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THE
Canadian Agriculturist.

VOL. VIII.]

TORONTO, FEBRUARY, 1856.

[No. 2.

PREPARE YOUR FIRE-WOOD IN WINTER.

Winter is not yet over, and it may prove useful to some of our readers to turn their attention for a few minutes, to the subject of fire-wood,—one peculiarly interesting at this season of the year. The cost of fire-wood to those who are obliged to buy, in our towns and cities, and in many of our villages, is a most serious item. Unlike some other household expenses, it cannot be dispensed with. Fire-wood is as much a necessary of life in Canada, as water. If it is becoming scarce, and dear, thus early in the settlement of the country, what will it be twenty years hence? Many of those living in cities have flattered themselves with the hope that Railroads would cheapen fire-wood; but they have thus far had a contrary effect. The quantity that these roads consume is enormous, and the cost of carriage for any distance is such that it makes the price to city consumers as great as it was before.

Farmers too are beginning to appreciate the value of their wood, and as their "bush" melts away rapidly under the wasteful system heretofore pursued, they cannot but feel uneasy for the future. Economy is therefore a question of general, as well as individual interest. As we write for the agricultural class, we shall not stop to consider the case of city consumers. They, we fear, must continue to pay a high price for wood. Their only means of relief will be found in warm houses, and an economical heating and cooking apparatus. To those who are not obliged to buy their wood from others we shall offer a few suggestions.

I. If you have cleared up your farm and reserved as much timber land as you think you will need, *let none go to waste*. Use the fallen timber before you attack the standing. Cut down the dead and decaying trees before you touch those that are sound. Thin out your bush gradually; sow grass seed with a large mixture of white clover to keep out weeds, and furnish pasture to your cattle, and you will find your wood-land as profitable as any other. To those who have not yet cleared all they intend to, we would say,—*stay your hand!* Leave *ten* acres more wood-land than you intended, if your lot be 100 acres; and *twenty* more if it be 200. Many farmers in

the older townships would give more for ten or twenty acres of timber, could it be restored, than they have ever realized from the same quantity of cleared land.

II. *Cut and haul your wood in winter.* Much discussion has been expended on the question as to the *proper time* of cutting wood. The proper time, in our opinion, is when it can be done without interrupting the other operations of the farm. During winter the farmer enjoys a respite from field labor. His teams are idle, and he can in most cases, without any additional expense for labor, provide firewood for the year. At any other time it will impede important operations that *must* be performed in season, or loss be sustained. It can be cut and hauled *easier*, and therefore cheaper, when snow covers the ground, than at any other season. A man can load a sleigh quicker and with less effort than a waggon; a team can haul more and larger loads in a day. Low or swampy lands not accessible in summer, can often be reached by Jack Frost's bridge, built for you without charge—and you should therefore take advantage of it. Winter is the "proper" season to procure firewood.

III. *Wood should be seasoned before it is used.* It is a popular error that green wood makes a hotter and better fire than dry. It must *season* on the fire before it will burn, and all the heat required for this purpose is lost as a means of warmth. Water in the process of conversion into steam, absorbs, or renders latent 140 degrees of heat, which go up the chimney. We have seen good fires made of green wood, but we do not believe in the *economy* of seasoning wood in the fire-place. The sun will do it for nothing, and if you give him time will do it well.

IV. *Cut your wood into stove-lengths with a circular saw.* The time spent and timber wasted in chopping stove-wood will in *two* winters, if not in *one*, pay for a circular saw, frame &c. Those who already possess a horse-power—and many farmers do,—can easily make the attachment, and with two horses and two or three hands wood enough to last six months, can be cut in two or three days. The cost of a Saw-mill complete, except the power, is about £10, and it will last many years.

PRICE OF GUANO—QUERIES AND ANSWERS.

MR. EDITOR,—

As a subscriber to your excellent paper—the new series of which is much improved in appearance—may I ask a little information, which, no doubt, you are able to supply. 1st, What kind of Guano is considered best for ordinary farm crops in Canada? Can the best kind be obtained at Toronto, or Hamilton, or at what point? What is the price per ton? I am anxious to get some of this much-lauded manure for use next spring, and shall feel obliged if you can answer the above in the February number of the *Agriculturist*.

With much respect,

I am, &c.

T. H. C.

Trafalgar, Jan'y, 18th, 1856.

REMARKS.—1. There are several kinds of Guano, or rather it is called by different names, corresponding with the names of the Islands from which it is obtained. We understand there is some variation in quality, but the Peruvian Guano is the principal kind in the market, and when unadulterated is unquestionably, a first-rate fertilizer. The “doctoring” of Guano is carried to such a length however, that it is very difficult to obtain it pure.—Even in England adulteration is extensively practiced, and the only security is found in purchasing from Importers of established reputation. As to the best kind for ordinary farm crops in Canada, we doubt whether any kind can be used with profit for grain crops. Hoed crops may justify its application in small quantity, though with regard to these we need further experiments. We had hoped that the Experimental Farm would have been in operation long ere this, and that the economical and manurial value of Guano, superphosphate of lime, plaster, &c. and other matters of a similar character, would have been tested in a careful manner and the results made public. We have no desire to find fault, especially as our esteemed friend, Prof. Buckland is interested, though not as we understand the matter, blame-worthy. The “Farm” has been shifted from one part of the University grounds to another, two or three times; and even now there does not appear to be any certainty as to its location. We would advise the Board of Agriculture to lease a piece of ground for themselves, and expend, in experiments, the money and time now wasted on their “Journal.” These will furnish something worth publishing, and the Board will thus better meet the design of their appointment, and aid the improvement of agriculture. But we are travelling away from our correspondent’s queries.

2. We are not aware that Peruvian Guano, reliable as to quality, can be obtained either here or at Hamilton. Our correspondent, we think, will be obliged to order from New York, or better still, from Baltimore, the head-quarters of the Guano Agent of the Peruvian Government.

3. The price per ton of 2,240 pounds, at Baltimore, is \$55. We presume almost any of our merchants would execute an order for Guano. They may import this as well as any other article. We learn from our American Exchanges that the stock of Peruvian Guano is light, and demand active. The price in England (17th Dec.) was £11 5s. sterling, equal to \$54 per ton.

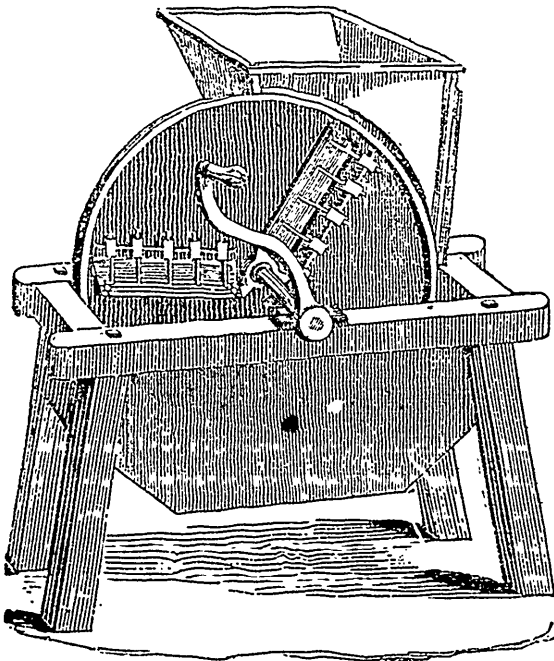
QUICK RETURN OF DEEP DRAINS.

