of the diseases incident to cultivated plants, is generally so little relished, and so unpopular, in the farming community. Hence, we write every sentence that relates to this science, in the fear of not being understood; and of exciting the disapprobation of many of our readers. But we must still crave their indulgence, while we pursue the discussion of this subject a little farther.

The premature development of the germs of potatoes is only *one*, and that perhaps the least injury, which thoughtless cultivators inflict on this invaluable plant. They omit to place within reach of its roots those *alkalies* and alkaline earths, without which no healthy and perfect tu-

bers can be formed. According to the most reliable analysis, an acre of potatoes, tops and roots, weighing 7,870 lbs. dried, require in their organization 193 lbs. of pure potash and soda.—Ashes and common salt will supply these elements; but others are also needed, which a little gypsum and bones will furnish.

Nothing is more certain than the fact that, to withhold from any being, whether vegetable or animal, its appropriate food, is to impair its constitution, and expose it in an eminent degree to become diseased and destroyed by injuries, whether by insects or other agents, that would fall harmless on well fed, strong, and healthy systems. A violation of the laws of Organic Life will be fatal, sooner or later, according to the extent of such violation, not only to particular beings, but to the *family* in which the injured individual is a connecting link between the past and the future. From this cause, many families in the highest class or genus of beings, that of man, have become extinct, although once endowed with great vital force. For wise purposes, God destroys families that, from generation to generation, consume more than they produce, in idleness, extravagance, and vice. This is doubtless done to make room for the expansion of families, distinguished alike for their industry and temperance, and the physical, moral, and intellectual strength, which Labor and Virtue always confer. If we view human action in its proper light, it will be found impossible, in the order of Providence, for man to inflict injury upon others, even on a potato plant, greatly needed as it is by the poor, without bringing on himself or his offspring a greater injury. But it is unnecessary for us to moralize on this subject; although morality and agriculture are more intimately connected than many suppose. Without any especial violation of natural laws, we have no doubt that varieties of plants as well as animals will, one day, cease to have any living representatives on the earth. The researches made in that department of Geology called Paleontology, which investigates fossil plants and animals, leave no room for doubt in regard to the extinction of many races, that have flourished for thousands of years on the globe. Hence, our able contemporary, Mr. BECHER, editor of the *Indiana Farmer and Gardner*, expresses a general truth too strongly when he says in a recent article: "Any *one tree* may wear out; but a *variety* never." A family of plants, or variety of such family, may endure for indefinite ages. But in the ceaseless progress of Time, an epoch will arrive when this family, like all the extinct families, from the recent mastodon downward, will have no living representative to perpetuate its lineage.

We can not dismiss this subject without remarking that constitutional weakness in the potato plant can be remedied as well by propagation from the germs in the tuber, as from the seeds

in the ball. The vital principle is as feeble, as much exhausted in the one organ of the being that forms embryos, as in the other. If vitality be lacking in the germ found in the potato or tuber, it cannot be more abundant in the seed.—If plants germinated from seeds, appear more healthy and vigorous than those from the tuber which gave the seeds, it is owing to extraneous circumstances, better care, keeping, less exposure, or some other incident. Unwise culture is only the predisposing cause of the potato rot; while the active agent exists unseen, and unappreciable in the atmosphere, like "the pestilence that walketh in darkness." We have good reason for the remark that, by supplying the crop with the precise ingredients required to form it, in its perfect state, and at the same time avoiding the bad practice of sprouting before planting, the peculiar malaria, insect, cryptogamic, or parasitic plant, or whatever else may complete the work of destruction, will pass harmless over the potato field.

Wheat Culture.

THE farmers of Monroe county sow annually about 72,000 acres in wheat, and harvest not far from 1,400,000 bushels of this most valuable grain. The breadth of land sown last year, according to the Census, was 72,635 acres; while the acres harvested were 68,383. These facts are interesting, because they show that wheat culture is on the increase in the Genesee country, there being 4,252 acres sown in one county in 1845 more than there were in the year previous. The average yield is something less than 20 bushels per acre. That this is a very profitable crop may be safely inferred from the circumstance that about one-third of the plow land in Monroe county has constantly a wheat crop on it. The whole amount of land in meadow, pasture, and tillage, is 281,011 acres. Deduct only one-fifth of this for moist land permanently in meadows or pastures, and it leaves 224,809 acres of wheat land. Divide this sum by 3, and it will give but a fraction more than the number of acres annually sown with wheat in the county.

It is taxing the natural resources of the soil pretty severely to take from it a crop of wheat every third year, and send the grain out of the county to distant markets. Our researches, however, by chemical analysis, into the composition of the soil, and of the fragments of rocks, which being broken up into pebbles, and ground into powder, form the principal weight and substance of all soils, warrant us in saying that, with skilful management, this land may be cropped with wheat every third year without impairing its enduring productiveness. But what *is* skilful management? No general rule can be laid down which shall embrace the best practice applicable alike to all soils, under all conditions and circumstances.

The common sense, not only of the profession, but of the community at large, has decided the point that no physician, no matter how well versed he may be in the sciences of anatomy, physiology, and pathology, and in the properties of medicines, can make a general prescription that will apply to all constitutions and all diseases. He must see every patient, and learn all the facts and circumstances peculiar to each, before he can say what remedies are needed in each particular case. This common sense principle applies with equal force to the renovation, and lasting improvement of soils, by removing every defect that attaches to each man's farm. We make these observations as an apology for not attempting to prescribe rules of practice for the guidance of farmers in the details of wheat culture. Without an analysis, we can only deal in generalities.

It is obvious that by growing, and sending off a farm, 500 or 1000 bushels of wheat per annum, the ingredients in the surface of the earth that combine with elements taken from the atmosphere to form the seeds of this plant, must gradually become less and less, without restitution from some source. The farmers of Monroe county annually make out of *something*, and export from their estates, the *matter* converted into wheat, equal to forty-eight millions of pounds. The whole crop of wheat at sixty pounds to the bushels will weigh nearly one hundred millions of pounds. We do not regard it as impracticable for this county to produce and export annually that weight of matter in good wheat, for indefinite ages to come. Our reliance is on the elements of this bread forming plant, which nature has stored up in the sub-soil, drift, and solid rocks for hundreds of feet in thickness below the surface of the earth where the plow-share now runs. In many respects this mine of the minerals required in making good crops of wheat, is vastly superior to the resources of the Nile, which enable the people of Egypt not only to feed unnumbered millions at home, but to export to Rome and other cities in Europe and Asia, for thousands of years, an incalculable amount of breadstuffs. It is a profound, and most interesting study to learn the best process for transforming Earth, Air, and Water, into bread, milk, meat, wool, and flax. It is the Earth, aided by air and water, light, heat, and electricity, that furnishes all *manures*, whether vegetable, animal, or mineral. Hence it is that man plows the earth, harrows the earth, spades the earth, hoes the earth, and cultivates it in a thousand forms, to favor the organization of useful plants. But he fails to plow and mellow the soil deep enough to command the full advantage of its mineral elements. The plow passes over too much surface in a day, and only half so deep as is necessary to give the roots of plants a fair chance to expand, and draw nourishment from a

considerable depth in the earth. We have recently taken up roots of common white beans, grown on a deep sandy loam, which extended 2 feet each way from the stem, and penetrated 18 inches deep into the soil. By placing the stem of a plant in the centre of a square whose sides are distant 2 feet from it, the area will be 16 feet, or 4 on all sides; and if we include a depth of 18 inches, the solid contents will be 24 cubic feet of soil to yield food to the growing plants. Now, limit the extension of the roots of the plant to one foot in all directions, to the depth of 9 inches, and you will have a surface of only 4 square feet, containing just *one-eighth part* of 24 cubic feet. Every body knows that a hard, impervious soil is fatal to the growth of bountiful crops.— Plow, then, a narrow furrow, move all the earth down eight inches, and let a sub-soil plow follow in the same tracks, to break up, and pulverize the compact earth six or eight inches deeper.— This will enable the oxygen and carbonic acid in the atmosphere, and other meteoric elements, to decompose the before insoluble silicates and phosphates of potash, soda, and lime; and permit the thirsty roots of starving plants to go down and drink in the nourishment which they most need. In this operation the sub-soil is not brought to the surface, but only broken up, and made friable and pervious to water, air, and roots, in all respects like the surface-soil. In studying the art of plowing, as practised in Western New York, we have witnessed the too prevalent custom of letting the plow run far to land, by which the whole of the furrow slice is not cut up and separated from the earth below. Although the defect and bad work are covered up from the view of superficial observers, still the injury will be very serious to the crop. Plow fine and deep, executing the work as you would for a garden, when you intended to raise beets two feet in length and weighing 16 or 18 lbs. To give a due degree of compactness to the surface, the roller may be used, after seeding, to good advantage. How one can best increase the elements that form wheat in land, where they are lacking in the sub-soil, as well as in the soil above it, is a subject of so much practical importance that it can only be fully elucidated by another article on wheat culture as long as this, which will appear in our December number.

GRAFTING THE TOMATO UPON THE POTATO.— Mr. Meigs read from the "Annals of the Royal Horticultural Society of Paris," before the New York Farmers' Club, an account of a successful experiment of grafting a stem of the tomato upon the stalk of a potato, by which a crop of tomatoes were raised in the air, and one of potatoes in the earth.

THE Indians on one of the islands in Lake Huron made the present year one hundred tons of maple sugar.

Science and Agriculture.

UNDER this head Mr. JOHN J. THOMAS, of Macedon, has written an Essay, which is published in the last volume of the Transactions of the State Agricultural Society; and for which a premium of \$100 was awarded by said Society. We had intended to notice this Prize Essay before, but a pressure of other matters displaced it from our thoughts, till we saw it copied into the October number of the Albany Cultivator.

Having received so high a premium from the State Society, this production should not only convey much valuable information, as an original composition, but it should be free from errors in reference to the application of science to the practice of agriculture. Of its merits, in regard to originality of thought, and the disclosure of new views of the subjects discussed, we shall not now speak. The correction of the errors which the article contains, and which are being widely disseminated through the columns of the Cultivator, and the endorsement of its conductors, is the object of our criticism at this time.

On page 215 of the Transactions, the author says:

"A ton of manure yields	2 lbs.	and	4 oz.	of potash.
do guano do	66 do		8 do	do
do manure do	1 do		10 do	soda.
do guano do	36 do		15 do	do
do manure do	5 do		1 do	phosphoric acid.
do guano do	233 do		9 do	do
do manure do	1 do		4 do	sulphuric acid.
do guano do	93 do		8 do	do
do manure do	1 do		9 do	chlorine.
do guano do	62 do		0 do	do

This table is copied from the London Agricultural Gazette. The kind of manure spoken of is common stable and barn-yard manure. We have reason to believe that it was originally published in the London journal mainly as a puff, to aid some dealer in Guano to sell his ware, by representing a pound of it to be worth 60 or 70 times more than a like weight of the excretions of domestic animals. It is one of the thousand humbugs used so successfully by speculators to fleece unsuspecting purchasers. Consider for a moment the first statement: "A ton of manure yields two pounds and four ounces of potash."—From this assertion the reader is given to understand that 2000 lbs. of manure, no matter what the kind, or quality of food consumed to form the excretions, always contains a fixed, and uniform amount of potash! So too, 2000 lbs. of the manure of sea-birds, called guano, under all circumstances, yields just 66 lbs. 8 oz. of this alkali! It matters not what plants a farmer feeds to his horses, cattle, sheep, and swine, nor how much or little soda their food contains; a ton of their manure will invariably yield *one pound ten ounces of soda*; while a like weight of the dung of sea fowls, whether old or recent, will give the purchaser just 36 lbs. 15 oz. of the same mineral! The good sense of the respected Author should have saved him from such absurdities.

It is obviously a gross perversion of chemical analysis to attempt to draw any such sweeping conclusions from it, in regard to the nature and properties of manures. These must depend exclusively on the composition of the food and drink of animals, out of which all of their excretions, whether liquid or solid, must be formed. As the constituents of the food vary, so must the manure. Mr. THOMAS has fallen into a similar error in stating the comparative value of poudrette and guano. He makes a ton of poudrette (the excretion of the human family,) contain just 4 lbs. 10 oz. of soda, no matter what the people eat, nor how much or little salt they use!

Speaking of "common barn-yard and stable manure," Mr. T. says: "It contains a large portion of decaying vegetables, derived from the pulverized hay consumed by the animal; it is rich in ammonia and other *animal matters resulting from the secretions*; and it contains many salts derived from both of these sources."

The above remarks contain a material error, which should be corrected. It leads the practical farmer to believe that he obtains in his stable manure, "animal matters" and "salts" derived from certain "secretions," which are not contained in the food of the animal. How can an organ in any animal secrete "matter," the essential ingredients of which are not contained in its blood and furnished in its food? If an adult be well kept, it will not diminish in weight—and if it does not, how can it void, in manure, more matter than it takes into its system? If a young, growing animal, adds 100 lbs. to its weight while consuming 2000 lbs. of forage, will it not give off 100 lbs. less of the elements that make its flesh and bones than it takes into its stomach during the same period?

Will it be said that an animal transforms vegetable substances into animal matter, and thereby improves their properties for feeding plants?—If so, this is a mistake. The animal matter elaborated in the system to repair its constant waste, is used for that purpose; while the waste, or consumed tissues, &c., pass out of the body as decomposed, disorganized, and mineral matter. Thus the carbon in fat burnt to keep the animal warm, when its food is scanty in cold weather, escapes from the lungs in the form of carbonic acid, which, without farther change, may unite with caustic lime and form a most enduring rock. Hydrogen, when consumed in animals, escapes in the form of water, or ammonia, both of which are unorganized compounds. No farmer must expect his domestic animals to supply him with more, or better manure than their food and drink will furnish.

There are two or three errors relating to vegetable physiology; but of no practical importance, and we let them pass.

Although this Essay is short, (filling less than five pages in the Cultivator,) it contains many

valuable suggestions, as well as some errors.—The writer's remarks on the application of science to the construction of farm implements are to the point, and calculated to do much good as hints to mechanics, as well as farmers.

Making Pork.

The first thing to be attained in making Pork is to raise to maturity pigs suitable for fattening. This operation is effected with much greater economy and skill by some farmers than others. We have studied the subject a little in the famous pork region of southern Ohio and Indiana.—There, it is no uncommon thing to see several hundred swine feeding in a clover field, like so many sheep, and belonging to one man. In winter they live mostly on mast, getting a little corn when the range in the forest fails. When the hogs live on grass in summer, they are salted as regularly as sheep or cattle. On good fresh clover, water, and a little salt, pigs will grow and do well. At the West, good farmers provide a field or two of oats, or oats and peas, into which their hogs are turned early, to give them a start before corn is ready to feed. In the dairy districts in this State, the same crops are grown, harvested, and the oats and peas ground and fed with whey and butter-milk to swine, for making pork. If the meal be mixed with boiled potatoes while boiling hot, so as to swell and partially cook it, before cold slops are added, the food is much improved. The true way, however, is to make meal of any kind into well cooked pudding, take this out of the kettle, boil the potatoes, throw away the water in which they were boiled, and then mix the pudding and potatoes together thoroughly. If one has no potatoes to spare for feeding, it is good economy to mix a little wheat bran or shorts with corn meal before cooking, as the latter, if fed alone, is rather too concentrated, or lacks bulk to give up to the lacteals (vessels that convey nutriment to the blood from the intestines,) all the flesh and fat-forming elements in corn meal. There is often a very great waste of these elements in the ordinary process for adding both fat and lean meat to the carcass of an animal. The digestive organs should be comfortably filled with food easy of digestion, and not so rich as to leave an excess of nutritive matter to pass through the system, and add nothing to its weight or value.

Why is not a pound of corn meal, or wheat flour wet with cold water, and a little salt, quite as good, in a human stomach, to form blood, as it would be, if well cooked before it was eaten? What chemical change is wrought in the organized elements of the seeds of plants, or their roots and tubers, like beets and potatoes, that cooking should make them more nutritious? The baking of a loaf of bread adds nothing to the mass, and takes nothing away but a little moisture. And yet, the baking of bread or a potato does effect

a material change in the starch of the tuber, and the starch and gluten of the flour. It renders them not only more soluble in the gastric and other juices of the digestive organs, but far more soluble in simple water. Everybody knows that when a potato is grated to obtain its starch, that the latter falls to the bottom of the vessel containing water, a white, *insoluble* powder. Hot water transforms this into a *soluble* gum, called by chemists *dextrine*. Without pursuing the science of domestic economy farther at this time, we will only intimate that the practice of cooking food, so universal among all nations that have made any advance in the arts, is founded in natural laws, and advantages, which will secure the extension of its benefits to most of our domestic animals. 200 lbs. of corn well cooked, will make more pork than 300 lbs. fed raw. And if it be cheaper to cook two bushels than it is to raise one, by all means cook them. We are not sure that it is profitable to give a tenth of corn or barley to have it ground, for feeding animals. We suppose the gain, even for cooking, is somewhere in the neighborhood of 8 or 10 per cent. The hard, oily shell, or bran that surrounds the seeds of all cereal plants needs to be well broken before the kernels enter the stomach for digestion. Simply boiling corn fails to accomplish this, although the hull is broken.

Fattening hogs should be kept quiet, fed regularly, and have a comfortable place for sleep, and to eat their food. It is good economy to start them early in the season, for they will take on flesh and fat faster in moderately warm, than in cold weather.

DESTROYING INSECTS.—This season, insects have been unusually destructive to our finer fruits. The Wasp, the Yellow Hornet, the Bee, the Snapping Bug and Ants, have all been busy in breaking through the skin, and causing a premature decay—in some cases before the fruit was ripe. At least one-half of our apricots rotted in consequence of these attacks, and many of our finest peaches. A continued buzz was heard in the trees; and what to do became the question. Every wasp nest that we could find was destroyed, together with the *builders*, so that a very sensible diminution in their numbers was observable; but still there were many left to crowd in with the other insects; and I thought of the plan, long since adopted by English gardeners, which was to hang phials filled with sweetened water among the branches. This plan has proved very successful; and if I had adopted it early in the season, much fine fruit might have been saved. We will remember it next year.—*D. Thomas, in Horticulturist.*

THOUGH a man may become learned by another's learning, he can never be wise but by his own wisdom.

Potato Disease.

MR EDITOR :—I have read all that has been published in the present volume of the "Farmer," (and much besides,) on the subject of the Potato malady, without being satisfied with any of the reasons assigned for it, or any explanation of its nature or cause. I have looked for worms, and have found them only in a few instances, and under such circumstances as to induce the belief that they were not the cause, but the effect of the disease: in other words, that they had been bred in the potatoe *after* it was taken from the ground; or at least, after its decay. All other explanations, as far as I now recollect, assign the disease to causes which appear to me to have existed long before the disease was known. Some have ascribed it to a "peculiar state of the atmosphere" at a "certain stage in the growth of the plant." But how comes it that these two "peculiar" circumstances never existed together till within a few years, and that now they arrive every season? If they did exist in former years, why did they not produce the same effect that they now do? If they did not, in what do they consist? Certainly rain, drouth, heat, moisture, &c., were no uncommon things in summer, long before the potato malady was known. "Avoid cutting, or bruising them, &c.," says one, "at the time of digging," &c. But such precautions were not necessary twenty years ago. "Dry them," says another, "before storing." But in former years they could be transferred from the "hill" to the cellar, or to the "hole," or the pile in the field, and still remain sound if secured against frost. "Let them be thoroughly ripe," says another. Why now, more than formerly?

Thus, after reading all the explanations, theories, precautions, &c., the question involuntarily arises, "Why then were not our potatoes affected in former years?" Two theories may be regarded as exceptions: viz. the "worm" theory, (for which see above,) and that which ascribes the disease to degeneracy, or a decay of vitality. One argument in favor of this theory, is, that decay often commences in the injured part of a tuber, and soon destroys it. We have something analogous to this in the fact, that the wounds of aged people are not only difficult to be cured, but are often absolutely incurable, and frequently spread, or enlarge till death ensues. In former years, if a potato was cut or injured, (as with the hoe in digging,) a skin, or crust would form over the wound, and the tuber would remain sound and good. Now, the wound is oftener the starting place of the disease. Yet here a difficulty presents itself: the newer varieties, I am informed, are equally affected with the older.

I first observed the disease, or the indications of it, the past summer, in the shape of dots, or specks, on the leaves, which gradually enlarged, changed their color, and caused the leaves to ap-

pear as if drops of hot water, or some corroding substance had fallen upon them and destroyed their texture. The work of destruction went on, and in a few weeks the tops were nearly all destroyed, even of the late varieties. (Has any remedy for this stage, or variety, of the disease been found?) On digging the potatoes in September, they were nearly all sound, but had evidently been checked in their growth, not being perceptibly larger than when first attacked by the disease. The few that were rotten at the time of digging, and that perished afterwards, exhibited the disease in three forms: 1st, Some were reduced to a soft pulp, emitting a very offensive odor. 2d, A few turned black, (or nearly so,) but remained quite firm, having little odor. 3d, On others the disease first appeared in the form of depressions, or sunken spots, or patches, which gradually infested the whole tuber.

I have observed what I suppose to be a similar disease among other vegetables. On some of the pods of my Lima Beans I discovered spots, or blotches, resembling those that appeared on the leaves of the potato. These enlarged, but did not seem to destroy the texture of the pod. I did not leave them, however, to ascertain the result.

The fruit of the red, or bell, pepper has been affected with a similar disease. A small dark spot is first seen, which gradually spreads over the whole. On opening it the inside is found to be black and decayed, (rotten.) On examining my autumn squashes, (the large Marrow, and the Mammoth,) I observed that the stem of the fruit, in some instances, was decayed in part, (I do not know but this may be common with these plants,) and on a subsequent examination I discovered that one of the largest squashes was so far decayed on the underside, that a portion of it fell out, emitting an offensive odor. As the upper portion appeared sound, I proceeded to cut away the decayed part, but found that the disease had spread through the whole. Even the seeds were affected, presenting a watery, instead of a milk-white appearance. Two others on another plant I found to be affected in a similar manner. The flesh, which before cutting appeared firm, was found to be spongy, or full of little cavities and of a watery-yellow color, as if chilled by frost. The odor was not offensive, though a viscid, slimy substance exuded from them when cut. Both these plants perished prematurely.

The disease then may be the same in all. It appears to be inexplicable, and is perhaps incurable. Is there not something analogous to this in the epidemic that has prevailed in this country during the last few years? (One of your correspondents, I believe, has before suggested this idea.) And may not the one be in the animal world what the other is in the vegetable?—See also the strange disease, thus far incurable,

among the horses* in the south-eastern part of this State. The potato disease attacks the plant and its fruit while in an apparently healthy state, and soon destroys one or both. The epidemic attacks its victims in a state of health, generally in some remote part of the body, and spreads till it has done its work. The former has in general baffled the skill both of the farmer and the man of science, as the latter has that of the Physician.

Fairport, Oct. 8, 1846.

H.

* I think I have seen a notice of a similar mortality among the sheep of some of the countries of Europe.

The Crops in South Venice, 1846.

MR. EDITOR:—Having given to the readers of the Farmer an account of the crops grown annually in this section of Cayuga county, for two or three years past, I again indulge the privilege of giving a short statement of the crops grown the present season, 1846.

Wheat.—This crop is very good, except some fields that were injured by the rust. The early sown wheat, in this section, has done much better than late sown. The rust has not effected the early sown at all, while the late sown has been almost ruined. It is evident, therefore, that in order to grow good wheat, we must sow it early. The wheat yields much better than farmers expected, when harvesting.* The berry is good, and will amply pay the farmer for his labors.

Corn.—The crop of corn I never knew to be any better in this section. It will yield upon an average fifty bushels per acre. The crop is nearly all harvested in this quarter. The farmers are bringing their fall's work to a close.—There is now nothing to hinder them from enjoying the fruits of their past labors.

Oats.—This crop is unusually good, more so than last year. There were many sown in this vicinity; and in fact throughout the whole county there were more sown than last year—therefore the demand for oats will not be so great, here, as last season. In consequence of last year's prices, many were induced to sow more oats than they would have done had such not been the case.

Barley.—The crop is not as good as last year. The yield is not as good, nor the berry as plump, owing no doubt to the excessive hot summer.—More barley was sown this year, in this section, than has been, in one season, for many years.—If the barley crop had come in as well this year as last, it would not have brought more than 31 cents per bushel; but the failure of the crop has had a great tendency to raise its market value.

Buckwheat.—Not much sown; what was is very good.

Flax.—There is not much grown in this section; what there is has come in well. This branch of business, the farmers have come to the

* The reverse of this has been the fact, we believe, in most sections of Western New York.

conclusion, will not answer; it impoverishes their lands too much, and the profits derived are not so great as many imagined.

Peas.—I think this crop nearly as good as last year. There were, however, not as many sown in this vicinity as usual. The farmers are using more barley, and think it better than peas to fatten hogs.

Potatoes.—This crop is far short of an average, the rot having affected it more than last year. Many fields hardly pay for digging. I do not think there will be more potatoes than the people will want for their own consumption.

Wool.—This article commands so low a price this season, that it has almost discouraged many wool growers from growing sheep. There are not many wool growers in this section. Farmers think it more profitable to grow grain, their land being better adapted to it—and I think they can do better, and make money faster, by growing grain instead of wool.

Fruit.—This is a fruitful season, with us;—apples, peaches, pears, plums, cherries, &c., in abundance. No season have I known fruit more plenty than the present, in this section.

Grass has been very good, and was secured in season, and in fine order. After feed is in abundance—and in fact every thing reminds us of a wise and beneficent Being, who ruleth all things, and makes the wilderness blossom as the rose.

If these short statements are worthy of a place in the Farmer, please insert them.

Yours respectfully, W. S. T.

So. Venice, Cayuga Co., Oct. 13, 1846.

EMPLOYMENT.—The following just sentiment was uttered by DANIEL WEBSTER, in a late speech in the Senate of the United States. It should be had in everlasting remembrance:

"Sir, I say it is *employment* that makes the people happy. Sir, this great truth ought never to be forgotten; it ought to be placed upon the title page of every book on political economy intended for America, and such countries as America. It ought to be placed in every farmer's almanack. It ought to head the columns of every farmer's magazine and mechanic's magazine. It should be proclaimed every where, notwithstanding what we hear of the usefulness—and I admit the high usefulness—of cheap food—notwithstanding that, the great truth should be proclaimed every where, should be made into a proverb if, it could—that WHERE THERE IS WORK FOR THE HANDS AND THE MEN THERE WILL BE WORK FOR THEIR TEETH. Where there is employment there will be bread. And in a country like our own, above all others, will this truth hold good—a country like ours, where, with a great deal of spirit and activity among the masses, if they can find employment, there is always great willingness for labor. If they can obtain fair compensation for their labor, they will have good houses, good clothing, good food, and the means of educating their families; and if they have good houses, and good clothing, and good food, and means of educating their children, from their labor, that labor will be cheerful, and they will be a contented and happy people."

