

The Agriculturist.

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

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ANDREW ARCHER, Editor

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Cling to Those who Cling to You.

Cling to those who cling to you: More than half our sorrow's made When we are ourselves intruders. To the light of friendship's aid; But how sweet it is to own Some kind heart to thine best true. After many years had flown— Cling to those who cling to you!

A Pack of Weasels out Hunting.

Weasels frequently hunt in couples, and sometimes more than two will work together. We once saw five, and have heard of eight. The five we saw were working a sandy tank drilled with holes, from which the rabbits in wild alarm were darting in all directions. The weasels raced from hole to hole and along the sides of the tank exactly like a pack of hounds, and seemed intensely excited. Their manner of hunting resembles the motions of ants; these insects run a little way very swiftly, then stop, turn to the right or left, make a slight detour, and afterward on again in a straight line. So the pack of weasels darted forward, stopped, went from side to side, and then on a yard or two, and repeated the process. To see their reddish heads thrust for a moment from the holes, then withdrawn to reappear at another, would have been amusing had it not been for the reflection that their frisky tricks would assuredly end in death. They ran their quarry out of the bank and into the woods, where we had sight of them. The pack of eight were seen by a laborer returning down a wood-lane from work one afternoon. He told us he got in the ditch, half from curiosity and half from fear—laughable as it may seem—for he had heard the old people tell stories of them in their days when the corn was kept for years in barns, and so bred hundreds of rats, being attacked by those vicious brutes. He said they made a noise, crying to each other in short, sharp snappy sounds; but the pack of five we ourselves saw hunting in silence.—*Pall Mall Gazette.*

DAMPER.—A young city fop, in company with some bells of fashion, was riding into the country a pleasuring, when they saw a poor rustic-looking country lad at work by the roadside. Thinking it a fine opportunity to show his wit to the damels, by sporting with the poor boy's ignorance, he accosted him— "Can you inform me, Mr. Zebede, how far it is to where I am going, and which is the most direct road?" "Poor Zebby, not in the least daunted, but with most sober and composed face, said— "If you are going to the gallows it is but a short distance: if to jail, it stands but a few rods this side; and if only to poverty and disgrace, you are now approaching your journey's end—and as for the most direct road to either, you are now in it, and cannot miss the way."

The dandy dropped his head and drove on.

FLAVOURING WHISKEY.—An Irishman visiting Dublin for the first time went into a tavern and called for a glass of whiskey. It was brought to him with a slice of lemon in it. Pat surveyed it for some minutes in wondering silence, and then, calling the waiter, said in a half whisper, "What's that?" "Lemon, your honour," was the reply. "Sure, I know that," said Pat, who had never seen a lemon before in his life, "but what's it there for?" "To give it a flavour," answered the waiter. This was a wrinkle for Pat, who returned to his bog, and on the first occasion of entertaining his friends, slipped a slice of potato into each man's whiskey. "What's the meaning of that at all," inquired one of the company. "Don't you know it to give it a flavour," replied the host, affecting supreme contempt for the other's ignorance.

COULD YOU GET ME A GLASS?—A good story is told of one of the new school of Scotch parsons who was recently preaching in a strange church in a village. Fearing his hair was not properly parted in the middle or that he had a smudge on his nose, he quietly and significantly said to the deacon (there being no mirror in the vestry). "John, could you get me a glass?" John disappeared, and after a few minutes, returned with a parcel underneath his coat, which, to the astonishment of the parson, he produced in the form of a lemonade bottle with a glass of whiskey. "Ye maunna let on about it, minister, for I got it as a great favour, and I wadna ha' got it ava if I hedna said it was for you!"

Agriculture.

Pleuro-Pneumonia?

