

# THE JOURNAL OF AGRICULTURE.

SCIENCE IS KNOWLEDGE SYSTEMATIZED.

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WHOLE NO. 28.

## LAY UP FOR A RAINY DAY.

The economist will at once understand this to mean "save the pennies, and the pounds, instead of taking care of themselves, (as the old proverb goes on to describe them,) will come to you to be taken care of."

A farmer, if he thrives at all, must practice economy. There is no ship more full of leaks; no meal bin more fully riddled, than your badly-managed farm. Without watchful economy, the rats will soon instinctively desert the sinking ship, and the same sagacious species of vermin will leave the empty bin; and the spider will spin his geometrical figures in the one, and the barnacle will fasten upon the other, and the tale will be ended.

No one more thoroughly than ourself despises that pitiful meanness, which sacrifices the reasonable comforts of life to an insane spirit of accumulation; which teaches the farmer to sell of his produce all that is fit to be sold, and to give to the pigs what no one will buy, and to feed his family on what the pigs refuse. This existence on "skunk and dumping," in order that our executors may declare a little better dividend at the "final settlement," is not at all to our taste. Such stinginess is economy gone crazy. But the true economy is always commendable, and to the farmer, of all other men, is imperatively necessary.

The gains of a farmer are generally very slow and gradual; he cannot therefore safely indulge in extravagancies of dress or in delicacies of food. But to compensate for this, his occupation renders expensive and fashionable attire unnecessary in his working days, and ridiculous on him at other times. Furthermore, healthful labor creates a hearty appetite that despises tit-bits, and demands the plain and the substantial.

Thus, of all men, the farmer may with the least self-denial and the greatest ease practice economy. The lawyer and the physician, out of respect for their profession, must wear black broad-cloth of fine texture, and maintain an establishment correspondent with their eminence. The poor clergyman even,

who is expected to save the stingy souls of a parish that starve him slowly to death on \$250 per annum, must sport a decent hat and be clad in respectable sable garments, to do credit to the respectability of his office, and to the "pride of his parishioners." However scantily his stomach may be lined, his back must be well covered. But the farmer's ordinary wardrobe—aye, and the extra-ordinary wardrobe of every sensible farmer—is supplied at small expense. His equipage is useful at once for carrying pigs to market and children to church; and his whole establishment is inexpensive, and respectable in proportion as it is plain and suitable.

Let the farmer, then, not fail to lay up, as he easily may, for a rainy day. Provide, while you have youth and strength, for that time,—inevitable if you live,—when locomotion is a serious inconvenience, and "the grass-hopper becomes a burthen." In the seed-time and harvest time of life sow and gather into garner food for its dreary winter; in bright days gather sunshine for dark ones. And lay up stores not for the perishable body only, but for the mind that works while the frame is feeble, and for the soul that lives when the body is buried.

This is one head of our discourse,—a head that was popped in upon us most unexpectedly and Paul-Pry-ishly, as we sat down to write; but as "two heads are better" (it is said) "than one," we will now take up the next.

It rains fiercely! The chilled and dripping chickens crowd under the corn-crib or the wagon-shed; and on one leg stand still and silent. The lusty cock, celebrated in story for having "crowed in the morn, to wake the priest all shaven and shorn," droops as if he would disturb no more priests ly slumbers by his clarion note. The ducks waddle busily about, quackering with their bills in every shallow puddle, and wagging their hinder parts with emulous energy. The stately geese stalk slowly through the solemn game of "follow my leader." In the barn yard, the unhoused oxen turn tail to the wind, and with drooping ears and curved back, meekly endure the "pelting of the pitiless storm."

The cows crowd crouching in the corners. The south main-doors of the barn are open, and on the floor are four farming-men. One is asleep on the cut-hay heap; the others, squatted on barrel-heads or the edge of the feed trough, are busily employed in looking out at the weather and relieve the monotony by unconsciously squirting tobacco-juice at a mark,—the line formed by the dripping eaves. The farmer himself is at the house, and with an old rug over his shoulders, is clearing out the gutters and the spouts; doing to-day what might as well have been done yesterday.

This is a dull description of a dripping day, but we have all seen something-such a picture. There has been no "laying up for a rainy day" on that farm; no true economy of time.

Few things prove more conclusively the complete farmer, than the system with which he does everything at the right time; and, among other things, lays up work for rainy days. Aaron Burr, reversing the ancient motto "never put off till to-morrow what may as well be done to-day," was accustomed to say, "never do to-day, what may *as well* be done to-morrow." He argued that if a thing might *as well* be done to-morrow, there was the additional reason for its postponement, that circumstances might meanwhile occur to render its doing at all unnecessary, or perhaps, even hurtful. Now, though a farmer need not adopt Col. Burr's reasoning, because it is suited to the politician rather than to the plowman, he will find that there are times when he can act upon the advice. Many an hour in the busy season is spent by farmers without forethought, in doing what might as well be laid up for a rainy day; and it is a matter for each farmer's judgment, what those things are.

Among the things which should *not* be postponed to a rainy day, let us here mention the building of sheds to shelter cattle from storms. The pelting rain and the chill wind wash many a peck of meal out of their carcasses. The barn-cellar *may* be dug, at some disadvantage, to be sure, on a rainy day; but if not dug at all, a great many dollars will leak out of the dripping sides of the exposed manure-heaps, and many a "mint-drop" will be borne off on the wings of the wind. The fixing of the house-gutters and the clearing out of spouts is one of the penances of the house-holder; but he is injudicious who reckons it one of those things to be laid up for a rainy day.

There are wise farmers who have caused their sons to be taught trades; one, the saddler's; another, the wheel-wright's; and a third, the blacksmith's; or, if a boy is at all handy with tools, he can learn enough of each to make himself useful of a rainy

day, in repairing harness or even shoes, and in mending wagons, ox-yokes, or what not else that requires attention. Knowledge of this kind is useful to any one; and in a few years, when we have a Farm-school, where all these things will be taught, our boys will no longer be idle of rainy days.

Ed.

### THEORIES EXAMINED AND EXPLAINED

BY LEVI BARTLETT, WARNER, N. H.

NO. VI.

Within the past few years have been published in the various agricultural books, journals, &c., the results of a great variety of experiments with different kinds of manures on different soils and crops; the effects, in numerous instances, being very unlike. In many cases the application of mineral or saline substances have exhibited astonishing effects upon various cultivated crops; while upon other soils they seem to have no beneficial action. In a great many instances, it has been found that those substances used for manuring purposes, containing a large percentage of ammonia, exhibited very striking results, over other manures containing little or no ammonia. This was the case in Mr. Laws' experiments, as reported in the August No. of this Journal. From a multitude of other similar facts, it seems to be the opinion of many, (and perhaps, in regard to animal manures this may be correct,) that manures are valuable, just in proportion to the amount of ammonia they contain. For Prof. Norton says, "that during his stay in Edinburgh, samples from more than five hundred cargoes of guano were analyzed in the laboratory of Prof. Johnston, and were sold by his analysis, fluctuating in price as they indicated more or less ammonia. Had there been any mistake in this method of estimating value, experience would soon have detected it."

But notwithstanding the beneficial action of the sulphate and muriate of ammonia as used by Mr. Laws, and what Prof. Norton and others have said of its importance, there are numerous well authenticated facts on record that prove most clearly that the application of ammoniacal manures is not *always* attended with very marked beneficial effects, and there are also numerous cases where mineral or saline manures alone have produced extraordinary results, notwithstanding their failure on Mr. Laws' wheat crop. Why such different effects should be produced by the same kinds of manure on different soils, is an important inquiry for the farmer; the only reasonable way of solving the question is by assuming as *facts*, the general principles laid down by Liebig, Johnston, and other scientific writers on Agriculture. A summary of these principles is, that

some fifteen elementary substances are necessary for a luxuriant growth of plants; that some ten or eleven of these are furnished by the soil, and that soil, to be fertile, must naturally contain them, or have them artificially applied. These substances constitute the ash of plants, and are termed the inorganic part. Of the great bulk of vegetable life, nine-tenths, or more, is composed of four elementary substances—oxygen, hydrogen, carbon and nitrogen. The three first are usually supplied to plants from water and the atmosphere, in sufficient quantity; but not so with nitrogen. Plants cannot get it from the air, and generally there is a deficiency in most soils. It is only in the form of ammonia, or some of its compounds, or as a nitrate, that nitrogen can minister to the wants of plants, (through the agency of the roots) in solution with water. When there is a deficiency of ammonia, or nitrates in the soil, the application of manures, rich in ammonia, always produces a marked effect, but some soils, like the rich prairies, and other fertile soils of the West, would be injured by the addition of such manures, as these soils already naturally contain a supply, and further applications would cause a too luxuriant growth of stalks, thereby injuring the crop by lodging.

Prof. Norton, in speaking upon the inorganic constituents of a soil, says: "when one is gone, or reduced to a very small quantity, the crops which particularly require that substance will refuse to grow luxuriantly and yield well; suppose it to be wheat, and the wanting substance phosphoric acid; there may be the greatest abundance of every other necessary constituent, and yet all of their good effects are more or less neutralized by this one defect. By attending to such points as these, the farmer may often save himself much disappointment and expense. He may put on load after load of ordinary manure, and still not produce the desired improvement; when at the same time a bushel or two of some particular ingredient, at one-twentieth of the cost, may have been all that the land wanted. In this way we can explain the wonderful effects produced by a few bushels of lime, or plaster.—These were just the substances which were deficient in those soils where they proved so efficacious; being supplied, the soils at once became fertile."

Taking this view of the subject, we can readily reconcile many of the seeming discrepancies we find in the published statements of agricultural experiments. And for the purposes of illustration, I will give in a condensed form, some account of various experiments made to test the value of different manures, and other substances, for agricultural purposes.

In the *Agricultural Gazette*, of April 4, 1846, is an interesting table of experiments by Prof. Dauberry, with a dozen kinds of manure, upon the turnip crop. One kind was mineral phosphate of lime, in comparison with an equal amount of ground bone, (12 cwt. per acre,) the result was, the mineral produced as good a crop as the bone manure, and about as large an amount as nitrogenous manures. From this, the Prof. makes the following remarks: "Now as the Spanish phosphorite, which appears to act so beneficially, is wholly destitute of organic matter, it seems to follow that the more valuable portion at least of what is applied to the land, when bones are scattered over it, is the phosphate of lime, and not, as some have supposed, the oil or gelatine." On some soils, the mineral might produce as good a crop, as the bone on others; the organic position of the bone is doubtless as valuable, or more so than the phosphate. And on other soils neither the organic or inorganic portions of bone manure has any good effect. This has been proved on Mr. Cushing's farm at Watertown, Mass., and on many others.

In the *Gardener's Chronicle*, May 11th, 1844, the editor, (Prof. Lindley,) gives the results of some experiments obtained by a friend of his, near St. Albans. The object of one of the experiments was to ascertain whether the expense of carting manures long distances could not be diminished by burning the manure and applying the ashes. The editor observes, if his experiments can be trusted, the results are of considerable importance, because it shows that the stable litter burnt to ashes, is nearly as effectual as the common bulky manure.

The trials were made, as all trials should be, on an exhausted soil, consisting of heavy loam. Turnips were sown on the 21st of June last, in drills, 27 inches apart, and the space occupied by each experiment was exactly the same, viz: about the thirtieth of an acre.

- |  |        |
|--|--------|
| No. 1—No manure, gross weight of turnips,  | lbs 88 |
| No. 2—Horse dung, 4 cwt.; lime, half a bushel; the lime was slacked and mixed with the dung six weeks before it was put into the soil; this was for the purpose of driving off the ammonia. Weight of turnips, | 462    |
| No. 3—Horse dung, 4 cwt.; sulphuric acid 2 lbs.; applied six weeks before it was put into the soil; this was for the purpose of fixing the ammonia. Turnips,   | 444    |
| No. 4—Horse dung, 4 cwt., thrown into a heap six weeks before using. Turnips,  | 392    |
| No. 5—Horse dung, 6 cwt., same as above,   | 429    |
| No. 6—Horse dung, 8 cwt., same as above,   | 518    |

- No. 7—Horse dung, 5 cwt., burnt to ashes, with free access of air, 429
- No. 8—Dung, 5 cwt., burnt with a very limited supply of air, until the vegetable matter was burned into charcoal, 455
- No. 9—Dung, 5 cwt., sulphuric acid 5 lbs.; mixed with the dung, and then carbonized like the last, 117
- No. 10—No manure. 70

The editor remarks, "if these results can be relied on, we shall come to the conclusion: 1st, that 5 cwt. of stable litter, when burnt, is as good as 6 cwt. of raw manure, and 2d, that after all that has been said about the importance of ammonia in manure, the crops are as good where that principle is driven off, as where it is retained by fixing."

Prof. Nesbit of London gave a lecture before an association of farmers at Tryng, England, (reported in the *Mark Lane Express*, June 22d, 1846,) in which he spoke of the importance of the inorganic or mineral constituents of plants, as found in the ash. A Mr. Dawes, a farmer present, confirmed it by saying, "I have found the ashes of burned wheat very productive; I had a stock of wheat accidentally burnt, and I have used the ashes for manure; the consequence was, as good a crop as I could have had from guano." Mr. Nesbit replied, "exactly so, in the ash of the burnt wheat you had all you wanted."

In Mr. Laws' experiment, "the ashes of 14 tons of barn-yard manure gave 16 bushels"—one bushel less than the unmanured land. The only way these contradictory results can be explained, is upon the principle that the soil, when the ashes had a favorable action, was destitute of the inorganic constituents necessary for the crops grown upon it, and that the ashes supplied them; and that there was a supply of nitrogen in the soil, or derived from the rains, so that the addition of more in the manure was of no consequence.

In Mr. Copeland's review of Professor Horsford's letter in the *Journal* of May the 5th, Mr. C. says—"all the many experiments made with more or less nitrogenized manures, have *always* resulted in favor of the *more* rather than the *less*."

I think this is rather a stronger assertion than the facts will justify. Several years since, Prof. Henslow, of England, in order to test the value (if any) in fixing the ammonia in manure by the addition of gypsum, engaged some fifty or more farmers to institute a series of experiments for this purpose. Each experimenter was to make two compost heaps of manure and other materials, according to a fixed rule—(by weight and measure,) laid down by Prof. H. The only difference in the heaps was, that one

was to have the addition of a given quantity of gypsum supposed to be sufficient to fix all the ammonia generated during the fermentation of the heap. The two kinds were applied side by side, on various soils, and a variety of crops, and the results were carefully noted.

The report given by Prof. H. of the result seems to leave the question wholly undetermined. His conclusions from these experiments—fifteen in number—are given in this result. "It will be seen that with turnips\* the effect has been uniformly in favor of the gypsumed dung. With the straw of wheat, the result is twice in favor of gypsumed dung, once against it, and in one case no difference. In respect to the wheat itself, it is six times in favor of the gypsumed dung, and six times against—(a draw game!) The practical inference to be deduced from this part of the inquiry favors the idea of using the gypsumed dung for a turnip crop, but shows that it produces no better effect than *un-gypsumed* dung upon a wheat crop."

The green sand marl of New Jersey seems to possess very valuable properties as a manure. It does not, as far as I can learn, contain any nitrogen. Prof. H. D. Rogers, in his *Geological Report of New Jersey*, says "that Mr. Wooley manured a piece of land in the proportion of 200 loads of good stable manure to the acre, applying upon an adjacent tract of the same soil his marl, in the ratio of about 20 loads per acre. The crops, which were timothy and clover, were much the heaviest upon the section which had received the marl." Difference in cost of manuring the land; stable manure, \$2,00 per acre,—of marling the same, \$5. The marled land was free from weeds, while the stable-manured was very foul with them.

Prof. Rogers imputes the value of this marl in agriculture almost exclusively to the potassa it contains—as it was found upon analysis to contain about 10 per cent. of potassa. But the soil, it seems, or rather the crops, experimented upon by Mr. Law, received no benefit from the liberal applications of potash he made in the course of his experiments. Much of the land upon which the green sand marl had such a wonderful effect "was originally nothing but sand." Land which had been sold at \$2½ per acre, in consequence of the permanent increase in its fertility from the marl, is now worth \$37 per acre."

In the lately published volume of the Rhode Island Society, for the encouragement of Domestic Industry, we find valuable reports on the use of fish, guano, ashes, &c., by several of the farmers of that

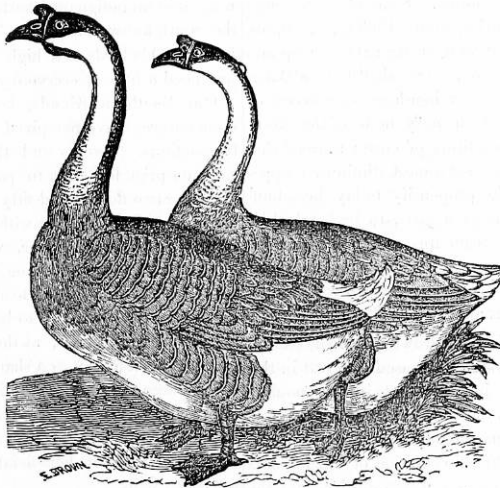
\* Colman's Report on European Agriculture, vol. 1, page 419.