The superfluous spirits of youth are like the coverings of some insects, which afford them food and support in their transition.

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

NUMBER THREE.

In my last I spoke of the responsibilities of the Farmer in his character as a Citizen. He is, in truth, more than a mere tiller of the soil—more than a simple machine, whose province it is to labor and toil. Our institutions regard him as an intelligent being—a moral agent, invested with political power—for the rightful exercise of which he is surely accountable. Let us look a little at this matter, and see how the case stands.

In a Republican Government, the exercise of political power is one of the highest and most sacred duties which devolves upon the citizen—one which he cannot use wrongfully, without culpability, nor yet refuse to use without equal guilt. Not only his own, but the happiness of every other of his fellow citizens, depends upon his action. The laws which he is instrumental in framing, and the policy which his political action marks out, are laws and a policy which are to affect the highest interests and dearest rights of the mass of the people. Government is the first consideration with any people, and alike important to those who would preserve their freedom, as to the despot who would assume supreme power. Civilized men cannot dwell together in large numbers, without rules of action general in their nature, and to which all must conform. So prone are the strong to prey upon the weak, the rich to oppress the poor, the vicious to injure the virtuous, that safety imposes the imperative necessity of combination, and of bringing the united power of all to protect and guard the rights and interests of each. A good government—one just in its principles and action—is, then, the highest good to a people. And a government founded on false principles, which are framed as instruments to be used by the few, to oppress and hold in subjection the many, is the greatest curse which can be inflicted on a nation. The power with which it crushes individual rights, and the force with which it strikes down the liberties and prosperity of the people, is overpowering and irresistible. In the light of these reflections the farmer will not fail to see the importance—the absolute necessity—of a system of law and public rule which is equitable in principle, and looking in its action to the protection, in “life, liberty and the pursuit of happiness,” of all the people. And how is this to be effected?—how preserved, when accomplished? How else in this country, than by the exercise of political power, on the part of the masses? Reflect coolly, calmly upon it, farmers of America, and learn to appreciate properly, your political duties.

I have no expectation that party feeling will ever be broken up in this country, or party at-

tachments dissolved. It is hardly possible that such should be the fact, and perhaps it is not desirable. Men will differ on political subjects, honestly differ, as to the best means to promote the public good. I would by no means urge the farmers of the country to attempt the folly of forming a farmers party—but this I would urge, that they study carefully their political duties, and see to it that they have their due share in shaping the policy, and in making the laws of the State and Nation. I would have them remember that their votes are their own—a means put into their hands for high and solemn purposes—a moral weapon, to be used for the accomplishment of important ends.

Farmers compose the mass of both great political parties, and they may, if they will, control the action of both of those parties—and that, too, without any improper combinations or undue exercise of power. How is the fact?—Let us look fairly at, and talk frankly on, the subject. Is it not true that party politics, as a general thing, has become a perfect jungle—so much a matter of bargain and sale, under the control of a few, that it is almost a disgrace to mingle much in it—and with which the high-minded farmer will have little or nothing to do. The truth is not to be disguised, that in this State, at least, there is much of corruption about the actions of parties—that, as a general thing, a few men, and they not of the best and purest, control party organizations, and dictate party action. A few professional men, located in a county town, together with a man here and there in the towns, form a county regency, and by skillful manouevring, and constant attention to study, manage the politics of the county; and the result is, in many instances, that the aggrandizement and interests of cliques is alone consulted in the political action of the State, and the interest and prosperity of the great mass entirely overlooked or disregarded. This is radically wrong, and the farmers of the State ought not to suffer it; they ought not to permit a few lawyers, and professed politicians, to chalk out the political game of their party, and then be wheeled into line under the battle cry that the interests of the party require it, or marched up to the polls, under the drill of party tactics, simply to do the bidding of others. Party allegiance is due, and only due, when measures are proposed and means used which tend to the advancement of the principles upon which the party is founded—but the truth is that the farmers of the country are responsible for the evils that exist; their subserviency as a class, and their lack of intelligence and want of attention, has made them “hewers of wood and drawers of water” to other classes. They have of ten acted as though they had no right to think and act for themselves, than to pursue an independent, manly course of political action. Hu-

miliating as it is, I ask if what I have just said is not true? But is there a remedy? Surely there is. Our institutions do not necessarily induce corruption; they are, however, based on the idea of intelligence in the masses—and when this intelligence is reached, the full force and beauty of republican government will be realized, and not before. A democracy is the finest field for demagogues, when the citizens who compose it are ignorant, and vice versa.—Let the farmers, then, make themselves intelligent; let them, by study, reflection and reading, prepare themselves for statesmen, legislators and judges; let them become familiar with the nature of our government, study its structure, and reflect upon its power, and limitations; let them look into the statistics of the nation, and then let them assert their rights, assume their true position, become intelligent politicians—not mere party hacks—and thus control the legislation and policy of the country. Such a course is but simple duty; you must be, you are, and you will be, politicians—so far as this, at least, you will vote. Then, I say, become intelligent, thinking, patriotic politicians, and no longer bow down in humble subserviency to other and vastly inferior classes. Be just to all; let others have their due share—proscribe none—but be not unjustly dealt by or proscribed. Look to facts as they exist, consult the statistics of the State, and you will find that the agricultural is the permanent interest—that it embraces the most wealth and produces the most, employs more labor and gives sustenance to more people, than any and all other occupations beside; and, as a consequence, the legislation of the country is to the farmer of more importance than to any body else; they have the most taxes to pay, the most burdens to bear, and the most duties to perform, and with them should be the preponderating political power and influence. They have most at stake, and instead of committing their interests to other and unsympathising hands, they should lay their own huge paws, guided by enlightened minds, upon the statute books, and see to it that none but wholesome laws and just enactments are recorded there.

The above reflections and suggestions are given in all frankness. They appear to me important—not chimerical, but practicable and absolutely demanded, if we would elevate the farmer to his true and rightful position in this country. Let the farmers of either political party make themselves, by their superior intelligence, the leaders and rulers of their parties; let them use the power they possess—exercise the influence which is in their keeping—and they will have succeeded in purifying the political parties from much that is alike disgraceful to them and the country,—and will also have elevated their own noble calling, and relieved the farmers from the opprobrium that now rests upon them, and

justly too, by the performance on their part of the dirty work and hiring offices which they have heretofore too often performed for the politicians of the country.

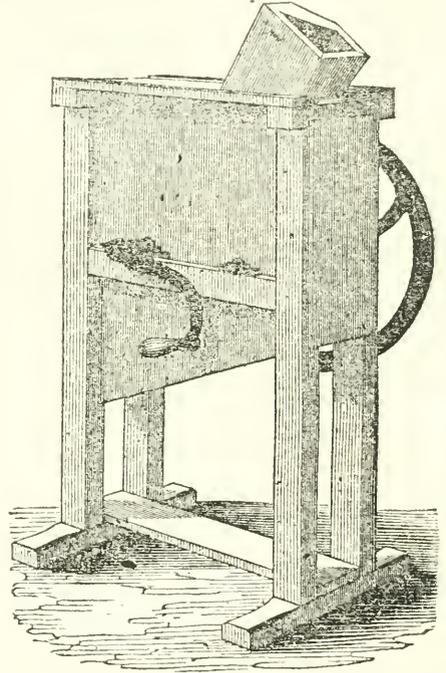
I now dismiss this matter for the present, and in my next will invite the farmers to the contemplation of other subjects.

D. A. OGDEN.

Penn Yan, Nov. 1846.

Taylor's Improved Corn Sheller.

WE are requested to call the attention of our readers to this machine, and invite an examination of the same. It is manufactured by Mr. E. TAYLOR, No. 6 Hill street, Rochester, and sold at \$10. (For shape, &c. see engraving.)



In his pamphlet circular, Mr. T. says: "This machine has, within itself combined, all that the farmer can ask for, in the operation of taking the corn off the cob. It is thoroughly built, warranted in all its parts, is very compact, and occupies not over two feet square of room. It can be used by hand with a crank, or a pulley can be substituted for the crank, and driven by a belt or cord. It will shell 150 bushels per day, and is so boxed up as to prevent the corn from being thrown over the room in which it is used. It is in fact a perfect machine, unerring in its operation. It is so light and portable as to be easily moved from place to place, and one machine will serve for several farmers." M.

SWARMS of the great brown locust have visited England in the northern and eastern counties.

Wyoming County Fair.

It was my good fortune to attend the Annual Exhibition and Fair of the Wyoming county Agricultural Society, last week, at Warsaw.

I was prepared to see a tolerable turn-out, and had anticipated, I hardly know why, that it would not be worthy of the farmers of that fine county. You may judge of my surprise when, as I came in view of the beautiful vale, and village of Warsaw from the west hill. I saw the ample field in which the animals were exhibited literally swarming with people. From the distant point at which I first saw them, they presented one of the most interesting pictures I ever beheld. The Cattle were seen lining the fences outside; the Sheep and Swine pens were through the centre; and the Horses were moving about in the ample back ground,—while the intermediate spaces were black with figures and moving groups. On driving into the village I found it thronged with the farmers from the surrounding country. Although the assemblage in the field had seemed large, yet not one half of the people were on the show-ground at any one time. Leaving my team with our excellent friend, and capital host, Gen. McELWAIN, I repaired to the field and spent a couple of hours very pleasantly and profitably in viewing the stock which was on the ground. The show was large, much larger than we had in our county last year, and but little, if any, behind ours this year. That you may judge of what Wyoming county farmers *can do*, I will mention the fact that a yoke of two year old steers, which were shown there, have since been sold for \$100 each.

From the Stock Yard I went to the Court House Square, where, under a temporary shed, the various articles of Domestic Manufacture were exhibited. By the assistance of their very active and zealous President, J. C. FERRISS, Esq., I was enabled to elbow my way through the crowd and get a view of the various articles which were spread out upon the tables. In this branch the ladies lose nothing in comparison with their sisters in Genesee. There were carpets, stockings, flannel, yarn, and various other domestic "fixings," which showed that the farmer's wives do not mean to be behind their husbands in making these holidays interesting. The show of butter and cheese was not creditable to a county containing so many noted and excellent dairies as Wyoming. There were some beautiful samples of maple sugar, and some very interesting specimens of honey in glass hives.

The show of fruit was very fine indeed, and was creditable to the persons getting it up. An hour was passed away with much pleasure, and as the day was drawing to a close I left the square, and found myself in as snug and comfortable quarters with the General as any man need ask.

The first business of the second day was the election of Officers. The President was re-elect-

ed unanimately. The course which he has pursued is such as every honorable, high-minded man should pursue. Though abundantly able, he does not compete for premiums at the exhibitions; and the presiding officer of no Agricultural Society should allow himself for a moment to come in competition with its members for any of its prizes, unless he wishes to mar the usefulness of the Society. The practice of our otherwise very competent President has had a bad effect, by creating a suspicion, where, I am persuaded, none ought to be entertained. Although he has taken many premiums, annually, yet from his well known liberality I have no doubt he has donated them to the Society.

After the election the business of the Society was taken up, until dinner, when a recess was taken. After dinner an Address was delivered to a large and attentive audience. Then came the Plowing Match, but as I was pressed for time I could not stop to see it.

You may set down Wyoming as one among the very first counties in the cause of agricultural improvement.

Sincerely yours,
T. C. PETERS.
Darien, Genesee Co., Oct. 12, 1846.

Ontario County Agricultural Fair.

The Fair of the Ontario Ag. Society was held at Canandaigua, on the 13th and 14th of last month. We are informed that the exhibition of Cattle, Sheep, Swine, &c., on the 13th, was not large, (in consequence of the severe rain storm,) but decidedly good. Considering the state of the weather, the show would compare favorably with previous exhibitions in this and neighboring counties.

We had the pleasure of being present on the second day of the Fair, and were gratified and instructed with what we saw and heard on the occasion. The exhibition of Horses was superior to that of most county Fairs. The *Plowing Match* excited considerable interest and competition—but not having witnessed it, we are unable to give particulars.

The display in the Horticultural Department was very creditable, and attracted considerable attention. There was an excellent show of Apples, Pears, Quinces, Grapes, &c. Our friend, A. B. RAPALJE, Esq., of Farmington, exhibited 45 varieties of Apples—and received the first premium, \$2. The first premium on Pears was awarded to R. CHAPIN, Esq., of Canandaigua—who exhibited a superb specimen of the Virgalieu. The exhibition of Grapes—by Mrs. PHELPS, of Canandaigua, J. W. CLARK, Esq., of Naples, and others—was very good.

In the Ladies' Department, the display of useful and fancy articles was decidedly rich and beautiful. In this respect, the Ontario Fair was far superior to that of Monroe. The wives and daughters of the farmers of Ontario are entitled

to much credit—and have set an example worthy of imitation by their sisters in other counties of Western New York.

The exhibition of Domestic Manufactures—Butter, Cheese, &c.—was quite creditable.

In the Mechanical Department we noticed many articles of rare beauty and superior workmanship. We saw but few Agricultural Implements; and heard many express regret at the lack of interest taken by manufacturers and inventors in this portion of the exhibition.

The Annual Address was delivered by J. B. NOTT, Esq., Cor. Sec'y of the State Ag. Society. We have rarely listened to more practical or appropriate remarks. The advice to young farmers, relative to the pursuit of knowledge—the perusal of agricultural books and periodicals, and the study of Agricultural Chemistry and its kindred sciences—exhibited the foresight of an enlightened mind and sound judgment. The Society requested a copy of the Address for publication, and we trust it will receive an extensive circulation.

At the conclusion of the Address, the following named gentlemen were re-elected officers for the ensuing year, 1847:

JOHN GREIG, *President.*

ELIAS COST, JOSEPH FELLOWS, JOEL S. HART, CHESTER LOOMIS, JONATHAN BUELL, HIRAM ASHLY, *Vice Presidents.*

WILLIAM H. GORHAM, *Recording Secretary.*

OLIVER PHELPS, *Corresponding Secretary.*

NICHOLAS G. CHESEBRO, *Treasurer.*

There is one feature in the Ontario Society which we observed with particular pleasure—and perhaps an allusion to it may not be out of place in this connection. The merchants, mechanics, and other business men of Canandaigua—including some of the wealthiest and most enterprising gentlemen in Western New York—generously proffer their means and influence to advance the interests of the Society, and thus promote its noble objects. This is most praiseworthy. The union of effort and interest renders the exhibitions of the Society far more creditable—and if it does not prove pecuniarily beneficial to all, it is mutually advantageous in other respects.

M.

Fine Pigs.

MR. FRANCIS ROYCE, of Pavilion, has a sow which has brought him 48 pigs, in 18 months.—This prolific animal is a cross of the Byfield and Leicestershire breeds. Seven pigs of the first litter made, 1463 lbs. of meat when killed at nine months from their birth. The first litter, *only seventeen!* brought \$80 54—a considerable portion of which was sold for roasters. The second and third litters were mostly sold, while young, at \$2 each. Dea. ROYCE has five of the second brood, that will weigh some 250 or 300 lbs. each.

Without any great expense in feeding, about \$150 00 worth of pigs has been realized from this famous sow.

Wheat Culture—Salt, Ashes, Lime, &c.

MR. EDITOR:—I see you ask for some experiments to be made in the culture of wheat. Let me state what I have been, and am, doing. I have sown salt on wheat at the rate of 5 bushels per acre. I have put on unleached ashes at the rate of 72 bushels per acre—and 1050 bushels of lime on 18 acres of my fallow, before sowing it with wheat. I have previously used a good deal of lime, and know the benefits of it on my land. Ashes (unleached) and salt, I have never before tried on wheat, although I have on grass—but not with a satisfactory result.

I see it often stated that a bushel of ashes is equal to a bushel of plaster. It may be so on some kinds of soil, but it is not so on mine, (a gravelly clay.) One bushel of plaster will do more for me in growing clover than 40 bushels of ashes. This I presume would be the reverse on black muck soil, as I could never see a benefit derived from plaster on such soils.

If I live until next season, I shall give you the result of my salt and ashes experiment. I have just finished applying my barn-yard manure to an 18 acre field for my next year's corn crop. I believe I have put on the manure at the rate of 25 or 27 tons per acre; (the land has been cut for hay 7 years.) I have spread the manure, and will plow it in next spring. You will say, *plow it now*—but I think I have learned to do better.

Yours truly,

JOHN JOHNSTON.

Near Geneva, Oct 15, 1846.

A New Cultivator.

MR. ALANSON T. ODELL of Royalton, Niagara county, has invented a Cultivator, which we are confident will prove to be a decided improvement on all that have preceded it for the tillage of uneven ground. It differs from IDE's implement in having a joint in the middle, like GEDDES' harrow, and bearing its weight on three wheels, instead of two. Like the harrows with hinge joints, it adapts its working surface to that of hollows and knolls; while on smooth even land it performs equally well, as compared with other wheel cultivators.

This implement was exhibited at the recent Fair in this County, and commanded the approbation of farmers, whose large experience in tillage enables them to judge wisely of the value of articles that pertain to the culture of the soil. It can be made and sold at \$25.

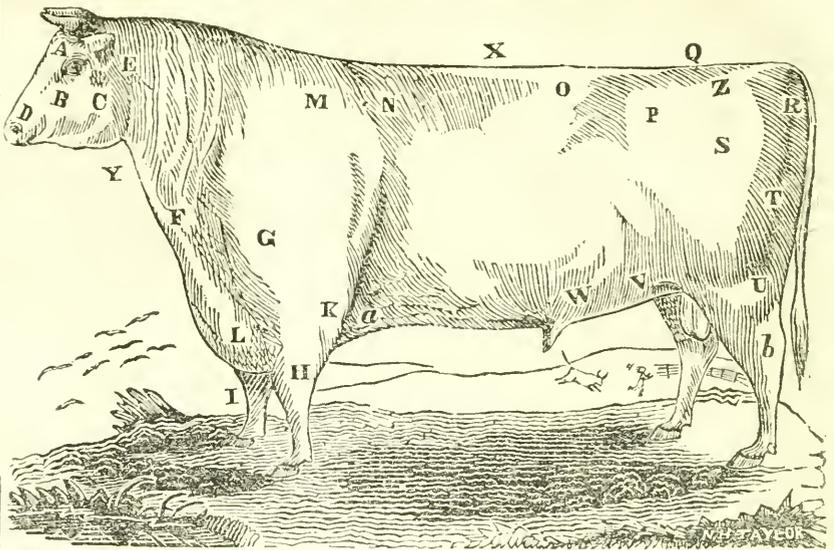
SHEEP.—There are over 30 million sheep in the British Isles, which is 10 millions more than we have in the United States—and yet how small their territory compared with ours.

SILK COCOONS.—It was, say the Chinese annals, the wife of the Emperor Hoangti who first engaged in spinning the cocoons which are naturally found on trees.

EXPLANATIONS.

- A—Forehead.
 B—Face.
 C—Cheek.
 D—Muzzle.
 E—Neck.
 F—Neck vein.
 G—Shoulder point.
 H—Arm.
 I—Shank.
 K—Elbow.
 L—Brisket or breast.
 M—Shoulder.
 N—Crops.
 O—Loins.
 P—Hip or huckle.
 Q—Crupper bone, or sacrum.
 R—Rump or pin bone.
 S—Round bone, thurl, or whirl.
 T—Buttock.
 U—Thigh or gasket.
 V—Flank.
 W—Plates.
 X—Back or chine.
 Y—Throat.
 Z—Hind quarter.
 a—Chest.
 b—Gambрил or hock.

Names of the Points of Cattle.



THE above engraving gives a fair outline portrait of an animal of the Durham breed, which received the first premium at a Fair of the New York State Ag. Society. The references illustrating the terms used in describing Cattle will prove useful to many—particularly young farmers who are not familiar with the subject,—and enable them to understand descriptions that would otherwise be incomprehensible. There appears, among many farmers, to be a great lack of knowledge upon this subject—and judges at cattle shows are not unfrequently at fault for the want of proper information.

M.

Genesee County Agricultural Fair.

WE attended the late Fair of the Agricultural Society of Old Genesee, and was happy to witness so large an assemblage of the farmers of the county, and to find them so heartily engaged in the good cause of Agricultural Improvement.—The display of neat Cattle was excellent, particularly the stock of the President, Mr. DIBBLE. The exhibition of Sheep, Swine, and Horses was certainly very creditable. We did not learn the names of the owners, nor stay till the second day to know who took premiums; nor is this material to the public. It is the spirit, zeal, and earnestness evinced by the tillers of the earth, or their marked indifference to all progress in the great art of all arts, of which the community at large is most desirous of being informed. Every body knows that our rural population have only to make an effort at advancement, to effect the most signal achievements. It gives us no ordinary pleasure to know that the farmers, not only of Genesee county, but in Western New York generally, are becoming pretty thoroughly waked up to the importance of *studying* as well as *practicing* their noble profession. Agricultural Fairs are extremely useful in bringing together so many intelligent agriculturists to teach one another.—So far as we have the honor to address our peers on such occasions it is almost our standing theme to point out the great advantages of farmers meeting together once a month at least, to discuss top-

ics that most deeply concern their profits and interests as practical agriculturists. A man must be supremely wise, or supremely stupid, who can learn nothing from the long experience and observations of those whose lives have been devoted to the subjects discussed. We make these remarks by way of a gentle hint that the season has arrived for establishing Farmer's Clubs in every town. But we have wandered from our subject.

The exhibition in Domestic Manufactures at the Genesee Fair was highly creditable to the Wives and Daughters of the yeomanry of that county.

COLMAN'S EUROPEAN AGRICULTURE. — Part VII of this work has been some time on our table. It is mainly devoted to the discussion of the subjects of Draining, Sub-soil Plowing, Irrigation, Rotation of Crops, and Soiling or House Feeding. These important branches of rural pursuits are treated with clearness, and ability. Published by A. D. PHELPS, Boston.

To Correspondents.

COMMUNICATIONS have been received during the past month from D. A. Ogden, T. C. Peters, Wm. R. Kelsey, Robert E. H. Levering, A. G. Melvin, Leander Wetherell, H., W. S. T., Wm. Johnston, Wm. B. Waldron, A. M. Badger, One who Knows, and E. H. C.

Monroe County Fair.

CONTRARY to the expectations of many of its warmest friends and supporters, our County Ag. Society had a better exhibition, at its recent Fair, than for several previous years. With the exception of some deficiency in one or two departments, the show was excellent throughout. The Fair was attended by an unusually large number of farmers, and the Stock and articles brought in by them gave abundant evidence of enterprise, progress, and improvement. But as we have devoted considerable space to an Official Statement of the Award of Premiums, (see page 260 and 261,) we have not room for particulars.

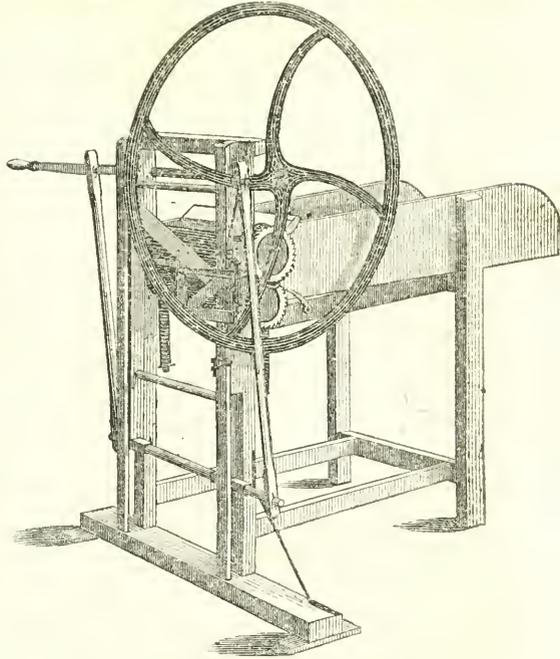
The Annual Address, delivered on the first day of the Fair, by our associate, Dr. LEE, fully sustained the high reputation of the speaker. It is spoken of as an able effort, worthy of the important subject discussed, and appropriate to the occasion. On the second day, J. B. NOTT, Esq. delivered an able and excellent address. Dr. LEE also again addressed the Society, previous to adjournment. The addresses were listened to with much attention by the large audience in attendance at the Fair.

The attendance and exhibition was highly creditable to the Society and the Farmers of Monroe. We trust the spirit now awakened will increase the zeal and efforts of all interested, and that the future exhibitions of the Society may prove still more interesting and beneficial to its members and the community. M.

LAND AGENCY.—We observe by a notice in a late number of the Michigan Farmer, that its editor, Mr. H. HURLBUT, has united with J. M. TREADWELL, Esq., in the establishment of a General Real Estate Agency, at Jackson, Mich. They are associated, as we learn from their Card, "for the purpose of transacting business as General Land Agents, and will personally attend to the purchase and sale of Real Estate of all descriptions, to the payment of Taxes, redemption of lands sold for taxes, examination of titles, conveyancing, and such other business as pertains to a General Real Estate Agency." Persons having business of this character, in Michigan, are referred to Messrs. T. & H.—We have no doubt they will attend to all matters entrusted to their management, with accuracy and promptness. M.

NOTE.—The following remarks should have been appended to the communication on Wheat Culture, published on page 257—but were not received from the editor until that portion of the Farmer was printed:

Remarks.—We shall be happy to hear the result of Mr. JOHNSTON'S experiments. For corn next season, we should *shelter* our manure till spring, instead of spreading it this autumn; nor should we plow it in, if spread, till near the time of planting.—Ed.



Jessup's Improved Straw-Cutter.

MR. EDITOR:—The above figure represents Jessup's Improved Premium Straw Cutter. It is said to be one of the best implements now offered to the public, for the purpose of cutting all kinds of straw, hay, or corn stalks. By simply moving a small pin on the side of the machine, which can be done in a moment, the straw can be cut of any desirable length. The machine is very durable, simple in its construction and not liable to get out of order. It cuts with great rapidity and ease—is highly recommended—and received a premium at the recent Fair of the Monroe Co. Ag. Society.

The above Cutter is manufactured at the Factory of TAYLOR & BROWN, No. 6, Hill street, Rochester—and by C. BURNETT, Lyons, Wayne county.

Yours, &c.

Rochester, Oct., 1846. A. M. BADGER.