At a recent meeting of the *London Society of Arts*, Mr. H. S. Thompson gave a very lucid illustration of the greater quickness of the deeper drain; and as his experiments throw considerable light upon the relations of air, soil and rain-water, we subjoin a condensed statement of his description:—

It has for some time been known to practical men that deep drains begin to run, after rain, sooner than shallow ones;—a fact that has engaged the attention of the scientific drainer, but seldom, if ever, fully and satisfactorily explained. Mr. Thompson, with a view of solving the phenomenon, had several glass tubes made of different lengths, filled with soil, and tested the times at which they began to drip when water was poured on the soil at the top of the tubes at the same moment. If the soil was

dry, the short tubes, which represented shallow drains, began to run first; but if water was again poured on the tubes before that previously poured on had all passed through, they began to drip again immediately that the second quantity of water was poured on, and without waiting for the water last used to pass through the soil. This was owing to the elasticity of the air confined between the free water at the bottom and that at the top of the column of earth, and in this case all the tubes, of whatever length, began to drip at the same moment. If, however, the tubes, after the first application of water, were allowed to remain some weeks, the short tubes discharged the whole of the free water, but the long ones, representing deep drained land, still retained a little free water at the bottom of the column of earth; and when water was again poured on at the top this free water was *immediately* discharged, or the deep drain began to run;—whereas the short tube, or shallow drain, having discharged all its free water, did not begin to drip for some time;—in fact, not till the water had percolated through the column of soil. This simple explanation seems fully to meet the case, and shows that there is no danger of making land too dry, as some have supposed, by deep draining. Every additional foot of earth ameliorated by the deep drain affords no less than 1200 tons of active earth per statute acre for the sustentation of plants.

VEGETABLE CUTTER.



The cut represents a very useful machine for cutting roots for cattle. In England, where roots are in more general use than in this country, machines to cut, slice, and grate them, are in much request, and no little ingenuity has been expended on their construction. They are usually made of iron; most of them are complicated and costly. The cutter, represented in the figure, is on a good principle, and can be made for about \$12. The cutting wheel is made of cast iron, facced on one side, through which are inserted three knives similar to plane irons. These cut the vegetables into thin slices with great rapidity, and then cross knives operate to cut and break them into irregular

pieces of convenient form and size for cattle or sheep to eat, without danger of choking. This machine will cut one bushel per minute.

PARSNIPS FOR STOCK.

MR. EDITOR,—Having seen it stated that parsnips were more nutritious as food for cattle, pigs, &c., than turnips or carrots, I sowed an extra quantity in my garden last season, and had a good crop. I found that pigs have a great affection for them, for on one occasion they found the garden gate open, and passed by everything else to feed on the parsnips. They seemed crazy to get at them. Now, sir, is not this fondness a strong proof that parsnips are *good* for pigs? Instinct seldom errs in such matters. What I wish to know is, whether they are good for *fattening* as well as mere feeding purposes. Will they fatten quickly, and will the meat be of good flavour, &c.

A SUBSCRIBER.

Etobicoke, January 22nd, 1856.

REMARKS.—There can be no doubt that parsnips are a nutritious as well as healthful food for stock of all kinds—cattle, horses, pigs, and even poultry. We have not tried them sufficiently for fattening purposes to speak from our own experience, but there is abundant evidence on the point from the experience of others. A good authority informs us that—“when parsnips are given to milch cows with a little hay, in the winter season, the butter is found to be of as fine a color and excellent flavor as when the animals are feeding in the best pastures. As parsnips contain six per cent. more mucilage than carrots, the difference may be sufficient to account for the superior fattening, as well as butter-making quality of the parsnip.” Another observes, “that in the fattening of cattle the parsnip is found equal if not superior to the carrot, performing the business with as much expedition, and affording meat of exquisite flavor, and of a highly juicy quality; the animals eat it with much greediness. The parsnips are given in the proportion of about 30 pounds weight, morning, noon and night; the large ones being split into three or four pieces, and a little hay supplied in the intervals of these periods. The result of experiment has shown, that not only in neat cattle, but in the fattening of hogs and poultry, the animals become fat much sooner, and are more healthy than when fed with any other root or vegetable; and that, besides the meat is more sweet and delicious.”

TAKE CARE OF THE LIVE STOCK.

The severity of the weather should remind the farmer of his duty to his domesticated animals. Cleanliness and shelter are quite as necessary as food, if animals are to *thrive*. It is a fact fully established by experience, and explained by science, that animals will do better with a smaller amount of food, when comfortably housed, than when exposed to the rigours of the weather, with the best and greatest amount of fodder that can be given them. When exposed a large amount of what the animal eats simply goes to sustain the natural temperature of the body, instead, as it otherwise would do, of forming muscle and fat. Hence it is the interest of the cattle feeder to provide clean, warm, and comfortable buildings for his stock, during winter. Yet how often do we see, during the most inclement weather, cattle shivering beside some miserable fence, or

corner of an open yard during the greater part of the day, or, perhaps, of the night!—It is no use getting improved animals, if they are not *properly cared for*. Protection against cold and wet; clean and dry bedding, with regular feeding and watering, are the indispensable conditions of success. The chaff or straw cutter is a most invaluable and economical machine, and ought to be in the possession of every farmer, who keeps a cow or a horse. A judicious *mixture* of food is found to be more relished by the stock, as well as more nutritious. With a laudable desire to make animals warm and comfortable, care should be taken not to over crowd them,—particularly sheep, which require for growth and health, considerable space and ventilation. The giving of roots to stock in a raw and half frozen state, is bad economy;—such food should be either *cooked*, or left to be given in *milder* weather.

THE BRITISH GRAIN HARVEST OF 1855.

We learn from various private as well as public sources of information, that the yield of wheat in the southern and central parts of England, does not upon threshing, come up to expectation. The crop was generally thought at harvest-time to be considerably above an average, it is now considered doubtful whether it will even reach that point, in some of the wheat growing districts. In other parts of the kingdom the yield seems to be more satisfactory. Very similar accounts have reached us from Ireland.

In Scotland agricultural statistics are beginning to be collected with the necessary care, and from the returns just published, we learn that sixteen out of eighty-five districts return the produce of wheat as equal if not inferior to the crop of 1854, and the remaining thirty-five districts are stated at ten per cent or more below that crop. Taking into account the character of 1854, as compared with the average of years, we should imagine the Scottish yield of wheat for 1855, to be not much below the crop in ordinary years.

From these facts, and the general state of Europe, it appears pretty evident that there can be no great giving way of the present range of prices before another harvest. Very much will depend on the yield of next harvest and the prospect of peace. Throughout the British islands every effort has been made to put the greatest possible breadth of wheat under cultivation, during the late fall. And we learn from private letters that in some of the southern counties, wheat-sowing was only stopped by the rather severe frost which occurred just before Christmas.

We think, therefore, our farmers will do well to thrash out their wheat and bring it freely to market as the spring approaches. The loss by vermin of keeping it long in the barn in an unthrashed state, is often serious, and prices have some time past reached a point that renders the raising of wheat—as well, in leed, of most other agricultural products,—highly remunerating. A more abundant harvest, especially if accompanied by peace, will no doubt materially reduce the existing range of prices,—but we anticipate no state of things for the future, that can possibly bring down the value of

grain generally, to the low level which previously was obtained in Canada. A new and most important era has undoubtedly commenced in Canadian farming, which it will be the duty and interest of the owners and cultivators of our free and productive soil to sustain and advance. The times of unremunerating prices, and that short-sighted niggardly economy, are we trust and believe past forever. Henceforth our soil will yield an ample return for enlightened and liberal treatment.

AWARDS AT AGRICULTURAL SHOWS.

The Committee on Machinery, Implements, &c., at the last New York State Fair, presented a Report which might well serve as a model for Committees or Judges, at our Provincial Exhibitions. They gave each article deemed worthy of it, a special notice, stating its uses, name of exhibitor, and their opinion of its merits. Information of this kind from a committee of shrewd, practical men, who cannot be suspected of partiality through interest, must be invaluable to the public. To award the 1st prize to A.'s Threshing Machine, or B.'s Plough, conveys little information to the public, unless they are also told *why*. We consider that more than half the benefit of our Agricultural Exhibitions is lost to the country, from the hurried, unexplained awards upon the merits of the competing articles.

