

# The Agriculturist.

A WEEKLY JOURNAL DEVOTED TO LITERATURE, AGRICULTURE, AND NEWS.

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## Agriculture.

### Wheat Prizes.

Some time ago, we mentioned, that the *Maine Farmer* had offered a prize of one hundred dollars in three premiums, as an inducement to the farmers of that State to use greater efforts to raise larger fields of wheat; to make better preparation of the land for, and more intense culture of the same. Farmers who intended to compete were required to signify their intention on or before the 1st of June. The land on which the competition crop was to be grown, it was stipulated, should consist of one acre of 4840 square yards, to be measured by a sworn surveyor of the town in which the competitor resided. The last issue of the *Maine Farmer* (June 16th) contains a list of the names and places of residence of the competitors. There are sixty-one names in all, so distributed as to fairly represent all sections of the State. "The entries are now made," says the editor, the books closed, and the wheat put into the ground, there to await the fulfillment of that promise of "seed time and harvest," which has never failed. In mentioning the *Maine Farmer* prizes, we also said that, since there was no agricultural paper in the Province rich enough to initiate and encourage such a competition, the Government on its agricultural side might do so. We think so still. They might make it known at once, (the Government meet this month we believe) that they will, among the premiums of the next Provincial Exhibition in 1880, offer a hundred or a hundred and fifty dollars, in three or four premiums for the greatest certified yield of wheat per acre. It would give farmers an object, and the competition would, we are sure, create great interest among them.

### The Potato Pests.

Potato beetles, or the Colorado bugs threaten destruction to the potato crop in Maine, and elsewhere in the New England States, and, it is said, that great vigilance will have to be exercised in order to avert it. If our neighbours' fields in Maine suffer, those of the farmers of New Brunswick will not likely escape. It is not the bug that does the mischief to the potatoes, but its larva. Paris green, as every farmer knows, will destroy the larva is a sovereign remedy, but some farmers think it dangerous to use. Some one recommends the following new cure as a sure one:—

For the last five years I have not lost a cucumber or melon vine or cabbage plant. Get a barrel with a few gallons of gas-tar in it; pour water on the tar; always have it ready when needed; and when the bugs appear, give them a liberal drink of the tar-water from a garden sprinkler or otherwise, and if the rain washes it off and they return, repeat the dose. It will also destroy the Colorado potato beetle and frighten the old long potato bug worse than a threshing with a brush. Five years ago this summer both kinds appeared on my late potatoes, and I watered them with the tar-water. The next day all Coloradoes that had not been well protected from the sprinkling were dead; and the others, though their name was legion, were all gone.

Or the following recipe, which was sent to the Montreal weekly *Witness*, by Mr. James Drummond, Park Hill, Petite Cote, may be tried: To one pound of Paris green take fifty pounds of land plaster, mix well together, the land plaster being previously riddled fine through a grass seed or other riddle, so that there will be no lumps in the mixture. The potato stalks should be sprinkled when they are about four to six inches high. Fifty pounds of the mixture will be sufficient for an acre. It will require more on the subsequent occasions as the stalks will be larger. A piece of gauze the size of a small handkerchief will do to make the bag. Shake the stuff over the stalks as you walk along; see that each plant gets some, and use some discretion as to the number of times you will repeat.

WHAT A PLANT DID.—A little plant was given to a sick girl. In trying to take care of it the family made changes in their way of living. First, they cleaned the window, that more light might come to its leaves; then when not too cold, they would open the window, that fresh air might help the plant to grow. Next, the clean window made the rest of the room look so untidy that they used to wash the floor and arrange the furniture more neatly. This led the father of the family to mend a broken chair or two, which kept him at home several evenings. After the work was done he staid at home, instead of spending his leisure at a tavern; and the money thus saved went to buy comforts for them all. Thus the little plant brought a real as well as physical blessing.