PREMIUM FLOUR.—We find in the New York Tribune the following notice of the flour which took the premium at the American Institute:

"The first premium for Wheat Flour was awarded at the late Fair to the 'Extra Superfine' of the 'Whitney Mills, Rochester.' We see that James M. Hoyt & Son, 176 Washington st., advertise 500 bbls. of the same 'Extra Superfine' in our paper to-day. We suspect it will not stay with them many days."

THANKSGIVING.—Gov. WRIGHT has issued a Proclamation recommending that *Thursday, the 26th instant*, be observed as a day of Public Thanksgiving in this State. The same day has been fixed upon in several other States.

List of Premiums

Awarded by the Monroe County Agricultural Society, Oct. 15th and 16th, 1846.

HORSES.

Stallions.—1st. To Wm. Taylor, Sweden, Vol. Trans. and \$3; 2d. Geo. Wimbles, Rochester, Vol. Trans. and \$2; 3d. H. Sayles, Wheatland, Vol. Trans. and \$1.

Matched Horses.—1st. To Romanta Hart, Brighton, Vol. Trans. and \$3; 2d. Wm. Buell, Gates, \$3; 3d. Charles Killam, Wheatland, Vol. Trans. and \$1.

Mare with her Colt.—1st. To Thos. Wilcox, Mendon, Vol. Trans. and \$3; 2d. Jas. Hart, Irondequoit, \$3; 3d. J. H. Ballentine, Henrietta, Vol. Trans. and \$1.

Three year old Colts.—1st. To Jas. Hart, Irondequoit, \$3; 2d. H. S. Potter, Pittsford, \$2; 3d. J. Wood, Henrietta, \$1.

Two year old Colts.—1st. To James Hart, Irondequoit, \$3; 2d. L. Ross, Penfield, \$2; 3d. W. C. Sherwood, Penfield, \$1.

Yearling Colts.—1st. To J. Bolton, Brighton, \$3; 2d. H. B. Hart, Rush, \$2; 3d. T. Wiltse, Perrinton, \$1.

CATTLE.

CLASS I. THOROUGHBRED.—Best Durham Bull, Gideon Ramsdell, Perrinton, \$4.

Best Devon Bull, Wm. Garbutt, Wheatland, \$4. [The Committee being unable to decide as to the superiority of either of the animals exhibited by Messrs. GARBUTT and RAMSDSELL, concluded to divide the premium, and award as above.]

CLASS II. NATIVE OR GRADE. *Bulls*.—1st. To John Ayrault, Perrinton, Vol. Trans. and \$6; 2d. Geo. Wright, Henrietta, \$5.

Bull Calves.—1st. To Joseph Farley, Irondequoit, \$2; 2d. John Colver, Brighton, Vol. Trans.

Three year old Steers.—1st. To John Ayrault, \$5; 2d. F. B. Shearer, Pittsford, \$3.

Fat Oxen.—1st. To John Ayrault, Colman's Rep. and \$1.

Fatted animals for beef.—1st. To T. H. Hyatt, Rochester, \$5. [Mr. Hyatt, one of the committee, dissented from a majority of the committee, while he is thankful for their compliment.] 2d. John Ayrault, Vol. Trans. and \$1.

CLASS III. NATIVE OR GRADE; WORKING OXEN, MILCH COWS, and HEIFERS. *Working Oxen*.—1st. To Gideon Ramsdell, \$5; 2d. John Ayrault, \$3; 3d. L. D. Mitchell, Pittsford, \$1.

Milch Cows.—1st. To Jacob Strawn, Chili, \$5; 2d. Thos. Chisolm, Greece, \$3; 3d. Geo. C. Latta, Greece, Vol. Tr. and \$1; 4th. Samuel Leggett, Henrietta, Vol. Trans.

[Mr. Hooker, of Rochester, exhibited a fine cow.]

Heifers.—1st. To Wm. Garbutt, \$3; 2d. Allen Frost, Brighton, Vol. Trans. and \$1; 3d. Jacob Strawn, Vol. Tr.

SHEEP.

LONG OR COARSE WOOLED. *Bucks*.—1st. To J. Baynes, Gates, Vol. Trans. and \$2; 2d. Jno. Serpell, Henrietta, \$2.

Ewes.—1st. To Wm. Buell, Vol. Trans. and \$2; 2d. Jno. Parks, Gates, \$2.

Fat Sheep.—1st. To J. A. Frost, Brighton, Colman's Reports; 2d. Alfred Fitch, Riga, \$2.

There was also exhibited a pen of fine South Down bucks. The owner did not wish the committee to rate them long or coarse woolled sheep. A number of fine lambs were exhibited, for which the Society had offered no premiums.

FINE WOOLED. *Bucks*.—1st. To John Row, Riga, Vol. Trans. and \$5; 2d. Elisha Harmon, Wheatland, Vol. Trans. and \$3; 3d. Romanta Hart, Vol. Trans. and \$1.

Ewes.—1st. To R. Harmon, jr., Wheatland, Vol. Trans. and \$3; 2d. J. P. Still, Wheatland, Vol. Trans. and \$2.

Lambs.—1st. To R. Harmon, Jr., Vol. Trans. and \$2; 2d. Romanta Hart, \$2.

[The committee on fine-wooled sheep state that a very fine buck, exhibited by D. D. T. Moore, of Rochester, could not be noticed on account of its recent introduction into the county.]

The undersigned, two of the Committee appointed to judge on Fine Woolled Sheep, have completed the labor assigned to the whole; (Mr. HART being a competitor could not by the rule serve, and the other members of the committee were not present.) Your Committee proceeded by examining the sheep in the pens. The first pen was No. 244, and on until all were carefully and thoroughly examined, again and again. In awarding premiums your com-

mittee did not judge from the fineness of the wool alone on the sheep, but coupled the size of the animal in connection with the build, so as to embrace all the properties the animal contained of the greatest amount of interest to the owner.

On the whole, your Committee would further report that the exhibition of fine sheep was an improvement on all preceding years—and believe that a very desirable impetus is being had in propagating fine wool in our County.

ASHBEL A. HOSMER, }
CALEB K. HOBBS, } Com.

SWINE.

Boars.—1st. To Hugh Mulholland, Brighton, Vol. Tr. and \$3; 2d. Wm. Buell, \$2; 3d. A. C. Lobbie, Irondequoit, Vol. Trans. and \$1.

Sow and Pigs.—1st. To M. Burns, Gates, \$3; 2d. M. Garrett, Gates, \$2; 3d. J. Onderdonk, Greece, V. Tr. and \$1.

BUTTER.

Ten pounds.—1st. To F. B. Shearer, \$3; 2d. John Ayrault, Vol. Trans. *Discretionary Premiums*.—To John Row, 2 vols. Genesee Farmer; T. Bingham, 2 vols. Gen. Farmer.

Twenty lbs. packed, made in May or June.—1st. To E. H. Barnard, Mendon, \$3; 2d. E. J. Opp, Brighton, Vol. Tr.—[The committee state that a lot of roll Butter, exhibited by Mrs. A. A. Hosmer, was justly entitled to the first premium, which would have been awarded had there been a sufficient quantity. The committee awarded to Mrs. Hosmer a discretionary premium of \$1. Butter of superior quality and flavor was brought forward by two of the committee—especially that exhibited by Mrs. H. N. Langworthy—which could not be offered for competition, Mr. L. being one of the committee.]

HONEY AND SUGAR.

Ten pounds Honey.—1st. To T. Wiltse, \$3; 2d. Oliver Harroun, Ogden, 2 vols. Genesee Farmer.

Ten pounds Maple Sugar.—1st. To Alfred Fitch, Riga, \$3; 2d. M. Garrett, 2 vols. Gen. Far. [The committee also noticed with Mr. Garrett's Sugar, a superior article of Maple Molasses. Mr. L. True, of Ogden, presented a fine sample of Sugar, but the color was not quite equal to some others.]

AGRICULTURAL IMPLEMENTS.

Discretionary Premiums were awarded by the Committee, as follows:

Plows.—P. D. Wright, Rochester, (Wright's Cayuga Plow,) \$3; N. C. Dayton, Rush, (Gang Plow,) Vol. Tr.; R. G. Benedict, Rochester, (12 plows of superior workmanship,) Vol. Trans.; Rapalje & Briggs, Rochester, (Burrall's Wheel Plow; Ruggels, Nourse, & Mason's Eagle Plow; Delano's Diamond Plow; Side Hill Plow, and other agricultural implements,) Vol. Trans. [Daniel Anthony, of Rochester, exhibited a Plow, with a joint or slide in the end of the beam, for the purpose of setting the beam for 2 or 3 horses. Manufactured in Cayuga county.]

Cultivators.—P. D. Wright, (Corn Cultivator, with double pointed steel teeth,) \$1. [L. Wells, of Gates, exhibited Ide's Wheel Cultivator, manufactured in Orleans county. It appeared to the committee to be a new and valuable improvement. Carter Evans, of Ogden, exhibited a Cultivator similar to the above, with a double joint, and an additional wheel in the centre for uneven ground.]

Straw Cutters.—H. A. Chase, Rochester, (Sanford's Patent,) took first premium last year. Taylor and Brown, Rochester, (Jessup's Patent,) Vol. Trans. [Geo. Catchpole, Geneva, exhibited a Straw and Stalk Cutter—a very good machine, well got up.]

Pennock & Peirce, of Chester Co., Pa., exhibited a Seed and Grain Planter, (for sowing in drills.)

H. L. Collins, of Perrinton, exhibited a Corn Planter and Cultivator, (J. Putnam's Patent.)

Taylor & Brown, (by A. M. Badger,) exhibited Grant's Fanning Mill, Corn and Seed Planters, Corn Sheller, Patent Churns, and other well made implements—for which the committee award them a Vol. Trans.

J. C. Rich, Penfield, Washing Machine, 2 vols. Gen. Far.

J. Swift, Clarkson, exhibited superior Horse-Rake;—took first premium last year.

P. D. Wright, exhibited a Gang Clevis, for regulating the depth of a Plow white in motion. A new and very convenient article.

HORTICULTURE.

Twelve varieties of Apples.—1st. To H. Hooker, Brighton, \$2; 2d. H. Fellows, Penfield, Vol. Trans.; 3d. Samuel Briggs, Brighton, 2 vols. Gen. Far. [There were four fine

collections of apples, not named, which were not considered by the committee entitled to compete.]

[Several seedling apples were presented, but none of them were considered of sufficient merit to entitle them to a premium.]

Twelve Pears.—1st. To Hall Colby, \$1—(Virgalieu).—[Swan's Orange is highly recommended.]

Peaches.—Best 12—To H. N. Langworthy, \$2. Best seedling—H. N. Langworthy, (Langworthy's late Rare-Ripe,) Vol. Trans.

Quinces.—N. Hayward, Brighton, \$1.

Grapes, ripened in the open air.—1st. To H. N. Langworthy, (Isabella,) \$2; 2d. do., (Catawba,) Vol. Trans.; 3d. Z. Burr, Perrinton, (Royal Muscadine,) 2 vols. Gen. Far. [The committee adjudged these premiums upon the ground, that they should by their awards encourage the production of such varieties as were of the greatest utility.]

Watermelon.—H. N. Langworthy, (White Imperial), ... \$1

Egg Plant.—C. F. Crosman, 1

Muskmelon.—do, 1

Beets.—do, 1

Celery.—Jas. Murray, Irondequoit, 1

Turneps.—J. Donellan, Greece, (Aitkenham,) 1

Salsify.—N. Hayward, 1

Onions.—H. Luitweller, (white,) 1

Tomatoes.—T. Backus, Rochester, 1

If the funds of the Society will permit, the committee recommend that a vol. Trans. be presented to Zera Burr, for a half-bushel of very fine Sweet Potatoes.

[In awarding premiums on beets, carrots, and turneps, the committee decided upon their merits as table vegetables.]

NON-ENUMERATED ARTICLES.

Stoves.—Geo. M. Norton, Rochester, Cooking Stove, (called the "Universe,") a superior article. Diploma.

A. K. Amsden & Co., Rochester, exhibited Buck's Cooking Stove; also Peckham's (Utica) Parlor Stove. Diploma.

Hitecock & Co., Rochester, exhibited well-balanced and apparently accurate counter and platform Scales, manufactured by them. Diploma.

Ezra Taylor & Co., Rochester, exhibited Bench Vise, Refrigerator, Portable Shower Baths, &c. Diploma.

Hatch & Co., Rochester, exhibited Boots and Shoes of superior workmanship, (the leather was manufactured by Churchill & Co., Rochester.) Diploma.

Dr. O. Reynolds, Webster, exhibited superior Bee-Hive. Took first premium last year.

Fowls.—E. Benedict, Webster, exhibited 17 Fowls, of extraordinary size and in excellent condition, (part Borkings.) Vol. Trans. J. W. Bissell, Brighton, exhibited 6 Ostrich (or Bucks co.) Hens, worthy of special notice. 2 vols. G. Far.

Jno. Parks, Gates, exhibited a Yorkshire Ham, put up last Christmas, (interesting from the fact of its being cured to suit the English market,) in excellent condition. Also, two bladders of Lard, put up at the same time. Their white and pure appearance, and freedom from all foreign matter—the sweet taste of the Lard, without the rancidity of the American article—renders it an article of great interest.—Lard and Hams cured in this manner must, at a trifle or no expense, greatly enhance their value for home use or exportation. The committee recommend them to the consideration of the society—and that Mr. Parks be requested to furnish recipes for curing hams, and trying and putting up lard; and award to Mr. P. a vol. Trans.

Dr. J. J. Treat, of Mendon, exhibited a very superior article of Smooth Straw Paste Board, of his own manufacture. Phelps, Messenger & Farnham, exhibited a forcing and lifting Pump.

LADIES DEPARTMENT.

Flannel.—Mrs. N. M. Norton, Perrinton, \$1; Mrs. F. B. Shearer, Pittsford, \$1.

Filled Cloth.—Mrs. M. Brown, Wheatland, \$3; Mrs. T. Bingham, Riga, two vols. Genesee Farmer.

Quilts.—Discretionary Premiums.—Mrs. A. A. Hosmer, Riga, 1 quilt, (peony figure,) \$2. Mrs. Elisha Harmon, Wheatland, \$1; Mrs. C. C. Gage, Penfield, \$1; Mrs. C. Cogswell, Rochester, 1 piece patch work, (4000 pieces,) \$1. [Miss C. Blackmar, Wheatland; Mrs. P. Robinson, Scottsville, quilts, and Mrs. N. M. Norton, coverlet, which were very creditable. Mrs. H. B. Martin, Clarkson, silk quilt—quite novel.]

Mrs. A. Fitch, Riga, 3 pairs stockings, \$1; Mrs. H. B. Martin, Clarkson, ladies' hose, (wool,) \$1; Mrs. Selah Mathews, Rochester, 1 pair ladies' worsted hose, \$1.

Mrs. A. Fitch, 3 pieces linen cloth, superior articles, V. Tr.

Mrs. N. M. Norton, 1 piece diaper, 2 vols. Gen. Far.; Mrs. A. A. Hosmer, 1 piece linen drill, 2 vols. Gen. Far.

Carpets.—Mrs. A. A. Hosmer, Riga, wove carpet, \$1.—[Mrs. P. Robinson, Scottsville; Mrs. J. Eowell, Chili; Mrs. D. L. Bailly, presented rag carpets; very creditable.

Mrs. J. McGonegal, Irondequoit, and Mrs. D. D. T. Moore, Rochester, exhibited steel bead purses; very rich.

Miss Octavia Finch, Wheatland, pencil drawings and paintings.

Mrs. Simpson, Rochester, worsted fire board cover.

The Committee regret that so few articles were exhibited; and think the Ladies of Rochester and Monroe county are either less enterprising, or far more retiring, than their sisters in other counties.

PLOWING MATCH.

1st. To F. B. Shearer, Pittsford, (Livingston County Plow,) Colman's Reports and \$2; 2d. Wm. Buell, Gates, (Wrights Cayuga Plow,) Vol. Trans. and \$2; 3d. L. D. Mitchell, Pittsford, (Delano's Diamond Plow,) 2 vols. Gen. Far. and \$2; 4th. Jonathan Ramsdell, Perrinton, (Wisconsin Plow,) \$2.

[The Committee regret that so few teams were entered; and hope that more interest will be taken in this important branch of husbandry, hereafter—particularly by the young men of the county.]

THE ANNUAL ADDRESS

Was delivered on the first day of the Fair, by Dr. D. LEE. It was able, comprehensive, and appropriate, and was listened to with attention and satisfaction by a large audience.

On the second day, an address was delivered by J. B. NOTT, Corresponding Secretary of the State Ag. Society.

The subjoined resolution was unanimously adopted, at the conclusion of Mr. Nott's address:

Resolved, That the thanks of this Society be tendered to J. B. Nott, Esq., for his very able and practical address, just delivered.

Dr. LEE being called upon, addressed the audience for nearly an hour, in an impressive manner.

The premiums will be paid by the Treasurer, James P. Fogg, at the Rochester Seed Store, on Saturdays. All premiums not claimed within three months will be considered as donations to the Society.

The Society adjourned to meet at the Rochester Seed Store, on the Second Tuesday of December ensuing, for the election of Officers for 1847—at which time the Committees on Farms and Field Crops make their Reports.

JOHN H. ROBINSON, *President*.

D. D. T. MOORE, *Secretary pro tem*.

TO PREVENT THE SMOKING OF A LAMP.—

Smoke is the result of imperfect combustion. Combustion is always imperfect when more matter is decomposed, than is consumed. This is evident from the fact that smoke may be collected and *burned*. To prevent the smoking of a lamp, therefore, it is only necessary to prevent the decomposition of too much oil. This is done by *lowering* the wick till the blaze terminates without smoke. A little care in *trimming* a lamp will save expense, (an unnecessary waste of oil.) prevent the blackening of the ceiling, and the offensive and unwholesome smell occasioned by the smoke of a lamp. ONE WHO KNOWS.

TO DESTROY ROACHES.—

Mix a table-spoonful of red lead and Indian meal, with sufficient molasses to make a thick batter, and place the mixture at night on a plate or piece of board on the hearth, or in the closet frequented by these vermin. They will eat it, and be poisoned by it.

PEARLASH mordant, with walnut husks, produce the color called nankeen.

HORTICULTURAL DEPARTMENT.

BY P. BARRY.

Monroe County Fair—Horticultural Department.

THERE was quite a handsome display of Fruit and Vegetables at this exhibition. We passed around in the afternoon, and made some notes of what we saw, but we understood that some parcels of fruit had then been taken away.

H. N. LANGWORTHY, of Irondequoit, had fine Isabella, Catawba, and Clinton Grapes; Virgaliu and Swan's Orange Pear, besides Quinces and Melons. ZERA BURR, of Perrinton, beautiful bunches of Royal Muscadine Grape, ripened in the open air. These were the finest grapes exhibited. Mr. B. had also fine Isabellas, and Apple and Pear Quinces. Pear-shaped Quinces of great size by Dr. E. G. MUNN, of Gates.—Gen. HARMON, of Wheatland, CHAS. POWIS, of Greece, ELIAS AVERY, of Greece, N. HAYWARD, of Brighton, H. FELLOWS, of Penfield, H. HOOKER, SAMUEL BRIGGS, and others whose names we could not ascertain, had fine collections of Apples, most of them of great size and beauty. A very pleasant fall apple, a seedling, was exhibited by N. HAYWARD; and 5 winter varieties, said to be seedlings, by Mr. DONNANAN, of Greece.

Vegetables were exhibited by C. F. CROSSMAN, of Brighton, THEODORE BACKUS, HUGH MULHOLLAND, Rochester, JOHN DONNANAN, of Greece, and Mr. MURRAY, of Irondequoit. The Celery and Cauliflower of the latter were very fine.—Mr. DONNANAN'S "White Stubble" turnep was a beautiful article.

We hope we will be pardoned for suggesting the propriety of procuring a suitable place, in future, for the exhibitions of the products of the Gardens, Orchards, Dairies, as well as Domestic Manufactures, of this County. A small open shed, in the fields, is not, in our opinion, a proper place. These branches of industry and taste should all be promoted, and this can only be done by making ample arrangements for exhibiting what may be brought in. The apathy which has for a few years past existed in relation to our County Fairs, no doubt prevented the officers of the Society from making any extensive preparations; but we hope that the spirit now awakened will lead to great improvement on the arrangements of this and the several previous years.

Fine Gooseberries.

IN our August number we acknowledged the receipt of 12 varieties of Gooseberries from LESLIE & Co., of the Toronto Nursery. They were exhibited in the Show Case of the Horticultural Society of this city, and were much admired.

We have never seen Gooseberries in greater perfection than in the Toronto Nursery, and in

private gardens around Toronto. The Gooseberry is a favorite dessert fruit with old country people, and is also much used by them for jams, &c. It is a delicious, easily produced fruit, and we should rejoice to see more attention given to it in this country. We saw some splendid specimens, as large, or larger, than Green Gage Plums, sent to this city by H. P. NORTON, Esq., of Brockport, who is quite an enthusiastic amateur Horticulturist.

The following varieties have been grown in our own grounds for several years, and we find them to succeed well, unaffected by the mildew, a fatal foe to this fruit:

Warrington: large, oblong, roughish, dark red, fine flavored and productive.

British Hero: very large, oblong, smooth, dull red and green; flavor fine and very productive.

White Smith: large, oblong, roughish, pale green or whitish; an abundant bearer, and fine flavored.

Green Gascoigne: round, roughish, pale green, medium size; delicious.

Crawford: oval, medium size, slightly hispid, white; fine flavor.

Blacksmith: medium size, round, smooth, dark purple; high and fine flavored.

Aston Red: large, oblong, rough, light red; beautiful and fine flavored.

Iron Manger: medium size, round, roughish, dark brown; delicious flavor.

Crown Bob: large, oblong, slightly hispid, dark red and green; productive and fine flavored—*one of the best*.

Green Wave: large, smooth, deep green; beautiful and delicious.

Ailen's Green: medium size, roundish, slightly hispid, light green; very fine.

Ailen's Red: medium size, round, roughish, handsome and fine.

PROTECTION OF TENDER TREES, SHRUBS, AND PLANTS.—All trees, shrubs, and plants, susceptible of injury from the severity of winter, should be properly protected in due season. Ailantus, and all soft-wooded trees transplanted this autumn, should be sheathed up with straw, and have earth banked up around the base, and covered with litter; this will carry them through the winter safely. Tender shrubs may be treated the same way. Roses may be sheathed up in straw, or laid and covered with leaves or earth; tender varieties of Grapes, the same. Beds of Bulbous roots may be covered a few inches deep with leaves. Every one who has choice trees and plants under cultivation will look around now, and see what attention of this kind they may require. This may serve to remind them of it.

A LIBERAL PATRON OF HORTICULTURE.—The Hon. THEODORE LYMAN of Brookline, Mass., has made the munificent donation of \$1,000 to the Mass. Hort. Society, "to be invested in a permanent manner, for the encouragement of the growth of such kind or kinds of fruit as the government of the Society may deem advisable to select." We wish Mr. LYMAN a long life, to see the *fruits* of his generosity enjoyed. "Rich men of New York," where are you? Can you do nothing, in this way, to establish and sustain amongst you an institution like the Mass. Society, to do honor to your city and your State?

To Correspondents.

SETH H. HIGBY, Port Byron. Your Pear, (No. 8,) is, we are pretty sure, the *Belle et Bonne*. We happened to have some specimens of our own to compare it with. It is uncommonly productive, bearing in great clusters, large size and fair—not the finest quality, but a very desirable variety. No. 9 we think, from the description and drawing, is the *Summer Rose*. If you had sent us a sample we could have been certain on this point. It is a good, productive Summer Pear.

Apples.—The “Byron Whiting,” (No. 7,) which you say is a seedling, is a beautiful apple; but we think not so rich as the Fall Pippin, in use about the same time, or the St. Lawrence, which comes in before it, but will keep as long. Still, it is well worthy of culture. The “*Southern Spy*” is also a good fall and early winter fruit. Are you sure these are both seedlings? We consider these two among the *best* of the great number of varieties which have been shown us as “seedlings” this season. No. 4 is not the “Pumpkin Russet.” It is called here the “Cheesboro Russet.” It is a spongy, poor apple. No. 10 is not, we think, the Roxbury Russet. It was picked too soon. No. 1 is grown here as the American Golden Pippin; and No. 2 is the Monstrous Pippin—or Gloria Mundi, as you have it. The others we do not know.—Most of them were so strongly perfumed with the Grapes that we could not judge of their flavor correctly.

Your “Port wine Grape” is the Alexander, with large pulp and seeds, and altogether quite inferior to the Isabella, Catawba, or Clinton.

THOMAS PECK, West Bloomfield. We do not know the names of your apples. The large one is sprightly and agreeable, but too dry. The small ones were badly bruised; they seem to be very tender and pleasant, but not at all equal to many others ripening at the same time.

JOHN DONNELLAN, Greece. Your Fameuse are beautiful. This we class with the very best late autumn and early winter apples. Those marked “Seek-no-further” are the Vandervere, a very fine fruit.

Pomme des Lisles seems to be a fine flavored fruit, but this specimen is deficient in juice. We will be glad to know more about this, as it is highly prized in Canada. The streaked Gilliflower, and large Russet, called “Cheesboro,” are both inferior fruits, not worthy of a place in a choice collection. The “seedlings,” being winter varieties, we can only say they *look* well.

JOHN DOUGALL, Esq., Sandwich, C. W.—Your “Roseau” is not the “Black Detroit,” known as such here. The Detroit is usually larger, more flat in form, will keep 2 months longer, and is, we think, richer and better, though the “Roseau” is a nice, pleasant, fall apple.—

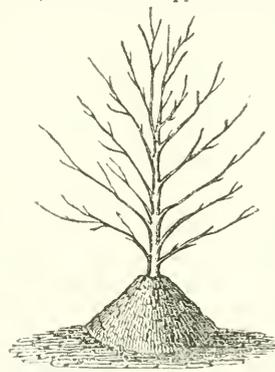
The “La Bute,” which you say is a seedling, is a very beautiful looking apple; this, and its large size, make it worthy of cultivation, even if the quality be ordinary. It is not yet in season but we should say it is rather coarse grained and acid. We will be much obliged if you will send us a few specimens, when in season, and some account of its bearing, habits, &c.

A. G. MELVIN, Webster. Salt, if judiciously applied, is good for Plum Trees; otherwise it may be destructive. The best way to apply it, is to strew it over the surface of the ground, and allow it to be washed by the rains, and reach the roots gradually. It may be spread a fourth of an inch deep. If brine be applied it should be sprinkled over the surface of the ground evenly, and let it percolate through the earth until it reaches the roots. Loosening the ground, and *pouring* it in, as you say you have done, is a very likely way to injure one's trees. We would advise, as we have often done, persons experimenting to go about it cautiously and as fully informed on the subject as possible. The unqualified remark upon which you acted was inserted by the printer to fill up a column—but is correct, in fact, notwithstanding its brevity.