The following items from the Report of the Implement Committee of the N. Y. State Fair for 1855, are copied for two reasons,—1st, for the information of readers generally,—2nd, as an example for the benefit of Judges at *our* shows particularly:—

“The most gratifying feature presented, was the unprecedented display of machinery and implements of every description, adapted to every variety of labor. It seemed as if “invention” was let loose upon the world, as the pioneer in every industrial pursuit.

“In this, as in every other effort of the human mind, there is something which may prove abortive. Yet it indicates a strong persuasion that the world is full of secrets of high moment to man, and a conviction that the spirit of inquiry, by the observation of facts, may arrive at important results in agricultural and mechanical pursuits.

“The exhibition was well calculated to instruct all classes, demonstrating to them the progress made in every department of industry; showing them the necessity of keeping up with the age, of taking advantage of every facility offered in improved implements, and in improved modes of agriculture, of maintaining the prestige of position with all, in all the pursuits of life.

“In pursuing the examination, we find it necessary to be extremely cautious to discriminate between the different things offered as “improvements.” The world is full of new inventions, possessing superior merits, if we believe their authors and vendors. We find some of these offered for competition, exhibiting real worth, and calculated to facilitate labor; others worthless, “made to sell.” To the cautious discriminating mind, the subject presents itself in all its practical phases; it selects and uses such as will aid in business. It is ever careful not through extreme caution to lag behind the times, or through undue zeal to become the dupe of imposition!

“The exhibition presented an opportunity for all to inspect these inventions, for the farmer to examine them, for their exhibitors to explain their use and value. It was a coming together of vendors and purchasers for mutual introduction and for mutual advantage.

"1. One of the most useful and efficient machines presented for competition, and which is calculated to revolutionize the whole process of the "Cooper's Trade," is 'TRAPP'S PATENT BARREL MACHINERY,' exhibited by the Elmira Barrel Machine Manufacturing Company. This machine takes the timber in the bolt, saws the staves, hollowing with the grain; cuts them all of equal length; planes both sides smoothly; joints them, giving each stave its proper proportion of bilge; bevels, cuts the crease, turn the head and prepares the barrel for hooping, in a manner perfect and of the highest finish. With selected timber this machine cannot make an imperfect article, as the staves are all made of uniform thickness, are jointed accurate and true from one end to the other, ensuring casks that are tight, strong, of equal weight and capacity.

"The machine is so arranged that it can be guaged to manufacture barrels or kegs, of any size. It takes the stock in the rough, and turns out the work ready for hooping, at the rate of from seventy to one hundred barrels per day, according to their finish, reducing the cost of manufacture very materially. In view of its utility we award a Diploma and Notice.

"2. 'PRATT'S DITCH DIGGER,' the committee consider 'the most valuable machine or implement for the farmer, either newly invented or an improvement of any one in use,' offered for competition, and award it the Society's diploma and Silver Medal.

"3. 'PRATT'S TILE AND BRICK MACHINE,' the Committee deem to be the best improved tile machine entered for competition, and award it the Society's Silver medal.

(The descriptions of these machines—Digger and Tile Machine, are omitted here, as we have not the cuts.)

"4. 'GIBBS'S PATENT PLOW GRINDER AND POLISHER,' exhibited by J. Gibbs, Canton, Ohio, is a valuable invention affording ease and dispatch in grinding and polishing plow castings, inducing the plow maker to depart from the old plan of selling rough work, and freeing the plowman from days of drudgery, before his plow is in a condition to do good service. It is a machine that every plow manufacturer should have who seeks to have public patronage: award a Diploma.

"5. 'BRAMBLE'S AUTOMATIC GRAIN SCALES,' exhibited by S. G. Milligan & Co., Buffalo, is awarded a Diploma.

"The Automatic Scales is adapted to flouring mills and forwarding houses. It receives the grain, weighs, registers and discharges it, and at the same time re-adjusts itself. All the power required is the gravity of the grain. The machine is a moveable drum on a common-platform scale: there seems to be nothing complicated about it.

"The smallest machine will weigh one bushel at a draught, and five draughts per minute; the largest fifty bushels per minute. We deem it a useful invention.

"15. No simple invention has, probably, produced more efficient results than that found in 'DEITZ'S PATENT ANGULAR HAME.' It is so constructed as to fit the anatomical outline of the shoulder of the horse, and confines the draught entirely upon that point of the shoulder where the horse can exert the greatest strength in drawing: award a Diploma.

"16. 'PATENT FARM OR ROAD GATE,' exhibited by C. Winegar, of Cayuga county, is very convenient for passing through without stopping to open or shut, as this is done by simply touching a lever (in approaching the gate) to open it, and another, (after having passed through the gate) to shut it. It is so constructed as to keep in order through all seasons of the year: award a Diploma.

"17. 'LUM'S SELF ACTING GATE,' is so arranged that in driving through in a carriage, the carriage wheel passes over an iron lever, as it approaches the gate, and opens it, and in leaving the gate, over another lever, and shuts it. It is evidently a summer gate and not a winter gate.

"18. 'THE DRAINING TILE AND PIPE,' exhibited by John B. Dixon, of Geneva, is deemed the best entered for competition, and is awarded a premium of \$5.

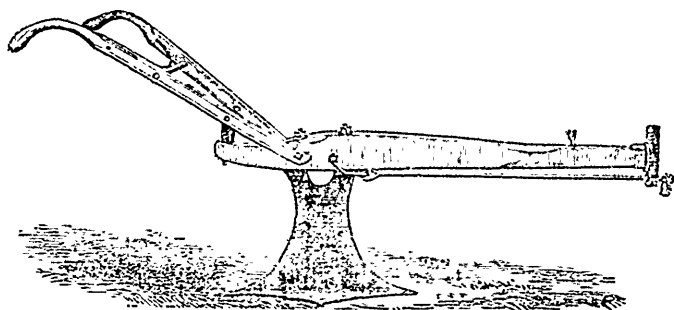
"The attention of farmers being directed more recently to the subject of ditching and draining lands, the committee subjoin the prices for pipe and tile as furnished by Mr. Dixon. It is sold per 1000 pieces, as follows:—Pipe, 1½ inch \$9, 2 inch \$10, 2½ inch \$12 50, 3 inch \$15, 4 inch \$40, 8 inch \$80. Horse Shoe Tile, 2 inch \$9, 3 inch \$11 50, 4 inch \$13 50, 5 inch \$17 50, 6 inch \$25. 13½ pieces will lay 1 rod.

"19. Samples of 'STONE PIPE FOR DRAINS, GAS AND SEWERAGE,' exhibited by E. & D. Foadick & Co., of Middleburg, Ohio. This pipe is glass, glazed on the inside, and will not, therefore, alter the chemical properties of the water or gas passing through it. It is capable of standing great pressure, and well calculated for use in drains, reservoirs, and for hydraulic purposes generally: awarded a Diploma.

"For the information of farmers, &c., we subjoin the price per foot for which the pipe is furnished, viz: 1 inch, 7 cents; 1½ inch, 7½ cents; 1¾ inch, 9¼ cents; 2 inches, 12¼ cents; 2½ inches, 16 cents; 3 inches, 20 cents; 4 inches, 28 cents."

Many other machines are spoken of in similar terms; but we have copied those most interesting to the farmer.

REVERSIBLE SUBSOIL PLOUGH



The above is an illustration of a new subsoil plough got up by Ruggles, Nourse, and Mason, of Boston, upon the recommendation of Professor Mapes, Editor of the *Working Farmer*. It is a double-winged plough, with an inclined plane on each side. It has a heavy cast iron body part or standard, which is secured to the beam by bolts, front and rear. The lower part of the body terminates fore and aft, in a two-winged share or point, the wings or inclined planes on each side moderately rising from said points, meeting centre-ways of the body, at a slight altitude above the base of the plough. When the front end or point has become too much worn to be effective, the body part may be loosened from the beam, turned end for end, and attached again, thus reversing the point.