## Fodder Crops.

There is now a prospect that there will be a good crop of grass in this section, though it is possible that the weather may be unfavorable and that the present expectations may not be fulfilled. Fortunately the hay crop is not the only resource of the farmer. If he were dependent upon this alone for material upon which to keep his stock he would be wholly at the mercy of the weather. If the season proved favorable he could keep a herd of cattle whose numbers should be proportioned to the extent and fertility of his grass lands, while in indifferent and unpropitious seasons he would be obliged to reduce the number, even though he had to sell the animals, considerably below their real value. But by means of the various fodder crops the farmer can now keep as many cattle as he chooses, and is free from the loss and embarrassment caused by the necessity of selling part of his stock whenever the grass crop comes in light, or the pastures are burned with drought.

A great advantage of some of these crops lies in the fact that they can be planted or sown quite late in the season. If the weather is favorable, so that the farmer will cut all the grass which he needs, he can remain satisfied with that and not attempt to increase the quantity of fodder, but if the grass does not come on well, and it becomes certain that the hay crop will be light, he can now a piece of good land, plow it, and sow Hungarian grass, Millet, Sweet Corn, or some other crop which will yield a large return from a small area. If the land is in good order the seed of these crops can be got in as late as the first of July and still give good returns. It would be full as well to do the work ten days earlier, especially for oats, but it is not absolutely necessary. It is not well to sow oats for fodder as late as July. Why they will not do well I cannot say, but the fact has been learned by way of experiment which involved the total loss of one crop and partial failure in other cases. Probably rye would do well sown at any time, but I much prefer Hungarian and corn to the other fodder crops which are in common use.

In order to obtain the best results with these crops the land should be well plowed and the surface finely pulverized. A light coating of fine manure should be harrowed in for Hungarian, and the same treatment should be given for corn if there is not manure enough to allow a liberal quantity to be scattered in the drills. If manure cannot be had, use ashes, or some good commercial fertilizer. The richer the land the heavier the crop and the more profitable it will be. If Hungarian is used the seed should be fresh and good. Old seed is not always, some think it is never, reliable. From one half bushel to a bushel of seed per acre is sufficient. It should be sown broadcast and covered with a light harrow or a bush. Corn should be sown in drills from three to four feet apart and cultivated three or four times during the season. Too much seed should not be used, and the kernels should be from one to two inches apart. Many farmers seed much heavier, but the quality of the fodder is injured by close seeding.

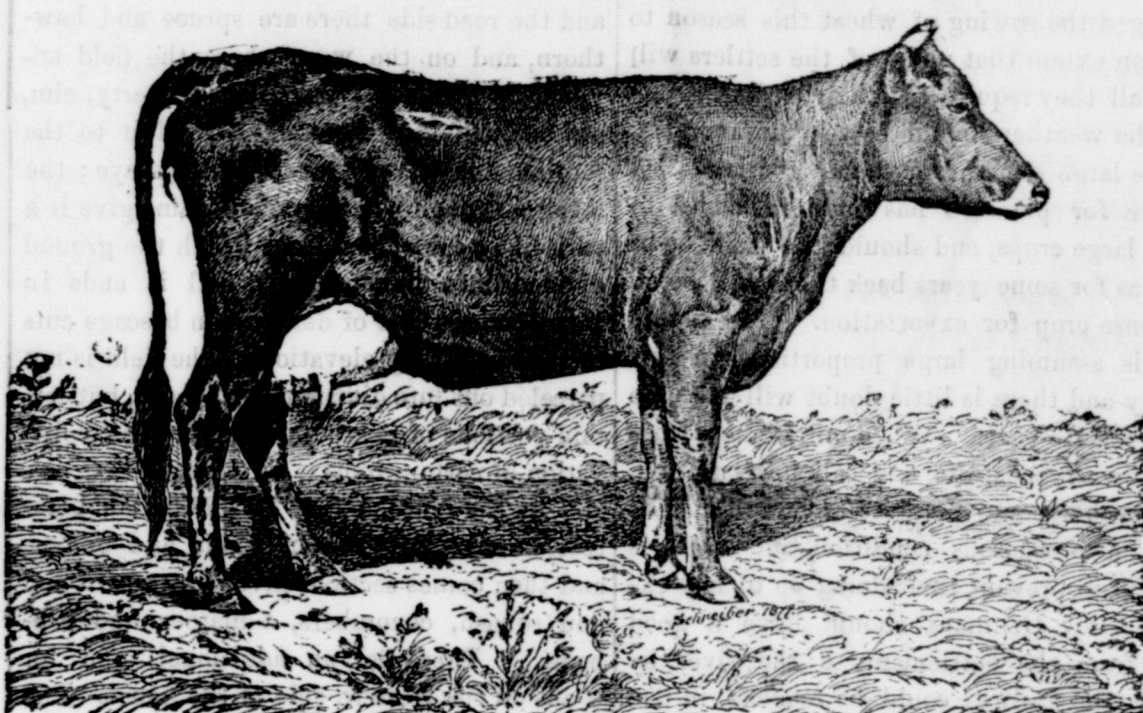
Either Hungarian or corn can be used green if desired. In case of drought in August these crops, if planted by the first of July, can be made available, but not quite as large a quantity will be obtained as would be if the plants could stand two or three weeks longer, but there will be enough to make them profitable. All that stock does not need during the summer can make a larger growth and then be cured for winter use.