Supporting Autumn planted Trees.

S. G. PERKINS, Esq. of Boston, one of the most experienced horticulturists in the country, in an article in the Horticulturist on “Transplanting Trees in Summer,” recommends the following mode of supporting trees planted in the fall, instead of staking them in the ordinary way:

“When standard trees are transplanted in the fall or autumn, it is best to support them with a cone of earth, about 12 or 18 inches high, according to the size of the tree. (See figure.) This mode is far preferable to *staking*, as it supports them in an upright position without chafing the tree, as a stake is apt to do; besides the earth covers and protects the newly planted roots from the effects of the winter's frost, which will heave them, if the ground be moist, unless they are well *mulched* or covered with litter.



Conical mound to support a transplanted tree.

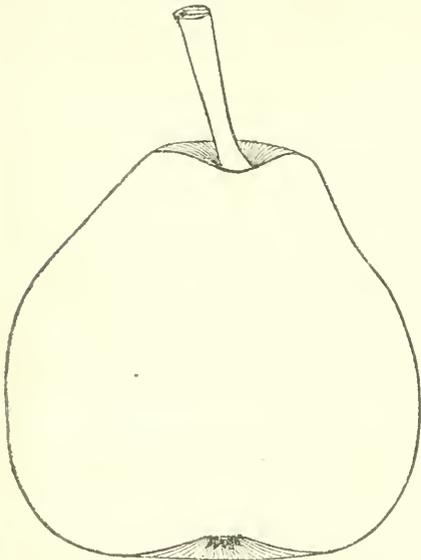
in this manner, and the earth may be then levelled, and the tree will remain firm in its position.”

Thousands of trees are lost every year from the lack of proper support, and from the ground being left bare around them. See remarks in another place, on protection.

SOCIETY is like a glass of ale—the dregs go to the bottom, the froth and scum to the surface, and the substance or the better portion remains about the centre.

Countess of Lunay Pear.

This is a new French Pear of the finest quality. A young tree, imported in 1844, bore last year and this; and we are satisfied that it will become a very valuable and popular fruit. The only place where we have seen it noticed, is in Hovey's Magazine for Aug. last, (1846.) It is there stated that Col. WILDER imported it from France, in 1841 or 2, among other new kinds.



Size medium, about as large as a Julienne, which it somewhat resembles. Form, regular obovate, tapering regularly from the eye to the stem, where it terminates obtusely and is somewhat swollen. Stem, over an inch long, moderately thick, enlarged at the end next the branch as many are; slightly curved, and inserted in a very shallow cavity. Eye, medium size, open in a smooth shallow basin. Flesh, white, melting and juicy, with a rich and delicious flavor. Ripe in October.

The most rapid growing Maple.

How many persons, undertaking to improve new and bare places, are at a loss for what trees to plant for immediate effect! "Something which will grow fast," is to them the great desideratum of life. To talk to such persons about steady and slow growing trees—beeches and oaks—is like talking to the manager of the electric telegraph about the advantages of the old fashioned mail coaches.

We must have the pleasure of recommending to such persons that excellent tree, the Silver Maple, *Acer eriocarpum*. It is, we believe, to be had in all the large nurseries; though indigenous here and there, it is seldom planted as an ornamental tree north of New-Jersey. It is a large and handsome tree, with leaves as large as those of the Sugar Maple, but more delicately

formed, and with a silvery or downy under surface.

But the *habit* of the tree is quite distinct from the other maples.* When it has once formed a head, its branches begin to decline or droop slightly, with just enough of a sweep to be graceful, but not sufficient to amount to a *weeping* wood. In short, with its pleasing habit, clean foliage, and smooth bark, it is one of the most agreeable of trees.

As regards its rapidity of growth, it is quite remarkable. We do not know any fairer wooded tree, except the Elm and the Abele, which sooner throws a fine shade. As compared with the Sugar Maple, its growth is double. In five years it really makes a fine large head. And as a recommendation of still greater importance, we may add that it will thrive in almost any tolerable soil, from a light sand to a strong clay loam.—*Horticulturist*.

We join the Horticulturist in recommending this Maple to all who wish a *fine tree, that will grow fast*. We have seen splendid specimens in Philadelphia and Burlington, not over 10 or 15 years old, that look venerable, *in point of size*, already. The new, snowy, maple-leaved Abele, is also a beautiful and striking tree, of very rapid growth. The Ailantus is another, and the *Pawlonia*, recently introduced, seems not much behind any of them. These all grow rapid enough to suit the most impatient. They can all be had at the nurseries.—Ed.

Fruit Stealing.

THE following is from the Barre (Mass.) Gazette. The editor should be made an honorary member of all the anti-thieving societies in the country. He is certainly entitled to "*the hat*;" for a cranium from which such wisdom emanates ought to be properly "protected." Hear him hold forth:

M.

"Some one or more scoundrels robbed a peach tree on the premises of Dr. Joseph N. Bates, on Sunday night, and not content with bearing off the ripe fruit, broke down a branch two or three inches in diameter and carried it away. It was a rare kind of tree, which Dr. B. had carefully cultivated for two or three years, and had just commenced bearing.

"There is no punishment by statute or lynch law half severe enough for such scoundrels. They ought to have their eyes picked out with hot pinchers, their flesh filled with needles, their hands drop off with rot, their tongues eaten with vile maggots, their ears grubbed out with dull knives, their feet roasted over burning coals, their knees stuck through with rusty skewers, their hair pulled out by slow weights, their noses ground off with rasps, their jaws taken off with dull saws, their throats filled with melted pitch, their teeth drawn out one by one, their legs worn off by travelling on scorpions, their bowels shot into with Mexican copper grape, their backs opened by cats drawn backwards and healed by aqua fortis, and then be drawn by the magnetic telegraph over four thousand miles of stump fence. In addition, they should be held to pay a smart fine and all damages."

It is said a plantation of the Alpine strawberry yields fruit the same season it is made.

THE whole of human virtue may be reduced to speaking truth always, and doing good to others.

Meteorological, Horticultural and other Observations, made at Rochester.

BY LEANDER WETHERELL.

ROCHESTER is situated on both sides of the Genesee River, seven miles south from its entrance into Lake Ontario. Latitude 43° 8' 17" N. Longitude 170° 51' West from Greenwich. Elevation above tide water 506 feet.

It is a fact well established by observation, that the mercury in the thermometer does not sink as low in Rochester, by many degrees, as in Auburn, Utica, Albany, Springfield, Worcester and Boston, places near the same parallel of latitude. The fact is probably owing to the proximity of the Lake

The average mean temperature of Rochester, for the last 14 years, is	46.54 degrees.
Of Auburn, 18 years,	46.78 "
" Utica, 20 years,	45.61 "
" Albany, 20 years,	48.26 "
" Trenton, N. J., for 1844,	52.50 "
" St. Louis, Mo., 1836,	55.0 "
" Nashville, Tenn., 1844,	59.92 "

The lowest degree that the mercury sunk, the present year, was one degree above Zero, (Feb. 19th.) The highest that it rose was (July 10th.) 96 degrees. Range, 95 degrees.

Monthly mean, 1846.	1845.	St. Louis, 1836.
Jan. 27.56 degrees.	28.05 degrees.	29.5 degrees.
Feb. 22.79 "	23.10 "	34.5 "
March, 34.80 "	33.41 "	42.7 "
April, 47.36 "	46.42 "	58.6 "
May, 60.24 "	53.78 "	65.2 "
June, 64.45 "	64.66 "	73.1 "
July, 69.87 "	69.58 "	78.1 "
August, 69.86 "	69.35 "	74.6 "
Sept. 65.71 "	58.80 "	66.9 "

The changes in the temperature are sudden and great—often varying 40° in a few hours.

The last frost in the Spring was on the morning of the 22d of May; and the first this Autumn Oct. 3d, (slight.)

The prevailing wind at Rochester, for the last 14 years, *West*; at Auburn, for 18 years, *N. W. and S.*; at Utica, 20 years, *West*; at Albany, 20 years, *South*.

The average quantity of rain at Rochester, for the last 13 years,	29.95 inches.
Auburn, for 17 years,	33.73 "
Utica, 18 years,	40.80 "
Albany, 20 years,	40.39 "
Worcester, 1844,	37.85 "
Rochester, "	26.17 "
Trenton, N. J., "	29. "
Lambertville, N. J., 1844,	40.319 "
" " 1841,	57.365 "
Charleston, S. C., 1844,	36.31 "
Nashville, Tenn., 1840,	59.14 "
" " 1841,	61.70 "
" " 1844,	42.27 "

Greatest range of thermometer observed at Nashville, within 13 years, 117 degrees—from 99 degrees in 1829, to 18 below Zero on January 26th, 1832.

The greatest range that I have known was last year, 102—from Zero in Jan. to 102 in July.

The medium annual temperature of the whole earth is said to be 50 degrees, 2½ degrees higher than the annual mean of Rochester for 1845.

Below is the Rain Gauge for Rochester, 1846 and 1845—and for Charleston S. C., in 1844:

Rochester, 1846.	1845.	Charleston, 1844.
Jan. 2.18 inches.	3.51 inches.	2.21 inches.
Feb. 2.92 "	2.01 "	2.33 "
March, 1.53 "	2.62 "	4.20 "
April, 1.13 "	2.49 "	1.50 "
May, 2.34 "	2.65 "	2.14 "
June, 4.96 "	4.42 "	1.80 "
July, 2.49 "	2.75 "	0.45 "
August, 3.85 "	2.77 "	7.38 "
Sept. 2.76 "	4.32 "	4.95 "

The following table gives a comparative view of the time of the blossoming of fruit at Rochester and St. Louis:

Rochester.	St. Louis.
Apricots April, 14th,	March, 5th.
Peaches, " 24th,	" 25th.
Cherries, " 24th,	April 3d.
Plums, " 24th,	" 3d.
Apples, " 29th,	" 10th.
Gooseberries, 19th,	" 10th.
Pears, May, 2d,	" 10th.
Apricots ripe, July 13th,	July 14th.
Plums ripe, July 21st,	July 17th.
Cherries ripe, June 1st,	June 12th.

The season has been remarkably warm and productive over our entire country—fruit abundant and delicious, though injured in some localities by insects.

In 1843 we had 145½ fair days, and 219½ cloudy; 85 on which rain fell; 71 on which snow fell; 16 on which rain and snow fell. In 1844 we had 170 fair days, and 196 cloudy; 124 on which rain fell; 70 snow fell; 9 rain and snow. In 1845 we had 154½ fair days, and 210½ cloudy; 105 rain fell; 74 snow fell; 17 rain and snow.

The year past has been remarkable for fair weather—more so than any one previous for five years. We had good sleighing through the winter—but little mud in the spring—vegetation came forward early—the summer uncommonly warm over our country, rather dry—crops good. The autumn unusually pleasant—the first half of September uncommonly warm, the first half monthly mean being 71.90 degrees—the mean for the month being 59.61 degrees.

The first half of October very pleasant. On the 13th we had an uncommon fall of rain. It began to rain about 3½ o'clock in the morning, and rained incessantly until evening—when the wind changed and the clouds passed-away, and followed by a pleasant day. The quantity of rain that fell on the 13th, was 2.32 inches—a greater quantity than I have known to fall in one day for 6 years. Rain Gauge for the first half of October, 3.52 inches.

The noblest spirits are those which turn to heaven not in the hour of sorrow, but in that of joy.

Just anger makes our sympathies more tender, as a hot climate brings forth spices as well as poisons.

We praise men for fighting, and punish children for doing the same thing precisely.

More on Grafts, &c.

INDUCED by some remarks in the July number of the "Farmer," I was led, contrary to my own convictions, to cut from an apple-tree, (on which nearly two dozen young grafts were growing,) all the young shoots from the stumps, or stocks, (on which the grafts were set,) in order, as the writer stated, to give the grafts a better opportunity to grow. The quantity removed was considerable, and immediately all the grafts, except a few that were set on short stumps, (i. e. had branches growing a few inches below them,) appeared to suspend all action; the leaves contracted, the ends of many of them died as if scorched by the sun. After remaining in this state two or three weeks, till a new set of young shoots started up, the grafts revived and now appear to be doing tolerably well. Whether this experiment should be considered decisive or not, I will not say. The effect, at any rate, was very marked, and I could assign no other reason for it than the sudden removal of so much of the foliage.

The explanation of the phenomenon I take to be this: By the removal of the young shoots, the grafts were placed in the situation of *over-fed* young animals; or rather, perhaps, of *over-tasked* young laborers, or both; and being unable to perform the task required of them, (viz., that of digestion, assimilation, &c.) they sunk for a time under their increased labors, until either the young shoots came again to their assistance, or the parent tree adapted itself to the change.—The tree had quite a full top.

As my remarks on the subject of Grafts, Pruning, &c., are somewhat scattered, I will here repeat the substance of them in few words, for the convenience of those who may wish either to consult them, or to compare them with observations and experiments of their own.

1. *Grafts*.—If these have been set on small trees by cutting off the entire head, or on the naked branches of a large tree; i. e. at the distance of a foot or more from the body of the tree without any lateral branches below them, I would remove only a part of the young shoots, (those most in the way,) and leave the others to grow. At the season for pruning, i. e., after the tree has done growing for the season, remove the rest. Prune as close as you please at this time, or before the leaves appear, but cautiously afterwards. Similar remarks apply also to budded stocks.

2. *Pruning*.—Trees should be well pruned at the time of transplanting. All broken and shattered roots should be pared smoothly off. I believe the neglect of this is not only one reason why many trees die prematurely, but also why young shoots that spring from the roots of larger trees, commonly called "suckers," are not considered as good stocks for budding and grafting, as seedling stocks. Suckers taken with the roots mangled and torn, seldom thrive. On the

other hand, if the roots be treated as above directed, though barely sufficient to support the tree, even suckers will seldom fail of becoming healthy trees. They require, however, more careful management for the first year or two, in the way of watering, judicious pruning, &c.

In regard to the annual Pruning, I would prefer that it be done in the spring, (unless with those trees that bleed profusely at that time,) before the leaves appear; or in Autumn, (say Aug. or Sept.) when the trees have done, or nearly done, growing for the season. At the same time I would use my knife at times during the growing season, whenever I saw a special occasion for it; as in giving a proper shape to the head of the tree, and in removing superfluous branches when it could be done with safety. But whenever pruning is done, let it be done neatly.

Trees newly transplanted sometimes appear to do well till towards mid-summer, when they show signs of decay. The leaves wither, become leathery, die in part, &c. At such times they should have immediate attention. A portion of the branches should be cut away to prevent too great evaporation, and the trees should be freely watered.

After all that can be said on the subject, much must be left to the judgment of those concerned. No set of directions will, I am persuaded, apply to every case. In wet seasons less caution is perhaps necessary. In severe drouths greater care will be requisite. Climate, also, may have its influence; and a system of management adapted to our climate, may not be entirely successful in another. Even in our own variable climate the same system may not always be equally successful. Hence the necessity of studying the nature and habits of trees in order to adapt ourselves to circumstances. As a general rule, I would say, 'Use the knife sparingly when the trees are in full growing;' nor would I cut much late in the fall or during the winter, except in clipping the ends of branches, where this operation may be necessary. If the trees be stunted in growth, cut more freely, scrape, wash, dig, &c., but do not use the knife when the hoe or spade, and the watering-pail, would answer a better purpose. II.

Fairport, Aug., 1846.

ECONOMY IN COOKING CRANBERRIES.—To each quart of berries, soon after putting on to cook, add a tea-spoonful of saleratus. This neutralizes the acid, and one-fourth the sugar usually used renders them more palatable than when cooked in the common way.

The above from an exchange paper is doubtless correct, and the same mode will apply to excessively sour apples or other kinds of fruit.—Care should be taken, however, not to apply too much saleratus, otherwise the flavor will be destroyed.—Ohio Cult.

Horticultural Exhibition in Rochester.

An Exhibition of the "Horticultural Society of the Valley of the Genesee," was held in this city on the 10th of September, as noticed in our last number. The following schedule of contributions has been copied from the books of the Secretary.

Many collections were brought in without names,—and others were brought in so late that the Secretary could not register them in detail. The Committees, we are informed, do not intend to report until the close of the year.

Apples.—Hon. W. Pitkin: King, Golden Russet, Esopus Spitzenberg, English Russet, Fall Jenneting, Pomme d'Api. H. Hooker: Yellow Newtown Pippin, Hooker, Cheesboro Russet, Black Gilliflower, Fameuse, English Russet, Pomme Grise, Yellow Bellflower, 20 ounce apple, Autumn Beauty, R. I. Greening, Durham Sweeting, Sweet Pearmain, Golden Russet. H. N. Langworthy: Sweet Bough, Earley Joe, St. Lawrence. E. B. Strong: Red and Green Sweeting, Baldwin, Roxbury Russet, R. I. Greening. M. Galusha: 27 varieties, including Roxbury Russet, Black and Cornish Gilliflower, Yellow Bellflower, Pomme Grise, R. I. Greening. G. C. Gillet: 12 varieties, including Orange or Lowell, and 20 ounce Pippin. H. Gay: 30 varieties, including Northern Spy, 20 ounce Pippin, Hooker, &c. T. H. Hyatt: 20 varieties, including 20 seedlings, Cornish Gilliflower, R. I. Greening, Esopus Spitzenberg, Black Gilliflower, James Lennon, 2 varieties. E. F. Smith, 1 variety Pumpkin Sweet, very large. M. B. Seward, Hawley apple, very fine. W. I. Hall, 3 varieties. C. Mumford, 1 variety. John H. Thomson, 1 variety. Z. Burr, 2 varieties, L. A. Ward, 1 variety. W. R. Smith, Macedon, 1 variety. W. E. Arnold, 3 varieties. S. Strowger, Penfield, 1 variety. S. Moulson, Rochester Nursery, Alexander apple. Bissell & Hooker, Commercial Nursery, 13 varieties—Roxbury Russet, Baldwin, Holland Pippin, Pomme Grise, Esopus Spitzenberg, Sweet Pearmain, R. I. Greening, Swaar, Green Sweeting, Fall Pippin, Red Siberian Crab. Ellwanger & Barry, of the Mt. Hope Nurseries, 40 varieties—Kenrick's Autumn, American Summer Pearmain, Corse's Indian Prince, Porter, Summer Scarlet Pearmain, Muden's Blush, Scarlet Golden Pippin, Autumn Strawberry, Golden Reinette, Reinette Bauman, Great Cassler Reinette, Reinette Franche, Reinette Versailles, Reinette d'Islande, Towne, Fleiner, Dyer, Yellow Bellflower, Blue Pearmain, Baldwin, Orley, Jonathan, Red Calville, White Spitzenberg, Pound Sweeting, Pumpkin Russet Sweeting, Grafton Sweeting, Sawyer Sweeting, Golden Sweeting, Golden Russet (English), Golden Russet, (American,) Yellow Ingestrie, Lady Apple, Montalivet, Vermillion d'Espagne, Bec d'Oie, Belle Thouin, Bardin, Rallay.

Pears.—Hon. W. Pitkin: 7 var., including Summer Bonchretien, and Swan's Egg. H. Hooker: 3 var.—Steven's Genesee, Green Chisel, &c. E. B. Strong: Bleeker's Meadow. H. N. Langworthy: 3 var., including Swan's Orange (Onondaga Seedling.) L. A. Ward, 7 var. W. R. Smith, 9 var. M. F. Reynolds, Brown Burro. T. R. Roby, Brockport: White Doyenne, Gray do., &c. M. Galusha: 3 var.—Seckel, Grey Doyenne, Rushmore's Bonchretien. G. C. Gillet, Le Roy: 8 var.—White and Grey Doyenne, Bezi de la Motte, Seckel, Summer Bonchretien, Rousselet de Rheims, &c. H. Gay: 19 var.—Seckel, White Doyenne, Rushmore's Bonchretien, Rousselet de Rheims, Gansel's Bergamot, &c., &c. Jas. Lennon: 2 var. M. Chapin, Summer Bonchretien. S. Moulson: 2 var.—Winter Bell, Summer Bonchretien.

Ellwanger & Barry: 62 var. **Pears**—Bartlett, White Doyenne or Virgalieu, Doyenne Gris, Doyenne d'Ete, Julienne, Summer Rose, Seckel, Fulton, Steven's Genesee, Calabasse, Ananas, St. Ghislain, Beurre Diel, Beurre d'Amalis, Beurre d'Automne, Beurre Coloma, Beurre Chaptal, Beurre Gris or Brown, Burro Easter, Ambrosia, Belmont, Louise Bonne de Jersey, Swan's Orange, Monarch, Heathcot, Countess of Lunay, Bergamot Cadette, Bergamot Gansels, Bergamot de la Pentecote, Delices de Hardenport, Foster, Epine, Dumas, Belle Angevine, Paquency, Martin Sec, Messire Lean, Doyenne Sieulle, Belle Henriette, Roi de Rome, Striped Swiss or Verte Longue Panachee, Poire Cameron, Mouille Boche or Mouth Water, Winter Bonchretien, Rousselet

Perdreau, Royal Winter, Ritelle, Bleeker's Meadow, Angélique de Ronre, Winter Nolis, Passe Colmar, Henry 4th, Dr. Hunt, Large Yellow Winter, Girault, Frederick of Wirttemberg, Newtown Virgalieu, Urbaniste, Capiaumont, Napoleon, Winter Bell, Henriette, Belle et Bonne, and some others not named.

Peaches.—H. Hooker, 3 var. J. H. Waits, 1 var., Seedling. G. S. Riley, Barnard's Early. H. N. Langworthy, 3 varieties—Seedling Cling and Seedling Free Stone, and Barnard's. Zera Burr, 1 var. L. A. Ward, 1 var. M. B. Seward, 1 var. M. G. Warner, Lemon Cling. W. Pitkin, 2 var. J. H. Thompson, 1 var., Cling. E. F. Smith, Pine Apple Cling, J. M. Fish, Pine Apple Cling, M. Galusha, 3 var. G. C. Gillet, Le Roy. 4 var.—Red Cheek Melocoton, Old Mixon Cling, Wabers' Early, &c. H. Gay, 3 var. H. D. Wade, Old Mixon Cling. W. A. Welles, Pine Apple Cling. S. Moulson: 3 var.—Old Mixon Free, French Noble, &c. Bissell & Hooker: 3 var.—Old Mixon Free and Cling, White Rare Ripe, Walter's Early, Red Cheek Melocoton, Royal Kensington, &c. Ellwanger & Barry: Early York, Cole's Early, New York Rare Ripe, Jacques Rare Ripe, Snow Peach, Old Mixon Free, Green Catharine.

Plums.—L. A. Ward, 1 var. G. C. Gillet, Le Roy, 4 var. **Quinces.**—C. Mumford, J. H. Babcock, S. Moulson, G. W. Camer, Jas. Lennon, Z. Burr, M. G. Warner, H. Gilman, and J. W. Seward, each fine specimens of Orange. H. Gay, Orange and Portugal.

Grapes.—H. Bush, Isabella. H. N. Langworthy, Clinton. G. W. Cumer, Isabella. G. C. Gillet, Le Roy, Miller's Burgundy and Winne. H. Gay, Isabella and Miller's Burgundy. Jas. Lennon, Isabella. M. G. Warner, 2 var. Hon. W. Pitkin, 5 var.—Isabella, Black Hamburg, Catawba, White Sweet Water, and Miller's Burgundy. Ellwanger & Barry, 5 var.—Isabella, Golden Chasselas, Miller's Burgundy, Feldleiner, White Sylvaner.

Melons.—B. Hill, Victoria Musk Melon, C. F. Crosman, Beechwood Musk Melon, and Long Island and Citron Water Melons. H. N. Langworthy, Imperial and Spanish Water Melons.

Almonds.—Bissell & Hooker, Hard-shell.

VEGETABLES.

H. Plummer, mammoth Beet. H. N. Langworthy, 2 varieties Squashes, 2 of Tomatoes, and 2 of Beets. C. F. Crosman, 5 varieties of Beets, 2 of Carrots, 3 of Onions, 3 of Squashes, 3 of Cucumbers, 2 of Tomatoes, 4 of Peppers, 1 of Egg Plant, (purple.) W. Pitkin, 2 varieties of Squashes, and fine Mangel Wurtzels.

FLOWER DEPARTMENT.

Green House Plants.—Wm. King, Monroe Street Green House, a collection of 35 plants. Ellwanger & Barry, a collection of 41 plants.

Boquets.—Mrs. Jas. H. Watts, 1. Misses Green, 2. Mrs. B. F. Smith, 1. Wm. King, 6. Bissell & Hooker, 1. Ellwanger & Barry, 2.

Floral Ornaments.—Mrs. Wm. Pitkin, a fine pyramid of miscellaneous flowers. Mrs. A. Frost, a pyramid of perennial Sunflower and Dahlias. Ellwanger & Barry, a mound of Verbenas, comprising 12 varieties, and a pyramid 5 feet high, of Miscellaneous fruits and flowers.

Annuals.—Mrs. Z. Burr, Globe Amaranthus, very fine, in pots. Wm. King, splendid Coxcombs, in pots. H. Billings, a beautiful collection of Balsams.

Dahlias, named: Ellwanger & Barry, 14 varieties—Admiral Stopford, Anna Minerva, Beauty of Wakefield, Cleopatra, Grace Darling, Henry Clay, Hector, Queen (Widal's,) Sylph, Washington Irving, Royal Standard, Prince of Wales, (Girling's,) Oriental Pearl, Marchioness of Ormonde.

Roses, named: Ellwanger & Barry, 43 varieties—**Hybrid Perpetuals:** Duc d'Anaule, Madame Lafay, Marshall Soult, Princess Helen, Prince Albert, Rivers, (Laffay's,) Count de Paris, Clemence Seringe, Lady Fordwith, Edward Jess, William Jess, Mistress Elliot, Augustine Mouchelet, Madame Damene, Marquisa Boccella, Dr. Margoline, Lady Alice Peel, Louis Bonaparte, La Reine, Dr. Marx. **Moss:** Purple, Changable, Perpetual, and Perpetual White. **Perpetual:** Four Seasons, (blush,) Rose du Roi, Bernard, Claire du Chatelet. **Bourbon:** Glorie de Rosamene, Marshal Villers, Mrs. Bosanquet, Queen of the Bourbons, Boquet de Flore, Hermosa, Henri Plantier, Henry Clay. **Bengal:** Agrippina, Archduc Charles, Louise Philippe. **Tea:** Yellow, Triumph de Luxemburg, Gigantesque Devonieusis, Camelia.