The inclined planes rising gradually and to but a slight elevation, the draught of the plough is quite light, as compared with subsoil ploughs of other construction, while at the same time the lower soil is loosened and disintegrated. Where the object is to merely open and loosen the subsoil, without bringing it to the surface, this plough will be found useful. We have not seen it used, but from the accounts of its performance in the American journals, it seems to give satisfaction. The price is from \$8 to \$10.

WINTER MANAGEMENT OF SHEEP.

In the U.S. Patent Office Report for 1851, there is a valuable article on the "History and Management of the Merino Sheep," by Geo. Campbell, Esq., of Westminster, Vt., from which we extract the following remarks on the winter management of sheep, which will be read with interest :

"Much of the success of the wool-grower depends upon the winter management of his flock. Sheep are animals which pay their owners better for good care and keeping than any other stock usually kept on a farm; but if fed with a stingy hand, or neglected, if suitable conveniences are wanting, they pay perhaps as poorly as any. The annual loss to the United States, resulting from the want of suitable sheds and other conveniences for the winter accommodation of sheep, is immense. The promptings of self-interest would seem sufficient to induce our farmers to adopt a better system of winter management. No intelligent farmer at this day will attempt to deny that warm enclosures are an equivalent to a certain extent, for food; a variety of well-conducted experiments have conclusively demonstrated the fact. A large proportion of food consumed in winter is required for keeping up the animal heat, and consequently, in proportion as the apartments are warm, within certain limits, the less amount of food will be required. The other extreme, too close apartments, would be objectionable from the impurity of the air, and should be avoided. Sheep have very little reason to fear injury from the cause. The majority of those in our State suffer for the want of shelter, and a suitable quantity and variety in their winter food. Many flocks are brought to their winter quarters in fair condition, but are fed so sparingly that the growth of their wool is almost wholly arrested during the winter season, the fodder given them being only sufficient to sustain the vital functions. Under such circumstances the food consumed by them is in fact nearly lost. The owner has received no return in the increase of wool nor in bodily weight; and he will suffer further from a large per cent. of actual deaths before the time of shearing.

With such a course of management the profits of wool-growing will necessarily be small. If neither self-interest nor the feelings of humanity will induce the farmer to provide properly for his dependent flock, he will find it for his advantage to keep some other domestic animal, and I know of nothing more suitable for such men than the hardy goat. While I protest against the starving system, it would seem hardly necessary to caution farmers against the opposite extreme, too-high feeding, which is also detrimental to the health and long life of the animal. While preparing sheep for the butcher, high feeding is necessary and proper, but for store sheep and breeding ewes an over amount of fat, produced by high-keeping, is decidedly injurious; and aside from the attending expense to produce this state of things, it has a tendency to shorten the lives of the sheep and enfeeble the offspring. The forcing system of feeding brings animals to maturity early, but is productive of premature death.

The proper and most profitable mode of feeding, for breeding and store sheep, is that which will develop in them the highest degree of bodily vigor. Sheep fed in this manner would endure the fatigue of a long journey, while those high fed would fail from the excess of fat, and the scanty fed from muscular debility. Every wool-grower will find it for his interest to provide warm, capacious, and well ventilated sheds for his flocks, with a convenient access to pure water. The feeding racks should be made with good tight bottoms, in order that the chaff and seed, the most valuable part of the hay, may not be lost. Such racks will also answer for feeding out roots and grain, and will avoid the necessity of having an extra lot of troughs for that purpose.

The different ages and classes of sheep should be properly assorted. This classification, however, must be left to the judgment of the breeder. The size of his flock and his conveniences for keeping will determine the extent of the classification. It will be

necessary, in all flocks of considerable size, to place the strong and feeble in separate flocks. The breeding ewes should constitute another division, and so on, with the lambs, keeping each class and age by themselves.

In regard to the question, How often should sheep be fed? a difference of opinion among good managers exists. While one believes that twice a day is sufficient, another thinks it desirable to feed three or four times; but the most important point, I apprehend, is to feed regularly, whether twice, thrice, or four times a day. The writer feeds, at present, hay twice one day; and next, hay in the morning and straw at night, and so on, giving hay and straw alternately instead of hay; and beside, a feed of roots and grain is allowed at mid-day, allowing a half bushel of corn and cob, or oatmeal mixed with two bushels of roots to the one hundred head. As sheep are fond of a variety of food, it is desirable to make as many changes as practicable. If allowed constant access to pine or hemlock boughs through the winter it will be conducive to their health. Salt is also equally as essential in winter as in summer, and should be kept constantly by them. Rock salt, which is imported in large lumps, weighing from 20 to 50 pounds each, is the cheapest and best. Sheep are not liable to eat it in sufficient quantities to ever injure them, as they can only get it by licking."

COFFEE AND COFFEE POTS.

"My dear friend," said the Doctor, holding his cup in the left hand thumb and forefinger, with the other three fingers stretched out over the rest of the table, "I never inhale the fragrance of coffee without thinking of the old-fashioned coffee-pot, or 'Madame Follet,' as dear Miss Bremer used to call it. Do you know, sir—and I suppose you know everything—do you know, sir, there are a great many old-fashioned people in the world?"

We replied the fact was not to be disputed.

"Old-fashioned people, sir; old-fashioned people, sir; old-fashioned in dress, in speech, in politeness, in ideas, in every thing. And, sir, not long since, I had occasion to visit two old ladies, sir; I went down stairs to the basement dining-room, sir, without ceremony, sir, and there I found the antiquated virgins over their coffee, sir; and in the middle of the table there was the old-fashioned tin coffee-pot, sir, scoured as bright as sand could make it, with a great big superannuated spout, and a great broad-necked handle, sir, and a great big, broad bottom, sir, as broad, sir, as the top of the great bell-crowned hat I used to wear when I went to visit them as a spruce young buck, in the year eighteen hundred and twenty sir." Here the Doctor's spectacles fairly glistened again.

"Well, Doctor?"

"Sir," replied Doctor Bushwhacker, "there was plenty of silver, in the cup-board; plenty; great pots and coffee urns of solid metal, sir, with massive handles to match, but they were so old-fashioned as to prefer the old, scoured, broad-bottomed tin pot, sir, and with reason, too, sir."

"Give us the reason thereof, Doctor, if you please."

"Well, sir, one of the sisters apologized for the coffee pot in a still, small sort of a voice, a little cracked and chipped by constant use, and said, the reason why they drank their coffee out of that pot was *because it never seemed to taste so well out of anything else.*"

"Why not, Doctor?"

"Why not? Easily enough explained, sir; we never *make* coffee in a silver urn, and when we pour it from the vessel in which it is made into another, we lose half the

aroma, sir. Coffee is of most delicate and choice flavor, sir; very few know how to make it or to use it. The proper way to make good coffee, sir, is to roast it carefully in a cylinder over a charcoal fire, until it is a light brown color; then the cylinder should be taken off the fire and turned gently until the berries are thoroughly cooled. The best part of the aroma is dissipated, sir, by the abominable practice of turning out the coffee into an open dish so soon as it is roasted. Why, sir, any body can see that the finest part of it escapes; you can smell it, sir, in every crack and corner of the house. When cooled, it should be put into a mortar and beat to powder. A coffee-mill only cracks the grains, but a mortar pounds out the essential oil. Then, sir, put it in an old-fashioned tin coffee-pot, pour on the hot water, stand it over the fire, not too hot; let it simmer *gently*. If your fire is too hot, it will burn the coffee and spoil it. Then, sir, take Madame Follet fresh from the fire, stand her on the table, and if you want an appreciative friend, send for me!"

"What kind of coffee is the best, Doctor?"

"Mocha, sir, from Arabia Felix. The first Mocha coffee that ever reached the Land of the Free and the Home of the Brave direct, sir, came in a ship belonging to Captain Derby, of Salem, in the year 1801."