Barn.

### Barn Yard Manure.

Barn yard manure is by far the best and the most important fertilizer that can be obtained and in this opinion there is no disagreement between the scientific man and the unlearned. It is the natural means of restoring fertility to exhausted soils, because it is natural for decayed vegetation after having performed its functions as plants, to return to the earth and become incorporated with it. The only reason for employing chemical fertilizers, is to make up for the deficiency of barn yard manure of which there is never enough. The commercial fertilizer is formulated to meet a special demand, for good, well rotted manure is of itself a store of food for vegetation throughout the period of its existence. Hence the importance of increasing the quantity and preserving the quality of this great natural fertilizer which to every farmer is a mine of wealth.

Ammonia escapes rapidly in vapor from hot dung heaps. Its presence may be shown by waving a little piece of cloth wet with muriatic acid in the vapor, when if ammonia is present, dense white clouds will be formed.



"Lady Maud," one of the Herd of Jerseys which took First Prize at the Centennial. Property of Chas. L. Sharpless, Esq., of Philadelphia.

### Care of Cows.

Mr. H. M. Smith, writing in the *Maine Farmer*, says:—"I have kept cows for the last twenty-five years for the production of milk for the Bangor market. I give to the heifer at two years, one month before calving, one quart of corn meal and two quarts of shorts per day, that she may be more fully developed. I do this to all my cows; both old and young, varying the feed according to the age of the cow. I consider it very important that a cow or heifer calve with a nice full bag. The heifer must be taught to stand still and give down her milk. Keep her calf and let it suck, and milk her at the same time; then take the calf away as soon as the heifer is dry, that she may not injure the teats, or bag. When I wish to take him off, she will stand still and give her milk freely; always using gentle treatment, that she may not be made fractious. I then give her grain until she comes to grass; and we have a perfect little cow giving from two to three gallons per day. By September (or when she does not get enough in the pasture) I give her a little corn fodder or hay with grain. Potatoes fed in any considerable quantity will produce garget. When I wish for the heifer to go dry I take off her grain; then as the heifer grows older, I increase her feed, adding a little cotton-seed meal. My older cows, or those I give full feed, I give three quarts of corn meal and two quarts cotton-seed meal per day, with good early cut upland hay. It makes four gallons per day difference with eight full winter cows which I am feeding now, whether the cotton-seed is put on or taken off. It is a very nutritious food, and should never be fed alone. When my cows go to pasture they are in good condition, their old coats are gone, and they are ready to do a good summer's work. I take away their grain gradually as the grass increases until they are fully ready to go to grass. If my cows scow badly I give them dry herds-grass hay, which sets them all rights in a few days. At this season of the year my cows are inclined to rub themselves a good deal. I take a fine card (a common wool card I think the best), and card them over every day; they look grateful, and it pays well for the trouble. The floor they stand on is four feet and eight inches deep; they lie dry and clean. I do not allow my men to be rough with them while watering or feeding. I milk as nearly as possible at the same hour night and morning; and milk with the thumb under the fore finger, the right hand and the right forward teat, and reverse. After the cow gives her milk freely I milk as rapidly as possible, and it takes from five to six minutes to the cow.