LOCUST TREES.—It is well known that this species of shade trees is very subject to be destroyed by the "Borer," a worm which bores into the trunk. We are informed that Dr. Freeman Edson, of Scottsville, has preserved his locusts when attacked in this way, by boring several holes with a small auger around the trunks of the trees, and filling them with a paste composed of sulphur and oil of wormwood. The holes are to be closely plugged after filling. It may be worth while to try so easy an experiment.—*Roch. American.*

Western New York Agricultural School.

The Proprietors of this Institution have pleasure in announcing to its friends and the public that its second term will commence, under the most favorable auspices, on the 20th of September next. The year is divided into four quarters of 11 weeks each, but no extra charge will be made to permanent pupils staying a year, for board and tuition during vacations, if they remain at the School.

The studies pursued are Chemistry with the practical analysis of soils, fertilizers, &c.; Geology, Botany, Comparative Anatomy with dissections, Physiology, Natural History, Book Keeping, Surveying, Practical Farming and Gardening, beside the study of the Languages and Mathematics, as usually taught in colleges. The undersigned have secured the services of Mr. R. K. SANFORD, of Fulton, a gentleman of high mathematical and literary attainments, to aid them in the Literary Departments of the School. They have also a Primary Department for giving lessons in all branches of a good English Education. Whatever pursuit the student may wish to follow in after life, it is the purpose of those having charge of this Institution, to qualify him for its duties, to the extent of a thorough, practical education, embracing a liberal range of the Natural Sciences.

When the weather is suitable for out door work, pupils will labor from one to two hours a day, receive instruction in rural affairs. Strict attention will be paid to their morals. They will board in the family of the Principal, and attend church with the same.

TERMS \$25 a quarter, or \$100 per annum including board, washing, tuition, lights, and firewood.

DANIEL LEE,
RAWSON HARMON, Jr.

Wheatland, Aug. 25, 1846.

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, September, 1846.

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 \$3; \$2 per 100—or three dozen for \$1. All orders, (post paid,) will receive prompt attention. Address D. D. T. MOORE.
Farmer Office, Rochester, Sept. 1, 1846.

Wanted.—100 bushels Peach Stones, at the old Rochester Seed Store, nearly opposite the market.
Oct. 1, 1846. JAMES P. FOGG.

MOUNT HOPE BOTANIC GARDEN AND NURSERIES, Rochester, N. Y. (South St. Paul st., nearly opposite the Cemetery.)

THE Proprietors of this Establishment offer for sale an unusually large and fine collection of
FRUIT AND ORNAMENTAL TREES,
FLOWERING SHRUBS, VINES AND ROSES, HARDY HERBACEOUS PLANTS, DOUBLE DAHLIAS and BULBOUS ROOTS;
GRAPE VINES, RASPBERRIES, STRAWBERRIES,
AND GOOSEBERRIES; ASPARAGUS ROOTS,
RHUBARB, &c.; HEDGE PLANTS,
GREEN HOUSE PLANTS, &c.

The collection of Fruit Trees comprises the most popular varieties cultivated, and has been grown with the greatest possible care to ensure accuracy. The Proprietors are practical and experienced Nurserymen, and wholly devoted to the business;—all the important operations are either performed by themselves or under their immediate inspection.

Experience has fully proved that the trees grown at this point, in addition to being free from diseases, are better adapted to cold climates than those of any other portion of the United States.

The collection of Apples includes several thousands of the famous new American Apple, the "*Nothorn Spy*."

A large assortment of Pears, of the choicest kinds, are propagated on quince stocks for DWARFS and PYRAMIDS, and will bear the first or second year after planting; they are admirably adapted for garden culture. A lot of these are now on hand, of extra size, for immediate bearing.

The collection of Ornamental Trees is large and fine, comprising several hundred of the splendid *Paulownia Imperialis*. The catalogue of Roses embraces the most popular new varieties. A great variety are propagated for standard or Tree Roses, 4 to 6 feet high, with fine heads.

Of *Double Dahlias* the assortment is unsurpassed, including the finest show flowers yet introduced to this country, and many that were imported last season at 5 guineas each, of which a separate catalogue will be furnished.

The stock of Green House Plants is very extensive, and includes the most beautiful new Pelargonium (Geranium,) Fuchsia, Camellia, Calceolaria, Verbena, Cactus, &c., &c., all finely grown, and will be sold at greatly reduced prices.

Trees and Plants packed in the best manner, and shipped to any part of the country agreeable to order.

A new edition of our descriptive priced catalogue will be published this month, and sent gratis to all post paid applications. Orders from unknown correspondents should be accompanied with a remittance or reference.

ELLWANGER & BARRY.

Rochester, Sept., 1846.

NURSERY OF J. J. THOMAS,

MACEDON, WAYNE CO., N. Y.



A FINE COLLECTION OF FRUIT TREES are offered for sale at this Nursery, all of which have been propagated from BEARING TREES, whose genuineness or excellence, and fitness for the climate of Western New York, have been thoroughly proved by the personal examination of the proprietor. It has been a principal object to avoid the confusion resulting from a numerous list of varieties, and to present only a moderate collection of the very finest kinds. To accomplish this, many years have been occupied, and selections have been made from several hundred sorts in bearing, none but the best being chosen, after thorough examination and trial.

The Ornamental department contains some of the very finest Shrubs and herbaceous perennial Flowering Plants, suited to open ground culture.

The new Catalogue of this Nursery will be sent gratis by mail, or other information furnished, on every post-paid application.

10-2m

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.

FARMERS, CURE YOUR HORSES!

GEO. W. MERCHANT'S CELEBRATED
GARGLING OIL.

An Invaluable Remedy for Horses, Cattle and other domestic animals, in the cure of the following diseases:

<i>Fresh Wounds,</i>	<i>Fistula, Stifast,</i>
<i>Galls of all kinds,</i>	<i>Strains, Lameness,</i>
<i>Sprains, Bruises,</i>	<i>Sand Cracks.</i>
<i>Cracked Heels,</i>	<i>Foundered Feet,</i>
<i>Ringbone, Windgalls,</i>	<i>Scratches or Grease,</i>
<i>Poll Evil, Callus,</i>	<i>Mange,</i>
<i>Spavins, Sweeney.</i>	<i>Horn Distemper.</i>

Also a valuable Embrocation for diseases of the Human Flesh.

AVOID DECEPTION.—It is not generally known, that no means have been left unemployed by that class of persons who attempt to counterfeit every good medicine that has acquired public confidence, to mislead the public mind into the belief that their oil is the same as the Gargling Oil. Be not deceived, therefore, by such *knavery*; and be not satisfied except you find the marks of the *genuine* article upon the bottle.

One gentleman affirms that he cured a valuable horse of a *Windgall* which had become callous. Another says he has cured a fine horse of a *Sweeney* which nothing else would effect. Another has cured himself by the use of the Oil, of a *Rheumatism*, and in his family has used it for all complaints requiring an external remedy. Another who had it "on hand" says that he relieved himself immediately of *severe* and continued *pain*, resulting from the setting of a dislocated knee joint which every application made for twenty-four hours had failed to perform; he soon obtained sleep.

It has cured *Founders*, and is a common remedy for *Galls*, *Sprains*, *Bruises*, *Strains*, *Cramps*, *Weakness of the Joints and Limbs*, *Frozen Feet*, *Contraction of the Muscles*, *Scalds*, &c., and if all the facts were told they are so remarkable they would probably not be believed.

For testimonials, synopsis of diseases, and mode of treatment, see pamphlet which accompanies each bottle.

☞ Sold at the ROCHESTER SEED STORE, and by Druggists and Store-keepers in the U. States and Canada.
☞ Also at the GENESEE SEED STORE, Rochester.

More Pular Merino Bucks.

I have prepared another lot of *Pular Merino Bucks* from the celebrated flock of S. N. Jewett, of Vermont. For sale by R. HARMON, jr.
Wheatland, August 26, 1846.

Gang Plows.—Ward's celebrated Gang Plow on hand and for sale (price \$12) at the Genesee Agricultural Warehouse and Seed Store, by
[9-1f] RAPALJE & BRIGGS.

Straw Cutters, of all the most approved kinds, used Western N. Y., for sale cheap, by
RAPALJE & BRIGGS.
No. 10, Front-st.

Corn Shellers—A first rate article, price \$10, for sale at No. 10, Front-st.
RAPALJE & BRIGGS.

NEW SEED and IMPLEMENT WAREHOUSE.

GENESEE SEED STORE & 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 of 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.

RAPALJE & BRIGGS.

Rochester, Feb. 1, 1846.

Rochester Agricultural Warehouse.

BY THOMAS NOTT.

THE Subscriber having purchased the interest of Mr. JAS. P. FOGG, (late B. F. Smith & Co.,) in the Agricultural and Horticultural IMPLEMENT BUSINESS, takes this method of informing the Farmers of Monroe and adjoining counties, that they will find it to their advantage to call and examine his Stock of Farming Implements before purchasing elsewhere.

In his assortment may be found the following articles:—

Burrall's Patent Corn Sheller, price, \$10.
Cultivators, price from \$5 to \$8.
N. C. Dayton's Gang Plow, for putting in wheat, \$15.
Hatch's Seed and Plaster Sower, \$25.
Delano's Diamond Plow, \$7.
Massachusetts Sward C Plow with extra points, \$7.
" Eagle and Eagle No. 25 (3 horse) Plow.
" Side-hill and Subsoil Plows, \$9 to \$15.
Straw Cutters, from \$5 to \$15.
Sanford's Straw Cutter, \$15.
A complete assortment of Plow Points.
I. Grant's Patent Fan Mill, price \$27.

A full assortment of AGRICULTURAL IMPLEMENTS, TIN AND WOODEN WARE, and hundreds of other articles too numerous to mention. For sale cheap, by

THOMAS NOTT,

Front st., nearly opposite the Market.

Rochester, July, 1846.

Seed Wheat.—100 bushels Gen. Harmon's celebrated White Flint Wheat; also, 50 bushels Soul's do., just received, and for sale at the Genesee Seed Store, by
[9-1f] RAPALJE & BRIGGS.

Plows for Sale.—We have on hand, and intend to keep constantly for sale, the celebrated *Diamond* and *Wisconsin* Plows, the merits of which have been fully tested. Price, \$7.00 for medium size. The farming community are respectfully invited to give us a call.

RAPALJE & BRIGGS,

21f.

No 10 Front-st

Ba s! Bags!! Bags!!!

THE Subscriber, wishing to dispose of his stock of Grain Bags, has reduced the price, and Farmers or others wishing will do well to call, see quality and buy, which I am confident they will do. To be found at E. Watts Hard-ware Store. JAMES H. WATTS.
Rochester, Sept. 1, 1846. [9-2f]

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	97	Pork, bbl,	10,00	11,00
Corn,.....	50	Pork, cwt,.....	3,00	3,50
Barley,.....	33	Beef, cwt,.....	3,50	4,00
Oats,.....	25	Lard, lb,.....	3	
Flour,.....	5,25	Butter, lb,.....	12	14
Beans,.....	75	Cheese, new lb, ..	6	6½
Apples, bushel.	25	Eggs, doz,.....	12	
Potatoes,.....	20	Poultry,.....	4	6
Clover Seed, ..	4,00	Tallow,.....	6	6½
Timothy,....	1,00	Maple Sugar,...	6	77
Hay, ton,....	7,00	Sheep Skins,...	31	44
Wood, cord,...	2,00	Green Hides, lb	33	
Salt, bbl,....	1,06	Dry ".....	6	
Hams, lb,....	6	Calf Skins,....	7	

[By Magnetic Telegraph.]

NEW YORK, Oct. 30—3 P. M.

There is considerable firmness in flour at \$6 for shipping lots Genesee. There have been sales 5000 bbls at that rate. Michigan and flat Ohio 5 37a5 91. The receipts to-day are light. For the east inquiry moderate. White wheat is quiet at previous rates. Corn 68a70c for mixed—75c for yellow, with sales 10,000 bush. Sales 5000 bush. rye at 78a80c. Oats steady at 35a36c. In Barley nothing doing. Sales of pork very light. The market is depressed; prime 8 25, mess 9 50. Rough flax seed 1 39. Clover entirely nominal. Sales of Tallow at 8½c. Good lard in bbls selling in lots at 7½a7¾c. Butter in fair demand at 14a16c—good lots western dairy Cheese is slow at 7a7¾c.

BUFFALO, Oct. 30.

The sales which have occurred since our last, are 12,500 bushels prime quality Milan and Sandusky in store at 78c, free of storage for ten days, and 6000 bushels similar quality at the same. In flour we notice the sale of 1000 bbls Ohio, at 4 50—750 bbls three brands Ohio, afloat at the same—522 bbls two brands Mich. at the same—530 bbls of a choice Mich brand, and 300 bbls Wisconsin and Illinois in one lot, the former at 4 56, the latter at 4 41. Corn is very dull, and holders to-day are offering good Wabash at 37½c.

CLEVELAND, Oct. 27.

The continuance of high freights keeps prices down.—Sales to-day are 500 bbls flour, at 4 23—300 do 4 07½—1600 bu wheat at 65c. Our warehouses are so crowded that storage can scarcely be obtained. Freights too are still higher, and vessels scarce. It is said that 27c has been paid to-day for wheat to Oswego, and to Buffalo for wheat 12½c, and flour 45 and 48c.

DETROIT, Oct. 26.

Flour went up on Saturday from 25 to 50c per bbl, and the market closed on Saturday evening, at \$4a4 25.—Wheat at former quotations, 70c.

MILWAUKEE, Oct. 20.

Best samples of winter wheat have commanded 54a56c. Some few loads yesterday brought a cent or two more. In point of quality, the wheat now coming in is much better than that brought to market earlier in the fall. Vessels are still very scarce. The propeller Chicago was taken up yesterday to load for Buffalo at 20c. She will carry about 5000 bushels. Flour is firm at \$4a4 50 retail. A small lot was sold yesterday at \$4. No corn or barley in market.—Salt firm at \$1 75.

POST-MASTERS and others who have generously lent us their aid, by obtaining and forwarding subscriptions to the current volume of the Farmer, are respectfully invited to continue acting as Agents. We are now perfecting our arrangements for 1847, and hope to make the ensuing volume more valuable than any preceding one. The patrons and friends of the Farmer will greatly oblige us by forwarding the subscriptions of those of their acquaintances who may wish to subscribe.

Removal.

Previous to the publication of the December number, the Farmer Office will be removed to *Talman's Block, on Buffalo street*, nearly opposite the entrance to Arcade Hall.—Our new location is central, and convenient to those having business to transact with the establishment.

1847.]

VOLUME VIII.

[1847.]

GENESSEE 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,

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, at 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 Close of the Volume.

THIS number closes the seventh volume of the GENESEE FARMER. Whether our efforts to make a paper worth all that it costs, and something more, have been successful, each subscriber will of course judge for himself. We are satisfied with the evidence afforded by the large increase of its circulation, and shall make corresponding additional efforts to render the Farmer worthy of the most extensive patronage. Our terms are so extremely low, that nothing short of tens of thousands of subscribers will enable us to realize a fair living by editing and publishing this journal. Nor can we well employ and pay agents for procuring the names of those that ought to take, read, and sustain a paper devoted entirely to the interests of our rural population. Our dependence is on the public spirit, and patriotism of its readers, to extend the circulation and usefulness of this, the cheapest agricultural work in the Union, and doubtless in the world. Take the whole State together, not one farmer in fifteen either subscribes for, or reads, any agricultural journal whatever. It is now some 17 or 18 years since the GENESEE FARMER was first started; and 12 or 13 since Judge BUEL commenced the publication of the CULTIVATOR, at Albany. Although neither the Farmer nor Cultivator has reason to complain of a lack of patronage, yet all must regret that so large a majority of the tillers of the earth neglect to learn what they may by studying the recorded experience, and observations of other practical agriculturists; and in turn, recording in some periodical for the equal benefit of their brethren, the results of their own experience in rural affairs. To

enable Farmers and Horticulturists to teach one another, at the least possible expense, we publish annually a volume of nearly 300 large octavo pages, at 37½ cents a volume where eight copies are taken together. There is not a town in the State that should not receive at least 100 copies; nor is there one where that number can not be circulated by a little effort. The organization of FARMER'S CLUBS, and the enlistment of young men in the noble and honorable work of improving the *race of husbandmen*, as well as their domestic animals, farms and crops, is the direction in which our labors should now be turned.

Young Men of Western New York! will you not lend us your assistance to extend the circulation of the GENESEE FARMER? The cause to which it is devoted is your cause—the elevation of honest, rural industry. Do you wish to rank in the community as men of science, familiar with the unerring laws of Nature; then sustain the earnest efforts of the Editor of this paper to simplify the study of natural phenomena, that all may read and understand the works of God, as displayed in the happy results which He has secured to the labor of all that know, and obey His laws. Our unfathomed mental powers were obviously created for *use*. It is a plain question for us to decide, *what use* we shall make of this, the most precious gift of infinite Wisdom and Goodness? If Heaven has made us social beings, then let us be *social*, and strive to improve the society in which our lot is cast. Let us be willing to learn of others, and to teach what we learn, that we all may be wiser than we now are. Study the great Volume of Nature, for it was written by One that loves his pupils, and will reward them liberally for their diligence in the acquisition of true knowledge.

To our Patrons.

CONSIDERING the price at which it is afforded, the present volume of this journal contains an unusual amount and variety of useful and interesting matter, in both departments—and likewise over *fifty engravings* of Improved Implements, Farm Buildings, Domestic Animals, Fruits, &c. It is far the *cheapest*, (if not the *best*,) Agricultural Paper now published. If any doubt the truth of this assertion, let them examine the Farmer, and compare it with other similar journals.

We wish, and intend, to make the ensuing volume of the Farmer superior, in many respects, to the present. Our facilities for its publication in a neat and proper style will be greater than heretofore, and we shall avail ourselves of every appropriate means to render the GENESEE FARMER worthy of the confidence and earnest support of an intelligent and enterprising community. [See Prospectus, &c., on last page of this number.]

Wheat Culture.

NUMBER TWO.

How can one best increase the elements of wheat in soils where such elements are lacking?

This is a question of great practical moment. To show, in the first place, what one acre of land can do, where Science had supplied it with each element used by Nature in forming this invaluable plant, so far as such elements were lacking in the soil, we ask the reader's attention to the following facts:

In part VIII, vol. 2, page 206, Mr. Colman says: "It is well attested that a crop of wheat grown in Norfolk county in the same year (1845) produced 11 quarters, 2 bushels, 3 pecks per acre, that is to say, 90 bushels, 3 pecks per acre."—The evidence of the truth of this statement being satisfactory to the Royal Agricultural Society, its Council directed Prof. Playfair to make a critical analysis of the soil that produced this remarkable crop. He did so, with the following result:

Organic matter, - - - - -	2.43
Hydrate water, - - - - -	2.69*
Carbonic acid, - - - - -	0.92
Silica, - - - - -	31.25
Per oxide of Iron, - - - - -	3.41
Lime, - - - - -	1.23
Alumina, - - - - -	3.53
Sulphuric acid, - - - - -	0.09
Phosphoric acid, - - - - -	0.33
Magnesia, - - - - -	1.12
Potash, - - - - -	0.30
Soda, - - - - -	1.50
Chlorine, - - - - -	a trace.
Loss on analysis, - - - - -	0.63
Total, - - - - -	100.00

In so small an amount as 100 grains, this soil shows an appreciable quantity of each element, (14 in number,) found in perfect wheat plants. And yet, more than four-fifths of the soil is nothing but silica, or pure flint sand. The proportion of silica is about the same as we find in our best wheat soils in Wheatland. It differs from them in containing more *soda*, *potash*, and *phosphoric acid*; while the amount of lime, magnesia, alumina, oxide of iron, and chlorine, correspond very exactly with the results of our own analyses. We have, however, never so small an amount of organic matter (vegetable mold) as 2½ per cent. The fact that over 90 bushels of wheat can be grown on an acre with so little organic matter in the surface soil as 2.43 per cent., is worthy of mature consideration by those that desire to prepare their land for producing large crops of wheat at the least expense. It is not *vegetable*, but *mineral* matter that our soils lack to give a large yield of plump wheat. An abundance of mold will increase the growth of *straw*, but not of *grain*. To promote the growth of the latter, no one thing is so valuable, as a general rule, as that of *bones boiled to a powder in strong lye*. To this the addition of gypsum and com-

mon salt will be of great service. The phosphate of lime contained in bones is an indispensable ingredient in forming the seeds of the wheat plant. The gluten in this grain contains sulphur, which the sulphate of lime (gypsum,) will furnish. The plant also needs potash, soda magnesia, and chlorine; all of which the common salt, and ashes leached to obtain lye, will supply. The liquid excretions as well as the dung of animals abound in elements most useful in forming wheat. But an excess of manure will be ruinous to the crop. And *why* this is so, let us now consider. Suppose, for an experiment, one should make 2000 lbs. of ripe wheat, including both straw and grain, into a heap of manure for feeding a second crop of wheat plants. Let this manure be spread over the ground eight or ten inches deep, so that the plants would have to organize their tissues, seed, &c., from the appropriate elements contained in the manure. Could a large yield of good seeds be thus grown? We think not. Why not? Every thing the kernels of wheat need, as well as all that the stems and leaves require, would be present in great abundance. The difficulty is this: Nature designs that this plant shall derive from the *atmosphere*, through the medium of its roots and leaves, a large portion of the carbon, nitrogen, oxygen, and hydrogen, used in organizing its seed.—Hence, to feed wheat plants with an excess of these elements in rotting manure, is to inflict a *surfeit* and *disease* upon the same. All organized beings, whether vegetable or animal, may be injured, more or less, by having an excess of nutritious matter thrown into their circulating systems. Wheat can endure this surfeit far less than corn, oats, or barley. There is a *natural limit* beyond which we can not force any plant or animal, by the use of its most appropriate food. But in regard to wheat culture, we are far behind the maximum of product consistent with the highest profit. Something can be gained on most farms, by the droppings of domestic animals, applied directly to wheat fallows. They are not generally too rich for a dose of barn-yard manure; especially if it be well rotted, and contain an admixture of gypsum, salt, ashes, and lime. Don't spare the clover seed, the plaster, nor the leached ashes, where you wish to enrich your soil.

Most farmers, in our judgement, sow too little seed per acre. They seem to have too many acres to do full justice to each rood of land.—Having contrived, some how, to obtain possession of a large surface, they appear too poor in ready money, to prosecute their business to the best advantage. Pride and avarice in agriculture, as in other pursuits, over-reach themselves. Less capital in land, and more in ready cash, would effect a change most advantageous to more than one reader of our paper. The great objection to buying the things required to form good crops of wheat, is the want of funds for that pur-

* Water not driven off at 212° of heat.

pose. Many would purchase more clover seed, timothy seed, gypsum, salt, ashes, lime, bones, &c., if they had less land and more money. If they had fewer acres to fence and cultivate, they would buy more rails, and better farm implements. It is not often that we tell our friends of their faults; and we hope now not to give offence. There are some wounds that require to be probed a little, before they will heal soundly at the bottom. We are thoughtlessly driving too many young men out of New York, who have been born and raised in the State, by a pernicious practice of adding farm to farm, to be cultivated by foreigners, either as hirelings, or tenants. We do not object to foreigners coming among us to work at any pursuit whatever. We object only to the expulsion of the best talent, the noble enterprise, the pride, and hope, of the Commonwealth, because a foolish spirit of land monopoly denies them soil to cultivate in New York on such terms as Humanity and Virtue deserve.

We do not consider these remarks as out of place. It must be borne in mind that in very many of our most fertile towns, our rural population is on the *decrease*; and the character of the inhabitants is undergoing a rapid change, by the removal of young men, and the incoming of other persons from abroad. Let as many come in from abroad as will.

We shall undertake to show, at another time, that money earned in Western New York, can be more profitably employed here in growing wheat for New York and Boston markets, than at any point west of the State. Still, this fact by no means justifies that craving spirit which grasps at all the land that joins the estate where it frets and chafes a lump of living clay. Small, well tilled, and highly productive farms, occupied by an intelligent, virtuous, and independent people, is just the condition of the society that we desire to witness. The greatest good to the largest number, is our motto. When this maxim shall be acted on in good faith by the community, the wheat and corn fields of the Empire State will produce twice as much as they now do; and a double population will be twice as comfortable and happy as is now seen by the traveller in going from tide water to lake Erie.

Sheep Husbandry on the Prairies.

A correspondent writing from Lafayette Co., Indiana, asks for information on the subject of keeping sheep on the prairies, in regard to shelter in the winter, the value of wild grass after autumn frosts, &c.

We have spent only two winters on the prairies in Illinois, and then in the latitude of St. Louis; but we have often visited the State in the winter season. A prairie range for cattle or sheep is nearly worthless, after cold weather has fairly set in. Both alike need other forage than

wild grass, as well as good shelter to protect them from the strong, cold, and almost continuous winds of that vast, open country. In southern Illinois and Indiana, where there is more timber, and the climate is naturally milder, less attention need be paid to guarding against the inclemencies of the seasons. But even there cold rains, sleet and snow are quite too severe on sheep for them to be out with impunity. Sheds are uncommon, but clumps of trees, and dense groves serve as substitutes which are better than nothing. Red clover does not take readily and grow well; but turnips, blue grass, timothy, oats, peas, beans, corn, &c., make excellent food for sheep. White clover is indigenous on the banks of the Little Wabash river. At Albion, in Edwards county, are flocks of Merino sheep that have been kept for 30 years, 6 or 8 months each year, on wild prairie grass, and have continued in good health and vigor. The progenitors of these sheep were imported by wealthy Englishmen, who purchased and settled a large tract where the village of *Albion* is located, at the close of the war in 1815. The quality of the wool of these fine Spanish sheep has not deteriorated, although Albion is a little south of the latitude of Washington city. The writer of this knows of no better country for wool growing than southern Illinois, if one is proof against fever-and-ague.

Any quantity of choice land can be had at Congress price, both timber and prairie. Much of this land is high rolling prairie, and makes capital sheep walks. They need a shepherd, however, to protect them from the depredations of the little, mean prairie wolf, and from dogs, which are meaner still. The climate is the same as that of St. Louis, and most admirably adapted to the growth of apples, pears, peaches, and grapes. The society is not so good as it might be; consisting mainly of persons too poor to hold slaves in Virginia, Kentucky, and Tennessee, who have emigrated north to settle on Congress lands.

USEFUL TO THE LADIES.—One of the most important of all household duties, is to keep the door knobs, the lamps, the spoons, the plates, "and all that sort o' thing," in brightly polished order. If instead of the chalk, and preparations, ladies will use camphene oil 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 ever been found to equal it.