"When was coffee first used in Europe, Doctor?"

"That my learned friend, is one of the 'two or three things to suggest conversation at the tea table,' as our friends of the Home Journal have it. It is a matter of dispute, my learned friend, and it will probably be settled after the commentators have agreed upon the proper way of spelling the name of Shakespeare, Shaksper, Shlagsper, or whatever you may call him."

"How early was coffee in use in the world?"

"Sherbaddin, an Arab author, asserts that the first man who drank coffee was a certain Muffi, of Aden, who lived in the ninth century of the Hegira, about the year 1500, my learned friend. So says Dr. Doran. The popular tradition is, that the superior of a Dervish community, observing the effect of coffee berries, when eaten by some goats, rendering them more lively and skittish than before, prescribed it for the brotherhood, in order to cure them of drowsiness and indolence. Dickens, in his Household Words, gives a capital account of the old coffee-houses of London. By the way, there is an account, also, in Table Traits. Here is the book.

"Lend me thine ears."—*Shlagsper*.

"The coffee-houses of England take precedence of those of France, though the latter have more enduringly flourished. In 1652, a Greek in the service of an English Turkey merchant in London. "I have discovered his hand-bill," says Mr. Disraeli, "in which he sets forth the virtues of the coffee drink, first publicly made and sold in England, by Pasqua Rosee, of St. Michael's Alley, Cornhill, at the sign of his own head." Mr. Peter Cunningham cites a M. S. of Oldys in his possession, in which some fuller details are given. Oldys says, "The first use of coffee in England was known in 1657, when Mr. Daniel Edwards, a Turkey merchant, brought from Smyrna to London, one Pasqua Rosee, a Ragusan youth, who prepared this drink for him every morning. But the novelty thereof drawing too much company to him, he allowed his said servant, with another of his son-in-laws, to sell it publicly; and they set up the first coffee-house in London, in St. Michael's Alley, Cornhill, but they separating, Pasqua kept in the house. and he who had his partner obtained leave to pitch a tent, and sell the liquor in St. Michael's churchyard. Aubrey, in his "Anecdotes," states that the first vender of coffee in London was one Bowman, coachman to Turkey merchant, named Hodges, who was the father-in-law of Edwards, and the partner of Pasqua, who got into difficulties, partly by his not being a freeman, and who left the country. Bowman was not only patronised, but a magnificent contribution of one thousand sixpences was presented to him, wherewith he made great improvements in his coffee-house. Bowman took an apprentice, (Paynter,) who soon learnt the mystery, and in four years set up for him-

self. The coffee-houses soon became numerous; the principal were Farres', the Rainbow, at the Inner Temple Gate, and John's, in Fuller's Rents.'

"There, sir; and now my learned friend, I must pay a visit to that charming lady, Mrs. Potiphar, who is suffering severely with a neuralgia.—*Wine Press*

From the Country Gentleman.

GAYLORD'S WHEAT CATERPILLAR.

MR. TUCKER,--Other engagements having engrossed my time for a few months past, I have been unable to examine and reply so punctually as was desirable, to several letters of inquiry respecting injurious insects, which have been received from your patrons and correspondents. Being again at leisure, I proceed to fulfil this engagement.

W. R., writing from Cobourg, Canada West, under date of August 4th, says:

"I enclose in two quills, some insects that have made great havoc among my wheat this season, which I suppose to be the Wheat-fly or midge. What I wish to know is, if those small orange-colored things in the quill marked I, are the same species as those in the quill marked II, as I find them both in the wheat. My own impression is, that the one is the *larva*, the other the *caterpillar*, which will by-and-by become the *fly*; but not having been able to satisfy myself on the matter, I take this method of consulting your superior judgment."

The insects in the first of the quills, were, as the writer supposes, the larvæ of the wheat-midge, which is so improperly called "the weevil" over a vast extent of our country. Those in the second quill, had all perished before they reached me, but their dried reliques plainly showed that they were quite a different insect from the others. In their present shrivelled state, these caterpillars are little over the tenth of an inch long, and appear to have had a soft cylindrical body, which is turned upwards posteriorly, and tapers to a point. The head is somewhat flattened, smooth and polished, and of a tawny yellow color, with a few fine bristles scattered over it and the body. The neck or second segment, is also polished on its upper side, and commencing on this segment, five dull white stripes extend the whole length of the body. One of these runs along the middle of the back, and is edged each side with blackish; another extends along each side of the back; and the other, which is broader, is placed low down upon each side. The back, between the three upper stripes, is dull brownish yellow or tawny; the sides are black between the broad lower stripe and that along each side of the back, and the under side of the body is dull pale yellow. There are six pairs of feet, situated upon segments 2, 3, 4, 7, 8 and 9. In the quills were numerous gray and blackish grains, the castings of the worms, held slightly together by fine, cobweb-like threads, which they had spun as they crawled about in the quill.

The description given above plainly indicates that these wheat-caterpillars from Canada, are the same which have long been known in western New-York and northern Pennsylvania, our first and principal accounts of which appeared in the year 1839 in the sixth volume of the *Cultivator*, consisting of a communication (page 21) from Mr. NATHANIEL SILL, of Warren, Pa., and a more extended article (p. 43) from the late WILLIAM GAYLORD. Mr. Gaylord also gave a revised account of the same worms in his "Treatise on Insects," which is published in the *Transactions of the State Agricultural Society*, vol. III. p. 147. We learn from the last edition of Dr. HARRIS'S *Treatise*, (p. 154,) that similar worms had been brought to him from the state of Maine and also from Connecticut, and that subsequently he had himself seen them in a wheat-field in the latter state. From the description which he gives of these New-England wheat-caterpillars, they would appear to be the same as those which I have described

above, except that the number of their feet is stated to be sixteen, whereas, in the specimens before me, twelve feet are plainly perceptible, and I can discern no distinct traces of any beyond these, and this is also the number given by Mr. Gaylord. These worms must hence be regarded as widely different from those of New-England, although they are so closely alike in their stripes and colors.

It is much to be regretted that the perfect insect has never been reared from any of these wheat-caterpillars of our country, that we might know what they are more definitely. Mr. Gaylord says the worms of which he writes, move like an inch or span-worm, which we should not expect them to do with feet situated as they are in the specimens before me. If these specimens show the real structure of the caterpillars, it is evident that they belong to the small group of moths named *Platypteryx*; although all the larvæ of that group which are at present known have one pair of feet more than we find in these worms. This group is placed in the family GEOMETRIDÆ, i. e. the span-worm moths, by Mr. WESTWOOD in his synopsis of the British genera; but more recently (in Humphrey's British Moths) he follows Mr. Stephens in elevating it to the rank of a distinct family, named PLATYPTERICIDÆ, i. e. the broad-winged moths.

According to Mr. Gaylord, these worms feed on the kernels of the wheat, both when it is in its milky state and after it has ripened. They grow to the length of half an inch or more. When disturbed they let themselves down from the wheat-stalk by means of a fine thread which they spin. Some years they appear in great numbers, and perhaps not one of them can be found the next year; and they will sometimes be quite numerous in one wheat-field, when an adjacent field will be exempt from them.

ASA FITCH. *Salcm, N. Y. (East Greenwich P. O.) Nov. 5, 1855.*

PASSAGES FROM A FARMER'S NOTE-BOOK.

..... I find it stated, at a late meeting of the Yorkshire Agr. Soc., that heads of wheat differ more than I had previously supposed as an average, in respect to the number of kernels or grains which they contain. Mr. H. S. Thompson, of Kirby Hall, presented one head as a sample of the largest sized heads, and it was found to contain seventy-nine grains. In some quite as large heads grown in 1853, and of this same kind of wheat, the number of grains only reached from twenty to thirty, and those were extremely small. The crop in which the best heads contained from twenty to eighty grains, produced rather more than five quarters (over forty bushels) to an acre. The crop of 1853, of which some equally large heads contained only twenty to thirty grains, looked equally well, and had fully as many stems as the other; but it produced only two quarters (about seventeen bushels) to an acre.