### Shearing Sheep.

According to an interesting paper by Professor Freitag, of Halle, it is only since the sixteenth century that the practice of shearing sheep has been followed in Germany. Previously to that date the wool was separated by simply plucking it out,—a process which was found to be greatly facilitated by penning up the sheep closely, and keeping them without food for a few days before the operation. This system still obtains in some northern European countries; and the Professor had an opportunity of personally witnessing it during his late travels in certain parts of Norway and Sweden, and in Iceland and several other islands. In these regions the short-tailed sheep (*ovis borealis*), which like other wild mountain races, changes its hair yearly, is the variety chiefly kept; and the fleece is plucked off in June, after its bearer has been submitted to a few days' starvation. The ordinary breeds of sheep met with in most other countries do not change their coat, as has been clearly demonstrated by exhaustive experiments. They have been left unshorn for four, seven, and even eleven years without any fresh growth being observed, although the original coat continued to increase by simple prolongation of the individual hairs. The rate of growth is fastest during the

first three years of the sheep's life, after which time it decreases gradually and considerably. In domesticated sheep the growth each year is most luxuriant immediately after the shearing in June or July; while in the wild breeds, as might be expected, it is most marked in winter time, when the severity of the weather demands additional protection.—*London Farmer*.

### Failure of the Honey Crop.

Among the valuable industries of the United States is the cultivation of the honey crop, but the bee cultivators have become very much disheartened this season by a serious destruction of the bees. Owing to the cold and damp weather of the recent spring the bees have died by the thousands from pneumonia, and many of the bee cultivators have been almost ruined. One large bee raiser in this State, who had 220 swarms of bees, has now only 18, and another who had over 300 swarms has now not a single healthy hive of bees. It has been ascertained by correspondence that in New York and the New England States over sixty per cent of the bees have died, and the others are in a very poor condition. Advices which have been received from the Pacific slope, where over five million pounds of good honey has been produced annually, say that the loss of bees has been very serious, and less than half a crop can be expected. In San Diego county, Cal., which was one of the most prolific, the bee culture has this year become a total failure, and the most favourable signs for the whole State only foreshadow a very small crop of honey for the season. All over the country the bee raisers have been crying out relative to the destruction of the bees, and even the best cultivators can suggest no means for remedying the evil which is likely to kill off all the best honey-giving bees in the country. Not only have the imported domestic bees suffered from the disease; but many of the regions where the native wild bees had been in the habit of collecting in swarms, have been deserted this season, while thousands of the dead insects have been found lying on the ground or on the limbs of trees.

### Raising Pigs.

The most important thing for the swine breeder at this season of the year is to get the greatest possible growth from his spring pigs. There is no period in this life of the hog when so great a return for the food consumed is possible as during the first six months, and it is here that the advantages of skilful feeding are apparent. Unless great care be taken the growth of the pig will be seriously checked when it is from three to five weeks old. The milk of the dam, which was ample to promote a rapid growth in the litter of pigs during the first two or three weeks, is not sufficient to answer the demands of the same litter as they grow older; hence the pigs should early be taught to look elsewhere for a part of their sustenance. This is an easy matter. A little milk or nutritious food of any kind, in liquid form, placed conveniently where the pigs can have access to it at all times, but beyond the reach of the sow, will soon do the work, and it should be replenished frequently through the day. If this is attended to, there will be no "stunting" of the pigs at this critical period, and their growth will be uniform and rapid. A good clover pasture is a valuable adjunct, and helps wonderfully. The true secret of successful pork making is to push the pig from the date of birth until it is big enough for market; and the earlier the age at which this point can be reached, the greater is the return for the food consumed. A slop made of corn and oats, ground in equal parts, with a little oilmeal added, makes the best food for the sow while suckling, to increase the flow of milk; and this, with clover pasture and plenty of soaked corn during the summer, will promote a rapid and healthy growth of pigs.