Both the *New England* and the *Maine Farmer* refuse to believe that contagious Pleuro-Pneumonia is afflicting the cattle in any part of the States. The *New England Farmer* goes no further than to state, on the authority of Professor Linn of Cornell University, that there have been several cases of the disease in distillery stables at Brooklyn, and on Long Island. The *Maine Farmer* explains what it may have been that the American cattle that were shipped in the "Ontario," that was claimed that was mistaken by the Inspector for contagious pleuro-pneumonia. The cattle were stored between decks, in the most cramped and unventilated quarters, and in consequence in a long and exceedingly stormy voyage the hatches were closed during the entire trip, and the ventilating shafts were demolished by the heavy seas. It is altogether probable that the cattle confined in the foul atmosphere of an unventilated hold, became ill, and that inflammation of the lungs—pneumonia—ensued; as well understood that at this season of the year this disease is frequently developed in man and beast from over-exertion or exposure. Now from the accounts of this transaction which we have, it appears that the Inspector ordered the animals killed on the supposed ground that they were suffering from pleuro-pneumonia—although the symptoms of the disease in the cattle were very slight—and in that case it would be simply impossible to prove that pleuro-pneumonia was present. Between this and ordinary inflammation of the lungs no difference can be detected in the first stages of the disease—only the one is contagious and the other is not. We hardly think it possible that any of the cattle in this condemned cargo were affected with the contagious form of pleuro-pneumonia—but rather that simple inflammation of the lungs due to the confinement and exposure of the long voyage was detected by the Inspector, and this officer ordered them to be killed.

The "Farmers," naturally dislike to think that contagious disease is raging among the cattle in the Eastern States, and will be loth to acknowledge it until it is thrust unmistakably under their observation. They do not like to believe that the live cattle export trade from the United States to Great Britain which has reached great proportions should receive a check. The *Maine Farmer* says— The United States are fast becoming the butcher shop, as we are the granary of that country. England wants bread, butter, meat, cheese—and we are supplying these great staples. Every week, and almost every day in the week steamers leave New York, Boston, Portland, loaded with these products. One steamer lately left Boston for England with a cargo of 252 live steers and 4000 live sheep—and our shipments of dead meat have reached over 8,000,000 pounds in a single month. If live stock imports are prohibited from any cause, it will only serve to increase our trade in dressed meats—England must have beef and mutton, whether we send it to her in one form or the other matters little, only we should dread a visitation of the cattle plague and trust it may be far from us.

Sugar Beets. The Maine Beet Sugar Company has issued a circular stating that they are prepared to contract for 1000 acres of sugar beets, at the rate of five dollars cash per gross ton of 2240 pounds of unwashed beets, as they come from the field, delivered at the nearest railway station; or will pay \$5.75 per gross ton, delivered at the Forest City Sugar Refinery, in Portland, either by wagon or sailing vessel. This is twenty-five per cent. more than was paid last year, and fifty per cent. more than in Europe. They will also supply the seed at the rate of twenty-five cents per pound, payable next fall in cash or beets.

A writer in the *Western Farm Journal* says that salt is injurious to hay and should not be used on it. Instead of drying and preserving it, the salt absorbs moisture, dampens and blackens the hay, and in no case preserves it. Salt in large quantities is a preserver. And so is sugar. But either in imperfect quantities below the preserving measure aids in more decomposition. Cattle are sometimes injured by eating salt hay. Cattle fed on salted hay drink too much water and this brings on laxity of the bowels, scouring and sometimes fever. Salt should be given to cattle in moderate quantities, or kept where they can get access to it daily, and they will not eat too much.