From these and similar observations which this gentleman had made he was pretty thoroughly persuaded that the great difference in the yield of different crops consisted chiefly in the number of grains in the ear; or, in other words, that the great difference between a productive and an unproductive crop was to be found in the great difference of the number of grains in the ear.

May not a hint be taken from these observations? It seems quite probable that if those heads which contain the largest number of grains were selected out and sown by themselves we might in this way effect an improvement, or obtain seed to produce an improved and more productive kind of wheat.

..... We find it stated that a certain portion of land in England which for many years had been let at a rent about equal to sixty-two cents of our currency, is now rented at a sum equal to about twelve and a half dollars. During the period in which this

land could not command any more than the lowest rental just named, it was sold at a price equal to about thirty-two dollars of U. S. currency. The present market value of this land is not stated; but if in the same proportion to the rent as formerly, its value would now be about two hundred and fifty dollars.

This very surprising increase in the value and in the rental of the land is likely to excite in some, if not incredulity, at least curiosity or inquiry as to the cause. And what was the cause of so great a rise? It consisted in the change of a blowing sand into good arable and productive soil. This change seems to have been brought about by the addition of one hundred loads of clay to each acre of the light sandy soil. While this addition of clay to sand was being carried forward many thought the proprietor was committing an expensive act of folly and madness. But any one can in a few minutes make all the calculations necessary to prove that, at ordinary rates of wages for labor, every load of this clay must have been well laid out. For the land which formerly would produce next to nothing, now produces, when in wheat, as much as forty bushels to the acre. Or each acre has been raised in value nearly two hundred and twenty dollars; and by the most liberal calculation, the addition of clay which was made could not have cost, at reasonable distances, any thing over the one half of this sum, and probably not as much as that. After allowing a wide margin for manuring afterwards, there would still remain a considerable sum to be set down as clear or net profit.

But it appears that many sandy soils in Norfolk county especially, had been rendered ordinarily fertile or productive by the addition of much smaller quantities of clay. It has been the practice of some in that county to add thirty to forty loads of clay per acre, and to repeat that in ten or twelve years. The land thus treated has in consequence, become so altered in quality that it was almost impossible for old neighbors who had moved away to recognize it again.

Whether fifty dollars could be expended to better advantage in improving an acre of light sand by the addition of clay or of muck is a question about which we find variety of opinion. Almost every one admits however, that some such amount might be laid out on some sands so as to *make it pay*. ARATOR. In *Country Gentleman*.

DRY BROTH.

Dry broth is a very useful and nutritious article. It is very common in Russia, and in other countries amid huge forests where game is scarce and fuel of great price. In traveling in that country, I came to a place where this broth was manufactured, and remained there three days for the purpose of learning the process. It is as follows:

Take half of an ox, half of a sheep, entire, ten fowls, ten partridges, and cut all these into small pieces. Place it in a copper boiler well tinned, and pour six quarts of water to one pound of flesh. Cook this in the open air, or in a basement over a moderate fire, skim it carefully, and after the soup is well cooked add some vegetables, &c., that is to say, celery, pork, parsley cut fine, and cook the whole ten hours or more, or until the soluble portions of the flesh are dissolved. Then strain the liquor through a colander. Place the residue under a press and pour what flows from it into the soup. The residue of the flesh is comparatively tasteless, and may be given to dogs, swine, &c.

The soup which has been strained, is again poured into the boiler, and made to boil moderately. It should be taken from the fire at such time as, when poured off and allowed to cool, it will become a compact mass, resembling chocolate. This moment must be determined by repeated trials. The soup should then be poured into vessels of tin or potter's ware, and suffered to remain several days. The mass is then placed in the sun or in a dry room, until it shall become dry soup.

Dry soup is prepared of different sizes, of one, three, six or twelve pounds, and is sold by weight.

It should be observed that in its composition there is no salt, nor spice. Salt has a tendency to soften and moisten it, and any spice does not suit all persons alike. Besides, the broth, being administered as soup and dissolved, would not be suitable for the sick.

This dry broth forms a very convenient kind of food for those traveling on foot or through uninhabited districts.

The Russians who make the voyage from Moscow to Kiachta, over the steppes of Siberia, scarcely use any other kind of food. A vessel holding six or eight ounces of boiling water, into which is thrown a half pound or more, according to the number of guests, seasoned with salt and pork, and with garlic if to their taste, poured upon biscuits, furnishes a nutritious, wholesome and pleasant repast. For sailors it is useful as a preventive of the scurvy. (When wrecked, should each man secure a few pounds of it they might thereby save themselves from starvation and death.) In long journeys over prairies and desert countries, it is of very great value.

This broth might be prepared with the beef and mutton, without the addition of other things. But it would not be so pleasant to the taste, nor command so high a price.—*Plough Loom and Anvil.*

BUTTER MAKING.—SWEET CREAM.

A writer in the *Ohio Farmer*, discussing the propriety of allowing cream to turn sour before it is churned, says :

“If milk be churned as soon as drawn from the cow, and butter be separated, the buttermilk will be found to contain acid, though it may not taste very sour. Whether this lactic acid is a cause or an effect of the separation of the butter, has not been satisfactorily settled; but that it is always present after butter has been churned is a well ascertained fact, and this fact all scientific books on the dairy assert. Johnson, Ballantyne, Ayton and Traill, all teach that “butter made from sweet cream is less in quantity and requires more labor to produce it, and is therefore unprofitable.”

We do not quite agree with this. We cannot imagine why the presence of a minute portion of lactic acid should be presumed without evidence to promote the gathering of the butter. That should be proved ere it is put forth. We know that nice tests often discover the presence of lactic acid in *new milk*, and we have good reason for believing that the process of churning, by which the temperature of portions of the milk must be somewhat affected, should tend to increase the amount of acid. We are not satisfied that the presence of lactic acid is either the cause or the effect of the separation of the butter. Nor does the fact that sweet cream requires longer churning than sour cream, *if it be a fact*, show that it is less economical. The quickest process is not always the best. Besides, our scientific men are not the best authority on such questions. We should much prefer the opinions of judicious dairymaids. We have facts, from such sources, which we would offset against a host of mere chemists, though ever so “scientific.” Ask the dairymen and women of Orange county, so widely distinguished for its good butter, and the information they would give would not strengthen the doubts which this writer suggests.

We do not believe that the presence or the absence of lactic acid can have any effect on the “quantity” of butter. The butter is there confined in sacks, and lactic acid cannot increase it, nor can butter produce lactic acid. Science cannot begin to

give a reason why it should be supposed to do so. Facts show that the best butter, the butter that with a given amount of washing will retain its sweetness the longest, is from sweet cream.