A Port Hope doctor has a pig with one head, two bodies and eight legs.

## Various Seasonable Hints.

The following hints regarding the hay field, the dairy, the herd, the flock and the garden, are in season:—

### HAY.

Recent investigations threaten to upset some popular notions. It has long been supposed that early cut hay is more valuable than that cut later. If the judgment of the cows were a test there would be no question about it. They will leave the ripper hay, and even refuse to eat it at all, if they can procure that which was cut earlier. In the writer's dairy, the milk falls off more than 10 per cent. when the young hay is changed for that cut two weeks later. This is sufficient to

### CUCUMBERS.

Dust the young plants freely with a mixture of ashes and plaster or air-slaked lime, to keep away insects. Unless seed is to be saved, cut away all that are large enough to use, whether needed or not, to prolong the bearing. In sowing for pickles the last of this month or the first of next, it is as well to sow in well manured rows, as in hills, putting in 12 to 20 seeds to the foot, to allow enough for the bugs. When well established, thin out the vines to a foot apart, and let them spread on each side of the row.

### FREQUENT CULTIVATION.

Frequent cultivation is essential to successful corn growing. The cultivator should be kept going this month through the corn and the root crops, about once a week. It matters not that there are no weeds in sight; it is not alone to kill weeds that we cultivate and hoe, but to loosen the soil, and by that means to stimulate the growth.

### COWS AND THE DAIRY.

Now that winter dairying has come into vogue, it does not pay to pack butter for sale in competition with fresh creamery pairs in winter. A change has come over this business, and it is no longer advisable, unless under exceptional conditions, to keep butter stored away for sale. The most profitable butter now is that sold fresh in small tubs or pails. This change should be noted and provided for as soon as may be. It also affects the management of cows, and these are now brought in fresh at any season of the year, so as to keep a constant supply of fresh milk. With the "perfected butter colorings," as they are called, June grass color has paled in comparison, and is now of less consequence. "June" butter, or butter equal to that, so called, can now be made, with fresh cows, at almost any time of the year.

### SHEEP AND LAMBS.

Dry ewes may be fattened as quickly as possible, and marketed. Lambs to be made ready for sale, require extra food along with the grass. Those not marketed this month, may be fed until the fall, and sold then, when they will pay better. Flies will soon be troublesome, and sheep and lambs should be closely tagged, and smeared with tar in places where flies may gather. The flock should be closely watched, and counted every night when brought in from pasture. The careful shepherd will count his flock every time they are visited or moved. Anything wrong will then be noticed.

### USE THE HOE.

June brings the harvest of the strawberries and the early crops of the garden. It is at this time that the weeds, if neglected, will establish themselves to the partial or entire destruction of the crop. The only way to be master is to keep ahead of the weeds. Fight them when they are weak. "Parsley" and pansies can not thrive together. Clean culture is the only culture that pays. The use of the hoe and rake in June decides, in great measure, what the season's work will bring.

### STRAWBERRIES.

If the beds are not already mulched apply it before the berries get heavy enough to fall over and become soiled. Keep newly set beds clear of weeds, and pull up large weeds that come up through the mulch on old beds. The picking and packing for market requires great care and good judgment, and for it is the appearance of the fruit in the market which sells it. Avoid putting in over-ripe berries as one such will be crushed and spoil the whole basket. Use well ventilated crates; of a size to be easily handled, and plainly marked.