Low Grade Farming. Professor Mason, who delivered the opening address before the Vermont Dairymen's Association that met lately at Montpelier, in that State, made some remarks that might have been profitably listened to by farmers of New Brunswick had any been present. Farmers often become discontented with their lot on account of the small return they receive for their labor. They blame the nature of their calling, though the fault generally is themselves in not bestowing sufficient cultivation on soil which will repay their care. In endeavoring to show what was the real cause that made farming in many cases an unsatisfactory and disappointing pursuit, the Professor said—

Emphatically, I declare it to be my opinion that our farming is of too low a grade. Under the most favorable circumstances, no man can afford to work a sterile acre. With our labor as dear as it has been, it is absolutely certain that our production must be enhanced, and materially so if we would hope to succeed and prosper. I need not tell as intelligent and practical a body of men as the one I now address, that it is no harder to cultivate an acre of very rich land than it is to tend a very poor one; but at the same, or less expense, with double or treble the yield for the rich acre, what a vast difference does it make in the fortune of the farmer! I need not say, you, many of whom are teachers in our noble art, how little tillage, and especially of fertilization, does it require to increase a crop one-fourth.

Let us stop one moment to think what it would add to the general welfare, if all our farm productions could be enhanced just one-fourth. If all the butter of the country was of good quality, it would be a saving of a hundred million dollars per annum. What comfort, enjoyments, joys might be purchased with this amount; and, on the other hand, what misery is imposed on the suffering consumers condemned to wrestle three times a day with an enemy whose strength overcomes them. We do not exaggerate. Experts, whose lives are made miserable by reason of the bad butter they are compelled in the course of trade to taste or smell, assure us that a large share of the butter brought to market is classed as grease, and sells for low price. If it were just fairly good it would bring twice what the wretched stuff brings as material for slushing down the masts of ships or filling some other plebeian purpose in the world's economy. First-class butter is wanted in large quantities, and is quickly taken up at figures which hardly bid the list in market reports, or is retailed privately at prices far in advance of those. Reports came from the butter dealers inquiring. What can we do with the white, streaky, badly-smelling butter, to render it fit for sale? What can they do with it? Not all the spices of Araby could sweeten it. Disguise cannot cover up its iniquity. It comes in such a questionable shape, after all the vain attempts to reconstruct it, that it is suspected at once; and butter, like Caesar's wife, should be above suspicion.

The fact must be confessed that a large of our butter is below first class, and is disagreeable or unfit for use. Can farmers stand this intolerable tax? With abundance of material wealth, as a class they are poor. Poor but honest? We are happy to believe and avow. But not honest to themselves, for they inflict on themselves a yearly loss they would submit to from no other source. A hundred million dollars slip through the farmer's fingers in consequence of bad butter. Sour, bitter cream from dirty vessels yields butter depraved from the churn. We should learn there is such a virtue as cleanliness; poverty is not disgraceful, but nastiness is. Think of these things, brethren, and have them reformed. An increase of one fourth in quantity and price would make a difference of nearly three millions of dollars in our dairy product of Vermont yearly, allowing 200,000 cows to be employed in the product of the dairy. Two hundred thousand cows at 120 pounds per cow average now 24,000,000 lbs. at 20 cents, \$4,800,000; 200,000 cows at 150 pounds, 30,000,000 pounds; at 25 cents, \$7,500,000; an increase of \$2,700,000 in the product of the dairy; and so in proportion to all other farm products. How many farmers in straightened circumstances in Vermont would this increase of production bless! There is no fancy in all this. The fact is in our grasp, and easily made to demonstrate it. How, you ask? By securing a moderate supply, if not a liberal one, of manures. Here, let me say to you, gentlemen, is the foundation fact in

our efforts at improved husbandry in Vermont.

The inexorable and conclusive fact in all successful agriculture, is a rich soil. How to keep our lands up to a remunerative point of fertility, is the great problem that is ever recurring, and is ever perplexing to the farmer. There is no such thing in our practical experience, when dealing with the soil, as stability and uniformity. We must either be ascending or descending in the scale of success. We must be ever moving.

An Agricultural Editor.