State. The communication of Adam Anthony is a valuable paper, as he gives a detailed account of the methods he pursued, by which, in a few years, he made such improvements upon a worn-out, sandy, gravelly farm, as to raise the value of the crops from \$385 to \$3575; nearly ten-fold increase in the products of the farm. He says, "of such improvement as has been effected in the condition of this land, and indeed of the farm, millet and clover, grown by the aid of *leached ashes*, have been the basis." About 200 bushels to the acre was the usual quantity first used on these poor soils. The ashes supplied lime, potash, soda, phosphates, &c. The nitrogen was obtained from the soil, rain and snow.

Mr. S. H. Smith furnishes an interesting account of his use of guano and ashes. "In 1845," he says, "I seeded down half an acre of ground, a sandy

loam, with eight quarts of millet, ten pounds of S. clover, one peck of herdsgrass, and one peck of red-top seed. This lot was dressed with 350 lbs. of guano, worth \$9. On an adjoining half acre I put the same kinds of seed, and in like quantity. Instead of guano, I applied 64 bushels unleached ashes, worth \$8. The crop of millet was perceptibly best where no guano was used, and about ten days earliest. The crop of grass in 1846 was one-fourth the longest where the ashes were used. In 1847, the clover had nearly all disappeared where the guano was applied, but remained well stocked where the ashes were put. The first and second crops this year were decidedly in favor of the ashes. In this experiment, the ashes produced a much more permanent effect.

To be continued.



HONG KONG GEESE.

#### THE CHICKEN CONVENTION.

"Hark, hark! I hear  
The strain of strutting Chanticleers  
Cry, Cock-a-doodle-doo."—TEMPEST.

The Mammoth Tent of Mr. Wright still rears its huge bulk against the sky. The gay streamers still flaunt in the sunny air. But, alas! silence reigns within those canvass walls, that yesterday were sonorous with the shrill clarion crow of cock and cockerel. The spirit of the reporter silently stalks "solitary and alone" along the empty aisles, and gazes through the telescopic spectacles of memory upon the plumed and the unplumed bipeds that lately graced its avenues and adorned its stands.

The Hong-Kong, the African, the Wild and other geese,—the buyers and the bought;—the Shanghaie,

China, Chittagong and other crows,—the vender and the vended, victimiser and victim;—poultry proprietor and purchaser, the sellers and the sold, all are gone; and now

"When I remember all  
The friends so LINKED TOGETHER,

\* \* \* \* \*

I feel like one, who treads alone  
Some banquet-hall deserted,  
Whose lights are fled, whose garland's dead,  
And all but he departed."

The last show of *The New England Society for the Improvement of Domestic Poultry* commenced on Tuesday, the seventh day of September, A. D. 1852, in the Public Gardens of Boston, beneath *Wright's Mammoth Tent*, and continued for three days. It has now come to an end; and we canno

repress the presentiment that we are writing its epitaph. The departed was just three years of age, and has accomplished in its short life a great deal of good, by awakening attention to the importance of a neglected interest, and to the improvement of a valuable member of our farm-yard stock company. This influence will exist and extend, whether the Society survives or not; and therefore while we may not deplore its decease, we have reason to remember with gratitude the day of its birth.

The beautiful Devons, that roam over our Northern hills, and the noble short-horns, that depasture the rich fields of the West, were once, without doubt, a scrubby race—small in size, probably scraggy, and of all forms and colors. Now a perseverance in improvement presents them to us, perfect in their proportions, true to their color and other distinguishing points, and *begetting their like*, generation after generation. So will it be, some day, with Domestic Poultry. Some chicken-fancying Bakewell will arise, some Colling, or Bates, among the *gallinacis*; and as we have Sheep and Short-horns in perfection, so we shall have a Bakewell or other breed in our hen-houses; a breed, or breeds, that will take on most flesh of the finest kind at the least expenditure of corn; a breed that with a great size possesses a most diminutive appetite, and an invincible propensity to lay three hundred and sixty-five eggs a year, to be hatched by *eccaleobion*, or other steam apparatus. This may be a rather highly wrought picture of the good-time-coming breed: but something not entirely unlike this, some of us will some day see.

For all the good that has grown out of the exhibitions of this society—the increased interest in this already perceptible improvement in the poultry through the country, the information with regard to their rearing and management, that is common now to all classes, the bettered condition of chickendom in respect to house-room and dormitories, and the reaction of all this interest, information, and improvement upon the care and treatment of other farm-stock—for all this direct and incidental good, we are indebted to the working officers of this society; and, seriously speaking, it is difficult to over-rate it. But there are evils which have grown out of our shows—evils for which the management are not responsible, for they were beyond their control—these check any boisterous lamentation, in which we might otherwise feel inclined to indulge, at the prospect of the demise, at the tender age of three years, of the present New England Society for the Improvement of Domestic Poultry.

Speculators have made a tool of it, and the unsuspecting have been shorn at the shows. The

country, far and near, has been swept of fair to middling birds, and then sanded with advertisements of *importations*. Monstrous prices have been asked, predicated upon sham prices paid for fowls. At the late show, three birds of the crane order—Cochin China, we believe—were said, in the *hearing of anxious buyers*, to have been sold for \$100! This makes five and twenty, thirty, or fifty dollars per pair *appear moderate*; and bird and buyer are soon sold—the bird, by and by, appears to be dear, but the buyer feels remarkably cheap. Exaggerated accounts of these sales are spread broadcast through the land, and the return crop of orders comes pouring in. *Snook's* importation, *Smith's, Jenkins'* have their fancy prices, like "Delaware and Hudson," "Harlem Rail Road," "Canton," and other Wall street game. Fortunately these orders seed also, and this season came up a crop of the victims, eloquent of their wrongs. "Call the Society what you will," said an indignant Charleston-ian to us, "we at the South know it as ——'s speculating Society. I bought his birds at a high figure, and they have produced a *little of everything*."

Our Southern friends, because of the ardor of their nature, have perspired prodigiously in these transactions. Twenty and thirty dollars is no uncommon price for them to pay for a bird, that cost the seller two dollars and fifty cents; and was really worth no more than *fifty* without the *two*. And for all this we must all suffer, while a few grow rich—"Yankee nutmegs, Yankee tricks, Yankee meanness" are the phrases that load down letters from the scene of operations, and to be a fancier of poultry and a seller will soon, at the present rate of progression, rank a man as a sharper and a swindler.

For these reasons we see without a sigh the downfall of a society which has done much good; hoping that upon its ruins may arise an amateur association that will have all its beneficial influence without the attendant evils.

Ed.

## PATAGONIA AND PERU IN NEW ENGLAND.

BY R. M. COPELAND, BOSTON.

The last of the articles under the above head, published some weeks since, ended thus: "here, then, we leave the subject, hoping some abler hand will lay hold where we have left off." Nor was this paragraph penned in any mock humility. I would candidly admit my knowledge of farming and manures to be less, perhaps, than that of any other contributor to this journal, and the articles were not so much written to display my own knowledge, as to draw from others their experience upon a, to me, interesting subject. Nor was I unprepared for cen-

sure, or rather opposition to my interpretation of Prof. Horsford's letter, but I must confess that the author of "Theories Examined and Explained," has somewhat surprised me, by his *manner of criticism, or correction.*

I am a "perfect stranger" to him, and he is "bound to believe my object in writing is to aid the cause of Agriculture." I will assume this to be fact, and retrace the steps by which a "mistake" was developed into "wrong conclusions."

But let me ask what is the cause of the *interest* which Mr. B. takes in my *review*? A real or only apparent misquotation?

Before entering into the merits of the case, I would premise that the gentleman has been unjust to himself and his own good sense. If, as he says, my blunder was "unintentional," it could not have been so "gross," but at the worst only a freer rendering of the text—perhaps accidental—and, taking the latter view of the case, might it not have been well if Mr. B. had stopped a moment to inquire whether first the mistake was not made by the printer; second, whether it *might not have been accidental* on my part; third, whether in either case, it materially affected the subject matter of the article. To the first of these points, Mr. B. paid no attention; the second he referred to, but only after having directly attacked me at some length, asserting that by my misquotation, I had rendered Prof. Horsford ridiculous, and then only in the faintest manner possible, alluding to the chance of mistake, *par parenthese*, and that so modestly as to leave the attack unqualified.

If the error had been designed, I was indeed worthy of any censure, and if not, there was no occasion for the assault.

Or had the gentleman been earnest only to sustain Prof. Horsford, and yet willing to *spare* me, by addressing the editor of the Journal or myself, he could have been satisfied on all points concerning the design of the author. But perhaps strange "theories" are so seldom advanced, that his opportunities for reviewing were lost, did he not seize upon occasions, like the one offered by my article, to victimize somebody. It is to the third part Mr. B. has mostly confined his attention, and after falsely assuming my *mere reference* to Prof. H.'s pamphlet to be a review, he proceeds to clear the Prof.'s skirts, but as I shall show, but lamely. On the whole, I am rather afraid the gentleman's cool love for Agriculture was somewhat sacrificed, in his desire to defend Prof. Horsford's blunder, and rebut my inferred charges.

I will do as he did not, and treat the matter under these three heads—

First, the mistake was in the printing; no sheet being sent me for correction, and absent the time of publication preventing immediate acknowledgement of the error. A farther evidence of this lies in the fact that in paragraph 13 of t. first article, the figures are sadly misprinted. Fo. 53.560 read 43.560, for .5 read .05, and for 326.200 read 80.566—40.29 tons—and in paragraph 14, for 6272540 read 6272640, for 940896 read 94089, for (3d line from top of page 235) 35 read 36, and for 219542400 read 225815040, and for 127050 read 130680.

Having thus shown that the error is not attributable to me, my second head may be passed over. But even supposing it had been a direct and wilful misquotation, I maintain it would and does make no difference to the statement on account of the loose and inaccurate manner in which the sentence was constructed.

I will therefore now proceed to do that which I am wrongly accused of having done in the first instance, viz: review Prof. Horsford's pamphlet, in so far as it refers to the nitrogenous system of manure.

I would premise that no one is expected to go behind the text, and make allowance for what was in the mind of the author at the time of writing.

If the author is unable to clearly express himself, and thereby incurs the risk of censure, it is by no means the business of A. B. and C. to swallow down his assertions, and then take large doses of some other person's knowledge, as a corrective and aid to digestion. Nor in spite of Mr. Bartlett's sober denial, can any educated man, come grammatically to any other conclusion than the one he has so confidently pronounced "*wrong*."

If we are to take the strict letter of the text for our guide, and as an exposition of the writer's knowledge, what was stated in the former articles comes but the more clearly to light. The only difference between Prof. Horsford's articles and mine (not Mr. Bartlett's rendering of that article) is the following: Correct—"The quantity with usual falls of rain:" mine—"The quantity which usually falls in rain." If the quantity, as Mr. Horsford has it, refers to any certain amount, (as Mr. B.—t, in his review, would give the reader to believe, by inserting in the middle of what he calls the true version—first a parenthesis as follows: after "the quantity" ("that is the quantity naturally in the soil") and second, after "usual falls of rain" (130 lbs of of N H  $\frac{3}{4}$  which amount, by the way, is no where given in the Professor's article, but which Mr. Bartlett assumes, or borrows from me without giving me the slightest credit) it would make a very

aterial difference, whether the succeeding sentence pre, "with usual falls of rain" or "which usually falls in rain." No such reference, however, exists; nor is any thing said in any portion of the letter which would cause the reader to refer to any specified amount existing in one or an other place.

Again, whilst I have done Prof. H—d no intentional injustice, Mr. B—t has, in reality, done me a very great one, by inserting in what he calls Prof. H—d's text his own parenthetical explanations, causing, of course, all readers to suppose them made by the first writer. Here, then, I would reiterate, and in reiterating, defy Mr. B—t or any other to show the contrary, that unless in the immediately antecedent clause, what 'the quantity' is, be defined, it makes not the slightest difference to the sense of the sentence whether one or the other reading be adopted. Even supposing that in the preceding portion of the letter some definite quantity has been stated, unless it is set at some absolute and unchangeable amount to be known either by exponential letters or figures, or by an exponent known as 'the quantity,' when afterwards we meet 'the quantity' we are to give it only the force it derives from its immediate position.

That no such definition or limitation exists in its own independent sentence, Mr. B—t himself has shown to be true in his quotation, which I admit is correct if we disregard his *interpolations*, and that no such specifications exist in the preceding portion of the same letter I will show by quoting all the passages which directly refer to the point under discussion.

"Liebig, as you are already aware, takes the position, that the sources of carbon and nitrogen are the carbonic acid and ammonia of the air, and not soluble bodies met with in some soils. He asks, if it be not so, where the thousands of tons of wood, grown for centuries in succession on a soil containing but traces of organic matter, have derived their carbon?" "Where did these ingredients come from? Boussingault's ingenious experiments with regard to the sources of carbon had yielded a partial answer; the carbon came from the carbonic acid of the air; the ammonia, as you will presently see, could have had no other origin." "He (Liebig) holds that when the required physical properties have been given a soil, and the necessary inorganic ingredients in suitable solubility, the ammonia and carbonic acid, with healthful falls of rain, will provide themselves." Perhaps we might be allowed to ask, if we are willing to bear the stigma of fool for being so dull, how much rain is contained in healthful falls; or, if healthful falls should not be supplied by nature, where we should turn for the supply of

NH  $\frac{3}{4}$  &c. He then goes on to give analysis of the amount of N H  $\frac{3}{4}$  found in various soils, and at the conclusion of the list says, "the excavated earth was taken from a depth below the traces of organic matter. The Illinois prairie soil was brought by a returning German, in paper, from a field that had been cultivated without manuring already ten years I think!!!" So, after all his theories and researches, he is not sure even of his premises, but thinks at the end; he then continues as before quoted.

"Now, what farmer ever carted from his manure yards 8000 lbs. of N H  $\frac{3}{4}$  to an acre of land? One may almost inquire, what farmer ever carted the tenth or even twentieth of that amount? It is obvious that the N H  $\frac{3}{4}$  spread on fields in the ordinary distribution of barn-yard products is of no moment. The quantity with usual falls of rain greatly exceeding in the course of a season any conceivable supply by human instrumentality. These results put the question of the source of ammonia or nitrogen out of all doubt." Here, for a moment, I shall return to Mr. B—t. After stating my mistake again, he says, "Mr. Copeland has put out of sight the 8000 lbs. of N H  $\frac{3}{4}$  which Dr. Krocke found in the soil, and he would have us believe that Prof. H—d has proclaimed to the world the absurd idea, that each acre of our land annually receives from the falling rain 8000 lbs. of N H  $\frac{3}{4}$ —an idea which, from the nature of the case, every practical man knows cannot be true."

Now, have I made Prof. H—d give this view, or is it his own idea? He tells us, as above quoted, "The quantity with usual falls of rain greatly exceeding in the course of a season any conceivable supply by human instrumentality." If 8000 lbs. are supplied, we admit the force of the Professor's position; but if, as Mr. B—t would have us believe by inserting, *par parenthese*, my statement of 130 lbs. in his version of the original, an equal and greater amount could easily be supplied by any tyro in farming, as any manure affording even six per cent. of N H  $\frac{3}{4}$  to the ton would, if we applied a ton to the acre, more than equal the natural supply. Therefore, either Mr. H—d meant us to understand by inference that some large quantity like 8000 lbs. was naturally supplied to the acre, or else he must have a poor idea of the constituents of manure and the quantity generally applied. We must therefore answer Mr. B—t's indignant query, "Now, would Prof. H—d, Liebig's pupil, have had the temerity to publish," &c., by something very like an affirmative, unless, indeed, Mr. B—t will kindly come again to the rescue, and re-interpret the Professor's words.

Here, then, is just the story as Prof. H—d gives



it. Whether he meant more or less I know not; nor ought I volunteer to speak for him. If *his own words* make him ridiculous in Mr. B.—'s eyes, I can only say, that I should prefer Mr. B. would "render unto Cæsar," &c.

It is, of course, unnecessary for me to descend into the minutia of the argument, having once set the important fact on its own and right foundation. If the principle is right, the accessories are so too.

As lack of time prevents me at present entering further upon the subject of nitrogenous and liquid manures, I shall refer all desirous of further information to Dana's Muck Manual.

I will conclude by quoting once more from Mr. B.—t, taking the liberty to substitute his name for my own. Mr. B. "is a perfect stranger to me, and I am bound to believe his object in writing is to aid the cause of agriculture;—nevertheless, he has made a mistake by which he has arrived at wrong conclusions."

#### DISBARKING TREES.

If our memory rightly serves us, we have somewhere seen extracts from some magazine of horticulture or other, commenting upon Professor Turner's plan of disbarking the cherry. It is impressed upon our mind, also, that there was a dolorous attempt at facetiousness in the article alluded to, an attempt abortive as well as dismal. There are some people,—nay, truth to tell, some editors even—who invariably decry, as absurd, whatever does correspond with their own experience, or does not emanate from themselves or their clique. Without examination, or at best examining with a view to strengthen their disbelief, they ridicule the experiment and abuse the experimenter. Such persons are fair game, to be hunted and bagged in the manner most convenient for the sportsman;

"What reck's it where, or how, or when,  
The pricking fox is ta'en and slain?"