### ROOTS.

Early blood beets and sugar beets may be sown early this month. Mangels will now require clean culture and vigorous thinning. Rutabagas may be sown from the 1st to the 25th of this month upon the land that has support the general opinion in spite of chemical analysis, which go to show that ripe hay is heavier, more bulky, and contains more nutritious substance, than that cut earlier.—*Per-*

haps the operations of the chemist can extract more nutriment from ripe hay than can the cow's stomach; but as young hay feeds more profitably, it seems best to cut early.

### FODDER CROPS.

The rye ground cleared by this time, may be immediately prepared and planted with fodder corn or oats, the latter to be followed with late turnips as the oats are cut for feeding; or Hungarian grass may follow the rye, and be cut off in time for sowing rye again next fall. A good plot of cabbages will be found useful for fall and early winter feeding of cows, and if plants have been provided for, they may be set out on the rye ground, or some other piece of rich moist soil, not been prepared in time for earlier crops.

### THE TENT CATERPILLAR.

The tent caterpillar taken at just the right time, and that time is in this month, can be destroyed with comparative ease. As soon as the nests are large enough to be seen, they should be "wiped out of existence." On a cool morning before the greedy "worms" are out for their breakfast, and while the dew is glistening on the nests, is the most favorable time to take them. The lower nests may be reached by the hands, and the upper ones by a pole with a swab of cloth or a brush. A wash of strong lye is an effective bath for them, but it is best to see that they are burned or crushed.

### SWEET CORNS.

Sweet corns are the best for fodder. Triumph, Mammoth, and Stowell's Evergreen, are suitable for this purpose. The common opinion that sweet corn is better for fodder than field corn is well founded; but there is some difficulty in curing the stalks, which is easily surmounted, however, and which will be noted in season.

### Feeding Cows and Fattening Cattle.

The Ohio *Farmer* says:—"I wish to give my experience with milch cows, and feeding cattle for market. I will speak of the cows first. My feed during the past winter has been ground corn, sheaf oats, and clover hay. I feed one gallon of corn and cob meal to each cow each day. Meal alone in the morning, and cut oats with meal in the evening, at the rate of one small sheaf to each cow, and in addition twelve pounds of clover hay per day to each cow. The two gallons of corn and cob meal weigh just nine pounds, and at the rate of twenty-five cents per bushel, is three and one-half cents per day for each cow. Counting clover hay at five dollars per ton, and oats at twenty-five cents per dozen, I find that my cows consume about seven cents' worth of food each day. We are feeding at present seven cows, ranging in weight from 600 to 1,100 pounds, and from three to five years old—three Ayrshires, two Jerseys and two Durhams. Five of them have been milking five to six months, and two of them four to seven weeks, and they are giving at present from eighteen to twenty pounds each, on an average, per day. I have practiced weighing my feed for my cows the past three winters, and when I first began I was surprised to find how cheaply I kept my cows. Waldo can feed all the corn fodder he wishes to, but I much prefer clover hay as being more convenient, less bulky, and making better manure. I stabled and fed, during the past winter, six teen head of grade Durham cattle, all but two coming three years this spring. Fourteen steers fed twelve weeks, gained 2,440 pounds, or nearly two pounds each per day. Their average weight when I began to feed was 1,200 pounds, and when I quit at the end of twelve weeks, 1,400 pounds; they consumed at the rate of twenty-three pounds of corn and cob meal each, per day, or one bushel of corn in three days, and in addition fifteen pounds each of clover hay per day. I also fed two young cows coming five years old this spring. One of them weighed 950 pounds when I began to feed, and at the end of twelve weeks her weight was 1,150 pounds; the other weighed 1,400 pounds when I began to feed, and at the end of fourteen weeks and four days her weight was 1,700 pounds and weighed 24 hours off of water, her net gain being a little over 3 pounds per day. A great many farmers claim that cattle cannot be made to gain in weight in winter, but it is all a mistake. Good stabling and proper feeding will make beef almost as fast as blue grass.