The Editor of the *New England Farmer* not having been able from press of duties to attend a meeting of importance and report the proceedings, takes his readers into his confidence and divulges the reason why— "That any of our readers who may think that we can leave at any time without much inconvenience, may better understand the situation, perhaps it may not be out of place to state that a press of home duties, in our case, means a dairy head of fifty cows all for milk, yielding between eighty and ninety pounds of butter per week; that all this butter is churned, worked, salted, and put up in quarter-pound cakes by the proprietor alone; that churning day comes every Monday and Thursday, the year round, and that for the past four years the semi-weekly shipments, regardless of heat, cold, storm, or snowbank have been delivered promptly and without fail to the regular customers. Indeed, this prompt and regular delivery is a part of the "stock in trade" that gives the dairy its value and reputation. Until the present we have been assisted in case of an emergency, by a younger branch of the family, who has been competent to fill the gap caused by our absence, but who is now studying the science, as well as the practice of agriculture, at one of our agricultural colleges. This leaves a load to be carried, which, under the circumstances, is not easily thrown off or shifted upon other shoulders.

The Farmers Requirements.

The *Mark Lane Express* declares that the only hope of the permanent salvation of British agriculture is increased production by means of larger capital and more enterprise. But who, says the *Express*, is to employ the increased amount of capital? The landlords generally will not, because three-fourths of them are limited owners, holding under settlement, and to spend money on their estates would be directly opposed to the interests of themselves and all they have to provide for, with the sole exception of the heirs to the estates. No one else dares, because his property would not be secure; it would be liable to confiscation, according to law. Nor is this all. On many estates it would be folly to spend money in producing more food for game, and on a larger number still enterprise is checked by the most vexatious restrictions against the cropping of the land and the sale of its produce. Capital must be safe, as far as the law can make it so, and enterprise must be free, before our agriculture can be said to have a fair chance in the great conflict with all the world. We want free land, free capital, and free farmers to give us that fair field which, whether with or without favor, we have never yet had in this country, if we would not have the finest agriculture which the world has yet seen sink into insignificance.

The Stock.—While you have been feasting and having a good and pleasant time of it with family and friends during the holidays have you also been duly careful and thoughtful for the stock? Have your domestic animals had a good time of it too, and been provided with dry, warm shelter and plenty of good hay and grain? If not, you have failed of a duty and been guilty of a wrong you ought, we think, to be a little ashamed of. While the law may not force any one to treat his dependent animals in a humane and merciful manner, yet self-interest—the strongest motive with many—certainly does demand it. The better care you take of your stock the more profitable and valuable it is likely to be, and the more it will sell for in the market. Be sure your stock has warm, dry shelter and enough suitable feed, before you sit down to your own feast or lock your self indoors from the winter storms that beat upon your dwellings. Less feed will be required where the cattle have comfortable shelter to protect them.—*Rural Messenger.*

The International Agricultural Exhibition, to be held in New South Wales, has met with a ready response from large numbers of European exhibitors.

Liquid Manures.