COUGH IN HORSES.—The boughs of the common cedar, cut fine, and mixed with the food of horses, are said to be an effectual remedy for the troublesome and very prevalent disease called "cough."

The Study of Agriculture.

CHAPTER I.

WHAT is Agriculture ?

1. Agriculture is both an ART and a SCIENCE.

What is the *art* of agriculture ?

2. The *art* of agriculture consists in the skillful application of manual labor to the cultivation of the earth.

What is the *science* of Agriculture ?

3. The *science* of agriculture has for its object the investigation of those Natural Laws, and changes in Matter, by which it is *organized* into the bodies and products of cultivated plants, and domestic animals; and again dissolved into its original elements, after vitality has ceased to influence the condition of the various substances with which it has been associated.

What distinguishing feature characterizes all Natural Laws ?

4. They are distinguished by the *uniformity* and *certainty* of their operations. Hence, if we study them thoroughly, and *once* learn their peculiarities, the knowledge so attained will be true, and available, during the balance of our lives.

What is *one* of the most important Laws, which control the production of all cultivated plants ?

5. It is that Law, which renders it impracticable to organize any vegetable, *without a supply of the precise things that Nature uses for making the whole substance of such vegetable.*

What are the *things* used in forming the bodies and products of all cultivated plants ?

6. If we consider them as *binary* compounds, i. e. compounds of two simple substances, they are thirteen in number, and they have the following common names: *Water; Carbonic acid; Ammonia; Silica; Alumina; Lime; Potash; Soda; Magnesia; Oxide of Iron; Sulphuric acid; Muratic acid; and Phosphoric acid.*

Do cultivated plants contain no other elements than such as exist in the compound bodies above named ?

7. None of any practical importance. There is occasionally found in their ashes, a little of the metal called *manganese*; and animals that live on vegetables extract from the same the *fluorine* which is formed in the *enamel*, or glassy covering, over the exposed surface of their teeth.

If *water* be a compound substance, what are its constituent elements ?

8. The constituent elements of water are *oxygen* and *hydrogen*, combined in the proportion of *eight* parts by weight of oxygen, to *one* of hydrogen.

What is *Oxygen* ?

9. The term is derived from two Greek words that signify "to make *sour*;" "to form *acidity*;" because this simple element naturally unites with many others and forms most biting acids, like *aqua fortis*. When pure, oxygen is an invisible *gas*, without taste or smell, having all the me-

chanical properties of atmospheric air, of which it forms 21 parts in 100.

Does *oxygen* exist in nature, in other forms than those of a *liquid* in water, and of a *gas* in the atmosphere ?

10. It does. In 100 pounds of *silica*—pure flint sand—there are 52 lbs. of oxygen combined with 48 of a simple element called *silicon*, or *silicium*. Nearly one half of the weight of granite mountains is nothing more than oxygen in a solid form; while it constitutes eight parts in nine in all water, vapor, ice, and snow.

Is this substance known by any other name than that of *oxygen* ?

11. It is; being often called "vital air," from the circumstance of its supporting the respiration of all animals. It also supports combustion, by uniting chemically with the body consumed.

What do you mean by the *chemical union* of two or more bodies ?

12. *Chemical union* is distinguished from *mechanical union* by the circumstance that, a *new* and *fixed* compound is formed by chemical union, which differs in its properties from each of its constituents. Thus *water* is as unlike either oxygen or hydrogen *gas* in all its properties, as it well can be. It occupies less than a thousandth part of the space filled by these gases before their chemical union to form water.

Is there any known law that governs the combination of simple and compound bodies ?

13. There is. All elements that combine chemically at all, do so in *definite proportions*.

Will you illustrate this law ?

14. Take 8 grains of oxygen gas and mix with it 1 grain of hydrogen, in a clean strong glass vessel. These gases can be set on fire by an electric spark, and will explode with some violence, but not enough to break stout glass, and form 9 grains of water. If 11 grains of oxygen are used instead of 8, only 8 will combine with the hydrogen; 3 grains will remain unaffected. If 2 grains of hydrogen are used to 8 of oxygen, 1 grain only will combine.

What important practical effect has this law of definite proportions ?

15. It gives a fixed and uniform character to all chemical compounds. Hence, water, although a binary substance, possesses all the advantages of a simple element, in connection with those of a chemical compound.

Can water be decomposed, and its elements separated ?

16. It can be very easily, by the use of a little iron filings, sulphuric acid, and a quart glass bottle. 2 ounces of iron filings, 1½ ounces of the acid diluted in 8 ounces of water, and put into the bottle, will decompose water, disengage, and expel from the bottle, *hydrogen gas*. By perforating a cork with a pipe stem, and placing it in the bottle, the gas will pass through the small aperture in the stem, and may be set on

fire. It burns with a feeble, and almost invisible light in the day time.

How do you know that the gas given off comes from water?

17. Because neither the sulphuric acid, nor iron contains a particle of hydrogen; and water does.

What becomes of the oxygen in the decomposed water?

18. It unites chemically with the iron filings and forms a compound called *oxide of iron*.—With this oxide the acid combines chemically and forms the salt called *copperas*, or *sulphate of iron*. When the hydrogen gas that escapes from the bottle in the manner described, is burnt, what new compound is formed with this inflammable gas?

19. No other compound is formed than that of water.

How will you demonstrate the fact that, water is formed when hydrogen is burnt in the air?

20. By placing a glass tube an inch in diameter and 30 inches long over the burning gas, vapor will be condensed on the inside of the tube, although quite dry at the beginning of the experiment. The term *hydrogen* is derived from Greek words that signify, "I form water." Water can not be formed without hydrogen.

What are a few of the distinguishing characteristics of *hydrogen*?

21. It is the lightest body in the world that can be weighed; being 15 times lighter than common air, and 16 times lighter than oxygen. It was formerly used to inflate balloons. It is invisible and devoid of taste and smell.

If oxygen is 16 times heavier than hydrogen, and 8 parts by weight of the former unite with 1 of the latter to form water, must not two volumes of hydrogen combine with one of oxygen to give the relative weight of these elements, as 8 to 1?

Certainly. Let 1 cubic inch represent 1 of hydrogen, thus—

H.	O. 8
1	

and half a cubic inch will represent 8 of oxygen. The two make one of water, whose equivalent number is 9.

Do all chemical compounds have a *fixed equivalent number*?

23. They do; as will be abundantly shown in the course of our Study.

Do the gases oxygen and hydrogen ever combine without forming *liquid water*?

24. They do; and instead of forming *water* they make gaseous steam.

In that case is there any *condensation* of the volumes of the oxygen and hydrogen at their chemical union?

25. There is. The condensation is just equal to one third of the bulk of the two gases, i. e. the whole volume of the oxygen is merged into that of the hydrogen.

When a cubic foot of water is expanded into steam, how many cubic feet will the latter fill?
26. 1696.

When a quart of water is made into steam, at the temperature of boiling heat (212°) and the steam condensed in water at 62° , how many quarts will it heat up to the boiling point?

27. About $6\frac{2}{3}$ quarts.

How will you explain this phenomenon, seeing that the steam when tested by a thermometer is no hotter than boiling water?

28. If we place over a steady fire—that of a spirit lamp is best—water in a thin glass basin, its temperature will gradually rise till it reaches 212° when it boils, and the water becomes no hotter, but ebullition continues so long as any water remains. Let us suppose that the temperature of the water was 62° when placed over the fire; and it took a steady heat 6 minutes to boil it. The gain in temperature in 6 minutes was the difference between 62° and 212° , or 150.—This divided by 6, and it is seen that the gain was equal to 25° a minute, for 6 times $25=150$. With the same uniform heat from the lamp, it will take 40 minutes to evaporate all the water. 40 multiplied by 25° (the amount of heat imparted to the water in each minute,) give 1000° of heat as the sum total acquired by the steam. To raise the temperature of a quart of water at 62° up to 212° , will take 150° of heat. But it has been demonstrated that, although steam shows by the thermometer only 212° of heat, it has received 1000° , and when condensed, will raise as many quarts from 62° to 212° as the difference (150) is contained in 1000; which is $6\frac{2}{3}$ times.

In what condition do these 1000° of heat exist in steam, that a thermometer shows no more than 212° ?

29. In the condition of *latent* or *hidden* heat. I have stated the fact that, water in being changed into steam, expands to 1696 times its former volume. It is an important natural law that, the capacity of a body to hold insensible heat is increased as it passes from a denser to a rarer or thinner medium. Steam is a vastly rarer medium than water; and in making the transition, it renders a large amount of sensible heat insensible, or *latent*. All this is made sensible again, when steam, or any other body is condensed.

Water is a rarer medium than ice. Will you pretend to say that water at 32° in freezing into ice at the same temperature, gives out sensible heat?

30. Certainly I do. It gives out no less than 140° . How can you prove that?

31. Dissolve a pound of ice at 32° in a pound of water at 172° , and you will have 2 lbs. of water at 32° instead of 102° , the mean of 32° and 172° . This simple experiment demonstrates that ice in liquifying absorbs 140° of heat and hides it, which of course it will give out on freezing.

Is there any other similar instance where the

solidifying of water changes insensible into sensible heat ?

32. There is. Pour cold water on well burnt caustic lime, and it will disappear, being solidified, and chemically combined with the lime, to form a *hydrate* of that mineral. In this operation heat enough is often evolved from cold water to set wood on fire.

What is the weight of steam, as compared with that of atmospheric air ?

33. It is 38 per cent. lighter. Air being 1000 steam is 620.

At what temperature does water occupy the smallest space ?

34. At $39\frac{1}{2}$ degrees. It is an important law, which so modifies the arrangement among the particles of matter in water, that it *expands* in the same ratio on being cooled below 39.5° , even after it is frozen into solid ice, that is witnessed when its temperature is raised above 39.5° to any number below 212° . Thus water at 32° and 47° fills equal volumes.

When water at 32° is solidified into ice at the same degree, how much larger space does the ice fill than that occupied by the water ?

35. About 5 per cent. 100 cubic inches of water, on freezing, make 105 cubic inches of ice.

Is the expansive force of water, while chrysalizing, very great ?

36. It is. This prodigious mechanical force plays a very conspicuous part in *disintegrating* solid rocks, and other minerals.

What are we to understand by the *disintegration* of any solid substance ?

37. Take a lump of hard chrysalized sugar, and *crush* it by any mechanical force, and you will *disintegrate* its particles ; and by so doing, greatly increase the solubility of the sugar. The freezing of a compact lump of clay, separates all its particles, and greatly favors the solution of the salts in this lump of earth, which nature uses in the organization of plants. *Heat* and *Cold* are very important agents in the economy of Nature ; and their action on the material elements of the world should be studied with the utmost care.

How will you account for the cooling of the air in a room by sprinkling water on the floor in a warm day ?

38. As the water evaporates, it renders a large amount of the sensible heat in the atmosphere latent or insensible, which heat is indispensable to retain water in its expanded condition of vapor. The radiation of heat from the surface of the earth, and from mountains, its interception by clouds, the capacity of the atmosphere to hold vapor in a gaseous form, and its condensation into dew, rain, and snow, will be fully investigated under the appropriate study of *Meteorology*.

Suppose water in lakes and rivers had continued to contract in volume when cooled below $39\frac{1}{2}$ degrees, as it does from 212° down to that

point ; what would be the effect of such a law ?

39. Most disastrous to all land animals and plants in all the regions of the earth, where winter and frost prevail to any extent. Water and ice are good non-conductors of heat ; and by retaining a covering of ice, and of water below $39\frac{1}{2}$ degrees on the surface of rivers and lakes in winter, the escape of heat from the mass of water below is prevented. It is by this means that the fluidity of water is preserved in the coldest weather.

Suppose Providence had so arranged the particles of ice as to render it 5 per cent. *heavier*, instead of being 5 per cent. *lighter* than water, what would be the effect ?

40. The ice would sink at once to the bottom of the stream or lake as fast as formed ; and the whole body of water would soon become a solid mass of ice, which, in many cases, the heat of a whole season could not melt again.

How will you account for the large cracks in ice on rivers, ponds, and lakes ?

41. They are made by the remarkable influence of heat, which *contracts* ice, after severe freezing, and opens seams, just as heat in summer opens cracks or fissures in stiff clay. On lake Erie, wide fissures in the ice are often formed by its contraction in spring, which being filled with snow evenly over the surface, present to the traveller dangerous and unseen cavities.

Are the *wisdom* and *goodness* of Providence strikingly displayed in the laws that regulate the action of heat and cold on water, ice, and vapor ?

42. They are. The heat of summer would often be insupportable had not God so arranged the elements that both vapor and plants absorb and fix a greater or less quantity, according to the intensity of the heat. The latent heat in vapor is soon given out to check the too severe cold at night by the radiation of heat from the earth's surface ; while the latent heat stored up in the organized carbon and hydrogen of plants, may be kept indefinite ages, for the use of reasoning, accountable Man. Twenty millions of tons of coal are annually taken from the bowels of the earth in Great Britain, every grain of which contains latent heat that was absorbed from an overheated atmosphere tens of thousands, if not millions of years, before man was created on this planet. This latent heat thus long stored up by Providence, now warms millions of our race, cooks their food, and performs the mechanical labor, through the agency of steam, of a vast, and indefinite number of working men. That mineral coal is of *vegetable* origin, all that have investigated the subject now admit. And that forest trees, and all plants, absorb and fix heat, which is evolved when they are consumed by fire, or in animals, are facts, the truth of which few will deny, after they have studied with the Author, the *Physiology* of cultivated plants, and domestic animals.

The FARMER'S AGRICULTURAL CHEMISTRY, compiled from the best authors, and adapted to the use of Schools. By M. M. RODGERS, M. D., Lyons, N. Y.

We received a copy of a little 15 mo volume of 100 pages, with the above title, some time since; but not being able, in justice to our readers, to commend the work, in kindness to the young author, we preferred to let it pass without notice. Another copy has been sent us by a friend of the compiler, with a note, which in courtesy compels us to say something of the book. Of the 94 pages beyond the Introduction, 40 are taken bodily from other works; and 54 are compiled mainly from the writings of Von Thaer, Bergman, Chaptal and Davy, selecting from these old authors, with singular infelicity, such views on agricultural science, as have become obsolete by reason of more recent discoveries. Speaking of nitrogen, on page 10, the author says: "It exists in all animal substances, and many vegetables; it may be obtained from phosphorus." There are no less than three mistakes in this brief sentence. Every tyro in chemistry knows that pure fat is an "animal substance," and that it contains not a particle of nitrogen. The remark that "many vegetables" contain it, leaves the reader to infer that some plants are destitute of this element; which is not true. Nor is it true that phosphorus (which is itself a simple element,) contains nitrogen, or that the latter "may be obtained" from the former.

On the next page, to fix ammonia, in dung heaps, the author, following Chaptal, recommends the application of copperas and oil of vitriol. This was good husbandry in France and England 40 years ago; but since it has been discovered that gypsum is quite as good for that purpose, and it can be had at one tenth the cost of copperas, or sulphuric acid, it is plain which should now be recommended to farmers for fixing ammonia.

There is a chapter devoted to the "organs of plants;" yet nothing is said in regard to the circulation of sap from the roots to the leaves, and from the leaves to the roots again. This is like acting the play of Hamlet, with the part of Hamlet left out!

No department of chemistry is more valuable in small affairs than that which illustrates those changes in organized substances which go by the name of "fermentation." On this subject our author has just two sentences, the leading one is in these words:

"Fermentation is a peculiar decomposition or transposition of the elements of a complex organic substance, by the agency of some external force, different from ordinary chemical attraction, as heat, air, or contact with some other body similarly affected." The other sentence simply remarks that there are several kinds of fermentation, as the "saccharine," "vinous" "acetic." And this is all the pupil is to learn

of "fermentation" from a book, "adapted to the use of Common Schools"!

Chapter 4 treats of "Rocks, and the formation of Soils." From what work the author's remarks are compiled, it is difficult to surmise; for he says *primary*, as well as other rocks are arranged in *strata* or *layers*. The whole chapter abounds in errors, showing that his authorities belong to an antedeluvian age in geological science. If we are to credit this book, "one of the most productive soils in Sweden" contains only three minerals "silica, alumina and carbonate of lime;" as though wheat and other plants can grow without potash, soda, magnesia, sulphur, phosphorus, iron or chlorine! This statement is made on the authority of Bergmann who wrote before analytical chemistry was born. "Alumina is said to be the principal ingredient in clay." This remark would pass for truth 20 years ago; but now it is known to be almost impossible to find a clay soil which has one tenth of its weight of alumina. Again it is stated, (page 43,) that a "soil which contains 70 per cent of sand is not adapted to wheat, but with sufficient manuring may produce *barley*." This was the opinion of Von Thaer in the last century. We have shown in another article in this paper that 90 bushels of wheat have been grown on land containing over 80 per cent of silica.

On the subject of manures the authors says: "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 the plants." This remark is taken from Petzholdt, if our memory serves us, for no credit is given. It carries *theory* farther than facts and experience will warrant.

Our criticism might be extended to any length without exhausting the subject; but it is unnecessary to go farther. Had the author taken up Johnston's Lectures on Agricultural Chemistry and abridged the work to one third of its present size, and adapted it to the use of Common Schools, it would have commanded an extensive sale as a school book, and great good would have resulted from the labor. But to compile a good work from many authors implies a critical knowledge of all the sciences discussed, to discriminate accurately between *truth* and *error*. In his Preface the author says: "I expect to escape any *unfair* criticism inasmuch as my book is a compilation, and I claim no originality."—We trust he will not regard our criticism as "unfair," for it is with extreme reluctance that we have taken the trouble to point out a few of the defects in the book. Dr. Rodgers has considerable talent, but misjudges in attempting authorship, before he had studied for years, and fully mastered his subject. The cheap and easy method of making books by the use of *scissors* instead of *study*, is the way to destroy,

not to build up the literature of this country.—We are well aware that to toil in the field of agricultural literature at this time, one must work for nothing, and find himself. If Dr. R. cannot afford to do this, he will find his new profession any thing but a pleasant one.

The time will come however when talents and labor employed in this department of knowledge will command ample remuneration. To hasten the arrival of that era, great care should be taken not to impose on the public, already too suspicious in regard to agricultural works, any that will not stand the test of the most searching investigation. We insist on the point that, the profession of agricultural science will ever continue to be utterly worthless in this country, so long as every thing is permitted to assume the name, and pass as current coin in the agricultural journals of the United States. We know as well as any one can tell us that, to speak the truth plainly is to inflict pain, where we should rejoice to give unmingled pleasure. But, we have a duty to perform in this matter that must be faithfully discharged although no one may be gratified, and many may feel that their personal friend has sustained injury at our hands.

Steep for Wheat.

We copy the following from the last number of the London Mark Lane Express. We regard the practice recommended as important:

Sir,—In reply to your "Old Subscriber," I beg to say that I have used a solution of blue vitriol, (sulphate of copper) as a steep for seed wheat for the last sixteen years, and never have had smut. For every six bushels of wheat, dissolve two pounds of blue vitriol in five gallons of water; the wheat being shot on the floor (mine is of brick,) let the solution be gradually thrown over the wheat, turning it with shovels three or four times, till every grain be thoroughly saturated; the last time of turning, let the heap remain upon the highest part of the floor, and in a conical form; if this be done in the afternoon, the wheat will be quite ready for drilling the next morning.

The quickest way to dissolve the vitriol is to place it in a pail, add one or two quarts of boiling water, let it remain two minutes, strain the solution into a tub sufficiently large for the purpose, add more boiling water to the vitriol, strain off again, and so on till all be dissolved; then add cold water to this strong solution, sufficient to make the quantity required.

I am, sir, your obedient servant,

EAST SURREY.

Gabrick, Crawley, Sussex Co., Oct. 21.

P. S.—In order that the determined quantity to be drilled per acre may be ascertained, the seed wheat after preparation should be measured in the morning, in order to find how much the bulk has increased.

New York State Agricultural Society.

Minutes of the Meeting of the Executive Committee of the N. Y. State Agricultural Society, held at their rooms, in Albany, on the 12th day of November, 1846.

Present—Mr. SHERWOOD, Mr. VAIL, Mr. STEVENS, Mr. TUCKER, Mr. MCINTYRE.

The proceedings of the last meeting being read, the following was offered by Mr. VAIL:

Resolved, That the minutes be accepted. Passed.

The following were offered by Mr. TUCKER, of Albany.

Resolved, That the thanks of the N. Y. State Agricultural Society be presented to F. E. L. FISCHER, Director of the Imperial Botanic Garden, at St. Petersburg, Russia, for the donation announced in his letter just read, and that a copy of the transactions of this Society for 1845 be forwarded to him. Passed unanimously.

Resolved, That the thanks of the Society be presented to its President for a copy of the Census of the State of New York, for 1845. Passed.

Resolved, That the thanks of the Society be presented to JOSEPH FELLOWS, Esq., of Geneva, for his donation of fifty dollars in behalf of the Pultney estate. Passed.

By Mr. VAIL, of Rensselaer County:

Resolved, That the Recording Secretary and Treasurer procure Daguerrotype portraits of all the Presidents of the N. Y. State Agricultural Society, and that the Treasurer be authorised to pay for the same. Carried.

By Mr. SHERWOOD, of Cayuga:

Resolved, That the Treasurer of the Society be directed to keep charge of the rooms of the Society and provide for its being kept open for the transaction of the business of the Society, until further action of the Executive Committee. Passed.

By Mr. VAIL:

Resolved, That the President, Mr. PRENTISS and Mr. MCINTYRE be authorised to invest in Bond and Mortgage such sums of money now in the Treasury as will not be needed to pay premiums already awarded, and to pay also contingent expenses of the Society. Carried.

By Mr. SHERWOOD:

Resolved, That the Treasurer employ some competent person to color the plates of the "Jardin de St. Petersburg."

By Mr. VAIL:

Resolved, That the thanks of the Society be presented to JAMES LENOX, Esq., for his donation of 30 numbers of "Washington's Letters on Agriculture."

By the PRESIDENT:

Resolved, That the thanks of the Society be presented to Mr. GEO. FORBON for the spirited manner that he has shown in breeding and exhibiting at our several shows so many fine farm horses.

The Committee then adjourned till the second Thursday of December ensuing.

LARGE CALF.—The Madison Democrat gives the following indication of the success (in one branch of husbandry, at least.) of one of our permanent subscribers:

"SANDFORD P. CHAPMAN, near Clockville, in this county, has a heifer calf seven-eighths Durham, which according to a certificate shown us, weighed on the 31st inst. 640 lbs.; its age being but a few days over seven months."

NEW YEAR'S CAKE.—Seven pounds of flour, two ponds and a half of sugar, two pounds of butter, and a pint of water, with a teaspoonful of volatile salts dissolved in it. Work the paste well; roll it thin and cut it in small cakes, with a thin cutter; lay them on tin plates in a quick oven, for fifteen minutes.

To Correspondents.

COMMUNICATIONS have been received during the past month from S. W., D. A. Ogden, L. B. Langworthy, A. Plow-holder, M., H., W. S. T., R. J. Jones, Aaron Tufts, Israel A. Beach, G., Wm. R. Prince, State Agricultural Society.

Hints to Farmers.

There are some things that all Farmers ought to know.

Sheep put into fresh stubble are apt to be killed by eating too much grain.

A bare pasture enriches not the soil, nor fattens the animals, nor increases the wealth of the owner.

One animal well fed is of more value than two poorly kept.

The better animals can be fed, and the more comfortable they can be kept, the more profitable they are—and all farmers work for profit.

Ground once well plowed is better than thrice poorly.

Bountiful crops are more profitable than poor ones. Make the soil rich, pulverize it well, and keep it clean, and it generally will be productive.

Weeds that grow unmolested around the fences, stumps and stones, scatter their seeds over the farm, and are very likely to grow.

Cows well fed in winter give more milk in summer. An ox that is in good condition in the spring, will perform more labor, and stand the heat of summer much better than one that is poor.

When you see the fence down, put it up; if it remains until to-morrow the cattle may get over.

What ought to be done to-day, do it, for to-morrow it may rain.

A strong horse will work all day without food, but keep him at it, and he will not last long.

A rich soil will produce good crops without manure, but keep it at it and it will tire.

Farmers sons had better learn to hold the plow, and feed the pigs, than measure tape and count buttons.

Young ladies who have the good fortune to become farmers wives will find it more profitable to know how to make Johnny cake, butter and cheese, than to play on the Piano.

All who wish to be rich, must spend less than they earn. G.

TO PRESERVE EGGS.—The following is the simplest mode we have met with. First a layer of plaster, then a layer of eggs—not allowing one egg to touch another; with the *small* end downward. Over the layer of eggs put about three inches of plaster; then cover the vessel closely. Eggs thus put up have remained sweet and pure for eleven months. They must be put down within three or four days of being laid.

Remedy for Scours in Horses.

MR. EDITOR:—I will give you a sovereign remedy for the scours in horses, and if you think it worth any thing, or nothing, do with it as you please.

When the animal is attacked give him physic; motherwort is the best. Boil it to a strong lie. Give the animal three pints for one dose. After it operates freely, give the horse two quarts of clean loam, mixed with pure cold water, as thick as pan cake batter. The fever that always attends the complaint will induce the horse to drink. Repeat the dose once in two hours. It never fails to perform a perfect cure.

Never give physic after the complaint is checked. The loam will not harm the horse.

Yours, &c.

IRA YOUNG.

Conquest, Cayuga Co., 1846.

POLISH HONEY.—Poland is perhaps the greatest honey producing country in Europe. In the provinces of Podolia, Ukraine, and Volhynia, in particular, the cultivation of the honey-bee has long formed an object of national importance; and these bee gardens are not only very numerous and extensive, but they are also common in other parts of the Kingdom. There are cottages in Poland, with very small portions of land attached to them, on which are to be seen as many as fifty hives; while there are farmers and landed proprietors who are in possession of from 100 to 10,000 hives! There are some farmers who collect annually more than 200 barrels of fine honey, each barrel weighing from 400 to 500 lbs. exclusive of the wax. A tenant is often in this way enabled to pay his rent and taxes, to defray other domestic expenses, and often to accumulate handsome dowries for his daughters.

WATER PROOF RECIPE.—*Either for boots or other leather.*—One pint Tanner's oil, half lb. tallow, a lump of rosin size of a shell-bark, Burgundy pitch size of an egg, beeswax size of an egg, lamp-black three cents worth, all mixed together; and gradually melted over a slow fire. When to be applied, the mixture should be made about milk warm, and put on with a sponge.—The leather to be made a little damp, but not wet.—*Farmer's Cabinet.*

"Honor to whom Honor."