The easiest and most simple way of protecting young fruit trees from mice, is to carefully remove from about the stem all soil or litter that may be there, then mound up with fine dirt about them to the height of one foot. Half this height will do, if the land is clean. The ground should be made level about the stems of the trees in spring.

### Roosting Places.

Far less attention is paid to providing suitable roosting places for fowls and chickens than is given to a host of other and less important matters connected with poultry and poultry houses. We have seen neat, tasty poultry houses, which appeared from an outside view, to be the most comfortable places fowls could wish for, yet an inspection of the inside revealed the roosts from five to six feet high, far too high for heavy fowls. In "ye olden times," when light-bodied fowls were the go, it did well to let them roost high, especially as the hen-house was not carefully closed at night to prevent the visits of predatory rats, weasels and other animals with a natural relish for chickens in the rough.—*N. Y. Post*.

THE PASTURE.—In an article on pasturage, Alexander Hyde says there is no question but that most farmers have undervalued their grazing lands, have made them no return for the constant drifts upon them for milk, meat and wool, in short, have skimmed them until they are as destitute of the fertilizing elements of grass as skimmed milk is of cream. Few farms can pay interest on the capital invested in them unless they furnish good grazing. The remedy for the slow consumption of our pastures grazed by cows is to top-dress them occasionally with compost, or if they are too remote from the barn for this, to sprinkle them with wood-ashes or bone-dust. In case wood-ashes can be obtained at a reasonable price, there is no fertilizer for pastures so cheap and at the same time so effective. These contain phosphate of lime, potash, soda, in short all the inorganic elements which plants require for food. Sheep are good stock for pasture. They not only eat every plant that grows, but their excrement is all left on the land, and what they carry off in their wool and meat is small in comparison with milch cows. In case a pasture is fairly overrun with hardbarks or other bushes, nothing but thorough surgical operation will cure the soil. The scythe, the grab-hook, and the plow must do the work and the cost is tenfold what it would have been to keep the pastures in good healthy condition by a timely allowance of plant food.—*Exchange*.

THE FARMER'S POSITION.—The farmer occupies the most important station in society. It is to his exertions that the support, the food, the employment of every other rank is owing. To the surplus produce of the farmer we owe the institution, and preservation of distinct employment, the origin of commerce and manufactures, and the existence of government. It is the surplus produce of the farmer that sets the wheel of manufacture in motion; that bids sails of commerce whiten every sea; that gives the religion her ministers, to education her students; that supports the busy population of the crowded city, and that leads to government's resources, its energy its very being.—Let the farmer but raise only enough for his own support, and the mighty heart, which, by its beatings, communicates life to every extremity, would be chilled and every member of the great body politic be palsied in a moment.—*Mason*.

As regards its fodder value, Professor Storer says that from analysis, buckwheat straw, when mixed in small proportion with richer kinds of foods, might, like other straws, be usefully employed for feeding animals in many cases, especially if it were previously softened by steaming or soaking.

Salt boxes have frequently been described in the *American Agriculturist*; as they are easily made, very useful, and the supply of salt is healthful, a few of these boxes attached to the fences of the pasture, and kept replenished with salt, will be trouble well bestowed.

A farmer has experimented with manure taken from his barn cellar under cover and exactly the same kind of manure dropped just outside the cellar and of course exposed to the weather. The crop from the former was just about double that from the latter.—*Lowell Courier*.

RUBBING POSTS.—A few rubbing posts set up in the pastures, will save injury to the fences. Cattle will use these conveniences very often, if provided for them, and it is worth the labor, to witness the enjoyment of the animals in the use of them.

A sprinkling of lime, plaster, or sulphur over the leaves of the strawberry at the first appearance of the blight, is suggested as a remedy for this disease, which has made such sad work with the foliage of this delicious berry.