Manure in a liquid state is in the most beneficial state for applying it, when immediate results are required. Containing as it does fertilizing principles in a liquid condition, it is more readily absorbed by the feeding roots of the plants. It can also be applied at all stages of the plant's growth, which often cannot be done with solid manure; and some plants which are not in a condition for being much stimulated in the earlier stages of their growth can more readily receive it at the time they do need it when in a liquid form. For instance, peach trees grown in pots or beds under glass, if heavily manured with animal fertilizers before or at the time they are started into growth, are apt to drop their fruit when standing—the most critical period of their growth—but if applied after this stage it is of the greatest benefit to them, increasing the size of the fruit. Farmers who allow the liquid part of their manure to go to waste lose the most beneficial part of it, as ammonia is produced in the greatest abundance in the liquid part. The urine of cows, horses, and swine, together with the droppings of their droppings if allowed to run into a tank, then pumped on the manure heap or upon a compost heap, and then applied as a surface manure on the grass will produce very beneficial effects. Some of the leading farmers in Scotland utilize all the urine and droppings of their barnyards in this manner. It is conveyed from the stables into a large tank, into which they place a pump. Near by they collect into a heap all road scrapings and ditch-cleanings they can secure on their farms, and pump upon it the contents of the tank, conveying it to different parts of the heap with gutters. During the season the heap is turned once or twice, and when thoroughly saturated with the liquid, is conveyed to where it is wanted—more being added to the heap as it can be procured. According to Johnson, the urine of man and that of the pig, for most soils, are more beneficial than that of the horse, the cow, and the sheep, as they contain phosphates—the phosphates of the food of the horse, cow, and sheep remain in the solid excrements. In applying liquid manure to growing plants, great care should be exercised that it is not applied too strong, nor the ground saturated with it, as in either condition it is apt to destroy the tender rootlets of the plant. Urine, used in an unmixt state, is very beneficial to plants. It should first be allowed to putrefy, then be largely diluted with water. Pigeons' dung makes an excellent liquid manure for all kinds of plants in pots of a succulent or soft-wooded nature. A peck put into a barrel of water and allowed to remain a few days before being used, and applied diluted with about one half water, I have used with beneficial results on roses, fuchsias, geraniums, and other fast-growing plants. Guano, used as a liquid manure, should be cautiously applied, for if used too strong it has very injurious effects. It should be mixed with water to the colour of weak tea before using, and twice a week is often enough for any class of plants. When a plant is injured with guano water, its leaves get yellow and fall off, the oldest and most mature droppings first.—*Globe.*

Badly Lighted Stables.

The horse, although it looks straight forward much more than most animals, yet does not do so nearly as much as man, and therefore requires in its habitation, an arrangement of light quite different from that in the owner's dwelling. Give the horse the light from only one side, and it will direct only one of its eyes towards it, but the other eye will be in the shade; this inequality weakens both eyes. Put it in such a position that it looks into the dark, which is certainly unnatural, and when taken out of the stable the abrupt change from darkness to light will harm it. To place it straight against the light, would give the latter a blinding effect which is also injurious to the eyes. The stable should therefore receive its light from above, either through skylights or through windows placed near the ceiling in the wall to which the animal's head is turned as he stands in the stall. Moreover, the stable should be always bright, as bright indeed as daylight; for the horse is not a night or twilight animal, and is in no need of artificial darkness, like fattening stock.—*Rural New Yorker.*

The canning of meats, fruits, and vegetables has become an immense business. In Maine, over five million cans of corn are packed annually, the sales of which amount to \$1,150,000, giving employment to ten thousand people during the packing season.

PICKLED TONGUE.—For one dozen tongues make a strong brine sufficient to cover, and one teaspoon pulverized saltpetre and half pound sugar, keep a weight on them so that they may be covered with brine. Let them remain two weeks, then hang up to dry or smoke if you like.

Phosphate Discoveries in Canada.

Mr. Henry Vennor, F. G. S., provincial geologist, in his report to the Government for the year 1874 and 1875, makes special mention of the valuable discoveries of tri-basic phosphate of lime or apatite which had been made in that part of the province of Quebec immediately to the north of the city of Ottawa, the capital of Canada. Again, in his report for the years 1876 and 1877, he describes more fully the extent and value of these mineral lands, and particularizes many several localities where phosphate of the greatest known purity has been found, and which, on being analyzed, yielded from 75 to as high as 85 per cent. pure phosphate. These reports, and the stimulus of a great demand arising in England and in the United States, induced exploration on a large scale, and the result has been discoveries of phosphate deposits to an enormous extent. Within the last twelve months several remarkable developments in the way of phosphate of lime have been made in the regions of the Gatineau, Templeton, and Le Lièvre rivers where already several mines are in full operation, and are yielding most lucrative returns to their proprietors. Among the most successful mines now being worked are that of the Buckingham Company the Dagway, the Ritchie on the Le Lièvre River (which has recently been sold in London for £15,000), the Templeton, and a few others. The most recent discoveries are those situated in the township of Hull, where, so far as known, the largest exposure has been made, their being at one point a surface of over 40 feet square and 250 feet high laid bare. Several test-openings were made, from which over 90 tons of almost pure phosphate of lime were taken. The Barber Mine, also in that township, is being extensively worked, and has yielded such pure mineral that the sample recently analyzed in London showed 90 per cent. of tri-basic phosphate of lime, or apatite.