MR. EDITOR:—A notice in Saturday's American states that the Albany Cultivator for October contains the list of premiums awarded at the recent State Fair. This is a slight mistake. The Cultivator for this month contains but a portion (not half) of the list—promising the remainder in the November number. Of the several agricultural journals published in this State, the *Genesee Farmer* is the *only one* which has given the entire and correct list of Premiums awarded at the late Annual Fair of our State Agricultural Society. Yours, &c. ERRATA.

It will be seen by the above, which we copy from the Rochester American of Oct. 13, that the FARMER, though a FIFTY CENT PAPER, is not behind other agricultural journals in furnishing its readers important and appropriate intelligence. M.

Letter from S. W.

J. J. THOMAS' PRIZE ESSAY—RHODE ISLAND—ADAM ANTHONY'S FARM—PROF. JACKSON, & C.

MR. EDITOR:—I was sorry to read Dr. LEE'S strictures on J. J. THOMAS' Prize Essay. I like occasionally a little hypercriticism, from pragmatic men, of the Rev. Sidney Smith School—but not from one who can so well afford to be generous towards others as Dr. LEE. He seems to think \$100 a high premium for an essay of five close printed pages; yet, I presume to say, that on the other side of the Atlantic, 100 guineas has often been paid for a production much more theoretical, prosy, and common place, and so ambitiously full of the quibbles of the schools as to make the best friends of the writer blush for him—but of not a tittle the practical use of this condensed essay of JOHN J. THOMAS.

The Doctor demurs to the analysis given of a ton of barn-yard manure, because a difference in the feed of the animal will alter the result of the analysis, by which farmers may be led to believe that they are to obtain from their manure, matter not contained in the food of the animal. To this I reply, that no farmer can be thus mistaken, who has read Dr. LEE'S editorials in the Genessee Farmer within the last year. Whenever I speak of Dr. LEE, his writings, and his practical experience, to farmers, I tell them that he is dealing in a "better hope," to the farmers of our wheat growing region, than they have heretofore known. If J. J. THOMAS is restricted in his analyses to one particular experiment, he certainly errs in good company; I believe Dr. Sprengel, Boussingault, and even that great prince of chemists, Liebig, have done the same thing. I have lately heard one of the most intelligent, masterly, farmers in New England, laugh at Liebig's explication of the magical attributes of Gypsum. And yet almost as good a farmer, Scotch Johnston, of our own Seneca co., N. Y., would subscribe in full to Liebig's theory. The cause of this discrepancy in opinion among truly practical men, is found in the difference of their respective soils. The New England man's surface is barren sand; subsoil, stone and gravel detritus; Johnson's, an alluvial gravelly clay, resting on lime-stone—the subsoil, full of organic remains, is better than the worn surface. If J. J. THOMAS alludes not to the feed of the animals, whose manure is analyzed, neither does Liebig say that the effect of plaster will be nugatory on sand and detritus.—If Dr. LEE is more practically explicit in his teaching than the other Doctors, so much the better for his readers; in the end he will have his reward, provided always, that he practices that charity which is a great virtue in a great man.

Within the last month I have made a short trip to Rhode Island. That which struck me first in the altered appearance of vegetable life,

as distinguished from our dry climate and limestone soil, was the extreme verdure of the grass, in September, on the borders of the salt sea.—When I advanced beyond the reach of the muriatic vapor, the sea and its treasures, fish manure and sea vegetables, all was sand and detritus, relieved by occasional swamps and peat bogs—the true element of relief to the hungry upland—as though nature in generous pity, had not left the bane without its antidote. The muck and peat of these swamps is now, with the aid of leached ashes, being made the means of a perfect renovation of a soil capable of improving under judicious culture, and of sustaining crops almost beyond belief.

Two miles out of Providence, I stepped from the sady road upon the thick set lawn of my early friend ADAM ANTHONY. When I was a boy, this farm, like the surrounding country, was a blowing sand. It is now, sub-soil excepted, one of the best farms I ever trod on; 250 bushels of leached ashes to the acre, have already been expended on it—millet and clover did the rest, with the aid of decomposed hog peat and the animal manure of the farm. Forty milch cows sleeping nightly on dry peat, make manure enough now to keep the farm in good heart; each cow has her separate stall; the milk sells at 14 cents the gallon, at the stable, to the Providence milk-men. ADAM says that the suckers and barren stalks cut from ten acres of Indian corn, soiled his forty cows six weeks this summer—thus saving him \$150, which he otherwise must have paid for oil cake and shorts. This ten acres yielded at harvest 1400 bushels of ears, beside the stalks on which the ears grew. I might forgive an Englishman for disbelieving this account, but I myself have had a still better yield on a small scale, from that prince of the vegetable kingdom, Indian corn.

When Prof. Jackson, the State Geologist, visited this farm, his first words were, "What is your surface?" "Sand." "Your sub-soil?" "Coarse gravel, then stone and gravel."—"Your manure will leach." ADAM smiled at a learned academician should thus cling to a darling theory, when he saw its truth disproved, by full grown blooming facts.

I had no time to go beyond Woonsocket. I wanted to see the lime-kilns of Smithfield, as I had never yet seen a lime-stone in my native State, except the two little white rocks in Newport Harbor, which stick out like coral reefs from the sea—all else is grey whacke, slate, and granite. In passing through the swamps of Narraganset to Stonington, I felt glad that I went at rail-road speed; as here no farm, like that of ADAM ANTHONY'S, presented to the eye the fair spectacle of an oasis in the desert.

I am sorry to say that I had no time to attend our Seneca County Fair, held in this village on the 22d and 23d ult. I believe it was unusually

well attended the first day. The enterprising President, J. DELAFIELD, took the premium for the best farm, and well he has deserved it. He puts his own shoulder to the wheel, and keeps up in practice with the improvements of the age as insisted on by the books. GEO. FOX said the example of one true Quaker, would shake the country for thirty miles around. So will that of a true farmer—I mean one who loves his profession, not merely for the dollars and cents it gives for a single year, regardless and reckless of the future. S. W.

Waterloo, Nov. 10, 1846.

REMARKS.—We give place to the strictures of our friend "S. W." in regard to our correction of a few errors in the Prize Essay of Mr. John J. Thomas, in our last paper, because we had not the remotest idea of giving pain or offence either to the author or his friends. It is known to all that agricultural science is in its infancy, and that the only way to advance, is carefully to study and practice it, and promptly correct whatever research and experience shall show to be erroneous. In making these necessary corrections in a spirit of kindness, surely, a man must be unduly sensitive to be annoyed by the operation. We have perpetrated our share of blunders; and trust few have endeavored to profit more by the criticism 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 said the same thing in regard to Mr. Thomas, because he is justly looked up to by thousands as good authority on agricultural subjects. Our criticism is a compliment to his standing as an agricultural writer; for it is not our custom to waste time in correcting the vagaries of every one that spoils good paper in attempting to discuss what he does not understand.

Cattle.

THE number of neat cattle in the United States is very large; while the capacity of the country to grow and fatten this class of domestic animals is almost unlimited. A good farmer will study to improve his stock, by keeping no more than he can maintain in a thriving condition, and always breeding from the very best animals within his means and reach.

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.

Mr. Charles Collins imported cows from Holstein or Holland, and by crosses and skilful management got up the Holderness 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." These cattle have been exceedingly popular for many years, although in unskilful and careless hands they do not maintain their supposed superiority, especially for dairy purposes.

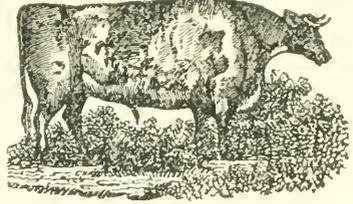


FIG. 1. *New Leicester Ox.*

The "Devons" are a smaller race, of a good figure, very active, and uniformly of a beautiful deep red. They are not large milkers, although many contend that their milk makes up in quality what it lacks in quantity. Figure 2 is a good likeness of a Devon cow.

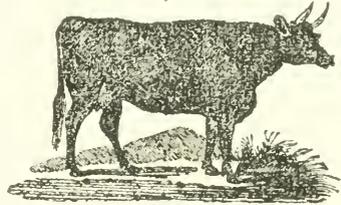


FIG. 2. *Devon Cow.*

The Hereford breed is beginning to be known and highly esteemed in this country by the importations of Messrs. Corning and Sotham, of Albany. This herd is now, we believe, the exclusive property of the last named gentleman.—The Herefords are a large, heavy race, and said to be easy to take on flesh, and good milkers. The color is red, with more or less white under the belly, on the flanks, and face. Figure 3 is a fair likeness of a Hereford Cow.

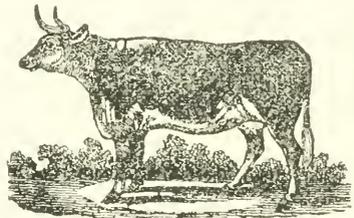


FIG. 3. *Hereford Cow.*

There are several varieties of Scotch and native cattle, which for ease of keeping, making working oxen, for dairy purposes, and the shambles, are hardly inferior to the best English breeds. The productive value depends, in a good degree on the way in which they are treated. No animal can be as profitable with bad management; while good judgment, and close attention will do much to improve an inferior race.

To relieve the oppressed is one of the most glorious acts. It is in some measure doing the business of God and Providence.

Potato Cholera.

MR. EDITOR:—I am inclined to think that the caption of this article is the best definition of the Potato Rot, that can be suggested. All my observations indicate that it is the result of atmospheric influence, and is an epidemic disease, and results from a diseased leaf, (the lungs of the plant,) affecting the bark and sap, causing an unhealthy state of the blood or circulating juice; commencing with a mildew or rust—a living vegetating fungus—a crisped decaying leaf—a loose spongy vascular stem, with sufficient vitality to convey the virus to the tubers of the plant. Like the cholera, the cause is beyond discovery, and therefore beyond prevention. Of the thousand speculations on the subject which are as prolific, as of times past was the *chess* agitation, not one is worth a straw. No theory in application has succeeded. Wet ground, dry ground—early and late planting—liming, ashing and salting, insects, &c., &c., all share the same fate. Even the proposition that the plant had arrived to the maturity of its age—passed the zenith of manhood, and is now in its second childhood and decay, and would require renewing from its proper seed, proves entirely fallacious.

I have this year cultivated eleven varieties, now four years from the seed, raised by Mr. ONDERDONK, of Greece. They were planted on dry ground, and not over stimulated with manure—all of which were as badly diseased as any of the old varieties. My brother, H. N. LANGWORTHY, of Irondequoit, has arrived at the same result, from a large number of kinds that he is experimenting upon. I cultivate on my farm the Ox Noble, Round Pink Eye, Flesh Color, Old Red, Mercer, and Merino; all are more or less affected, (the Mercers most,) except the Merinos, they were entirely exempt.

To my mind, sir, it is clearly attributable to the season, or atmospheric influence, for it can hardly be supposed that a new insect could come into existence and prevail in Europe and America simultaneously: Nor can the breaking of the sprouts as some writers assert, have come into use all at once in the two hemispheres: Nor can the hundreds of varieties now in cultivation in the world all be of the same age, and all require renewing at the same period.

We were not sensible of a change in the atmosphere during the cholera season, neither by our senses, nor by the most searching chemical analysis; yet how powerful its effects—how fatal—how devastating! Why may not this inscrutable vegetable disease be attributable to some malign influence on the air, as well as the all dreaded cholera? Like other epidemics affecting man and beast, it will have its period and pass off, perhaps, forever.

There is nothing new under the sun—no permanent new condition of things can take place; the laws of the Creation are perfect and immu-

table and equal to all contingencies. There is no need nor no example of a radical change in the law, or provisions of nature—various temporary calamities are the results of some accidental combinations, which neutralize themselves and return to their primitive state.

Shall we abandon the propagation of so valuable and wise a provision for the sustenance of the animal creation, in consequence of a partial failure for a few seasons? Good sense, and a reliance in the wisdom of Creation prohibits it.

L. B. LANGWORTHY.

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

NUMBER FOUR.

THE farmer above every other class in the country, seems to forget that knowledge is valuable as an instrument in his calling, and as an auxiliary to him in his every-day operations.—The idea prevails to a very great extent, that any body can cultivate a farm—that it is purely mechanical, demanding physical strength alone—and that he who is strongest in body, and can best endure toil, is, as a matter of course, the best fitted for a farmer. This opinion, so prevalent among agriculturists themselves, is at once humiliating to their intelligence, and beyond a doubt, degrading in its influence upon the profession. The time has been, and still is, that a man is ridiculed if he attempt to study, and educate himself in preparation for a cultivation of the soil. It is not to be disguised that the great mass look upon book-farming, as it is styled, with contempt. They seem to regard farming to be simply plowing, sowing and reaping—that manual labor is the main element in it, and that books and the teaching of books can have nothing to do with it. Nothing can be more wide of the truth. No calling demands the exercise of more discrimination—more critical and analytical thought and reasoning—more calculation, and close comparison of cause and effect—than agriculture; and none is better calculated, if rightly pursued, to develop and mature the intellectual faculties, and to give them full and enlarged action. Instead of selecting, as is now the case too generally, the dullest and the most stupid of the family for farmers, the brightest in intellect, quickest in perception, and the most commanding for talent and mental power, should be chosen, and when selected, he should be thoroughly educated for the business—indoctrinated by close study, connected with hard labor, into the theory and practice of tilling, on correct principles and in the best manner, the soil. How negligent, how lamentably negligent, have the farmers of this country been on this subject; and how bitterly have they felt the consequences. When the bright, active, intellectual boy, shall be placed upon, and educated for the farm, in-

stead of being placed in a law office, or put behind a counter, then shall the farmers not be dependent on other pursuits for their law makers, their judges, orators and statesmen, and not till then.

There is nothing inherently degrading in the cultivation of mother earth—nothing to induce mental imbecility or ignorance—nothing in labor in the open fields depressing to the intellect or calculated to crush or check the expansive power of the soul—but quite the reverse. Toil, amid the beauties of nature, with the lovely as well as mighty works of the omnipotent all about, is invigorating alike to mind and body—inculcating reverence, love and adoration to God, and knitting firmly the texture and power of intellect, as well as the physical frame-work of the man.

The earth which he tills—the crops which he gathers—the flocks which he tends—open to the study of the farmer, a wide field; each present numerous subjects for study, reflection and experiment—volumes richly stored with matters for the investigation of the curious, and which will employ a life time to fully digest and comprehend. It is not true that the farmer has no occasion for his intellect in the pursuit of his calling; and quite as unfounded and more deleterious in its consequences, the idea that he needs not to be educated, or learned in the sciences—that he need not to study and become wise and intelligent. A knowledge of the nature of soils—their preparation for and adaptation to the growth of crops—of the influence and exhausting nature of grain growing to the soil, and of the different effects of different grains—of the influence of heat and cold, light and darkness, on the growth of the food upon which plants feed, whether of earth or air, and of the chemical changes which take place in their germinative growth and maturity—of the best supplies for exhaustion, and the best combinations for, with their appropriate application of, manures—of the nature and remedies of the diseases common to domestic animals, &c., &c. I say a knowledge on the points above indicated is, and must be, of the highest practicable value to the farmer. Indeed it is indispensable to him, in the intelligent pursuit of his business; and in them we have subject for study, for years of patient investigation, for continuous and repeated experiment. They are not to be learned by simple practice in tilling the soil—nor by observation disconnected from an understanding of scientific principles, however close and keen the attention. They should form a part of the *education*, the mental acquisitions and discipline of the youth before he grows up and assumes the actual direction of the farm.—I cannot see how else we are to have scientific farmers. Few men, comparatively, will begin to acquire the necessary knowledge to make them really enlightened cultivators of the soil, if they have grown up to manhood in ignorance or without attention to it; few have the time,

and less the patience and close application so necessary in the acquisition of the principles and detail of science. But let them once be learned, once fixed in the mind, and then the every-day practice, the continued observation, the daily routine of the farmer's life is continually calling up, applying and rendering them subservient to good and useful purposes. I know a man can make a farmer, and in some instances a good one, who has nothing of the knowledge above alluded to; but it is, I imagine, equally true, that, in nine cases out of ten, he who is lacking in such acquirements, will gather but scanty crops, comparatively, and fail to obtain the full equivalent for his labor;—his farm will yield less, demand more labor and manure, and sooner become exhausted, while he himself will plod on in life a mere cypher—a simple laborer, a kind of free slave to some more crafty or wiser neighbor.

Knowledge is power,—whether applied to the productions of the green and fruitful earth, or to moral and intellectual achievements.—Knowledge is happiness, too, whether it be possessed by him who toils in the field, and studies nature in her own magnificent store-house of carpeted earth and outspread heavens, or by him who revels amid the wonders of science in his closet. Knowledge is the means of doing good, whether it be applied to an increase of the productions of the farm—and which form the sustenance of mankind—or to the moral advancement of the community in which we live; and all are bound to seek it, and all are culpable who have the means and fail to attain it. We cannot measure our full intellectual and moral stature, nor come up to the correct standard of duty, if we fail in storing our minds with information, which will enable us to grow more grain, produce more of the necessities of life, and at the same time fit us for the enjoyment of an elevated, rational, and enlightened social intercourse; and surely God will hold us all, farmers and others, to a strict account for the improvement of the means of advancement which he has placed in our hands or within our reach. We were not placed on the earth to be dolts. We each and all have positive, active duties to perform; nor did the Almighty give us our rich and beautiful farms to remain uncultivated—nor what is in principle the same, to have them half cultivated. We cannot, if we would, shake off responsibility, in the manner in which we use our money, our time, or our farms; and if the Lord has given to us that best of all gifts, children, it but adds to our responsibility, and we shall not be accounted innocent if we fail to give them the proper moral, intellectual and physical culture. But I see I am entering a field too broad to be traversed in this paper—and as I have much to say on the subject of education before I am done, I dismiss the subject for the present.

Penn Yan, Nov., 1846.

D. A. OGDEN.

To the Cultivators of the Soil in Western New-York.

FELLOW LABORERS:—The present number will close another volume of our agricultural journal, and it is for us to say whether it shall be continued or not—and I feel confident that there is not any of us, who have been its patrons the past year, but what will answer promptly in the affirmative. It is one of the best, and the cheapest agricultural journal now published; and it is with pleasure that I can say I think there is not one of its present readers who would wish to be deprived of the satisfaction and benefit of perusing its pages—and especially the youth. Men without knowledge are mere machines, and knowledge is very slowly obtained without reading.

From an intimate acquaintance with the Editor and Publisher, and the price of other similar journals, I know that the present circulation of the Farmer, at its present price, does not afford a sufficient remuneration for its publication.—Yet they do not wish to increase the price, fearing that that would curtail its circulation and diminish its usefulness. But could its present subscription list be doubled it would afford ample remuneration for its publication, and extend the bounds of its beneficial influence; and I feel confident that by a little exertion during the coming winter, the numerous friends of the GENESEE FARMER can more than double its readers. And I would respectfully suggest to all who take an interest in procuring subscribers, that we pay the 50 cents for each and every one which we forward—for at that price it is certainly as cheap as we can desire it to be; and the few cents in reduction which are saved by taking a few in company, is a mere trifle to each individual, but when put together, will do something towards defraying the expenses of publishing.

I annually forward several names, and intend in future to increase my exertions—knowing that by so doing I extend my usefulness—but I always pay the 50 cents for each one, and I think that I cannot make many of my young friends a better New Year's present than one year's reading of the GENESEE FARMER.

Yours respectfully,

A PLOW-HOLDER.

Monroe Co., Nov. 1846.

WHEN a crack is discovered in a stove, thro' which the fire and smoke penetrate, the aperture may be readily closed in a moment, with a composition consisting of wood ashes and common salt, made into a paste with a little water, plastered over the crack. The effect is equally certain whether the stove be cold or hot.

DIET BREAD.—One pound of flour, one pound of sugar, and nine eggs; finish as directed for sponge cake.

Encouragement.

DURING the publication of the present volume of the Farmer, we have received numerous letters, from all sections, speaking in the highest terms of its merits and usefulness. Such evidences of approbation have been truly encouraging, but we have hitherto refrained from publishing matter of this character, emanating either from individuals or the public press. We make less pretensions to perfectibility than some of our cotemporaries—albeit we perhaps have as many assurances of approval. We give the subjoined communications, recently received, because they contain some ideas worthy of thought. The first was not intended for publication, but we have no doubt our friend will pardon the liberty taken in giving it to our readers: M.

DEAR SIR:—Enclosed I send you one dollar in payment for your excellent paper, the Genesee Farmer, to the present year, and for '47 also. I have been a subscriber for the "Farmer" for several years, and think I receive every year more benefit than ten times the cost of the paper. We have a club here, that was formed last winter, with something over fifty names for your paper, which I am in hopes of not only seeing all renewed, but additions made thereto, for the coming year; and, as far as my influence extends, shall lend it cheerfully to obtain them. We have an excellent soil here, for wheat and clover, and as our land is in rather a new state in this section, (the Reservation,) shall look for good results for time to come.

In haste, yours, &c. G. C. SPRAGUE.

Castile, Wyoming Co., N. Y., Oct., 1846.

* We have about 70 subscribers, in all, at Castile; and a large number at each of several other Post Offices in Wyoming County.—PUB.

MR. EDITOR:—As a subscriber to your valuable paper, I need not say that from month to month I peruse its pages with not a little interest and satisfaction. Much I find that is worth remembering, and more that is worth practising. I regard it as of the highest importance to the tiller of the ground—to him who really earns his bread by the sweat of the brow—to have a paper devoted exclusively to his interests, from which he can learn the experience of others of the profession, or in it record his own for the benefit of others. It is a medium for the interchange of thought and feeling, which may not be lightly prized by any of us. And yet, great as are the advantages to be derived from such a publication, many there are among us, and some successful farmers, too, who go a "dead set" against "book farming," as they term scientific agriculture. This is an evil, however, which, like many others, is destined soon, I trust, to be among the things that were. Men cannot always resist the truth and close their eyes against the light, especially if such a course be adverse to their true interests. Circumstances will not always allow them to plod on in the foot-tracks of their fathers.

As the Medical Practitioner encounters, from year to year, new obstacles—new forms of disease, requiring close investigation and different treatment—so the circumstances in which the farmer is placed changes from time to time. He, too, has obstacles to encounter. The soil from which, for years, his wants have been supplied, seems to tire or grow slack, and refuses to yield its substance. Where once abundant crops repaid his toil, sterility now denies even an ordinary yield. From year to year he witnesses the encroachments of various weeds, and with deep regret beholds his scanty crops cut short by the ravages of the insect tribe. Such reverses usually set men to thinking and inquiring. They are made willing to learn. Their repugnance to agricultural publications—to "book farming"—is removed, and henceforward they are found among the believers in the science, as well as the practice, of agriculture.

I shall, at a convenient time, avail myself of the privilege of asking some questions relative to agricultural matters, for I trust I am, on no subject, unwilling to learn.

Durville, Oct. 17, 1846.

Yours, &c.

M.

HORTICULTURAL DEPARTMENT.

BY P. BARRY.

The Strawberry Question.

THE Horticultural publications of the day are besieged with drivellers on this subject. We dread opening one, lest three or four pages of twaddle about "stamens and pistils" should stare us in the face.

We think that Mr. LONGWORTH himself must have enough of the subject by this time. The last number of Hovey's Magazine contains a discussion between Mr. Downing's nursery foreman and Mr. Hovey. The former states that, in 1845, he examined a bed of Hovey's Seedling, at the Highland Nurseries, having both stamens and pistils fully developed, and produced one of the most uniform and handsome crops of fruit he ever saw, and that, too, at the distance of one hundred yards from the regular strawberry plantation or strawberry plant of any kind. To this Mr. Hovey replies: "We unhesitatingly say that every plant, which Mr. Saul or Mr. Downing has found in their beds of Hovey's Seedling with stamens, is not the true kind."

This is one point, at least, explicitly stated.—To our mind there is no doubt but that Hovey's Seedling, as Mr. Hovey says, "was an imperfect flowering variety, is so, and will remain so." The course, then, to be pursued in reference to its culture, is to plant it near others with staminate or perfect flowers. A fair crop cannot be obtained otherwise; this we have been convinced of by experience.

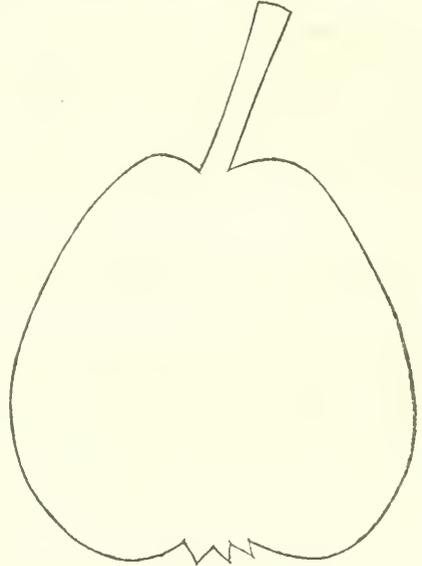
Osband's Summer Pear.

(*'Summer Virgalieu'* of the Rochester Gardens.)

IN our September number we noticed some specimens of this Pear from Mr. ZERA BERR, of Perinton, who, by the way, is industriously collecting fine varieties of fruit. We also received specimens at the same time from Judge CHAPIN, of this city, who first brought it to Rochester some 8 or 9 years ago, from Macedon.—He found the fruit accidentally in the market, and seeing it was the best he knew, of its season, he procured grafts the following spring, and now has one of the finest trees in the country. He says it is a regular and fine bearer. It ranks among the best August Pears in cultivation. We are glad to find the following history and description of it in the Nov. number of the Horticulturist from the pen of Mr. W. R. Smith, of Macedon:

OSBAND'S SUMMER PEAR. (*Osband's Favorite*, of some.)—This beautiful and excellent native pear has acquired considerable notoriety in this vicinity, and is destined, without doubt, to take rank with the best of its season.—It is in perfection previous to the Dearborn's Seedling, and so far as I can ascertain, subsequent to the Bloodgood.—It is a fine grower, and bears young and well. So strongly does it resemble the White Doyenne in outline and flavor, that it has been known in Rochester for several years as

the "Summer Virgalieu," a name obviously improper, as the Doyenne d'Ete, a distinct fruit, has been for some time described, and extensively circulated. The description of the fruit under consideration so nearly corresponds with that of the Doyenne d'Ete, that some intelligent cultivators are inclined to think them identical. But aside from the facts in the case, it may be remarked as conclusive against this opinion, that the Osband's Favorite has a large open calyx, with reflexed segments, while the Doyenne d'Ete has "calyx small, closed."* The former, too, appears to have much more of color than the latter.



Osband's Summer Pear.