Prof. Turner, of Illinois, is a horticulturist of high character, and his assertions, however much they may conflict with our preconceived opinions, are entitled to respect. To doubt a thing because it is novel,—because it is contrary to our experience—is to lay the axe at the foot of the tree of Knowledge. Fulton's theory of steam vessels was at first laughed to scorn. The report of the great discovery of Daguerra created much mirth. Gun-cotton was placed on the same shelf with Paine's water gas. Guenon's theory of judging of the yield of a cow by the lay of the hair was hooted at. In fine, to mention the discoveries in every science that have been received with ridicule is to furnish an almost complete list of them.

With regard to Prof. Turner's plan of disbarking trees, which has been decrised as "opposed to nature" &c., &c., we have before us a letter from an experienced and judicious cultivator, Mr. George Jaques, of Worcester, from which we make the following extract, sustaining the views of Prof. Turner:—

"I have now sufficiently tested the practice of disbarking the cherry, as recommended by Professor Turner, of Illinois college. I have extended the operation also, with *equal* success, to the plum. The results upon both trees are the same, and in a *high degree* satisfactory. The trees become early clothed in the fine rough bark which belongs to the *adult* age of all our hardy fruit trees, and indeed of nearly all the trees which are indigenous to our rigorous climate.

And further, there is a *modification* of the process which I will describe when my experiments shall have been sufficiently matured, and *not* before; for this firing between "half-cock and handle-cartridge" often does much mischief. The modification I allude to has done me valuable service in two or three instances, when tried upon the pear, and even upon the apple. The operation, as applied to the cherry and plum, consists simply in taking off the thin outer bark or rind by cutting a slit lengthwise of the tree, and then peeling it with the fingers. Certain conditions are *essential* to success. 1st. The tree must have been growing where it is, at least one year, and must be vigorous and healthy. 2d. It must be of at least two years growth from the bud or scion. 3rd. The operation must be performed not earlier than the last of June, *otherwise* the patient will be in great danger of dying under the operation—a consummation of things always to be dreaded by the experimenter; since the loss of a fine tree is a sore tribulation of itself—to say nothing of the chagrin of a failure, and the consequent sneers of one's neighbors.

To everything of this kind there are wise heads who raise objections; "it is *so* unnatural," say they. This is true enough; let nature alone, and she generally takes care of her subject. But what has nature to do with a fine fruit tree? We transplant it, we prune it, we graft it with scions themselves hereditarily in an abnormal state, we feed its roots with manure, we mulch, hoe, and defend it from insects, until its very existence is altogether *artificial*—moulded, guided and preserved by human skill! Nature, unassisted, is incompetent for our purpose. To the scientific cultivator she is an excellent servant—nothing more.

A word in regard to the theory of this process. The passage from *smooth bark* to *rough bark* is a crisis in the life of a tree, analogous to the change

from youth to puberty in animal life, and alike often attended with fatal consequences. In both cases we are able to render valuable assistance to the more or less artificial plants and animals which we have domesticated into our service.

In the case of a tree when once this crisis is past, we feel that the certainty of a long life is greatly increased. The *rough* bark protects it alike from the burning sun of the summer, and the merciless frost of the winter. But why cause *such* a bark to grow upon a mere sapling? We have one answer for a thousand similar queries. It is sufficient to say, "*the results of the practice satisfy us*;" and so we have little regard for opposing arguments. More of this by-and-by."

The plan thus appears to be not only reasonable but successful, and not more "opposed to nature" than other operations now common.

Four or five years ago, Mr. Lang, of Providence, informed us that in his youth, (twenty or thirty years previously,) he had disbarked pear trees, that would bear no fruit, with the utmost success, and that this treatment never failed to make them fruitful.

Ed.

### THE LATE A. J. DOWNING AND HIS WRITINGS.

BY GEO. JACQUES, OF WORCESTER, MASS.

"Since the issue of this number, intelligence has been received of the death of the Editor. MR. DOWNING was among the fated passengers who perished by the burning of the HENRY CLAY, on the Hudson River, on the 28th inst. His body was recovered on the following day."—[The Horticulturist Extra, August, 1852.]

The August No. of the *Horticulturist* has gone forth to the world, and the eyes of a thousand readers have lingered with sorrowful interest over its pages; but alas! for the versatile genius, the gifted intellect, the refined discrimination, the elegant taste of its accomplished Editor! Downing is no more! In the morning vigor of life and hope, full of the promise of usefulness, rich in the friendship of many hearts, he passed in one short hour from his home to an untimely grave. Suddenly summoned from among the living, he sank beneath the waters of the Hudson, whose scenery he loved so well. Yet was it a fitting place for such a one to die! On the shores of that majestic river was his birth-place—the school where he first learned to admire whatever is beautiful, or picturesque, or wild. They were endeared to him by the innumerable ties of hallowed associations; they had been embellished, as we see them now, by rural palaces and cottage homes, owing all their charms to plans which he had designed, or which had been executed under his guidance and supervision.

Born in a quarter of the world, where for two

centuries the finer arts of culture had been feebly struggling to make their humanizing influences felt, and entering upon the duties of life at a time when an insane worship of gold had begun to absorb all other religion, he zealously strove to turn back the minds of his countrymen to the study and appreciation of "THE BEAUTIFUL AND THE GOOD;"\* and surely no one ever saw more clearly or felt more deeply than he, how the energies of the better nature of man may be stimulated into a healthful activity, by associating all the forms and signs of external beauty with the sacred name of home.

Ambition could not have sought a more dignified or ennobling object. For this, to the last moment of his life he labored with untiring industry, with trustful and unwavering zeal, and with the encouragement of the most gratifying success.

It is in this department of his labors that his loss will be most severely felt. Here at least, if not elsewhere, he stood confessedly in advance of any writer who has lived upon the American continent; a pioneer in a most attractive yet hitherto almost unexplored field of literature. Mr. Downing was not merely a practical horticulturist and landscape gardener. He was least known by those who knew him thus only. It is true that most of his writings were of a didactical cast, but a genial originality, a high tone of moral sentiment everywhere pervades them. Called home thus early to a better world, he has left behind him much that will take high rank among the permanent literature of the age in which he lived. Through these works, though dead, he still lives, revealing to the Christian a new worship of God *the Creator of infinite Beauty*, and teaching to good and true men everywhere new sources of hope in the influence which the cultivation of rural taste may exert upon the progress of civilization. Alas! what a loss indeed, when such men die! Who can place metes and bounds to the influence and the value of such publications as "*Cottage Residences*," "*Landscape Gardening*," and "*Country Houses*?" or of the monthly missions of that most instructive messenger of rural art and rural taste, the *Horticulturist*?

How many eyes have not these writings opened to a perception of the beauty of proportion, symmetry, and order; hence the source of refinement and of much that most distinguishes civilization from barbarism. In how many breasts have they not multiplied the ties, and strengthened the love of home—that noble sentiment, that contributes so largely to the amount of human happiness, that elevates so much the moral nature of man, and

\* The motto of Mr. Downing's Seal was "*Il Bello et il Buono*."

to which this great nation may yet be deeply indebted for the security and permanence of its institutions.

Who now, as he, shall unfold the immutable principles of taste, or teach that harmonious blending of the useful and the beautiful—that combination of architectural decorations with the charms of rural scenery, by which a country residence may almost be transformed into imagination's realized dream of a primeval paradise? Other men have written, and may continue to write with sufficient ability upon the details of practical horticulture; but who shall ascend to those higher walks of literature to trace, as DOWNING has traced, the progress of taste as parallel with the advancement of civilization, contrasting the condition of life amid log-huts, stumps, fields, and bowie-knives, with that whose symbols are tasteful cottages, smiling lawns, and all the amenities of social refinement.

Who shall explain so clearly, and illustrate so beautifully the value of the moral *sentiment of home*?—that sanctuary of a nation's purity, and the prolific source of its intellectual wealth—that sentiment which, “with its thousand associations, has like a strong anchor, saved many a man from shipwreck in the storms of life.”\*

We seek not coldly to analyze the private character of our lamented friend. It concerns us not to inquire in how small or in how great degree he may have lived exempt from frailties common to all humanity. Nor will we vainly attempt, in stately phrase, to pronounce his eulogy. But as we seem to gaze upon the fearful picture of that last appalling scene; as we seem to listen when the temerity of reckless competition invoked the wrathful demons of fire and water to hurry into eternity so many valuable lives; with a deep feeling of sadness, and under the first impulses of bereavment for an irreparable loss, we have penned the humble tribute of these few lines. Others—more competent—shall fittingly commemorate his worth; the hands of more intimate friendship shall write his epitaph, and decorate his tomb. Our's be it to hear his name in the rustling breeze, which whispers in the forest—to behold his monument in every vine-clad cottage, that nestles in beauty beneath the leafy elm—or where the elaborate villa, from amidst its architectural decorations, looks proudly forth upon the gay parterres and verdant lawns, and all those rural fascinations with which taste may embellish an earthly paradise. It is ours TO FEEL that the voice of a beneficent teacher and guide is forever hushed, and in our mourning hearts to rear his cenotaph.

In the years to come, when men shall bow less abjectly at the shrine of mammon, when, in more advanced stages of civilization, they shall pay higher homage to the achievements of intellect, when enlightened culture, and refined taste, and victorious truth shall wear the laurel wreath, then, not till then, will the world duly reverence the lives, and gratefully cherish the memory of its chiefest benefactors.

G. J.

Worcester, Sept., 1852.

### Letters on Agricultural Education.

BY AGRICOLA.

To the Hon. Marshall P. Wilder, of Boston, President of the Norfolk Agricultural Society; Past President of the Massachusetts Horticultural Society; and Chairman of the Board of Commissioners for Agricultural Education in the State of Massachusetts.

#### LETTER XI.

##### THE INFLUENCE OF BOOKS ON AGRICULTURE IN PROMOTING AN AGRICULTURAL EDUCATION.

To raise doubts as to the influence of books on any science, in promoting a knowledge of that science, and then to maintain a lugubrious argument for demolishing the doubt, is about as valiant as the building of a windmill in order to show one's skill and strength in wrestling with it or in overthrowing it. The fact, that books will have such an influence, if not self-evident, is so much in accordance with all our habits of thought, that no one need spend time to prove it. We might as well attempt to prove that there is genial warmth in the rays of the sun when we all feel the power of it. We might as well attempt to prove that the uniformly progressive tendency for development and expansion in the vegetable and animal kingdoms is a law of nature, when we are constantly witnessing all around us the agency of this law. These are facts which need no proof. They are a species of first principles at the foundation of all research and investigation. They are to be used as the basis on which all theories relating to them are devised; the foundation on which superstructures are to be raised.

Such is the established conviction of all reflecting men. Else, why is it that the lawyer has his own law library? Why is it that the physician has his medical library? Why is it that the Christian minister has his theological library? If one in either of the professions were to be without books to which he might refer, we should think him a mere pretender—perhaps a quack. It is the same with the professors in our classical and scientific institutions; each one is furnished with the books relating to his own department of instruction. And even the artistic fraternity that perform their labors with legs

\* Preface to Downing's "Country Houses."

crossed like cob-houses, are beginning to place the perfection of their trade on printed rules. They have their diagrams and their Gunter's as well as the land surveyor and the master mariner. Without them we should have few dandies in our country, unless they were exotic. The farmer in this respect has seemed to stand alone; to repudiate all auxiliary agency in achieving the end of his labor; either supposing it is wholly a mechanical operation, requiring neither study nor thought; or, that the persons to perform it are born with all the requisite instincts for it, as fishes use their fins in the water, and birds use their wings in the air.

What are books? Simply the record of knowledge acquired by an individual, or by a number of individuals. The books of a particular age are the records of what men learned or knew in the generation of men that existed in that age. Thus the books written in our own age will be so many compends of what men now know, whether received from a past generation, or the result of their own discoveries and inventions; and they will become the evidence to the next generation of what is now known. If it were not thus to be preserved; if not written in books; much of this would be lost. The next generation would have to learn it over again, or live in ignorance of it. So it has been heretofore. Books are a late invention. They were unknown to the ancients; or, rather the process of making them was so tedious and expensive, that very few existed. Hence, much that was known by the early races of men has been lost. The first four thousand years of the world appear to us like a blank. The discoveries and inventions of the last fifty years are a thousand times in amount of all that has come down to us of what men knew in the first four thousand years of the world's existence. This is true in reference to agriculture and to every thing else. What do we know of agriculture for the first four thousand years; of the implements used in tillage, or of the nature and amount of the crops? Literally nothing. Had this been written in books, we might perhaps now profit from it. What do we know of the mechanic arts in that period?—Nothing as it were, save what comes to light in excavating the ruins of the overthrown cities. Tradition in most matters is an uncertain guide. We must rely on books for certain evidence of nearly everything we know. The difference between the one and the other is about the same for general purposes as the difference between oral and written contracts in business. As much as farmers dislike books on agriculture, but few of them would receive a verbal promise as evidence of debt, or for the title to their farms instead of a negotiable note, or

a warranty deed duly registered. We do not censure them for this. It is an evidence of their sagacity.—But we would suggest to them, that the well defined and durable records of the principles and processes of agriculture may, in numerous cases, be entitled to a corresponding preference.

For the foundation of an agricultural education we would have an abundance of books on the subject of agriculture; and we would encourage a liberal diffusion of them throughout the land. To create a taste for the reading of them we would have tracts or agricultural journals, or both, more simple and elementary in character to precede larger works, as we have previously shown. If farmers will not purchase these books themselves, there should be in every town, and indeed in every school district, enough of them, in public libraries, say district school libraries, to enable the members of each family to read the most important treatises, on all the branches of rural economy. The cost of it would be nothing compared with the benefits that will grow out of it. The measure too would be popular. What measure has been more generally popular than the establishment of the district school libraries, which has in some of our States been made with praiseworthy wisdom and liberality. Where this has been done, all that is wanted is the addition of the works on agriculture, if not already obtained. Where this has not been done, let the example of the State of New York be imitated till such libraries be found in all convenient localities throughout the whole country. No space of a mile square, where there are farmers and mechanics, should be without one.

And to encourage a disposition to read and study these books a premium might be given by the country Agricultural Society annually, to the individual who has the best agricultural library, of his own, and another to the individual who shall make it appear that he takes and reads the greatest number of agricultural books from the public libraries; not, however, giving the same individual a premium oftener than once in five years. Fifty dollars spent annually in each county for such premiums will soon cause visible effects wherever offered. In five or ten years, under such auspices, books on agriculture will be as plenty as arithmetics, geographies and grammars now are. Then it would require none of the log-rolling influence heretofore practiced, and without success, to establish on the most liberal basis, institutions for scientific agricultural instruction, or any other public pecuniary appropriation to advance the interests of husbandry. The farmers themselves would then be foremost in all such movements; or, if not foremost, would be the first to give them a valid sanction. Let it be asked who can doubt that

such would be the fact? Let it be asked, in what manner fifty dollars annually can be better appropriated, than in thus giving an impulse to the progress of scientific agriculture? The case is clear; or else we know little or nothing of the philosophy of mind; little or nothing of the motives to induce human effort. And it would be, we apprehend, an easy matter for each Agricultural Society to obtain fifty dollars to be thus used, in addition to what is now raised for other purposes.

It will be perceived that our theory for an agricultural education—one that shall be general in the community—is a reversion of the order heretofore proposed for it. We propose to begin where others have proposed to leave off, and to leave off, if we leave off at all, where they begin. If we understand the plan proposed for such an education, it is to commence with agricultural colleges and high schools; that this is the universal panacea for uprooting the old prejudices of our farmers as well as for upturning a sub-soil, and for making all the agriculturists of the land efficient scientific co-adjutors with Prof. Mapes. We propose to commence by creating a taste in rural communities for rural literature and science; to do this by sending among them tracts—by sending to their own doors an army of agricultural lecturers—by inducing them to read agricultural books—by making agriculture a common school study—and, above all, by having all our professional men educated in the science and the practice of agriculture. This in the process of time—the quickest way we think—will lead Congress and our State Legislatures, to do voluntarily every thing needed for improvements in agricultural science and practical farming. Our theory does not require any toilsome and enervating procrastination in waiting for the action of Congress or State appropriations. We may begin at once. Let a spirit of new vigor be infused into the existing Agricultural Societies; let new ones be formed; let public minded individuals publish and circulate cheap tracts, and other books on agriculture; let them encourage the circulation of agricultural papers—might there not be from twenty to fifty new subscribers obtained in most towns, if some individual would interest himself on the subject?—let one or more individuals in every town or school district make an effort to introduce the study of agriculture into the common schools—it is not credible that it cannot be done, if even a single individual were to make the effort in each of such localities—is there no one of public spirit enough to do it? In such a labor there is no occasion for any legislative action—no occasion to wait till next year—go to the work at once, in earnest; and then be assured, it will be done. ]

But if the commencement of the work is to depend on legislative action—on the establishment and endowment of agricultural colleges in number sufficient for the task, when, let it be asked, may the process exhibit signs of consummation? A voice from the twentieth century might answer, *Never!* And, provided we now had a prime agricultural college, with rich endowments and able professors, for instance in the rich farming county of Sussex or Warren, N. J., without any preparation in the minds of the inhabitants for it—the preparation for which we provide—where would be the pupils—where would they come? Could it be imagined that the halls of such a college would be crowded with young men from the different townships of the county, pining for a knowledge of agricultural chemistry? No, they must previously be impressed with the importance of the knowledge to be obtained; for we might as well suppose that young men in masses would press into our Universities for instruction in the ancient classics or philosophy, when untaught of the value of these studies. Let them be first impressed with the value of them, then they will rush with youthful ardor to the places where they can quaff at the pure and deep fountains whence streams of mental aliment are made to flow. It would be so with the sons of farmers in relation to agricultural colleges. Unless previously imbued with a love of the knowledge so to be given, the lecturers would be obliged to harangue in empty halls, with no response save the echo of their own voice; and, ultimately, the halls might become the shelter of the bat and the swallow, the sheep and the goat.