But we doubt whether sweet cream requires more labor to "produce" butter than sour cream. Each little sack must be broken, and its contents gathered. We can see how the presence of very sour milk might hasten the process of gathering or collecting the butter, after it has "come;" but this is not what the chemists mean to say; and whatever they mean, their opinion is of no more value than that of any mere professor of science, who may be fond of his own theory. Such questions are for actual practical churners to determine, who use various kinds of churns and various qualities of milk and of cream, and so far as our experience, which is not small, and our inquiries, which have been extensive, can elucidate this question, the conviction is full and complete, in our minds, that it is desirable to have sweet cream for butter that is to be kept a long time. Sour milk does not of necessity make sour butter, but the presence of sour particles in the butter made from sour cream cannot be certainly avoided by almost any amount of washing, and there may be enough present, after very frequent washings, to convert the whole, ere long, into a rancid mass. Hence we go for sweet cream.—*Ex.*

C O L D F E E T

Are the avenues to death of multitudes every year: it is a sign of imperfect circulation, of want of vigor of constitution. No one can be well, whose feet are habitually cold. When the blood is equally distributed to every part of the body, there is general good health. If there be less blood at any one point than is natural, there is coldness; and not only so, there must be more than is natural at some other part of the system, and there is fever, that is, unnatural heat or oppression. In the case of cold feet, the amount of blood wanting there, collects at some part of the body which happens to be the weakest, to be the least able to throw up a barricade against the in-rushing enemy. Hence, when the lungs are weakest, the extra blood gathers there in the shape of a common cold, or spitting blood. Clergymen, other public speakers, and singers, by improper exposures often render the throat the weakest part; to such, cold feet give hoarseness or a raw burning feeling, most felt at the little hollow at the bottom of the neck. To others, again, whose bowels are weak through over-eating, or drinking spirituous liquors, cold feet gives various degrees of derangement, from common looseness up to diarrhœas or dysentary; and so we might go through the whole body, but for the present this is sufficient for illustration.

If you are well, let yourself alone. But to those whose feet are inclined to be cold we suggest,

As soon as you get up in the morning put both feet at once in a basin of cold water, so as to come half way to the ankles; keep them in half a minute in winter, a minute or two in summer, rubbing them vigorously, wipe dry, and hold to the fire, if convenient, in cold weather, until every part of the foot feels as dry as your hand, then put on your socks or stockings.

On going to bed at night, draw off your stockings and hold the feet to the fire for ten or fifteen minutes until dry, and get into bed. This is a most pleasant operation, and fully repays for the trouble of it. No one can sleep well or refreshingly with cold feet. All Indians and hunters sleep with their feet to the fire.

Never step from your bed with the naked feet on an uncarpeted floor. I have known it to be the exciting cause of months of illness.

Wear woolen, cotton or silk stockings, whichever keep your feet most comfortable; do not let the experience of another be your guide, for different persons require different articles: what is good for a person whose feet are naturally damp, cannot be good for one whose feet are always dry. The donkey who had his bag of salt lightened by swimming a river, advised his companion who was loaded down with a sack of wool to do the same, and having no more sense than a man or woman, he plunged in, and in a moment, the wool absorbed the water, increased the burden many fold, and bore him to the bottom.—[Fall's Journal of Health.

THE DIFFICULTY OF JUDGING BETWEEN FIRST-RATE ANIMALS.

The following, from the *Mark Lane Express*, may be read with profit by those acting as judges at our public fairs. The recommendation in the last paragraph may be useful to Agricultural Societies:

“Sir:—Allow me to offer a few remarks on this subject, as applicable to the approaching meetings of our leading agricultural societies, now close at hand.

“The difficulties which are often experienced by the most competent judges, in deciding between two really first-rate animals of a first-rate sort, are greater than the majority of people who have never acted in the capacity of judges have any idea of.—I am happy to say that at the meetings of the Royal Society such cases frequently do occur, and, I hope, always will, and with the wish that what I here assert may tend to assist judges on their laborious duties, I am induced to trouble you with these remarks.

“I will take an instance of two first-rate short-horned bulls, neither of them having a faulty point. Judge A. says, ‘What a superb back No. 1 has!’ B. says, ‘But look at that depth of carcass in No. 2!’ ‘But the length of quarter in No. 1!’ continues A.; and in return B. draws attention to the silky texture of the skin of No. 2. The question is here put to judge C. who *should* decide the case; but he has to balance, in his mind, whether a superior back is more to be considered than extraordinary depth of carcass; and again, is a first-rate quality of hide equivalent to an unusual length of quarter? And thus points, without having some definite value attached them, might be compared one against the other *ad infinitum*, without ever coming to a satisfactory conclusion.

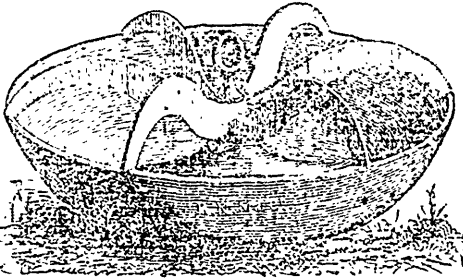
“Now, what I wish to see is, a definite value affixed to every point in the perfect animal, and when such cases of nicety as I allude to do occur, let the judges take point by point, and compare value in numbers, and then the animal commanding the highest amount would be the one selected. If the perfect animal were 50, the component parts might be something as follows:

	Bull.	Sheep.	Boar.
General Appearance, - - -	8	12	20
Back, (length and width,) - - -	8	10	8
Chest - - - - -	6	4	5
Width of hips and loin, - - -	5	5	5
Depth, (rotundity of carcass,) - - -	5	5	4
Quarters, - - - - -	5	3	3
Head, - - - - -	4	4	9
Hide, (or wool,) - - - - -	4	5	2
Bone, - - - - -	3	3	2
Shortness of legs, - - - - -	2	1	2
	50	50	50

"This table is merely on a rough scale; but I think if the committee of the Royal Society would devote one of their meetings to the consideration of the subject, their time would not be wasted; and a scale made under their direction, similar to the above, would be received by the agricultural public as an authentic data to refer to.

"Hoping that these remarks may draw the attention of our great stock-breeders to the subject,
I remain yours, etc.,
X. X."

IRON PIG TROUGH.



Pig troughs, as they are commonly made, will probably continue to be used by those who are not tastefully in such matters, and who have no great admiration for *new* things, which cost a little more than the old. But it must be borne in mind, that the first cost of an article, is not always its real, or full cost. Durability is an element that materially affects the question, and it may often happen that an implement, or utensil, which costs three times as

much as another, intended to serve the same purpose, is yet cheapest in the end, because it lasts three times as long. Of course, where the farmer is in want of capital—perhaps is paying for his farm out of its yearly productions—he is not able to purchase high-priced implements, though convinced of their superior merits and greater economy in the end. In such cases, inferior and cheaper articles must serve, until he is rich enough to procure better. It is well known that the capitalist in every department of life, can purchase in the same market, and even the same goods, at a lower price than the poor man. But by enabling the purchaser to secure the *best* articles, as to quality and durability, wealth is always a great advantage. Happily, a large proportion of our readers in this favoured country, are, in the true sense, wealthy. They "have enough and to spare." The disbursements of the year for all the necessaries and ordinary comforts of life, are more than equalled by the receipts. There is an annual addition, small though it may be, to the accumulations of the past. We call such persons *wealthy*, and when engaged in agriculture, they can afford to buy the best stock, and the best implements.

This is rather a long story over a *pig-trough*, but the idea we are endeavouring to impress on the reader, is just as applicable to the subject in hand, as to any other. The cut represents an improved pig-trough, consisting of cast-iron, which is both durable and convenient. The object of the partition fixture, which can be removed by a few turns of the screw in the middle, is to prevent the swine from getting their feet into the trough, or hindering weaker ones among them from obtaining their portion of food. It will be seen that *six* can feed at this trough at once. It costs little more than a common kettle of the same weight, and in many cases will, no doubt, be found preferable to any other kind.

AGRICULTURE—PAST AND PRESENT.

A LECTURE DELIVERED BY PROF. BUCKLAND BEFORE THE TORONTO MECHANICS INSTITUTE, DEC. 21ST, 1855.—CONTINUED FROM OUR LAST.