All doubts on this point will, I think, be removed by reference to the following history, which I obtained from G. Osband, a Methodist minister, in good standing, and every way worthy of confidence. Early in the settlement of this part of the state, a small nursery was planted by Tardon Durfee in the vicinity of Palmyra, Wayne Co. A public road was subsequently laid out through the premises, and a part of the trees in consequence removed. During this labor, the father of my informant, accidentally passing, was accosted by the proprietor, with, "here, I will give you this," handing a pear tree about two feet in height, with branches forking out near the ground. On reaching home, the tree was divided through the roots, and the two parts planted. Here one of them produced abundant crops for many years, and finally died, probably from the blight. The other was soon removed to a farm in the north part of this town, (Macedon,) and last year I gathered a few specimens from it, the last which the same potent enemy will allow it to produce. The name given is at the suggestion of the family who brought it into notice.

Size, scarcely medium, about two inches long, and two in diameter. Form, obovate, resembling a White Doyenne. Skin, smooth, shining, clear yellow, profusely marked with small green dots; well ripened specimens have a clear red check, slightly russeted at the crown. Stalk, an inch long, rather stout, a little knobbed, not deeply inserted in a cavity of four unequal sides. Calyx, large, open, segments reflexed. Flesh, white, a little coarse, juicy. Flavor, rich and sugary, with a slight musky perfume. Ripe from 5th to 10th of 8th mo. (August.) WM. R. SMITH.
Macedon, 3 mo. 1846.

* See Downing's "Fruits and Fruit Trees of America."

IN consequence of the space occupied by the Title Page and Index to this volume, which are given in the present number, several interesting articles, intended for publication in this department, are necessarily deferred. M.

Van Zandt's Superb Peach.

(*Waxen Rare Ripe*, of some catalogues.)

This Peach originated in the village of Flushing, Long Island, in the garden of Mr. VAN ZANDT. It is one of the most beautiful peaches known, and of good quality. The nurserymen of Flushing, Mr. PRINCE and others, have propagated it for a long time, and disseminated it widely; hence we have been much surprized at the statement made by Mr. W. R. PRINCE in Hovey's Magazine for November, that "there does not, perhaps, exist, at present, a single tree of the true variety except in our specimen orchard and nursery grounds." He further states that Mr. DOWNING has described a spurious variety in his work, totally different from the genuine." Below we subjoin the descriptions of both:

"The form inclines to oval; the flesh melting, juicy, and of fine flavor; but the greatest peculiarity is the color of the skin, which is considerably mottled, and of a beautiful waxen appearance."—*Prince*.

"Leaves with globose glands. Fruit of medium size, roundish, the suture slight, but one-half the fruit larger than the other. Skin white, with a beautifully sprinkled red cheek, on a yellowish white ground, the union of the two softened by delicate dotting of bright carmine red. Flesh whitish, but tinted with red at the stone, melting, juicy, sweet, and of good flavor. Stone deeply furrowed. First of September. Flowers small."—*Downing*.

Mr. PRINCE's description is meagre, and differs only in one point from DOWNING's, that is, *form*. We are inclined to believe that both describe the same Peach, after all. We would be sorry to have to believe that the Flushing nurserymen have been selling a spurious article under this name so long, with the original tree before their eyes.

Duration of Varieties of Fruit.

MR. EDITOR:—The following extract was taken from the fragment of a leaf of an old Almanac, published as early as the year '34 or '35.—I do not know who was the author of it. The Almanac was, I believe, one of the earliest "Agricultural Almanacs" published in this State. I would consider it a great favor, if you or any of your readers, or correspondents, would furnish the whole article, or inform me where it can be found. If not, will not some one furnish another article on the same subject, for the "Farmer," either in confirmation, or refutation, of the doctrine therein advanced?

"No kind of apple, now cultivated, appears to have existed more than two hundred years; and this term does not at all exceed the duration of a healthy tree, or of an orchard when grafted on crab-stocks, and planted in a strong tenacious soil. From the description which Parkinson, who wrote in 1629, has given of the apples cultivated in his time, it is evident that those now known by the same names are different, and probably new varieties; and though many of those mentioned by Evelyn, who wrote between thirty and forty years later, still remain, they appear no longer to deserve the attention of the planter. The 'Moll,' and its successful rival, the 'Redstreak,' with the 'Musts' and 'Golden Pippin,' are in the last stage of decay, and the 'Stire' and 'Foxwhelp' are hastening rapidly after them.

"All efforts which have hitherto been made to propagate healthy trees of those varieties which have been long in

cultivation, have, I believe, been entirely unsuccessful.—The grafts grow well for two or three years, after which they become cankered and mossy, and appear what I consider them really to be, parts of the bearing branches of old diseased trees."

The first article in the last number of the "Farmer," touches on the same subject, but I would like to see it more expanded, and the doctrine more fully carried out. It is to me a subject of much interest, as affording matter for profitable reflection, as well as for practical application. H.

Fairport, Nov. 11, 1846.

NOTE.—This subject has been, of late years, pretty thoroughly investigated by the most distinguished Horticultural writers, both of Europe and America.

The late THOS. ANDREW KNIGHT, of London, one of the most eminent Horticulturists of his day, was, we believe, the first who attempted to establish the theory that a variety will not exist in a healthy state longer than the parent tree from which it was propagated. He supported his theory by showing that certain varieties, that had once flourished in certain localities, had become "subject to the debilities and diseases of old age."

Mr. WM. KENRICK, of Boston, author of the "American Orchardist," adopted Mr. KNIGHT's views of the subject, and endeavored to sustain them by showing that many of the old fruits, such as the Doyenne (Virgalieu,) Brown Beurre, and other Pears, had ceased to flourish in this country, owing to these "debilities and diseases of old age."

In refutation of this theory it has been shown that many of the oldest varieties of which we have any record are, at this day, producing as perfect and as fine fruit, both in Europe and on this continent, as they have ever done at any former period. The White Doyenne, or Virgalieu, it is well known, is as vigorous and as healthy, and produces as large crops and as fine fruit, now, in Western New York, as it has ever done any where, at any period within the memory of "the oldest inhabitant;" and it was the most prominent subject cited by Mr. KENRICK to sustain his "decay" theory. The "English Golden Pippin" apple, cited by Mr. KNIGHT, as illustrating his views, is said by English pomologists of the present day, to be as vigorous and productive, in many parts of England, as it ever was.

The apparent decay of varieties, we think, has been clearly demonstrated to be owing to the peculiar circumstances connected with their cultivation. The healthy, productive character of many fruits, in the interior of our country, that do not succeed at all on the sea board, is an apt illustration of this. Careful and uncareful culture, too, has a great deal to do with the duration of varieties. But, aside from the facts of the case, we think that the theory of "limited duration" is quite incompatible with the principles of vegetable reproduction. We can see no reason why a healthy scion, taken from an apple or a pear tree 200 years old, and inserted on a young seedling stock, should survive only as long as its 200 year old parent. We refer our correspondent, "H.," and others who may wish to investigate this subject, to the elaborate and satisfactory article in the "Appendix" to Downings' "Fruit and Fruit Trees."—ED.

"SWAN'S ORANGE" OR "ONONDAGA SEEDLING" PEAR.—We are much obliged to E. W. LEAVENWORTH, Esq., of Syracuse, for the following item of information respecting this fine Pear. It shows how little reliance should be placed on the reports of the multitude of seedling or new fruits which we hear of around the country. Mr. LEAVENWORTH says: "I have traced all the 'Onondaga Seedlings' about here to the original tree of HENRY CASE, Esq., of Liverpool, and by a letter just received from that gentleman I learn that he got his tree from a graft cut by him in 1306, in Farmington, Ct., from a tree standing on the premises of the late FISHER CURTIS, of this town."

It appears from this that the Onondaga is an old fruit, but it is a first rate one, and under any name worthy of extensive culture. We shall yet most likely identify it.

THERE is nothing which gives to beauty a greater finish than the look of intelligence, which makes the eye appear as the index of the soul.

Outline and Description of two fine Autumn Apples.

DYER, (Fig. 27.)—This is a native of Rhode Island—said to have been brought into notice by the Messrs. DYER, Nurserymen of Cranston.—

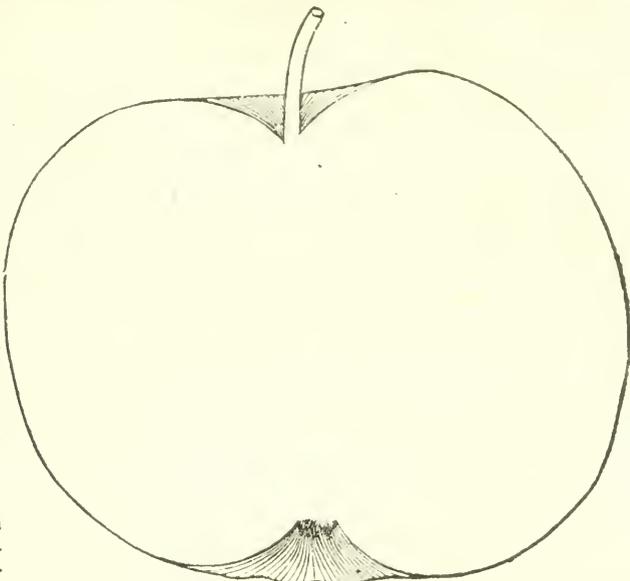
Size, large; the figure given here is from a medium sized specimen.—
Form, roundish or globular, sometimes slightly ribbed. *Skin*, pale yellow, fair and smooth. *Calyx*, small, closed, in a shallow basin, generally somewhat plaited and uneven. *Stalk*, about an inch long, projecting beyond the surface of the fruit, rather slender, inserted in a smooth cavity. *Flesh*, white, crisp, and abounding with a sprightly, rich sub-acid juice. As an eating apple we think this scarcely surpassed by any other of its season.

The tree has a fine, upright habit, grows vigorously, and we think, from what we have seen of it, is very productive. We have a tree in our grounds, sent us by Mr. KENRICK six years ago. It bore last season a few, and the present season a fine crop. It is noticed in the "Fruit and Fruit Trees of America," page 83. Mr. DOWNING says that Mr. KENRICK has confounded this with the "*Pomme Royal*" of Connecticut, which is a distinct winter variety. Ripe September and October.

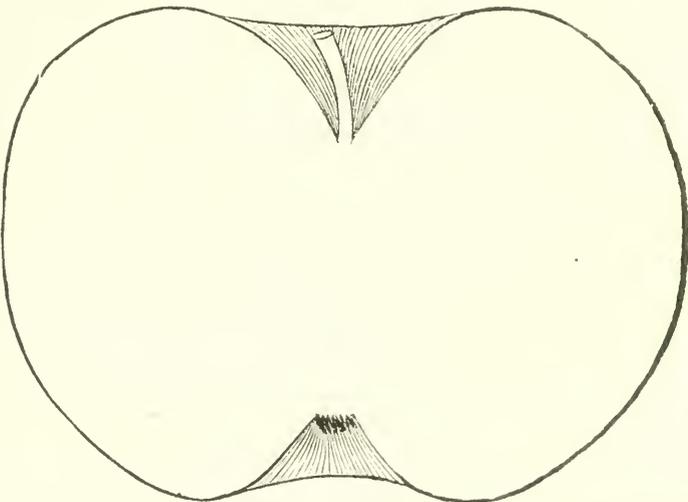
ST. LAWRENCE, (Fig. 28.)—This Apple was brought to this county, a number of years ago, from Montreal; of its origin, or how it came there, we know nothing.

In beauty of appearance, as well as in quality, we think it unsurpassed by any of its season. It succeeds admirably in this section, and will, we have no doubt, in every part of the country. It begins, now, to be pretty widely disseminated in our orchards.

Size, medium to large.—
Form, roundish, regular, a little flattened at both ends.—
Skin, smooth, covered with stripes and stains of red and crimson. *Stem*, half an inch long or over, inserted in a deep, smooth cavity. *Eye*, small, closed, in a deep, smooth basin. The streaks of red run into the cavities of the stem and eye, like regular delicate penciling. *Flesh*, white, stained slightly with red, very tender and juicy, melting in the mouth. Flavor delicious; sub-acid. September to October.



Dyer Apple. (Fig. 27.)



St. Lawrence Apple. (Fig. 28.)

NORTHERN SPY APPLE.—In reply to numerous inquiries as to where this apple can be procured, we would say that in this city they can be had of J. H. WATTS, Esq., who has purchased most of the crop of Mr. HAND, of Mendon. They have been uncommonly fine this season, and Mr. W. informs us he has already sold about 40 barrels, some to go to Europe, and others to various parts of this country. His price is \$2 50 per barrel. If any one has doubts about the surpassing excellence of this fruit, let them procure a few to eat during the coming winter or next spring.

Splendid Plants from China.

EUROPE and America are already largely indebted to the "Central Flowery Land" for many of the finest ornaments of their Gardens and Green Houses; but we think that the greatest vegetable treasures and curiosities of that vast country have yet to be discovered.

Mr. FORTUNE, who was sent out by the London Horticultural Society, at the close of the celebrated Opium War between England and China, to collect new plants, has returned during the past summer, after a very successful mission of upwards of 3 years. He has published a narrative of his expedition in the last number of the Horticultural Society's Journal. We have seldom read anything more interesting—and, if space permitted us, we would lay it all before our readers, as we know that some, at least, would peruse it with pleasure.

Among the great number of novel and beautiful productions he has secured, the most important seems to be—

Twelve or more new varieties of that splendid shrub, the *Tree Pileony*, of various novel colors, such as various shades of purple, lilac, deep red, white, &c. A magnificent *Climbing Yellow Rose*.

Mr. F. seems to have been enraptured with this discovery, and no wonder. He says:

"On entering one of the gardens on a fine morning in May, I was struck with a mass of yellow flowers which completely covered a distant part of the wall; the color was not a common yellow, but had something of buff in it, which gave the flowers a striking and uncommon appearance. I immediately ran up to the place, and to my surprise and delight found that I had discovered a most beautiful new yellow climbing rose. I have no doubt, from what I afterwards learned, that this rose is from the more northern districts of the Chinese empire, and will prove perfectly hardy in Europe."

The "Five Colored Rose" is another singular production: it produces elf colored, red or white, and striped blooms with both these colors, in the same plant. It belongs to the class known as China or Monthly Roses, cultivated in Green Houses and in the border during summer.

The *White Flowering Glycine* or *Wistaria*.—This will be a valuable acquisition. He found it entwined in an arbor with one of the blue, with which its long racemes of pure white flowers contrasted well. The blue we may remark, is, without exception, the most beautiful flowering climbing plant cultivated. It has been a long time under cultivation, but is yet still rare and scarce.

The celebrated *Shanghai Peach*, a large fine variety.

The true *Mandarin Orange*.

The *Weigela Rosea*, "one of the most beautiful shrubs of northern China, which was first met with in the garden of a Mandarin, near the city of Pinghae, on this island, (Chusan) was this spring, (1844) loaded with its noble rose colored flowers."

Azaleas, several new, distinct and beautiful varieties.—Alluding to these, Mr. Fortune says:

"Most persons have seen and admired the Azaleas which are yearly brought to the Chiswick fetes, and which as individual specimens surpass, in most instances, those which grow and bloom on their native hills; but few can form any idea of the gorgeous and striking beauty of these Azalea-clad mountains, where on every side, as far as our vision extends, the eye rests on masses of flowers of dazzling brightness and surpassing beauty."

The most gratifying success has attended the transmission of the plants, as it appears that out of 69 cases sent, only two of value have been really lost to the country. As many of the finest species are from the northern districts of China, and consequently hardy, we may hope to see them introduced to the gardens of this country in a year or two. Their propagation will no doubt receive the utmost attention of the most skillful English cultivators.

Acknowledgments.

WE are indebted to Mr. H. P. NORTON, of Brockport, for beautiful specimens of "Gray Doyenne and White Doyenne" (Virgalieu) Pears, from the garden of Mr. H. R. ROBY, of that village. They were received in fine condition, and were the most perfect specimens we have seen this season; as Mr. NORTON says "not easily surpassed." The "Gray Doyenne" is comparatively little known here. We shall refer to it fully hereafter.

To Mr. J. M. WHITSEY, for a specimen of a fine, rich, high flavored little Pear, from the garden of JOHN WILLIAMS, Esq., of this city. It is in eating now, Nov. 10.—We do not know its name. It seems to be a valuable variety, well worthy of a place in a good collection. We can, no doubt, find out its name next season, by seeing it bear.

To Mr. SAMUEL A. CUTLERBECK, of Olcott, N. Y., for a box of very beautiful and pleasant eating apples, which he says originated in that neighborhood. It is about medium size, roundish. Skin, pale greenish yellow, with a bright scarlet on the exposed side. Flesh tender, juicy and pleasant. Subacid. Sept. and Oct.

To the SHAKER SOCIETY of GROVELAND, Liv. county, for a box of fruit containing several varieties of Pears and Apples. We had a notice of these prepared for last month, but it was mislaid. The Pears were Virgalieu and Summer Bonchretien. The large russet apple is a spongy and poor sort, not worth cultivation. It is known as the "Cheeseboro Russet." The others seem to be good varieties; we do not know their names. They were picked too soon to admit of correct judgment being passed upon them. We are happy to learn that the society is embarking largely in the culture of the finest fruits. They have fine soil, plenty of it, in one of the best fruit growing districts in the country. With their good taste and abundant means and all necessary facilities, we have reason to expect much from them.

To Mr. REUBEN NORTON, of Bloomfield, for a basket of "Melon" Apples, a most delicious autumn and early winter fruit. They are tender and delicate as Peaches, and one could eat almost as many of them.

Horticulture in Mississippi.

M. W. PHILLIPS, Esq., of Edward, Miss., writes as follows in *Hovey's Magazine* for Nov. last:

The improvement in fruits is rapidly progressing in this State: quite a rage has sprung up to market fruit to New Orleans. One gentleman within some ten or fifteen miles of me has an orchard of pear trees of several hundred, and will, in 1847, have over one thousand trees. Another this fall will have some three hundred. I can point to one orchard of peach trees that number over one thousand;—to an apple orchard of eight hundred, that was planted this year within four miles of me; my peach orchard numbers over one hundred trees, with over three hundred large enough to place in orchard, and over four hundred budded this spring;—and, by the by, I can show a bud that was put in about the 7th of June, that is now near three inches long; it will be large enough to remove by fall.

YELLOW NEWTOWN PIPPIN APPLE.—A correspondent at Syracuse writes us—"Do you know of any case in which the Yellow Newtown Pippin has done well in Western New York, and if you do, do you know what the treatment has been? My trees do miserably in a rich, warm loam, highly manured. They are 14 years old, and never have produced but one or two good crops."

Will some of our friends furnish us with information in relation to this apple. We know of but a few cases where it is in bearing, in this section; in the most favorable of these, we believe, it produces poorly—at least cannot be said to "do well."

WE follow the world, in approving others, but we go before it in approving ourselves.

NEW SEED and IMPLEMENT WAREHOUSE.

GENESEE SEED STORE & 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 of 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.

RAPALJE & BRIGGS.

Rochester, Feb. 1, 1846.

Rochester Agricultural Warehouse.

BY THOMAS NOTT.

THE Subscriber having purchased the interest of Mr. JAS. P. FOGG, (late B. F. Smith & Co.) in the Agricultural and Horticultural IMPLEMENT BUSINESS, takes this method of informing the Farmers of Monroe and adjoining counties, that they will find it to their advantage to call and examine his Stock of Farming Implements before purchasing elsewhere.

In his assortment may be found the following articles:—
Burrall's Patent Corn Sheller, price, \$10.
Cultivators, price from \$5 to \$8.
N. C. Dayton's Gang Plow, for putting in wheat, \$15.
Hatch's Seed and Plaster Sower, \$25.
Delano's Diamond Plow, \$7.
Massachusetts Sward C Plow, with extra points, \$7.
" Eagle and Eagle No. 25 (3 horse) Plow.
" Side-hill and Subsoil Plows, \$9 to \$15.
Straw Cutters, from \$5 to \$15.
Sanford's Straw Cutter, \$15.
A complete assortment of Plow Points.
I. Grant's Patent Fan Mill, price \$27.

A full assortment of AGRICULTURAL IMPLEMENTS, TIN AND WOODEN WARE, and hundreds of other articles too numerous to mention. For sale cheap, by

THOMAS NOTT,

Front st., nearly opposite the Market.

Rochester, July, 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.*

Elwanger & 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.

Corn Shellers!—A first rate article, price \$10, for sale at No. 10, Front-st. RAPALJE & BRIGGS.

Bound Volumes of the Farmer.

A few copies of Volume VI, bound, for sale at this office. Price 50 cents. Also, (after the 10th inst.) bound copies of Volume VII, 1846. Dec 1, 1846.

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, September, 1846.

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, Rochester, Sept. 1, 1846.

FARMERS, CURE YOUR HORSES!

GEO. W. MERCHANT'S CELEBRATED

GARGLING OIL.

AN Invaluable Remedy for Horses, Cattle and other domestic animals, in the cure of the following diseases:

Fresh Wounds,	Fistula, Stifast,
Galls of all kinds,	Strains, Lameness,
Sprains, Bruises,	Sand Cracks,
Cracked Heels,	Foundered Feet,
Ringbone, Windgalls,	Scratches or Grease,
Poll Evil, Callus,	Mange,
Spavins, Sweeney,	Horn Distemper.

Also a valuable Embrocation for diseases of the Human Flesh.

AVOID DECEPTION.—It is not generally known, that no means have been left unemployed by that class of persons who attempt to counterfeit every good medicine that has acquired public confidence, to mislead the public mind into the belief that their oil is the same as the Gargling Oil. Be not deceived, therefore, by such knavery; and be not satisfied except you find the marks of the genuine article upon the bottle.

One gentleman affirms that he cured a valuable horse of a *Windgall* which had become callous. Another says he has cured a fine horse of a *Sweeney* which nothing else would effect. Another has cured himself by the use of the Oil, of a *Rheumatism*, and in his family has used it for all complaints requiring an external remedy. Another who had it "on hand" says that he relieved himself immediately of *severe* and continued *pain*, resulting from the setting of a dislocated knee joint which every application made for twenty-four hours had failed to perform; he soon obtained sleep.

It has cured *Founders*, and is a common remedy for *Galls*, *Sprains*, *Bruises*, *Strains*, *Cramps*, *Weakness of the Joints and Limbs*, *Frozeu Feet*, *Contraction of the Muscles*, *Scalps*, &c., and if all the facts were told they are so remarkable they would probably not be believed.

For testimonials, synopsis of diseases, and mode of treatment, see pamphlet which accompanies each bottle.

☞ Sold at the ROCHESTER SEED STORE, and by Druggists and Store-keepers in the U. States and Canada. ☞ Also at the GENESEE SEED STORE, No. 10 Front street, Rochester.

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

RAPALJE & BRIGGS.

No. 10, Front-st.

Wanted.—100 bushels Peach Stones, at the old Rochester Seed Store, nearly opposite the market.

Oct. 1, 1846.

JAMES P. FOGG.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	90	Pork, bbl,	10,00	11,90	
Corn,.....	38	44	Pork, cwt,....	3,00	3,50
Barley,.....	33	Beef, cwt,....	2,50	3,00	
Oats,.....	30	Lard, lb,.....	7	8	
Flour,.....	4,25	Butter, lb,....	10	11	
Beans,.....	37½	Cheese, new lb.,	5	6	
Apples, bushel.	15	25	Eggs, doz,....	14	
Potatoes,	31	Poultry,.....	5	6	
Clover Seed, ..	4,00	5,00	Tallow,.....	6	6½
Timothy,	1,00	1,25	Maple Sugar,--	6	77
Hay, ton,....	7,50	9,00	Sheep Skins, ..	33	50
Wood, cord,--	2,00	4,00	Green Hides, lb	3½	
Salt, bbl,....	1,12	Dry	6		
Hams, lb,....	8	9	Calf Skins,....	8	

[By Magnetic Telegraph.]

NEW YORK, NOV. 23.—8 P. M.

The market for Flour was not very active. Sales being about 6000 or 7000 bbls., including 2000 Brooklyn Mills, at \$5,25. The quotations to-day have been \$5,18 a \$5,25 for Michigan and Genesee, and \$5,31 for Genesee in Store; \$5,37½ being universally asked. There is not a great deal arriving, but the quantity piled up on dock is large. Some large receivers ask \$5,50.

In Grain the movement has been small; a parcel of 2500 bush. mixed wheat was sold at \$1,02, and 2000 do. fair \$1,06.

Corn is dull and I hear of nothing done in good parcels. A lot of Southern new sold at 60 cts.; good yellow Northern is worth perhaps 73 or 75 cts.

Sales 15,000 bush. Rye at 76½ cts. in the slip, and 79 a 80 cts. delivered. Oats tend upward. Canal are worth 38 a 38½. Sales 2400 bush. Barley for export on private terms.

Pork is \$8 a \$9,75. The sales both of Beef and Pork are very limited. A small sale Utica prime mess Beef was made at \$15,50.

Tallow is in good demand, but the supply is light. Prime is 9½ a 9½.

Cotton is rather firmer to-day in consequence of Southern frosts.

The operations in heavy produce are much hampered by the high freights.

The Cash System—1847.

Our subscribers are informed that we shall adhere, as strictly as possible, to the CASH IN ADVANCE SYSTEM. All, therefore, who have not already paid for next year, should at once renew their subscriptions. After this number no papers will be sent, except to agents, those who have paid for 1847, and such others as we suppose wish to continue as permanent subscribers. We trust our friends will bear this in mind, and send in their orders as early as convenient.

To Post Masters, Agents, &c:

POST-MASTERS and others who have generously lent us their aid, by obtaining and forwarding subscriptions to the current volume of the Farmer, are respectfully invited to continue acting as Agents. We are already greatly indebted to you, gentlemen, for past favors—and a continuation of similar kindness will render us under renewed obligations.

Send Early.—Agents and others—and we hope every subscriber will act as agent)—will please send in their orders for next volume as soon as possibly convenient. We wish to know, at an early day, how large an edition will be necessary, and thus avoid the expense of re-printing.

Monroe County Agricultural Society.

The Annual Meeting will be held at the Rochester Seed Store on the second Tuesday of December, (the 8th inst.) at 10 o'clock, A. M.

This Meeting will award the Premiums on Field Crops, &c., and choose officers for the ensuing year—1847. Let there be a full attendance of the Members of the Society.

JOHN H. ROBINSON,
President.

December, 1846.

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,
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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Removal.

The Farmer Office has been removed to Talman Block, on Buffalo street, nearly opposite the entrance to Arcade Hall. Our new location is central, and convenient to those having business to transact with the establishment.