Think not, my dear Sir, that I fail to appreciate the labors of yourself and others acting with you in this noble enterprise. Had it not been for these labors I might never have felt interest on the subject. The subject must be agitated widely and deeply, before we can expect great results. It would be marvellous, indeed, if, constituted as we are, the first effort were to reach the very point to be subdued, and to achieve the victory to be obtained. We might as well suppose that the first cannon shot would make a wreck of the seventy-four gun ship, or that the first thrown shell would cause the strong citadel to surrender, or that the first land skirmish would reduce an empire to a state of vassalage. It is not an order of Providence that great events are compassed in so short a time. Men must exercise patience and perseverance.—Then the triumph will be the more prized; the benefits of it more widely enjoyed.

You and your co-laborers are the honored pioneers in this campaign for invigorating the mind

and the soil. I act only a subordinate part. I lay claim to nought but a few second thoughts. When there shall be spoils of victory, they will belong not to me. They will belong to those who have borne the heat and burden of the day; who have for years been on the ramparts struggling for success; and the wreaths of triumph will also rest on them, whenever it shall be obtained. I have reached a period of life where the worldly honors that await a champion of great events present a dim lustre. I labor in this cause because I love labor, and not for the honor of a successful termination of it. Once I might have been influenced by other motives. And I can labor in it, because it is a duty of all who have talents and health, to consecrate them even to the end of life. With such a view of it, life has a definite value, with corresponding responsibilities; but with other views of it to guide human conduct, it would be difficult to tell how little it is worth.

I feel strongly tempted to touch upon one point in particular, which I had not purposed to mention to illustrate the influence of books, appertaining to rural literature, on a rural community. I allude to works on rural architecture. There is nothing in a rural landscape which more agreeably impresses the traveller than a comely style of farm houses, cottages, and other edifices needed on a farm. It is not simply so with the traveller who has a scientific knowledge of the principles of architecture. It is, in a measure, so with others. There is in all well balanced minds an apprehension of what is comely or beautiful, although in hundreds of cases they may be unable to determine the reasons for the emotion they experience. Well formed objects cause a pleasure in the mind of the beholder, and ill formed ones cause a painful sensation, although ignorant of the philosophy which occasions the difference. Few are so stupid as not to gaze with delight on a beautiful human face, a bright black eye, or well proportioned limbs; or to turn away, in disgust, at such as are of a contrary description. The same intuitive impulse operates in relation to architectural structures. Who would fail, however ignorant he might be of the principles of architecture, to bear testimony of the fact, when on the one hand beholding an edifice for a human habitation with one corner lower than the others, with windows and doors of all shapes but right angular ones, with its timbers more resembling the natural growth of trees than straight lines, and with numerous other similar outrages upon mechanical skill; and, on the other hand, beholding one with proportions of perfect symmetry, denoting adaptation to convenience and durability, as well as to the canons of a well cultivated taste, and this, moreover, encompassed with equally well con-

structed outbuildings, so arranged, as to furnish materials for an elegant landscape? Even a horse might seemingly be enabled to mark the difference between the two.

In this country there has generally been a deplorable deficiency of taste, and of adaptation to convenience and comfort in farm edifices. In multitudes of cases, the barn is known from the house rather because the occupants of the one have four legs, and those of the other have two, than from any prominent difference of architecture. By removing the windows and chimneys from the latter to the former the occupants of the two might exchange quarters, without much loss to the one party, or gain to the other. For this there is no necessity. The difference of cost, between such a style of structure, and one that commends itself to the man of taste, is not of any magnitude. The materials in both cases are about the same. All the difference is in the amount of labor required, and this cannot be considerable, if the builder employed understands his business. Surely, it is as easy to erect houses and buildings in good taste, as to erect those presenting every species of incongruity and deformity; and those different structures shadow forth the good sense of the proprietors, or the want of good sense, as the case may be. We think a good agricultural education should include correct notions on rural architecture; and this cannot be well accomplished unless by the medium of approved books containing the principles of the science, with designs of every variety, whether relating to cost or capacity. Our agricultural journals are occasionally doing something by plans and specifications of houses to enlighten the minds of their readers on the subject. This is as it should be.— In the want of more ample means for correcting the evil, it may do much good. It already has done much.

However, the subject is of so great importance, and embracing such a variety of details, a volume, or even a number of volumes, conveniently arranged, should be devoted to it. If the works on Cottage Residences and Country Houses, by Downing, the Rural House, by Wheeler, and Allen's Rural Architecture, or similar ones, were to be generally read and studied, in the country, by persons erecting edifices there, in a few years, instead of the former monstrosities of architecture, there would be seen the beautiful cottage surrounded by all appropriate outbuildings and other needful appendages, upon knoll after knoll, and by the sunny hill-side, and in the sequestered forest niche, throughout each winding avenue that connects village with village, and town with town. In the green pastures between them would be the well fed herds, indicating content

to back up the same load. Fifteen or more teams competed. We do not learn the names of the successful contestants.

The Plowing match, as usual, called together its thousands. Twenty-seven teams were entered. The work was well done, in good time, without racing. The first premium was accorded by the popular voice, and by the Judges, to Obadiah Brown, of North Providence, and the second to Daniel Winsor, of Johnson—the others we do not remember.

The show of Poultry exceeded anything that has ever been seen in the State before; and, in the number of varieties exhibited and the excellence of the specimens, we candidly think, and therefore declare it to be, unexcelled by any former show in America anywhere. Mr. John Giles, of Providence alone exhibited over forty varieties of gallinaceous, and aquatic fowls. Mr. Childs, of Woonsocket, Mr. Edward Aborn, of Providence, and 37 others were contributors. We were pleased to see Dr. Eben Wright of Dedham, and Mr. Sampson of Roxbury, and other amateurs from abroad, present, and careful in their examination. From this great turkey growing ground, there was no evidence that the race of gobblers had not died out. This should not be so. Rhode Island supplies the Boston, Providence and other markets with tons of turkeys annually. She surely should supply her own state show with a single live specimen of the true *black-leg* breed.

Some South Down and Leicester Sheep were shown by various individuals. The R. I. mutton, from the rich pastures of the *island* of R. I. stands superior to all other American sheep-flesh in the estimation of epicures; but of late years some residents of several States have been pleased to speculate on this *reputation*, and by palming off Brighton-bought mutton, have rendered buyers suspicious. Will not the sheep raisers of the island defend their breed—stand up for their color, if it is *black-faced*, as all South Downs are?

Few Swine were seen; these were generally good and generally Suffolk.

Of the numbers that attended this Show, we can now, (Sept. 18th,) scarcely form an estimate. So great have continued to be the crowds of gratified spectators, that it has been determined to keep the exhibition open three days longer, and until Wednesday, 22d.

The Show of Fruit and Flowers by the Horticultural Society entirely fills one of the large Halls, which is about 100 feet square. We were prepared to see the fruit dwarfed by the dreadful drought of the past season, but the long tables are bending

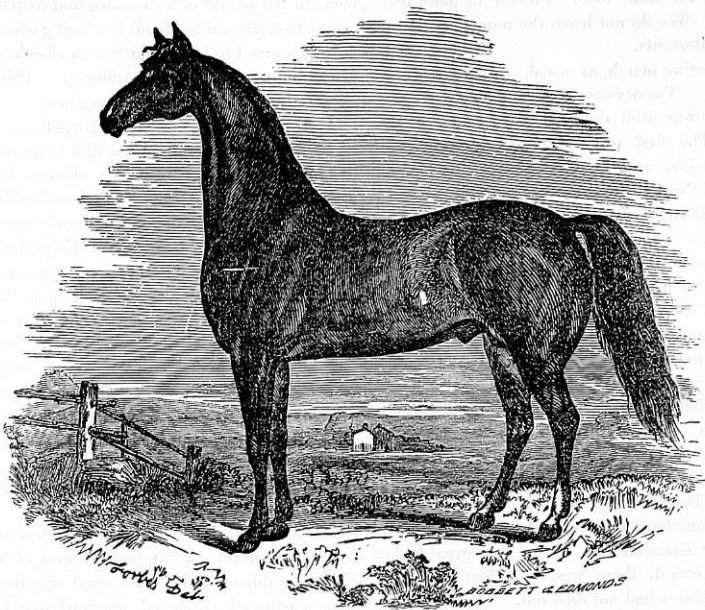
beneath the weight of well-grown and exquisite delicates from the orchard and the fruit-garden. The flowers seemed to blush and "turn all colors" at the reflection of their own loveliness. This young Society is now exceedingly strong in the legs.

The address of Hon. Geo. R. Russell was delivered on the 17th, and listened to by a large and attentive audience. Mr. Russell has the rare faculty of interesting all classes—the learned and critical, and the unlearned and hyper-critical—and consequently his hearers with one voice sound his praises. The oration delivered on the occasion was an elegant production, eminently fitted for the time, the place, and the people. A current of dry, and at times pleasantly sarcastic humor pervaded it, producing smiles at the moment, but providing food for after-thought, also. The address will be printed, when we will extract some of its beauties to adorn and enrich the pages of this Journal. Ed.

#### VERMONT STATE AGRICULTURAL SOCIETY.

The second annual Show of this Society was held at Rutland on the 1st, 2d, and 3d days of September. The rains, which had washed the dusty face of the earth and freshened the verdure of her garments, considerably ceased in season, and all Nature was in smiles. The ground selected for the show was a very gem of picturesque beauty. On the east rose the rocky heights and jutting peaks of the Green Mountain range, fringed to their very summit with the ever green. Answering, height to height, on the opposite side towered the Western Hills, belted and crowned with the pine and the fir. On the North again were mountains, and to the South mighty hills. Surrounded by these giant sentinels and screened from harm by their encircling strength, appeared the steeples and roofs of Rutland, hiding as it seemed in verdure. And here were gathered thirty thousand sons, daughters, nephews, and neices of Vermont.

One great feature of the fair that called together the mighty multitude, was the show of the famous Morgan, Black-Hawk, Hambletonian, and other blood horses; and herein, great as was our expectation, we were not a whit disappointed. Never before have we seen such a collection of splendid animals. Prancing with pride and restrained ardor appeared the glorious old GREEN MOUNTAIN MORGAN, backed by his owner, Silas Hale, of South Royalton, and followed by fifty or more of his get and family. With princely tread and noble mien comes BLACK HAWK to the field, with a long train of coursers claiming his blood—a proud man this day, and well may he be, is David Hill of Bridport.



### CONSTERNATION.

We cannot here enumerate all the fine horses on the field; our list of Hambletonians and others is unfortunately meagre; but by the kind arrangement of the owners, we can present the names of the principal Black-Hawks and Morgans on the ground. As we sat pencil in hand, surrounded at one time with the Green Mountain tribe who champed the bit and pawed the sod on every side; and at another by the Black Hawks, who swept like eagles to the spot, with their fiery eyes and bird-like motion, often we were reminded of the homely confession of the country swain with a lass, alas! on either side—

“How happy could I be with either,  
Were t’other dear charmer away.”

The following lists will be found to contain almost all the horses on the field that the Vermonters brag on:—

#### MORGAN HORSES.

*Green Mountain Morgan*: a noble animal famed throughout the country for his style and carriage, owned by Silas Hale, of So. Royalston, Mass.

*Young Green Mountain Morgan, or Aiken horse*: sired by old G. M. M., dam unknown, 7 years old. Sold on the ground by Mr. Hale, for \$1000.

*Prince Albert*: owned by S. F. Wright, Nashua, 7 years old. Sired by old G. M. M., dam a Messenger mare.

*Green Mountain Morgan, Jr.*, 11 years old.

Owned by R. W. Buckman, Windsor, Vt.

*Morgan Colt*, 3 years old. Van Ness Perkins Barnard, Vt.

*Green Mountain Farmer*, grand-son of old G. M. M., owned by Elisha Hewitt, Pomfret, Vt.

*Morgan Colt of J. S. Messer*. Sired by a French Horse, dam a Morgan mare.

*Morgan Mare* of A. G. Dewey, Quechee Village, Vt.

*Green Mountain Morgan*, 6 years old. Sired by Lawton horse. Owned by Taylor Alexander, Hartland, Vt.

*Young Green Mountain*, 6 years old, owned by Geo. Field, Greenfield, Mass.

*Morgan Eclipse*, mare, 5 years old.

*Morgan Eclipse*, stallion, 4 years old, owned by J. and R. C. Johnson, Bradford, Vt. [From a notice of this horse shown to us, we learn that “his sire was Morgan Caesar; his grandsire, the wonderful Woodbury Morgan; his g. g. sire, the king of fall sires, was the first Morgan ever known. On his dam’s side, he claims as grandsire that astonishing and everlasting-bottomed horse, the American Eclipse.” The owners are said to have declined \$2000 for this horse.]

*Gelding* of W. S. Carter of Quechee Village, a fine animal and very fast.



*Gifford Morgan*, owned in Wilmot, N. H. This noble horse received the first premium at the N. H. State Show, the last year.

*Bailey Horse*, Nashua. Sired by old G. M. M. *Green Mountain Boy*.

*English Morgan*, 6 years old. A fine mahogany chestnut.

*Flying Morgan*, a bright bay, owned by Mr. Adams of Burlington. [A truer horse than this never trod iron. He is well named the *flying Morgan*. To oblige the assembled crowd, he went around the course twice, doing his mile easily in 2:46.]

*Young Gifford*, or Pike horse, 9 years old.

*Morgan Bulrush*, sired by Clark horse, whose dam was old Justin Morgan; the dam of Bulrush was sired by the Burbank.

*Gifford Maunty*. These three beautiful horses are owned by Ebenezer Pike, Cornwall, Vt.

Weir's horse, of Walpole.

*Young Woodbury Morgan*, (his grandsire was the old Woodbury,) owned by A. Lyman, West Randolph, Vt.

#### BLACK HAWK HORSES.

*Old Black Hawk*, a noble jet-black stallion, perfect in form, graceful in motion, clean limbed, brave as an eagle but kind as a dove. Such an animal as a king would delight to bestride at his coronation. The old Hawk has fought many a main, but never was conquered.

*Three year old Colt*, owned by young Mr. Hill. A perfect specimen of a horse.

*Two year old Colt*. A beauty with promise.

*Vermont Eagle*. Brown.

*Blodget's horse*, of Burlington; 3 years old.

*Perry's horse*.

*Cook's gelding*, 5 years old.

*Cornwall horse*, 3 years old.

*Doane's Shoreham colt*, (black) 2 years old.

*More's two year old*.

*Ethan Allen's*, of Ticonderoga, 3 years old. This horse was offered to trot against Rattler, for \$1000. There were other beautiful Black Hawks on the ground, but it was as much as a man's life was worth to venture among those streaks of lightning, unless by appointment, as we obtained the foregoing.

#### HAMBLETONIANS.

*Rattler*, a noble animal, owned by James Bigott, Pawlett, Vt.

A brown horse, 6 years old, } Mr. Harrington's,

A chestnut horse, 5 years old, } Bennington, Vt.

*Grey gelding*, 5 years old. Owned by Leonard Williams, S. Adams.

*Wantastiquett Maid*, owned by Bemis and Lawrence, Brattleboro', Vt. This mare is of a chestnut

color, and as honest a horse as ever wore harness. A match was made up on the field with a powerful grey horse, for \$100, and though the filly was green, she beat with ease in three straight heats, making time as follows: 3:02, 2:58, 3:01. On the next day we saw her driven twice around the track, which is 4 rods over half a mile, with a slack rein, in 2:48. She promises to be heard from hereafter.

*Two or three Rattler colts*.

This is a slim sketch of one the most interesting and exciting horse shows that we ever witnessed, bearing the same relation to what we saw that the reading of the *bill of fare* does to a past banquet.

Vermont boasts not only of her noble coursers, but of her splendid sheep. These were fully described in our account of last year's show. Mr. GEORGE CAMPBELL, of West Westminster, Vt., had fine specimens of his French and Spanish Merinos. Of Mr. Campbell's sheep, we have made frequent and favorable mention. We were pleased to find them in fair breeding order, and not made up for the show.

Messrs. BINGHAM were out in strength. The sheep-shearing held this year by these gentlemen was highly spoken of.

Mr. S. W. JEWETT had sheep that no one need be ashamed of.

There were other breeders on the ground with their flocks, whose names we did not learn. On the whole, the show of sheep, though smaller, was as fine as last year, and this is praise enough.

The show of Neat Cattle and Swine was very good in quality.