Specimens of the apatite found in this district have been presented by Dr. Grant, F. G. S., to the Jermyn Street Museum collection, and to the Geological Society collection, and the British Museum. Probably many visitors at the Paris Exhibition remarked the beautiful bright green samples which were shown there. Out of one pit, 18 feet by 24 feet, and from 15 feet to 20 feet deep, 500 tons of this apatite was taken. In the course of his report, Mr. Vennor remarks— "The most valuable, and, in truth, the only mineral found on these lands is the apatite, and almost the entire rock exposed is true phosphate-bearing rock, a substance already banking among our economies, and probably destined to constitute one of the most important of the raw materials of Canada." There is no doubt that Canadian phosphate, from its high percentage of tri-basic phosphate of lime, will be the phosphate of the future, particularly when it becomes known at how low a figure it can be mined, and at how cheap a rate it can be freighted in cargoes to England. The demand for this material is practically unlimited, and the supply in Canada appears inexhaustible. Capital alone is wanting to fully develop this source of wealth. Already one or two mines have been sold in London; and there is no doubt that when the attention of capitalists is directed to the apparent inexhaustible richness of these mineral lands, they will not be slow in making investments in property which promises such a handsome return.

THE FARMER'S POSITION.—The farmer occupies the most useful, the most important station in society. It is by 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 manufacturers, and the existence of government. It is the surplus produce of the farmer that sets the wheel of manufacture in motion; that bids the sails of commerce when every sea; that gives to religion her ministers; to education her students; that supports the busy population of the crowded city, and that lends to government its resources, its energy and 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 palsied in a moment.—*Mason.*

WHEAT AND LIVE STOCK.—There is the most complete relation and inter-dependence between wheat and corn growing, manure and live stock. The examples of successful farming the world over, in our own province and in other countries, is that the balance of success rests in the live stock of the farm. This is true of the great wheat growing states of the West, as well as the wheat growing sections of the Old World. Yet all over New Brunswick there are instances which prove that unless this plan is resorted to among us, as a system, there must be less and less yield of wheat and corn per acre, excepting, possibly, in new lands. Manure cannot be made on the farm without cattle, sheep and pigs—and successful grain crops cannot be taken from the land year after year, without heavy manuring. It will not do to depend upon purchased commercial fertilizers of the different kinds—the manure factory must become a part of the policy and system of every farm in New Brunswick; the keeping of sheep; the keeping of pigs—even with pork at less than five cents a pound—and the keeping of cows and young neat stock, which are to be stabled every night the year round, must come into the system of New Brunswick agricultural improvement, and this is the key note for the season's campaign. Determine now upon more and better stock to be kept in the future. It will mean more manure; larger crops of hay, wheat and corn; more pork, wool, mutton, beef, milk, butter, cheese—all articles of prime importance and universal consumption—and it will mean more than all else, a new era for better farming, and greater success in all the industries of our Province.

A Safe Opinion on Fertilizers.

Says the Editor of the *New England Farmer*—if he were asked in a general way—to answer from his own experience, whether the use of commercial fertilizers pays—he would reply—that they pay on some land a very much better percentage than on other land; that they pay better applied to some crops than to other crops, and that they also pay much better in some seasons than others. If land is so coarse and loose that it cannot hold water enough to manure a crop, or is too wet for plants to grow in, it would be wasteful to cover it with fertilizer, whether that fertilizer be a concentrated chemical substance or a load of stable manure. Again, if a fertilizer is used for growing a crop that is not wanted in market, like our apple crop of the present year, there can certainly be no profit from growing it under such circumstances; and again, if the season is so unfavorable that all, or nearly all, crops fail, we cannot expect a field to produce well merely because it contains a sufficient amount of fertilizer to produce a crop, provided other conditions were all favorable.