Mr. SANFORD, of Orwell, Vt., exhibited some of his imported Devons, that cannot be excelled in America. Better animals we never handled.

Mr. W. W. SHERMAN showed a specimen Short-horn Bull and Cow, from the herd of Geo. Vail, of Troy. [Mr. S. offers these for sale at a reasonable price. Any of our friends in Vt. or N. H. wanting such stock, may address the Editor of this Journal.]

Mr. BINGHAM had a handsome Hereford heifer, a very model animal.

And there were many others, whose owners or keepers were too much on the trotting-course to post up enquirers.

Mr. Whitney, of Woodstock and others showed Suffolk Swine of the Stickney stock that would do credit to any show.

THE MANUFACTURERS HALL was more fully filled than we had any reason to expect. Many articles in this department will be mentioned in our next number.

THE PLOWING MATCH was well contested, and,



MERINO SHEEP—OWNED BY MR. GEORGE CAMPBELL, WEST WESTMINSTER, VT.

notwithstanding the attractions of the trotting course, drew a fair number of spectators. Ruggles, Nourse, Mason, & Co., entered 6 plows. Whittemore, Squier, & Co., Chicopee Falls, R. Taber & Co., Bristol, Vt., J. Harkness, & Co., Starksboro', Vt., entered 1 plow each.

The first premium we understand to be awarded to plow of Whittemore, Squier, & Co.

FLORAL HALL was elegantly decorated by the ladies. As by the touch of a fairy wand, the bare boards were converted into columns and arches of ever-green, and the unattractive pine hovel put on the appearance of a palace of Pomona. Fairy-like as were the results of feminine taste, we are assured that there was

"Double, double, toil and trouble"

in the accomplishing, that tasked mortal arm and mortal patience. The round-jacketed young gentlemen and even some who sported the long tailed blue were chary of their aid. But with woman "where there's a will, there's a'ye a way," for

"When she will, SHE WILL; you may depend on't;  
And where she won't SHE WON'T; and there's an end on't."

The tables were covered with flowers, real and feigning; fruits; embroidery and the thousand and one things that female fingers find to do; but which the constant crowd and other impediments prevented us from closely inspecting. Looking through the hall now, by the aid of memory, with her "double million magnifying gas microscopes of extra power," we can see nothing but bright eyes

and glowing cheeks; and we inwardly resolve the next year to send a purblind, octogenarian reporter to pick up details.

The address before the Society on the first day of the show was delivered by the Editor of the *Journal of Agriculture*. Hon. W. H. Seward addressed the society on the afternoon of the second day. However people may admire or reject Gov. Seward's politics, but one opinion prevails as to his abilities. Especially has he distinguished himself during his career in Congress. The speeches of no man in either house, during that period, have commanded or deserved more admiration and attention. The address, which we could not hear because of the dense crowd, will be published.

On the afternoon of the third day, a novel feature was interpolated in the arrangements. The Amphions, a band of itinerant vocalists, announced that they would crown two noble steeds—the Green Mountain Morgan and the Black Hawk. The horses were accordingly driven up to the stand; and after a speech more long-winded than listened-to, from a masculine Amphion, one of the feminines threw a wreath over the neck of the Green Mountain Morgan. After the infliction of another speech, another Amphioness similarly adorned the Black Hawk, amid the shouts of the spectators. Brother Hale, who had meekly endured the shower of compliments and roses that were poured upon his horse, returned thanks briefly. Uncle David Hill let a five dollar bill, handed to the girl, do his talking;

and plenty; and in the distance would be seen the wide fields of grain waving, and waiting for the sickle, and of grass waving, and waiting for the scythe; while around each dwelling place would be seen the richly cultivated garden, with its lawns and terraces, and the fruit trees, bending with their luscious golden treasures, and the scarcely less rich deep green foliage. These avenues, too, are studded, as far as the eye can reach, with rows of the majestic elm, or the regularly branched maple, impregnating the air with its saccharine dews. Beneath their broad tops, occasionally would be witnessed a group of well dressed children, going or returning from the village school; and the comely maiden, also, on an errand of mercy, might impart additional interest to the mind of the beholder. Nor is this all; in the garden would be seen the matron, with primitive simplicity, watching the progress of the rising germs or the opening buds. Nor would the faithful farm-dog be absent from the premises. Upon every occasion for it he would make known the duties of his station, causing the woods to echo with the melody of his voice, and to the unsuspecting traveller would give a look of social welcome rather than of repulsive defiance. There also would be the grunTERS, great and small, as sleek and portly as milk and mush can make them. There, too, would be clusters of the feathered tribes; the pompous peacock and the strutting gobbler, with their dames watching the young broods with maternal affection and assiduity; and though last in the enumeration, not least in importance, the common barn yard fowls, with their guinea cousins, more distinguished for richness of plumage than for sweetness of voice.

In such rural scenery there is a commingling and combining of nature and art, to heighten one's admiration, no where else to be found. Let such landscape scenery in the country become general, and no one, educated or uneducated, can be insensible to the magic witchery of it over the human affections. It will become more and more general with the progress of correct principles in agriculture. This progress will be hastened with the more general circulation of well-written books on these subjects. In this way more can be accomplished than in any other way, with the same amount of money. It is to be hoped, therefore, that those laboring in this cause will not fail to give the views here presented that consideration they deserve.

AGRICOLA.

Essex County, N. J., Aug. 25, 1852.

To stop a runaway horse, throw tin pans at him, which will so increase his speed, that in a short time he will fall to the ground from sheer exhaustion. If tin pans are not convenient, a green cotton umbrella will be found nearly as serviceable.

## R. I. HORTICULTURAL SOCIETY.

Providence, September 3, 1852.

At a special meeting of the Rhode Island Horticultural Society, held this day,

Voted, that in the death of the HON. LEVI C. EATON, this Society laments the loss of one of its founders and persevering patrons; the Chairman of one of its most responsible committees, a generous contributor to its exhibitions, and a zealous and successful Horticulturist.

Voted, that this Society sympathises with his relatives and with the community, for the decease of a man so estimable in his domestic relations, and to whose scientific knowledge, practical skill, and investigating spirit, the Horticulture of this State is greatly indebted.

Voted, that these resolutions be officially communicated to the widow of the HON. L. C. EATON, and be published.

WM. S. PATTEN,

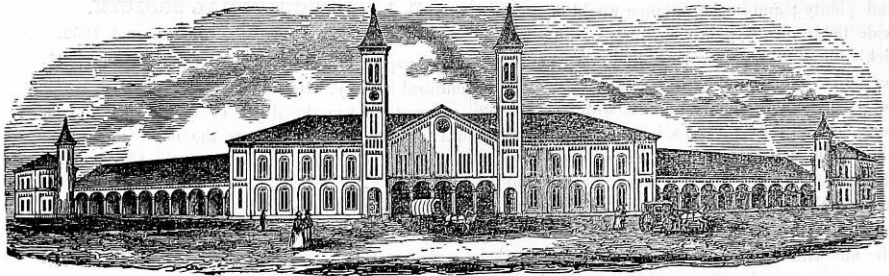
Secretary, pro. tem.

STEPHEN H. SMITH, President.

## GRAFTING EVERGREENS.

The French nurserymen are very successful in grafting evergreens, and practice it as follows: "The proper time for grafting pines, is when the young shoots have made about three quarters of their length, and are still so herbaceous as to break like a shoot of asparagus. The shoot of the stock is then broken off about two inches below its terminal bud; the leaves are stripped off from 20 to 24 lines down from the extremity, leaving, however, two pairs of leaves opposite and close to the upper end of the shoot so headed back—which leaves are of great importance for drawing up the sap. The shoot or stock is then split to the depth of two inches, with a very thin knife, between the two pairs of leaves left; the scion is then prepared—the lower part being stripped of its leaves to the length of two inches, and is then cut to a wedge and inserted, in the ordinary mode of cleft grafting.—The graft is tied with a strip of woolen, and a cap of paper is fastened to a stake, and firmly fixed over the whole graft, to protect it from the sun and rain. At the end of 15 days this cap is removed, and the ligature at the end of a month." Some evergreens, grafted in this way, make a second growth of five or six inches the first year—but most sorts do not start till the next year.—*Downing's Horticulturist.*

A bachelor having advertised for a wife to share his lot, an "Anxious Widow" solicited information as to the size of said lot.



RAILROAD STATION AT PROVIDENCE.

### THIRD R. I. INDUSTRIAL EXHIBITION.

Make way for Rhode Island! The third of the series of Expositions of Domestic Industry was held at Providence on the 15th, 16th, 17th, and 18th days of September, in the halls of the Railroad Station. Fit place for such a show! "Go ahead, Keep moving," is the Rhode Island motto, uttered by all they plan, and all they do, if not the legend on their armorial coat. "Do," says the one. "Hope," reads the other. And all that they do in the little State is performed with a cheering hope and a firm will.

Of the numbers of people who flocked to this great exhibition, we can form no estimate. At one and the same time thousands upon thousands were congregated on the grounds of the cattle show; other thousands were crowding our thoroughfares, gazing in upon the street-window displays; and the three immense Halls of the Station were crammed to their utmost capacity; inasmuch that for the safety of the lives and limbs of those admitted, the doors were closed and locked against other elbowing, pushing, panting thousands.

We did not see that the members of the Board of Managers, who had provided the rich display that congregated the multitude, stood any taller in their boots, or sported an extra feather in their caps, as they gazed upon the crowning evidences of their success; but they deserve the grateful thanks of every Rhode Island man for their long and arduous labors which have led to so gratifying a result.

The first thing deserving of mention in this State Show of Genius and Industry is the building wherein was held the show—a cut whereof appears above. It was designed by Mr. Thomas A. Tefft, a young architect of Providence, for the Providence and Worcester, and Boston and Providence Railroads; and was erected in 1848 under the superintendence of Mr. James C. Bucklin. The whole building is nearly 700 feet in length, and the towers are 120 feet in height. The offices are in the octagonal

rooms at the ends; the passenger-rooms are in the front portion of the first story, and the trains enter in the rear of the octagonal rooms at either end. The second story of the main building is used chiefly for the State Industrial Exhibitions.

This passenger station, and the adjoining freight station were the first examples of *ornamental brick-work* in this country; and hence the selection of the Lombardic style of architecture.

Of the architect, Mr. Tefft, the people of Providence are justly proud. He is a man yet in the spring-time of life; of strong and original genius, with a pure and high ambition. In a few weeks, as we hear, he sails for Europe to study more thoroughly than is here possible, the models and the spirit of Architecture. The trumpet of Fame will, by and by, tell more of him.

Entering the Halls by the western door, the first thing that fastened our attention was Manchester's display of Daguerreotypes. The specimens shown by these brothers excel anything that we have seen in New England. The Boston artists must bestir themselves.

The show of hats by G. R. Whipple, D. C. Anthony P. B. Stiness, Jr., O. M. Dutcher, and W. M. Webster was excellent. We can now save the cost of a trip to New York every time we desire to "sport a new tile." Of the respective merits of these artists in beaver, we shall not be able to judge till we have tried a hat of each. One at a time, gentlemen. We're on Whipple's now.

The elegant harnesses, single and double, of Geo. N. Earle attracted general admiration. One double set, costing \$150, was especially beautiful and well-made, as it ought to be. Bull, of New York, must look to his laurels.

Thomas Whittaker & Sons showed some splendid patterns of painted China, of American Workmanship. One toilet set, valued at \$100, was only too elegant for use. This firm also showed the Chandeliers of Cornelius & Co.'s make, that took the premium at "The World's Fair."

The Mathematical and Drawing Instruments of Joseph R. Brown are very perfection in every part. The marking on some is so extremely minute, as not to be deciphered but by the aid of a magnifying glass. With Mr. Brown and in his employ are Mr. Lucian Sharpe and Mr. Robert Henning, young men of rare genius, whose specimens of workmanship are exceedingly accurate and beautiful. Finely finished tools were shown by Joseph J. Luther, an apprentice to Mr. Brown, and a young man of great promise.

The show of Silver ware, manufactured by Gor-

ham & Company, (the same Gorham & Thurber of last year, only more so!) was superb. Go where one may in America, he will find little that can compare with the make of this house, whether for elegance of design, excellence of workmanship, or exquisiteness of finish; and none can excel them. The splendid sets that the millionaire purchases in Boston or New York, were very probably manufactured by this Providence firm, who sell largely to dealers in both cities. Do Providence people, who empty their pocket-books at the jewelry stores on Broadway, know this?



SILVER WARE, MANUFACTURED BY GORHAM & CO., PROVIDENCE.

The wood cut above will give a good idea of the style and finish of the wares of this house. The center piece is a *Rebecca Pitcher*—so called from the scenes on the sides, which represents “Rebecca at the Well,” and the “The arrival of Rebecca,” elegantly wrought in raised work. The handle and tip of this piece are also finely wrought. The *Lilly Pitcher* on the left, the *Cake Basket* and *Butter Cooler* in front are of excellent workmanship, and will bear critical examination. The *Salver* represented in the back ground, and the *Castor* on the right will richly repay examination, being exquisitely engraved, as well as richly enchased. These pieces in the exhibition attract constant crowds of admirers.

There are also many other elegant articles in the show cases of these gentlemen, than those in the cut. An *Oak Tea Set*, of six pieces—an entirely new design, and deriving its name from the chased work ornaments on the bodies and mountings.—Then we see sets adorned with “pictures of silver,” representing the growing and curing of the

*Tea plant*—the milk pitcher gives us dairy scenes the water pot shows water prospects, dear to the eye of Maine Law men, and the sugar bowl carries us to cane-breaks and Cuba sights.

The senior partner of this house is now in Europe engaging the most expert artizans in every branch of their business; and otherwise endeavoring to equal or excel the best foreign work.

The portraits by Mr. Lincoln are admirable. This artist was a favorite in Providence ten years ago, when we first knew it; but he has greatly improved upon his then conceded excellence. The portrait of Mr. Christopher Rhodes, painted apparently some years ago, is true to the life, as are others; but the oval portrait of Lt. Burnside, U. S. A., is one of the most spirited and excellent things that have come from the pencil of any artist. There are two excellent portraits by Healy; an unsurpassable one of the late Henry Wheaton, and a very good one of Mayor Burgess. There are many other paintings, of much merit, mingled as usual with a great deal of trash.

The willow-waggon—*chaises*, rather—of David Price, of 80 South Main street, pleased little people and parents.

Fine Vegetables were shown by S. B. Halliday, Thomas Andrews, Friend's School, Dexter Asylum, R. Daglish, W. Nisbet, and others. Finer garden productions we never saw than is here displayed. All that tends to make Providence independent of foreign markets for the supply of her citizens, we desire to encourage. Excellent melons were exhibited by Wm. Viall, also a Cotton plant in bloom which excited more curiosity than it would in Carolina. The Potatoes of J. L. Noyes were excellent—to all appearance. The feel of a Bank Note is more satisfactory to us, when we see the Cashier in the garden, instead of the race-course or the gin-palace.

Messrs. Greenwood & Co. made a very fine show of serviceable-looking wooden ware, of their own make—wash tubs, brass bound, meal measures, iron bound, rakes, &c., &c., and also a lot of agricultural implements from Parker & White's establishment, Boston. From a careful examination of the articles in the establishment of Messrs. P. & W., we are prepared to recommend them fully to our friends.

Messrs. Burdick & Barrett presented a good assortment of farming tools of good pattern and make.

Mr. W. H. Arnold contributed a Michigan plow, still a novelty to many; portable furnaces, tubular oven-ranges, Grecian air-tight stoves, &c., &c.

If these three establishments had a little enterprize, they and their stock of implements would be better known to the farmers of the State than they now are. Five hundred Rhode Island farmers will read this notice, who never heard of either of them.

The cast iron chain-pump shown by N. A. Eddy & Co. is worthy of general adoption by our farmer and others.

Miners' Patent cross-bar Bee-Hive, shown by Mr. E. Aborn, of Providence, who is agent for the sale of rights, attracted much attention and commendation. This is undoubtedly the best hive ever offered to the apiarian.

Mr. A. H. Manchester of No. 201 Eddy street, Providence, exhibited some double action forcing and suction pumps, of Barker's and Farnham's patents, that are admirable; but we think that THE PUMP, (as it is called,) of his own invention, or improvement, which is also a double action forcing and suction pump, and adapted to Artesian as for other wells, surpasses all others.

The uncommon beauty of the ornamental hair-work by Mrs. Rebecca A. Gray, and the elegance

of the designs, elicited warm praises from the ladies, whose taste in these matters is unimpeachable. Heretofore, many who admire this mode of calling to remembrance absent friends, have procured braiding to be done in New York, and even in Philadelphia. Such may find themselves admirably suited, on application to No. 5 Middle street, Providence.

Beautiful prints and bleached goods were shown by Clyde Works, Globe Co., A. & W. Sprague, and others. Sheetings, &c., from Allendale Co., Williamsville Co., Steam Cotton Manufacturing Co., Pontiac Mills, Stafford, Pierce & Co. Knitting, Darning, and Tidy Cotton, by N. G. B. Dexter of Pawtucket, R. I. The show of this department was shamefully small for this manufacturing State; and whether this be owing to any supineness on the part of mill-owners, or to petty jealousies, it is alike reprehensible.

#### CATTLE SHOW.

The show of Cattle on Thursday was gratifying, both for the numbers of animals shown, and their unusual excellence. Cows and Heifers that in former years would have swept off the principal premiums are now contented to be called third or fourth rate. We are pleased at the improvement in our dairy stock. The pastures, of northern Rhode Island especially, are none too rich; we must therefore select the better animals to maintain our supply of milk with fewer cows. The native stock are in all their glory in this State. Brighton Market is our breeding-ground to supply all losses by natural death, (which is the butcher's axe,) or casualties (which means departure by sickness or accident.) We do not remember to have seen three thorough-breds of any kind—poultry alone excepted—on the ground. It is not so important that the female should be of pure blood—we can improve with them by judicious crosses and continued selections. But if the farmers of this State desire to have a breed of milch-kine, that will transmit their good qualities to their young, they must learn never to use any other than a *thorough-bred Bull*, of whatever breed they please. We sincerely wish that the farmers were prepared to say that a *grade Bull*—a one-half, or one-quarter anything—was unentitled to a premium, however good the particular animal might be. And for this reason this is the true doctrine; this Bull may be beautiful in every way, but we have no guaranty in his blood that his descendants will be his equals.

The Drawing match excited much interest. The teams were required to draw a load of 2½ tons up the hill on Atwell's Avenue; and on their return,

and away drove the generous coursers, sprinkling roses in their path.

To the admirable arrangement of chief-marshal W. T. Burnham, of Montpelier, efficiently seconded by his excellent assistants, and especially aided by Mr. Henry Edgerton of Rutland, may be attributed much of the success of the show. With a crowd of thirty thousand persons we saw no instance of a serious breach of the peace—we had almost said of politeness, even.

Lingering in our grateful memory is the remembrance of the generous hospitality which we experienced in our own person, and witnessed all around us. In the family of Hon. Geo. T. Hodges, welcomed as a friend of long standing and not as a stranger, we found a happy home, and every comfort. There equally at ease, we met Gov. Seward and family; Gov. Fairbanks; Mr. Holbrook, President of the State Society; two gentlemen, delegates to the Society; and last, not least, six fair ladies.—A large household truly! but the house and the high-hearted hospitality of our host and hostess were far from being crowded to their capacity. As here so everywhere the inhabitants of Rutland opened their hearts and their homes. May all ever find hearts and homes as large. Ed.

#### PROBABLE CAUSE OF THE POTATOE DISEASE.

The following letter, suggesting a cause for the potato rot, is from the *Mark Lane Express*. We commend it to the consideration of our entomologists, and would be happy to have their opinions upon it. Ed.

"SIR,—It is now about seven years since the potato blight commenced its ravages in this country. Many causes have been assigned, and many cures proposed, for it; but how contradictory and unsatisfactory have been the result. The most esteemed theory now is atmospheric influence, from the blight coming in damp, sultry weather, such as we often have at this season of the year, affecting the more succulent plants at a certain stage of their growth; and yet the advocates of this theory are often puzzled on finding one drill or ridge in a field diseased, and one adjoining not—one variety bad, another good; the one good with A, though bad with B, and *vice versa*. The first symptoms of the disease are always black spots on the leaves, as if some poisonous drops had fallen on them, resembling those of the leaf of the sycamore tree, caused by an asphas, quite different from the black marks caused by wind or frost. The first soon increase; the stalks become blackened, the smell offensive, and lastly, though often sooner, the tubers show symptoms of decay. Cure, then, is out of the question; the best thing to do is to make use of them.

"Now the spots on the potato are caused by insects. They come about the middle of July I

think, at night. It has been remarked that the disease in many places has appeared on or about the same day each year; how many birds and insects do so? They are at first mostly in couples, and are to be found on the under part of the leaf, on the before-mentioned black spots, but are most difficult to find, for, on touching the leaf, they spring off so quickly, and with such force, that, although most invisible to the naked eye, an acute ear may hear the sounds of their jump. In a few days they increase in size, and deposit their eggs, which are white, and very pointed at the ends; after which the female, from a bright yellow, becomes almost white, and dies. I have found many of the skins of them quite perfect in shape. The eyes are near the top of the head, and are very dark colored. The young are soon found in great numbers, creeping over the whole plant, particularly on the stalk; these are much less inclined to jump than the first; some days when even touched they would not do so.

"I tried many plans to destroy them—fumigating with sulphur, tobacco, &c.—but with little effect; in fact a cure would be of but little use unless it could be easily put in practice. However, I soon found from their being so easily disturbed, and that even a very slight touch killed them, that by adopting the following simple plan, the difficulty was overcome: I put a drill harrow to work, having fastened to each end of the swingle-bar a few light branches of spruce fir, then brushing over two drills at a time, men followed spreading fresh slaked lime, 2½ bushels per acre; which, as the plants lay nearly flat from the brushing, the lime came in contact with the under part of the leaf where they were. Thousands in this way, with their eggs, were destroyed or brushed between the drills, there to be roughly used by the harrow. If, at the end of two or three days any are still to be found, the brushing should be repeated, but only when the plants are dry. The branches should not be so heavy as to break the stalks, but sufficiently heavy to bend them downwards. They will soon recover their former position.

"I have thought it right to address the Government on this subject, and to request that scientific men might be directed to examine these insects, some of which I have preserved; and I am happy to say that His Excellency the Earl of Eglington has taken up the matter most promptly; but as some delay must necessarily occur, I think it right to put the public at once in possession of my plan, so that farmers may immediately set to work to sweep away these vermin, as every day adds to the number of the enemy, and thus to the difficulty of destroying them, some of which I have even found on the specimen of the *solanum E. tuberosum*, in the College Botanical Gardens.

"Your obedient servant,

"J. FREEMAN NUTTALL.

"*Tittour, Newtownmountkenedy, Aug. 9.*

Scene—a stout gentleman and his wife gazing at their children, a pair of twins, who are encircled in each other's arms in the cradle.

*Wife.* Do look at them, husband; ain't they a precious pair of lambs?

*Husband.* If they are lambs, wife, what am I?

# The Farmer's Home Journal.

## THE BULL AND THE LOCOMOTIVE.

BY IVAN.

In a sort of moody madness  
Roamed he o'er the grassy plain—  
Hail in anger, half in sadness,  
Tossed his bushy tail and mane.  
Was he not the meadow's monarch—  
Of the pasture still the king?  
And he raised his head so lordly—  
Gave his tail another swing.

Was he not acknowledged chieftain  
Of the horned droves of cattle?  
Was he not the tried and trusted  
In each great field of battle?  
Was he not the loved and chosen  
Of the milch-kine's fairest queen?  
Was he not the admiration  
Of each bull-calf on the green?

It was true, and well he knew it  
Who his claim would dare dispute?  
Dearly, dearly should he rue it,  
Be he long or short horned brute.  
Well, at then, meant this daring stranger,  
Who, with breath of smoke and flame,  
Spouting fear and breathing danger,  
Through the meadows rushing came?

True, th' intruder's limbs were weighty,  
And he seemed a thing of might;  
True, he might be very dangerous  
If he showed a wish to fight  
But he blowed too much and loudly  
To be willing for a lark.  
And the bull repeated proudly:  
"Biting dogs do never bark;

"And I swear by fair Europa,  
When the stranger comes again—  
Rushing through the verdant pasture,  
Steaming wild across the plain—  
I will call my herd to battle,  
Boldly cross the monster's track—  
Either we shall be gone cattle,  
Or we'll drive him frighten'd back!

See! afar the locomotive,  
Whirling o'er the fragrant mead,  
And he hears the very meadow  
Where beneath the gallant lead  
Of their monarch true and valiant,  
Stand the tawney coated crowd;  
Nought he heeds them, but the bell rings,  
And he whistles very loud.

From his pent up breast escaping  
Shrieked the steam—a dismal cough;  
Frightened was the heard of bullocks,  
And they madly scamper'd off—  
All but one, and he courageous,  
Nought but death can force to yield;  
He will conquer, or, as beef-meat,  
You shall bear him from the field.

There he stands, and waits the coming  
Of his foe, who draweth near;  
Roars he with triumphant fury,  
From a breast that knows no fear.  
Sticks he down his noble frontlet,  
With considerable vim—  
But! he takes the locomotive,  
Butt!! the locomotive him.

Need I tell who most did suffer?—  
Need I speak the bullock's fate?  
Widowed cows, with ceaseless howling,  
Will the horrid tale relate,  
In the flashing of the lightning—  
In the twinkling of a thought—  
He, the chief of cow affections,  
By the cow-catcher was caught.

## THE RIVAL PAINTERS.

A TALE OF ROME.

"Farewell, my son, go trustingly forth, have thine own fortunes by untiring efforts, and it will be doubly enriched by the memory of those years of patient toil that gained so much happiness for thee. The world is bright and beautiful to a young heart, but its light and loveliness pass away. Set not therefore, too great value upon its riches. Walk calmly in the quiet path that leads to thy duty, envying none, loving all, and a purer and more lasting joy will be thine than the world can give thee. Fear nothing but sin and temptation, follow only the dictates of thine own innocent heart. Be faithful to thy friends, forgiving to thine enemies, true to thyself, and earnest in thy love of God, and with a mother's blessing on thy head, fare thee well."

And with nothing but a deep love for his beautiful art, and a heart filled with pure and lovely feelings, Guido, a young florentine painter, left home for the great city of Rome, where all his hopes and desires were centered. There, in the studio of some great master, he would seek honor and wealth for himself, and a luxurious home for her who, with all a woman's patient constancy, had toiled to gain enough to place her son where his exalted genius might be guided and taught, till he could gain that she fondly hoped; and when the time came, freely gave up all that made life pleasant to her—cheerfully bade farewell to her noble son, and in her lonely room toiled on, that he might lack nothing to cheer and help him on his way. Nor was all the mother's self-sacrificing love unappreciated or unfelt; it kept her son from temptation, and cheered him on to greater efforts, that might repay with unflinching care and tenderness, the sacrifice so nobly made.—Nothing could stay or turn him aside, while his mother's words lingered in his ear. No harm could fall on a head made sacred by her blessing, and no evil enter a heart filled with such holy love.

And so 'mid all the allurements of a luxurious city he passed unharmed, and labored steadily on till he won his way among the first of high born young artists who crowded the studios of the great masters, and as time went on, honor and wealth seemed waiting for him, but not happiness.

The kind old painter with whom he had spent so many happy years, had a fair young daughter, whom he had loved long and silently, happy that he could be near one so good and beautiful. He never thought of asking anything more till a fellow student, possessed of wealth and rank, comely in person and courtly in manner, sought her hand; and then only when he feared it was too late, did he gain courage to plead his love so well and earnestly that the old painter could not refuse to leave the choice to his daughter.

"Tell me truly, Madeline," he said, "and he you love shall be thine, with my blessing. But pause and consider; young Ferdinand hath wealth, rank, a splendid home, and a heart full of love for thee; Guido hath nothing—nay, blush not so proudly my child; I mean no earthly riches. He hath a rare talent for painting; but in this cold world these are uncared for, where gold and honors are prized more highly. Judge for yourself Madeline, which will bring the most happiness, the pomp and show of a countess, or an humble painter's home—subject to all the care that poverty brings. Wealth or love—



few maidens would pause; and yet 'tis a hard choice—both so noble and so comely—I wonder not at your indecision."

The image of the pale young painter came oftenest into the young girl's heart, and his silent acts of kindness, his humble, self-denying life, and most of all, his deep and earnest love for herself; and the gay-gallant count was forgotten. A flower from Guido was more highly prized than all the costly gifts her titled suitor laid at her feet; but she knew her father longed to see her the wife of some high born lord; his own life had been darkened by hours of poverty and sorrow, and he fondly hoped to spare her that pain which he had borne un murmuringly. So with a daughter's self-denying love she answered him—

"Father, as a painter's daughter, my life has been one of perfect happiness; why not as a wife? The count loves the beautiful art as a means of gaining honor, and even that love will soon pass away and some trifling thing succeed it. Guido is poor, and his art his all. I know the deep earnest love he bears for all that is great and good; beauty and purity he worships with a true painter's steadfastness, and while he humbly toils for bread, the noble genius which lies hidden will now awake, and hallowed by such a purpose, will bring him honor and wealth. But I am young, father, and the world is new to me; judge as your own wise love counsels, and by that judgment will I abide."

"So let it be, Madeline, and if I do not greatly err, our choice will be the same," he replied, as he passed out and left a loving heart behind, struggling with the gentle memories that thronged so tenderly about it. But with a woman's strength, all thoughts of love were banished, and she waited to fulfil her duty, hard as it might be.

"Signors," said the old painter, when he joined the rivals, who together sought to learn their fate, "my daughter leaves the choice to me, and as a father, I would ask what you would give up to win her love? Maidens are fond and foolish things, and would be hardly won. My lord, how highly do you prize the love of a simple girl?"

"More than life, liberty, wealth, or honor," replied the Count, with a glance at his humbler rival, who possessed so little to sacrifice.

"And you, Guido," said the old man.

The bright blood mounted to the pale face and clear light glowed deeper in his dark eye as he answered in a low sad voice—

"I would give up that which is more precious than life or liberty; that for which I would most gladly give the little of honor, wealth, or happiness that I possess; all these were trifles if that one thing were not gained."

"And this is what?" asked the wondering painter.

"Your daughter! her happiness is more to me than all the earth can afford. Let her bestow her love where she will, and God protect him who is so blessed as to possess it. My deepest, truest joy will be the knowledge of her own. Cold and selfish the hearts that do not find pure happiness in the joy of those they love. My rival hath all that can make life fair and beautiful; I would not bring a cloud to darken her bright sky; but when all the blessings that the world can give are hers, I would only ask a passing thought of one whose earnest life and abiding

love ever link all bright and happy memories with her."

"It is enough! hear my decision;—Three weeks hence is the Carnival; he who before that time hath painted a picture the most perfect in grace, and beauty of form, design and coloring, to him will I give my daughter. Strange as it may seem, I feel a painter's pride in bestowing my only earthly wealth on one worthy the glorious art that wins her. Three weeks hence at the gallery of —, we meet again, 'till then farewell."

And as the two rivals turned away, his eye rested proudly on Guido, as he whispered with a smile, "He is worthy of her, and will succeed."

The hours went by, and rumors of the strange trial between the rival painters were rife through the city. Many were the wondering thoughts of the people; gay jests went round, and happy visions of fame from the hands of the painters filled many a fair lady's heart.

The beautiful Madeline sat alone, and strove to banish the thoughts that would come, bringing a picture she would not look upon, and so the time went on, the days were spent, and the Carnival was in progress.

Gallery after gallery filled, still the crowd poured on till the dim old walls were brilliant with the fair and noble of the gay city; the sunlight stole softly in through the richly stained windows, throwing a strange bright hue on the old pictures within, and the air was heavy with the fragrance of the flowers twined around statue and pillar.

Two dark mysterious curtains hung side by side, and before them stood the rival painters—a strange contrast. The young Count, his proud face glowing with joy, his costly garments glittering with embroidery, and his plumed cap, heavy with jewels stood proudly forth, and many a light heart beat, and fair cheek flushed, as his dark eye glanced over the galleries, bright as an Eastern garden with the loveliest flowers of Rome.

But they soon turned from him to his rival and lingered there. His humble dress and threadbare mantle were unheeded for the noble face that looked so pale in dark shadows where he stood; but a ray of sunlight lay softly on the long dark locks that fell heavily round his face, and all unconscious of the eyes upon him, he stood looking calmly on the sweet face of a Madonna above.

A crowd of the first painters stood around a canopied seat, conversing with the father, who listened silently watching the dial, as it fast approached the appointed hour; beside him sat Madeline; the long veil folded so closely that it almost hid the lovely face that blushed beneath it, and the hand that clasped the victor's wreath, trembled with the emotions of hope and fear that made the dark eyes fill with tears and the gentle heart beat wildly.

As the twelve silvery chimes died away, the Count sprang forward and exultingly flung back the curtain. A long breathless pause, and then loud and long sounded the applause, till the vaulted roof rang again.

It was Madeline—beautiful as love could make her. Beneath the picture traced in golden letters, were courtly words of love and flattery, and before it the Count knelt gracefully, and with uncovered head.

Then the pale young painter lifted his dark cur-

tain, and not a sound broke the deep stillness as with fascinated eyes they gazed. Tears were on many a cheek, for the simple word "MOTHER" traced below, brought back to many a careless heart, the long forgotten hours of innocence and youth, it was strangely beautiful. The silvered hair lay softly round the gentle face, and the mild dark eyes seemed looking down on her son with all a mother's fondness, while the golden light that fell from the high window seemed to shut the world of sin and shadows from them.

The silence was broken by a burst of applause, and often as it died away 'twas again renewed, plumed caps waved, and flowers fell at his feet.— Still, with folded hands he stood heedless of all, for his thoughts were far away; he only saw the gentle face before him, heard only her sweet voice, felt only her hand laid on his head, and all else was forgotten.

Then clear and deep above the murmuring crowd sounded the voice of the old painter, saying—

"Guido of Florence hath won the prize, and more than this, he hath gained our love and honor, for one whose holy affections prized above the young and lovely, the face that first smiled upon him; the heart that first loved. I ask no greater wealth for my child than the love of so noble a son. She is thine, Guido, with my fondest blessing."