Deep Ploughing.

Some twenty years ago there was a mania among the agricultural theorists for deep ploughing. Every farmer, it was said, had a farm under his hands of great value, where the plow had not yet reached. No matter what the character of the surface and the subsoils were, the plow should go in to its beam. But those men are beginning to get their eyes open. Mr. Geo. E. Waring Jr., in speaking of the results of ten years' management of "Ogden farm," in the *Agriculturist*, says "About six acres were, some seven or eight years ago, plowed about twelve inches deep. The subsoil of blue clay, which was brought to the surface, was a lasting injury to the land. It still shows the ill effect of the treatment, in spite of time and manure. Certainly in this case—and I think many other similar instances—could be found—deep ploughing was a grave mistake, and it will be well for all enthusiasts who are disposed to follow the extreme theories of the deep ploughers, to study very cautiously the character of the subsoil which they propose to bring to the surface. I confess to having been an advocate of these theories for many years, and I have seen them sustained on certain soils, but I have slowly come to the belief that it is usually the safest plan to leave the "surface soil" where nature made it, and where she always keeps it in her most fertile forests and fields. There are some soils that would be benefited by ploughing twelve inches deep, but they are scarce." The rule may be said to be: "never turn up over one or two inches of unfruitful subsoil in one season; and when so turned up the land should receive a dressing of manure."

Feed The Calves Better.

If the calves get poor in fall and winter they will never entirely recover from it. A calf which gets poor during the first winter will never make a beef whose flesh will be as tender and juicy as this one which was kept thrifty. But this is not all. It will be small when it goes to market at the end of three years, and will command only grub prices. Ten bushels of corn meal fed to a calf, in addition to its ordinary rations, will make a return of fifty cents per bushel; while the corn which is fed to a steer when starving through the first two years of his life, will not set the owner twenty cents per bushel. The best way to sell corn is to drive it to market in the shape of good fat steers. And the time to commence is early in the fall with calves. Have no more little "pot-bellied" calves in the spring of the year, which will take half the summer to recover from the stint and starvation during the winter. Barley, too, is better for calves than for beef. Never sell oats at twelve cents, when they can so easily be converted into bones and muscles of calves. It is too late to talk about turnips and rutabagas for calves, but corn, oats and barley are cheap, and we hope that they will be of a far superior quality to any hereofore taken to market. The best class of calves only pay, and the only way to have them right is to begin with them in the State—food for them is plenty—and when perfect in form and flesh the world demands them at highly remunerative prices.—*Local Register.*

A SURE CURE FOR HARD TIMES.

How funny it is to see men so persistently wasting a sovereign remedy. As the frosty mornings come on, when we look at our manure piles, we see a faint, bluish mist rising from the centre of a snow-white cap of delicate frost work. What's the cause of it? It's very plain that nature has begun to think of next year's crops; she knows the land has been over-cropped, and that it needs manure, and with her usual foresight, she is preparing against time of need. If the farmer will now pile up all his manure into heaps, nature will work like a beaver till spring. Then let the farmer haul his sovereign remedy to his land, and hard times will vanish from the face thereof.—*S. Rufus Mason.*

A NEW WAY TO SMOKE HAMS.

Smoke the ham, in which the hams are to be pickled by inserting it over a kettle containing a slow fire of hard wood, for eight days (keeping water on the head to keep from shrinking); in this barrel keep the hams, and pour over them after it has cooled, a brine made in proportion of four gallons of water, eight pounds of salt five pints of molasses, and four ounces saltpetre, boiled and skimmed in the usual manner. They will be cured in eight or nine days, and they may be kept in the pickle for a year without damage.

From 12,000,000 cows in the United States it is estimated that about 300,000,000 lbs. of butter are annually made.