And 'mid a burst of triumphant music, the wreath fell upon his breast. The noblest painters crowded around him, fair ladies scattered flowers in his path, and even his rival shrouded his own fair picture, flung a bright wreath over the other, and with tears on his proud face, stood humbly before it, while gentle memories came stealing back, bringing a quiet joy, long unknown in his ambitious heart, and he rose up a better man for the holy lesson he had learned.

And while noble painters, and beautiful women paid their homage to the humble artist and the deep toned music rolled through the bright halls, high above all, the calm, soft face looked proudly down on the son whose unflinching love for her had gained for him the honor and love he so richly deserved.

## Editorial Notices.

A COUNTRY SEAT FOR SALE. — Peruse the advertisement in another column. The natural inclinations of nine men out of ten are for a country life. Some choose to spend their lives from youth upward and downward to manhood and to old age, upon the paternal acres; others crowd to the cities to acquire a competence, and late in life come back to the country, thinking to enjoy in peace, what they have acquired by strife. These last usually select a bleak and unimproved spot, and spend their time and their thousands in beautifying it with Cottage, trees, and garden; and just as they sit themselves down to rest and to admire what they have accomplished, comes a still whisper, perhaps, which bids them rest beneath the green sod. This is the fate of thousands. It was his fate who made "Hawkswood" a thing of beauty. Five-and-twenty

years ago, what is now a lovely lawn dotted with clumps of noble trees, and adorned with an elegant mansion, was a mere rocky pasture—a neglected field. Taste and wealth have turned it into a Paradise. But alas! he who labored there so zealously now sleeps beneath the shades of Greenwood; beside him lie some of those, who sported with us on the grassy lawn. The trees still wave their leafy branches in the air, the glad waters of "the Sound" still

"Break into dimples and laugh in the sun;"

but those who made Hawkswood HOME are now separated, "some by hundreds of miles of sea and land, others by the narrow strip that divides Time from Eternity."

A more lovely spot than "Hawkswood," we do not know. The mansion house is an elegant structure, built in the most substantial manner of the best materials, at a cost of \$35,000. The original farm of 180 acres, of which about 90 acres, with the dwelling house and outbuilding, remain unsold, is so well cleared, that one can scarce find a stone out of the walls with a telescope. The lawn is of twelve acres, thickly planted with forest and other ornamental trees, judiciously arranged; and surrounded by a parapet or *ha-ha* wall, whereby the adjoining fields which slope gradually down to the river appear to be one and the same lawn. In front and on either side, dotted with islands, are the waters of Long Island Sound, being here about five miles in width, and stretching away to the east as far as the eye can reach. On these shores a farmer can gather one to two thousand loads of sea-weed per annum; in ten minutes the fisherman can dig his bait, and row to rocks besieged with fish; and in the season of wild ducks, myriads blacken the waters of the bay and neighboring creeks; so that the sportsman, anchored in his light skiff at a stone's throw from this shore, has often bagged his fifty brace of a morning, all killed on the wing at single shots.

The land is a rich black loam of the most fertile quality, and produces immense crops. Over twenty years ago, while digging potatoes, we stinted an Irishman to dig and pick up sixty bushels in a day—at 11 o'clock in the morning the stint was performed. This speaks as well for the yield of potatoes as for *Hughy's* suppleness and skill with the spade.

Around about are the residences of distinguished gentlemen—neighbors, on whom one depends much for society; Mr. Edward LeRoy, who has lately purchased sixty acres of this farm, with intent to erect an elegant residence thereon; Mr. Richard Morris, Mr. Lydig Suydam, Mr. Edgar, and many other men of wealth and refinement.

But after all, many a millionaire, unheeding the

lesson which the fate of others reads to him, will pass by this place, and purchase another bleak pasture-lot, plant it with switches, build up a mansion, where in unsheltered misery he will broil for twenty years, and when his "place" begins to put on its beauty, he will in his turn be carried to "Greenwood;" and his example again will teach no one.

Those who are wise and wish to possess a country seat for their enjoyment, before years, which go to improve trees, have too much cramped their backs and bleared their eyes to enjoy anything, will do well to inquire about "Hawkwood."

**SHELBY COUNTY AGRICULTURAL SOCIETY.**—We have received the show-bill of this spirited society, whose first Annual Fair will be held at Shelbyville, Ind., on the 14th, 15th, and 16th days of October. The number of premiums offered is 141, varying in value from "a silver cup, worth \$10, and a bound volume of the *Journal of Agriculture*," for the best arranged and cultivated farm," down to "a gold quarter eagle." We are pleased to see agricultural books and journals offered in almost every case, in addition to the money premium; and feel complimented that the *Journal of Agriculture* should have been selected for ten of the prominent premiums. We wish success to this enterprising society.

**DEPARTMENT OF AGRICULTURE.**—We have received from Worthington G. Snethen, Esq., of Washington City, D. C., a pamphlet, purporting to be a Bill for the creation of a Department of Agriculture, with a request to notice it. The bill is drawn up with much care and labor, but the plan is impracticable—not to say *absurd*.

**FARMER'S JOURNAL.**—This is a new agricultural monthly, published at Bath, N. C. at \$1 per annum, edited by John F. Tompkins, M. D. It promises to be an able paper. North Carolina needs a stirring friend to shake the Rip Van Winkle-ism out of her, and we think that Dr. Tompkins will do the deed. Against one article in the first number we enter our protest. A correspondent grounds the claims of the paper to North Carolina support upon the fact (?) that the Northern Agricultural papers preach Abolitionism; and ought, therefore, to be superseded by a Southern paper, that is strong in the faith of slavery. Now to lug the Fugitive Slave Law, the emancipation of Negroes in the District of Columbia, the morality of the Slave Trade, discussions on the Guinea traffic, Uncle Tom's Cabin, and other topics of the kind into our agricultural papers is bad policy; and the

assertion that the Northern agricultural journals have ever mooted these points is untrue. We probably read as many Northern agricultural papers as the correspondent of the *Farmer's Journal*, but we never saw a line in them that the most thin-skinned Southerner could complain of. While every editor entertains his own opinions on this, as on other subjects, they have had the good sense to leave its discussion to the proper persons and places; and we trust that the *Farmer's Journal* will show equal judgement.

**THE TROPICAL FARMER.**—This is another candidate for public favor; it is edited by Lewis C. Gaines, and published monthly at Ocala, Florida, at \$1 per annum. We sadly need a faithful observer and reporter on the Peninsular; for few of us are at all acquainted with its soil, climate, or productions; and as the establishment in Florida of a National Garden has been suggested, it would be well that we were posted up on the subject. The genial tone that characterises the *Tropical Farmer* ensures all our sympathies in its favor, while the ability with which it is conducted enlists our judgement. If we had ten thousand friends in Florida and North Carolina, we would say to all "Take your own State papers and *The Journal of Agriculture*, too!"

**THE WESTERN AGRICULTURIST.** We have not seen this paper for a twelve-month, nearly.—We enquired by letter the reason of the discontinuance, but have received no reply. Unless we greatly err, this is the paper that once appropriated from us an article by Dr. Jackson of Boston, which was copied and credited to it by the N. E. Farmer, and on being afterwards taken to task by the misled Farmer, the Western Agriculturist abused the Farmer, and cut our acquaintance. Verily, if there is truth in the doctrine of transmigration of souls, a mouse died the day that man was born.

**WASHINGTON INSTITUTE, N. Y.**—The anxious inquiry of every parentis, "Where shall I send my child to school?" and well may it be an anxious inquiry. The father is selecting one to stand for a time in his own stead; he is placing a young and plastic mind in other hands to be formed for this world's service, and an immortal soul to be fitted for its future home. Well may the parent anxiously inquire, and well may one pause in his reply. But there are some establishments that have stood the test of time. Such a one is the WASHINGTON INSTITUTE, pleasantly located in the suburbs of the city of New York, and under the direction of the Brothers Porter; with whom is now associated

another old friend, (is it not so?) Mr. Gray.—Twenty years ago we left this institute, then as now under the Messrs. Porter's care, for College life—twenty years ago!—although our friend of the *Granite Farmer* will certify that we are yet “a very young man,”—and we remember with pleasure every hour that we spent there. We remember that there was kindness and firmness on the part of the principals and their assistants, that called forth the love and the respect of the pupils. We remember a universal obedience but never an angry word; we remember constant kindness, but no indiscreet indulgence. We remember to have found in our preceptor a friend, whose care over us was continued by correspondence for many years; and whose image, as of an elder brother, now rises before us with a smile of other days.

Mr. T. Dwight Porter, and Mr. Theodore Woolsey Porter belong to a distinguished literary family. In their veins runs the blood of two Presidents of Yale College—Pres't. Dwight and Pres't. Edwards—and unless we are mistaken, of the present President Woolsey; and we know them to be thorough scholars and good men. Of Mr. Gray—if our *old friend* Gray it be, who has been lately added to the management—we also entertain the highest opinion, as a teacher and as a man.

With a full knowledge of the responsibility that rightly attaches to such advice, we commend without reserve to all who have boys, *The Washington Institute, N. Y.*, as the best place within our knowledge for their moral, mental, and physical education.

**AMERICAN ARTISAN.**—This very excellent paper is published weekly in the city of New York; and contains much that will interest and improve all readers. It is the official organ of the Farmer's Club of the American Institute, N. Y., and contains, besides, much matter interesting particularly to Mechanics and Manufacturers. We will with pleasure forward orders for it. See advertisement in another column.

**JOURNAL OF COMMERCE.**—We see some of our articles going the rounds, credited to this paper. Will any one inform us whether or not this political paper has taken a cross of Agriculture.

**NEW YORK FARMER.**—We are pleased to see that this excellent paper is to be removed to Albany N. Y. A first rate paper, with clever fellows to conduct it, is much needed there. Such a paper and such fellows the Farmer and the Comstocks will prove to be.

**AGRICULTURAL ADDRESSES.**—We continue to receive invitations to address Agricultural Societies at their annual fairs. We will be pleased to perform our whole duty in this department, but the days set down for five of the shows to which we have already been bidden, occur on the very days when we have other appointments. Our yet unperformed engagements are as follows: On Sept. 29th, Annual Address before the Norfolk Co., (Mass.) Society at Dedham. Sept. 30th at Springfield. Oct. 6th, *if possible*, we will say a word at Middlebury, Vt., and Oct. 7 deliver the Annual Address before the New Hampshire State Society.

To our friends everywhere, we commend the Agricultural Implement Warehouse and Seed Store of Messrs. Parker & White, Nos. 8 and 10 Gerrish Block, Blackstone street, Boston, as one of the very best establishments in America for the purchase of improved farming implements, and well selected and reliable field and garden seeds. And if in want of fruit trees of rare excellence, or poultry of pure blood, the same firm will supply you to your entire satisfaction. Besides the excellence of the wares, it is no small recommendation to this firm, that they spare no pains to suit the wishes of those who deal with them. If at too great distance from Boston to call in person at this extensive and excellent establishment, farmers will find their orders, transmitted by letter, filled as much to their satisfaction, as though they were present to examine and select for themselves.

Subscribers to the 3d Vol. of the Journal of Agriculture can be furnished with the 1st & 2d Volumes neatly bound, on application, at \$2.00. Subscribers can have their numbers bound for 25 cents each Volume, by forwarding them to our office in Boston, or to P. Grinnell & Sons, or G. H. Whitney, Providence.

Messrs. Parker & White, Nos. 8 and 10 Gerrish Block, Blackstone Street, Boston, are the authorized general agents for this Journal.

Subscriptions to the Journal of Agriculture will be received in Providence by P. Grinnell & Sons, and Geo. H. Whitney.

C. M. Saxton, Agricultural Book Publisher, 152 Fulton street, and F. McCreedy, American Institute, are our agents for the city of New York.

SEVERAL original communications, intended for this No. of the Journal, have been crowded out by the length of the notices of the State Shows.

## MINER'S PATENT

## Cross Bar and Equilateral Premium Bee Hive.

**T**HE subscriber offers for sale, Rights to manufacture the above Hives, the best in the United States. The Cross Bar Hives took the only premium at the New York State Fair in September 1851. (There were thirty other Hives offered at the same time.)

The rights are in a pamphlet form with full directions and drawings of them, which are so plain, any one can make them as well as if he had a model to work after. I have a printed circular containing a large number of the strongest testimonials of both hives with a description of their qualities which I will send free of charge to any one who will apply for them.

I will sell the right to make both the hives for the low price of two dollars sent by mail post paid.

Miner's Bee Keeper's Manual and Essay on winter management, I will furnish to those who wish to purchase. No Bee Keeper should be without them. Please address, post paid. EDWARD ABORN.

No. 30 South Market St., Providence R. I.  
N. B. These Hives will be exhibited at the Fair in Providence.

## Country Seat For Sale.

**H**AWKSWOOD, the elegant residence of the late Elisha W. King, situated in Pelham, Westchester Co., N. Y., 18 miles from New York City, is offered for sale.

The Mansion House was erected under the direction of that eminent architect, Martin E. Thompson, of New York, at a cost of thirty-five thousand dollars. The grounds immediately surrounding the dwelling—about 12 acres—were laid out and planted with ornamental trees of every description grown in this climate, by the late Andrew Parmentier. The barns and all necessary out-buildings, built in the best manner and in complete order, are conveniently near to the house, and effectually screened.

The portion of the farm to besold consists of about 120 acres of land, that has produced 102 bushels of shelled corn to the acre. The waters of Long Island Sound surround the estate on three sides; presenting some of the finest views in America, and affording excellent fishing and fowling. From 1000 to 1500 loads of sea weed can be taken from the shore annually. It is confidently asserted that there are but few, if any, more beautiful located, elegant, and altogether desirable country seats in the United States, than Hawkswood.

For further description and terms, apply to Dr. T. F. King, Perth Amboy, N. J., P. V. King, 41 South street, New York, or to W. S. King, Manton, R. I.

A1—tf.

## GEORGE H. WHITNEY,

BOOKSELLER AND STATIONER,  
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Always for sale a general assortment of Law, School, Classical, Medical and Miscellaneous

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m5.—tf.

## JOSEPH WINSOR,

ATTORNEY AND COUNSELLOR AT LAW,  
At the office of the Farmers' M. F. Insurance Co. of R. I.  
No. 2 BROAD STREET,  
PROVIDENCE.

tf.

## Western Horticultural Review,

JOHN A. WARDER, EDITOR AND PROPRIETOR

Published Monthly at Cincinnati, Ohio,

At \$3.00 per annum.

**T**HE "Western Horticultural Review" is a monthly Magazine, of 48 large octavo pages, established to extend the information and to promote the interest of Gardeners and Fruit-growers. Among its contributors it numbers many of the most distinguished and successful Horticulturists in America.

This Review has now entered upon its second Volume and has fully met the high expectations of its friends and subscribers. Eastern admirers of the Garden, the Green, house, and the Grapery are invited to aid in sustaining it by their subscriptions and correspondence.

Attached to the Review is the "Western Horticultural Advertiser," which is circulated gratuitously with every number of the Review. Eastern Nurserymen, Seedsmen and Florists will find it to their advantage to advertise here.

Subscriptions and Advertisements received at the HORTICULTURAL SEED STORE, School street, Boston. M17.

## RASPBERRY HILL NURSERY.

BROOKLYN, CONN.

## Paris &amp; Henry A. Dyer,

ARE PREPARED TO FURNISH, ON THE MOST LIBERAL TERMS,

Fruit and Ornamental Trees, Flowering Shrubs, Plants, Vines, Creepers; Bulbous, Perennial and Biennial Flower Roots; Rose Bushes, Dahlias, Buckthorn and Hawthorn for Hedges, Dwarf Box, Asparagus Roots,

And all other articles usually found in an extensive Nursery Establishment. m20

## Imported Suffolk, Essex, and Middlesex Hogs

**T**HE subscriber has now on hand and for sale, some pure-blooded Suffolk, Essex, and Middlesex Swine, from the importation of the late William Stickney of Boston. All orders and selections trusted to Isaac Stickney, administrator to the estate of the late William Stickney, will be promptly attended to, and selections made with great care.

ISAAC STICKNEY,

Chatham street, Boston,

Boston, June 1 1851.

## SCIENTIFIC FARMING.

**A**GRICULTURAL ADVICE, &c. &c.—The Subscriber, editor of the Working Farmer, will visit Farms and advise proper modes of culture, necessary manures for general improvement of soils, special manures for crops, make analyses of soils, &c. &c.

He may also be consulted at his Farm, where practical illustrations of his system may be seen.

Letters asking advice as to preparations of manures, &c enclosing a suitable fee, will meet with due attention.

JAMES J. MAPES,

13—tf Consulting Agricultural Chemist, Newark, N.J.

## Improved Forcing Rams,

(FINE SIZES.) FOR SALE BY

PARKER & WHITE,

8 and 10 Gerrish Block, Blackstone st.

je16.—2t.

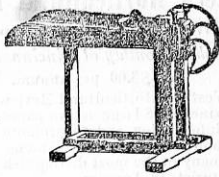
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## Young Durham Bull.

**O**NE Two Years Old DURHAM BULL—and tho rough bred, for Sale by

PARKER & WHITE,

8 and 10 Gerrish Block, Blackstone St. BOSTON.



- 1000** Improved Hay, Straw, and Corn Stalk Cutters,  
 2000 Martin's Improved green sward and stubble Plow.  
 100 Iron gate Hay Cutters,  
 200 Iron Sausage-meat Cutters,  
 200 Sausage Fillers,  
 50 Improved Corn Shellers,  
 100 Fanning Mills,  
 50 Beals' Corn and Cob Crushers,  
 50 Vegetable Cutters,  
 1000 Apple Parers,  
 200 Cranberry Rakes,  
 50 doz Ames, White, & Nason's cast steel Shovels,  
 50 doz 4 and 6 prong Potatoe Hoes,  
 25 " Flails,  
 1000 " Cow Chains,  
 100 " Long and heavy Ox Chains,  
 25 " sets Improved Grindstone Rollers.

For sale at the lowest prices, at

**Parker & White's Agricultural Warehouse,**  
 Nos. 8 and 10 Gerrish Block, Blackstone st., Boston.  
 sep.

### Farmers' Mutual Insurance Company, of Rhode Island.

**T**HIS Company insures Farm, and other Buildings not more hazardous than Farm Buildings; also Household Furniture, and all kinds of property usually kept in dwelling-houses; also, Hay, Grain, Cattle, Horses, &c., in buildings in safe localities.

Persons wishing Insurance are invited to call at the Secretary's office and learn the terms of insurance.

Applications for Insurance may be made to any of the Local Directors or Agents of the Company, one or more of whom may be found in each town in Rhode Island; or to the Secretary, who will be at his office in No. 2 Broad st., Providence, from 9 o'clock, A. M. to 4 o'clock, P. M. but all applications by mail should be directed to him at East Greenwich.

#### DIRECTORS:

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tf

#### MASSACHUSETTS

**HORTICULTURAL SEED STORE,**  
 38, SCHOOL STREET, BOSTON,  
 AZELL BOWDITCH, PROPRIETOR.

**J**UST received at this well-known establishment a large assortment of

#### GARDENING IMPLEMENTS,

Comprising—Shears for trimming hedges, and for trimming trees; Knives of various patterns, for pruning, budding, &c. &c.; Peach Pruners; Flower Scissors, &c. &c. Also a large assortment of Perennial and Biennial Flower Seeds.

Garden Vases of various styles, Chimney Cans, &c. Horticultural and Agricultural Books.

Bouquets, Cut-flowers, and Fruit furnished at short notice.

## AGRICULTURAL BOOKS

FOR SALE BY

**Phillips, Sampson & Co.**

110 Washington Street, Boston.

**COLMAN'S EUROPEAN AGRICULTURE AND RURAL ECONOMY.** From personal observation. 2 vols., 8 vo., cloth; embellished with sixty engravings from wood and steel.

**AMERICAN REFORMED CATTLE DOCTOR.** Containing directions for preserving the health, and curing the Diseases of Oxen, Cows, Sheep, and Swine. By G. H. Dadd, M. D., 8vo., muslin and sheep.

**BENNETT'S POULTRY BOOK.** Being a complete Treatise on the Breeding, Rearing, and General Management of Domestic Fowls. Illustrated with seventy-five portraits and engravings of Fowls, taken from life; 1 vol. 12mo. cloth.

P. S. & Co. keep constantly on hand a general assortment of Books in every department of Literature, which will be sold at the lowest prices.  
 Boston, Jan. 21.

### Practical and Scientific Agriculture.

#### NEW AND VALUABLE SCHOOL BOOK.

*Agriculture for Schools.*

**M**ARK H. NEWMAN & CO., 199 Broadway, New York, have just published a most interesting and useful Reading Book, entitled *Lessons in Modern Farming or Agriculture for Schools*, containing Scientific Exercises for Recitation, and elegant extracts from Rural Literature, for Academic or Family Reading, by Rev. J. L. BLAKE, D. D., author of "Farmer's Every Day Book," "A General Biographical Dictionary," and "Family Encyclopedia of Useful Knowledge," &c.

The Attention of Farmers, Teachers, and School Officers, is invited to the merits of this Book, containing, as it does, much valuable instruction on the subject of Agriculture. The following subjects are treated in a familiar and practical manner:—Agricultural Chemistry; Implements; Organs and Structure of Plants; Food of Vegetables; Theory of Manures; Nature and Variety of Soils; Approved Modes of Tillage; Rotation of Crops; Physiology of Animals; Milk, Butter, and Cheese; Theory of Feeding; History of the Horse, of the Sheep, of the Hog, and of the Ox; Distribution of Plants; Formation of Soils. American Farmer; Dignity of Labor, &c. &c.

The design of this Book is to store the mind with practical Agricultural Knowledge, in connection with the Rhetorical Exercises of the Scholar.

The Book contains 432 pages, and is substantially bound. The retail price is \$1, and they are furnished to Schools for \$9 per dozen.

Oct. 1.

### Fruit Trees—Special Notice.

**T**HE Proprietor has still remaining in his Nurseries, a large number of thrifty FRUIT TREES, which must be removed the present year, in order to complete the improvements now in progress on his estate.

The general collection contains many thousands, and from which selections can also be made of almost every approved variety extant.

**SPECIAL CULTIVATION** has been bestowed on the PEAR, and trees of EXTRA SIZE, with fruit buds, can be supplied, of many of the popular sorts, and at moderate price.

Also, most of the new varieties of PEARS, CHERRIES, PLUMS, RASPBERRIES, CURRANTS, STRAWBERRIES, and other fruits, and at rates less than is generally charged for novelties.

SCIONS for exportation and the home trade, can be had from fruit bearing Trees; thereby ensuring correctness of nomenclature.

SELECTIONS, when desired, founded on the experience of many years, will be made by the proprietor, and which will seldom fail to please the correspondent.

ADDRESS—"The Superintendent of the Nurseries, at Hawthorn Grove, Dorchester, Mass." to the care of the subscriber,  
**MARSHALL P. WILDER,**

No. 2 Pearl street Boston.

N. B.—Grove Hall Coaches leave No. 11 Franklin st. four times each day.

## Improved Super-Phosphate of Lime.

THE SUBSCRIBER is now prepared to furnish this admirable manure in any quantity. It is made after a recipe furnished by the Editor of the *Working Farmer*, and it has been used by himself and others, with the most marked advantages, for the last five years. The use of bones for manure has been long known to the community, and their importation into England has reached the immense sum of Ten Millions of Dollars per annum. These are chiefly used by chartered companies of the City of London and elsewhere, for the manufacture of Super-phosphate of Lime, made by dissolving bones in sulphuric acid—and five bushels of the Super-phosphate of Lime so prepared, has been long known to equal in effect fifty bushels of finely ground bones.

Until the present time the manufacture of super-phosphate of lime for sale has not been entered into in this country, and the method by which the article is manufactured, now offered by the subscriber, produces an article every way superior to the English super-phosphate; for in addition to the phosphoric acid and sulphuric acid usual in the manufacture of super-phosphate of lime, it contains such proportion of Peruvian Guano as is found necessary to furnish the other constituents of plants not contained in bones, and to these is added a liberal quantity of sulphate of ammonia made from the waste liquor of the gas houses.

Arrangements made by the manufacturers enable them to procure these materials at the cheapest possible rates, and hence they can offer a pure article, composed entirely of phosphate of lime, sulphuric acid, Peruvian guano, and sulphate of ammonia, at a price equal to that of Peruvian Guano, but for the use of the farmer it is of double its value. By such treatment the ammonia is no longer volatile, and hence it is more lasting than Peruvian guano. The phosphate of lime is rendered soluble, and therefore is at once available for plants, whilst the potash, uric acid, and other constituents of guano, bear a more just proportion the requirements of plants, than as they exist in the Peruvian guano alone. Five hundred pounds of the Improved Super-phosphate of Lime have been found by frequent experiment, to fully equal in value thirty half cords of well rotted stable manure, and from not being volatile, lasts in the soil until consumed by the plants. The cost of this quantity is not so great as would be the expense of cartage and handling of thirty half cords of stable manure given to the farmer, at two miles from his gate.

The convenience of this manure consists in its small bulk, and consequent ease of handling. It may be used before or after the planting of the crop, for even when applied as a top-dressing it cannot be lost by evaporation, as none of its constituents are volatile. A single hundred pounds applied as a top dressing to meadows, will increase the yield more than a ton per acre. As a drill manure it is unequalled, for unlike the unprepared guano, it does not destroy seed nor interfere with early growth. It may be applied in hills during cultivation of corn, potatoes, and other crops. When crops have been previously manured in the usual way and found to be of sluggish growth, it may be augmented by the use of this manure. To the Horticulturist it is invaluable, as it may be applied to fruit trees at any season of the year. More than a thousand bushels of Ruta Baga turnips have been raised to the acre, by the application of one hundred pounds of the Improved Super-phosphate of Lime; eight hundred bushels of long Orange Carrot, and eleven hundred bushels of White Belgian Carrot, have been raised to the acre by the application of this manure. For garden crops it is all that is necessary for success. Its superiority and economy, as compared with guano, is very great. Comparative experiments have been made with this manure alongside of all other fertilizers, and invariably with results favorable to the Improved Super-phosphate of Lime. By adding this preparation to ordinary compost heaps, the farmer is enabled to supply such deficiencies as are most frequently to be met with in the soils. Throughout the Atlantic States the soils have become early denuded of phosphoric acid by the export of bones to Europe, and by the export of crops containing this requirement; thus we find the wheat crop of New York

Ohio, and other States, less than half what they were per acre 30 years since. The application of the manure now offered, renews the ability of these soils to raise wheat.—The tobacco lands of Virginia may be at once rendered fertile by this application, and to the dairyman it may prove a desideratum. Phosphate of lime exists in milk in large quantities, and therefore for continual pasture, the fields of our dairy farms require additions of this material. They also require the stimulating effects of ammonia to enable the plants to make use of phosphate of lime, and the same quantity of grass with this amendment, will enable cows to give a larger amount of milk than when fed on grasses from soils not replete with phosphate of lime. Twelve thousand late Bergen Cabages have been raised from an acre manured with five cwt. of the Improved Super-phosphate of Lime. The keeping properties of vegetables raised with this and similar manures, are much greater than when raised from putrescent manures alone. For sandy soils, which from their free character cannot retain manures of a volatile character, this preparation will be found efficient, as it cannot be parted with by evaporation. Its superiority for garden use cannot be doubted, as it will not engender weeds nor insects. For bringing sluggish land into immediate heart, it surpasses stable manures, as no time need necessarily transpire to render its constituents available to plants; they are at once ready for its use, and in an unobjectionable form. When soils are prepared with this amendment, they will retain all the ammonia received from the atmosphere by dews and rains, it being immediately converted into sulphate of ammonia, and therefore no longer volatile. The Improved Super-phosphate of Lime is now offered for sale at \$50 per ton of 2000 lbs. being much less than the price at which it can be manufactured by individuals for use, and the price will, for the future, bear the present ratio as compared with the price of Peruvian guano. It will be furnished to consumers by all the principal Agricultural Warehouses, and may be had in large quantities of the Subscriber, who is General Agent for the manufacturers.

Arrangements have been made with Professor J. J. Mapes to superintend its manufacture, until those engaged at the factory shall be competent to conduct it without his assistance. His directions as to the relative proportions of materials used will be strictly followed, and purchasers may depend confidently upon its always remaining of uniform quality, and of its containing nothing but the ingredients before named. Each importation of guano will be accurately tested, and the quantity used will compensate for any difference in quality that may exist. The sulphuric acid will be of uniform strength, and the phosphate of lime being invariably heated to redness before its use, will not lead to error by the presence of moisture, or other accidental impurities.

The Improved Super-phosphate of Lime will be delivered in Bags of 160, 100, and 50 pounds each, and parties remitting will please order accordingly.

Within the last month an article of entirely different composition from the above, has been introduced in the market, and in some cases it has been purchased in mistake for the Improved Super-phosphate of Lime. Buyers will please observe that the article sold by me is marked with my name.

FRED'K. McCREADY,

Wholesale Agent for the Manufacturers,  
American Institute Building, 351 Broadway.

Orders for the above will be received by W. S. KING, at the office of the Journal of Agriculture.  
A1—2m.

## Notice.

THE Transactions of the R. I. Society for the Encouragement of Domestic Industry for the year 1851, are now ready for distribution, and may be obtained of Owen Mason, Esq., No. 17 North Main Street.

j2.

HENRY HOWARD, Secretary.

THE American Rose Culturist, The American Bird Fancier, Allen's Rural Architecture, Saxton's Rural Hand-books, for sale by C. M. SAXTON, New York, and TAPPAN & WHITTEMORE, Boston.

2t\*

## Mexican Guano.

A NEW ARTICLE is now offered to the Agriculturist and Dealers, under the above name, from its having been found near the Mexican coast. It has been analyzed by C. T. JACKSON, M. D., State Assayer, Boston; Dr. STEWART, of Baltimore, and others. Dr. Stewart says it contains the largest proportion of Phosphate he has ever met with in Guano.

The following are the results of the analysis made by C. T. Jackson, M. D.:

Water	-	-	-	23.40
Vegetable Matter	-	-	-	15.80
Soluble Salts (in water)	Phos. Soda	-	-	0.12
Phosphates of Lime and Magnesia	-	-	-	60.50
Insoluble Matter (Silice)	-	-	-	0.10
				99.92

The quality of this Guano as a rich fertilizer, and the great reduction in price compared with the Peruvian, is such as to render it an object for the Agriculturist and dealers to buy and give it a trial. It has been tried in the vicinity of Norfolk, Virginia, and much approved by the farmers there, who are now buying and using it freely. It may be obtained in lots to suit purchasers, of A. D. WELD, 127 State street, PHILEAS SPRAGUE & Co., T Wharf, or of P. A. STONE, who is the importer, and may be found at No. 15 Crescent Place, Boston where also other information may be obtained respecting it.

It is also for sale by PARKER & WHITE, 8 and 10 Gerrish Block, Blackstone street, D. PRUTY & Co., 19 North Market st. A7.

## New Staminate Strawberry. WALKER'S SEEDLING.

THIS new variety of the Strawberry is for sale, and will be sent out, to applicants in the Spring of 1852, price \$1 per dozen. Orders may be addressed to Samuel Walker, Roxbury, or to Mr. Azell Bowditch, at the Massachusetts Horticultural Seed Store, School street, Boston.

The Fruit Committee of the Massachusetts Horticultural Society report of the variety as follows:—"WALKER'S SEEDLING—this Strawberry has now been fruited three years; it is a dark colored berry, of good size, a very abundant bearer, of high flavor, very fine quality, and it will be, it is believed, an acquisition. It is a staminate, worthy, as the committee think, of an extended cultivation. Boston, June 28, 1851."

Fruit, Ornamental, and Evergreen trees, shrubs, &c., for sale at the Nurseries of

A7. SAMUEL WALKER,  
Roxbury, Mass.

## TO FRUIT GROWERS.

PERSONS wishing to procure extra sized Fruit Trees, or Trees in a bearing state, are respectfully invited to visit the Nurseries and make a selection.

## 60,000 Fruit and Ornamental Trees

The subscriber offers for sale his entire Stock of Fruit and Ornamental Trees, Evergreens, Shrubs, &c., in his various Nurseries in Roxbury and Dorchester. The collection embraces most of the varieties of the Pear, Apple, Cherry, Plum, Peach, and other Fruits that are worthy of cultivation. Also, Quinces, Gooseberries, Currants, Raspberries, Strawberries, &c.

Extra sized Pear Trees, in a bearing state, can be supplied at reduced prices.

20,000 Buckthorns, Rose Trees, Honeysuckles, Hawthorns, &c.

Scions, in large and small quantities, from fruit bearing Trees.

The whole for sale at the lowest market price.

M17. SAMUEL WALKER,  
Eustis street, Roxbury.

\*\*\* 3,500 Imported Fruit Trees for sale.

Walker's Seedling Staminate Strawberry—price \$1 per dozen.

## THE SIXTH VOLUME

OF THE

## AMERICAN ARTISAN,

WILL commence on the 18th of September, 1852. It will be published in quarto form, which will be more convenient for handling; but the size will not be diminished. The ARTISAN will aim to make itself acceptable and valuable to farmers, mechanics, and families. It will be embellished with numerous engravings of machines and buildings—will have full descriptions of new inventions and improvements—the weekly list of patents granted from the United States Patent Office, with the claims annexed, and other useful and scientific information.

The Agricultural Department will contain the official report of the Farmer's Club of the American Institute, a Club which has done very much to disseminate useful and important information on Agricultural and Horticultural subjects among the people. The paper also has some able contributors in this department.

The Family Matter will be such as shall instruct, improve, and amuse the family circle, without being filled with tales of horror, tame sentimentalism, or sick fancy, which to say the least, are of doubtful propriety.

TERMS—Two dollars a year, invariably in advance, or one dollar for six months.

Oct. 1.

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## The Journal of Agriculture.

EDITED BY

WM. S. KING, and PROF. J. J. MAPES.

Office at 8 and 10 Gerrish Block, Blackstone street, and Horticultural Hall, Boston.

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