We must now pass on from the field of classic literature, and make a few passing remarks on the condition and progress of our art in the mother country, during the middle ages. Britain was mainly indebted to her ancient conquerors, the Romans, for her first lessons in systematic agriculture, as also indeed for other civilizing arts. But soon after the retirement of that adventurous people, a blank commences in British history, and at the fall of the Empire in the early part of the fifth century, we learn that husbandry, with other useful arts had declined generally; and in Britain, the Saxons, Picts, and Scots, kept the country continually embroiled in internal wars,—the fields were ravaged, crops destroyed, and both the invaders and the invaded had to lay aside the ploughshare for the sword. The devastations of war, from the fifth to the eleventh century rendered land the least costly of all gifts, though it must ever be the most valuable and permanent. Amid the conflicts of factions and the din of war, the pursuit of letters and the arts, (among the latter agriculture occupied a foremost place,) found a retreat and a congenial atmosphere in the religious houses of that period. For despite the abuse which has been heaped upon their memory, the Monks were the sole conservators of agriculture and the other useful arts, as they unquestionably were of sound learning. Many of the grants to monasteries which strike us as enormous, were districts already wasted, which would probably have been reclaimed by no other means. We owe the agricultural instruction of the greater part of Europe, to the Monks:—they chose for the sake of retirement, secluded regions, which they cultivated with the labor of their own hands. Several charters are extant, granted to convents, of lands which they had recovered from a desert condition. The monks were in fact not only the most advanced agriculturists, but the first landlords in the best acceptation of the term, connected by the ties of ecclesiastical dependance and intercourse with Rome, the seat of their supreme authority, and whatever still remained in the world of ancient art, science and literature, and employed in the transcription of manuscripts, whose language was a silent repository of knowledge to all but their own order, they kept alive the embers of past learning and civilisation, which were otherwise threatened with extinction. Traces of their agricultural skill and labor, may yet be observed in several of the richest and loveliest scenes of the British Islands.

We have drawn a very hasty and imperfect sketch of Agriculture in the past, let us proceed to glance as far as time will permit at its condition and progress during the present century. It is now about fifty years since Davy read his celebrated lectures on the relations of chemistry to the practice of husbandry, before the Board of Agriculture. That circumstance may be said to have commenced a new era in the art. Agriculture having invoked the aid of science, it became thenceforth destined to assume a higher and more definite form. It became in fact reduced to its simplest formula,—the laws which regulate the conversion of inorganic matter, through the intervention of the vegetable, into the varied forms of animal life. Chemistry pointed out the soil and the atmosphere as the only sources from which vegetable and animal structures are built up, and the laws which govern their combinations.

“Out of nearly sixty centuries which make up the history of the world, take away but the last,—I might almost say the last half century and what becomes of this great elementary science, (little even yet valued at its true importance) which dissects and

explains to us, the simple elements and constitution of all the mat'er we behold,—of every existing substance that we come into contact with by the aid of our bodily sense, of everything, in short, that we can touch, taste, smell or see, and of a great deal which is not cognisable by the external senses, but only by those of the mind, such as invisible gases:—where, again would be that other science, which investigates the substance of the planet on which we live and move; which, step by step, interrogates the solid rock, and chronicles its place in the history of creation, by the evidence inclosed, (not without a fore-intended purpose) in its successive layers of once living creatures, now lying in monumental forms, more real than sculptured effigies, and affording, (by the regular series they present of fossil anatomy and osteology,) a complete sketch of the rise and progress of organic forms of plant and animal, antecedent to those we now see around us. Where, again, would be that analytical history of organised matter, which explains the growth and structure of all existing forms of LIFE, containing within themselves the principle of incision and reproduction?—I allude to Chemistry, Geology, and Animal and vegetable Physiology.”

It must be acknowledged that, considering the high antiquity of the agricultural art and its importance to mankind, science has done infinitely less for it, than for any other economic art of much inferior value. Many of the old rules and practices of Greece, and Rome, as we have already seen, have come down to the present day in their primitive and unimproved condition. This state of things admits of a ready solution, when it is considered that the present century may be said as having given birth to organic chemistry, at least so far as it has any clearly defined bearing upon the principles and practice of agriculture. Several tangible causes might readily be assigned to account for the comparatively slow progress of this art. One is to be found in *variety of climate*. This, which, from the earliest time, was the moving one in commerce, was a restricting and retarding one in agriculture. The easy labors of the Egyptian husbandman, when the Nile has left his fields manured and cultivated to his hand without any trouble on his part, would afford little of practical knowledge to the farmer of Bœotia, Migara and Thrace, the granaries of Greece, or of Sicily and Sardinia, the storehouses of Rome: nor would these in their turn, supply much useful or applicable information in the art, as in the progress of civilisation towards the more northern parts of Europe, the changed influence of the elements and seasons, gradually altered almost to complete reversal, every detail of husbandry practice, under the inverted preponderance of heat and cold, drought and moisture. The progress of the art was checked, as the conditions of its practice kept varying at every step.

Again differences of *soil* would be found upon smaller areas to operate against the rapid march of agricultural improvement, and of establishing the art upon a strictly scientific basis. What was applicable to one particular section of country, or indeed to one portion of a farm, would not be found suitable to another portion possessing a different soil. Altitude, or the elevation of a farm above the level of the sea, exhibits the exact effects of different latitude.

Then again the condition in the life of the agriculturist has been felt in all ages as more or less an impediment to the rapid diffusion of rural improvement. The farmer, from the very nature of his pursuit, is more or less localised and isolated, and is consequently cut off from the daily intercourse and mental activity which characterise the inhabitants of towns. The facilities, however, which railways are conferring on travelling, in diminishing vastly both the time and money consumed, is operating most favorably on the rural population and we are just beginning to partake of the advantages in Canada. Few things tend more to the improvement of agriculture, than the enabling of its followers to make extensive observations. Lord Bacon told us three centuries ago, that a science can only grow *by the observation of individual facts*. It is of the utmost importance therefore that agriculturists should occasionally extend their observations beyond their own districts, and make themselves acquainted with the farm practices and productions of different soils and localities.

Another cause of slow progress in this art may be found in *the length of time needed for experiment*. In many arts *effects* rapidly follow their *causes*, so that many trials can be made in a short space of time. Not so however in agriculture. The farmer can usually make but a single experiment on a given subject in the course of a year, and with reference to some manures and systems of rotation, several years are required to arrive at a single result,—beside after carefully, and it may be successfully, watching a series of processes for a number of years, some unforeseen and equally uncontrollable change takes place in the season, or a destructive visitation of insects, before the experiment is concluded, which render the whole proceedings of little worth. How different is the condition of the manufacturer, who conducts his operations with rapidity and certainty; and protected from, what to the farmer is so often a source of difficulty and failure, the fickleness of the weather. A Newton, a Columbus, a Harvey, a Watt, a Davy, or an Arkwright, might each, in a single life, revolutionise the whole structure of the art or science which formed the subject of his particular genius; but it was scarcely within the compass of a single mind to achieve discoveries of a corresponding magnitude in an art like agriculture, whose experiments reach over periods which exhaust human life in their development, and refer nearly to the whole catalogue of the sciences for the principles on which they depend.”

(To be concluded in our next.)

FLUKE POTATOES.—The Rural New-Yorker says, “Some of these potatoes were distributed from the Patent Office, last spring, and through the politeness of B. P. Johnson, Esq., several were received at this office. It is an English variety, and is much esteemed at Liverpool for its flat shape, fine quality for the table, and its long keeping. The writer planted one of the smaller specimens, and raised therefrom one dozen medium sized potatoes, of fine appearance. It was planted whole, and on a poor, sandy knoll, first plowed last spring. We are inclined to think it will prove a valuable variety.”

GALLOWAY CATTLE.—We perceive that these superior cattle for beef, were exhibited at the Fair in Canada West, and that quite a number of them are owned in Canada. We trust some of our enterprising farmers will introduce them into our State, as there can be no doubt of their proving very valuable in the northern districts of our State, and that they will give us beef that will astonish some people who have never witnessed the choice marbled beef from the Galloway.—*Trans. N. Y. State Ag. Society.*

CORNS.—Soak the feet in warm water, pare off as much as possible of the horny part of the corn, then lay upon it a moistened wafer, and again upon this a piece of buckskin, with a hole cut through it the size of the corn. Renew the moist wafer twice a day, and in a very few days the corn will work out. This cure is complete.

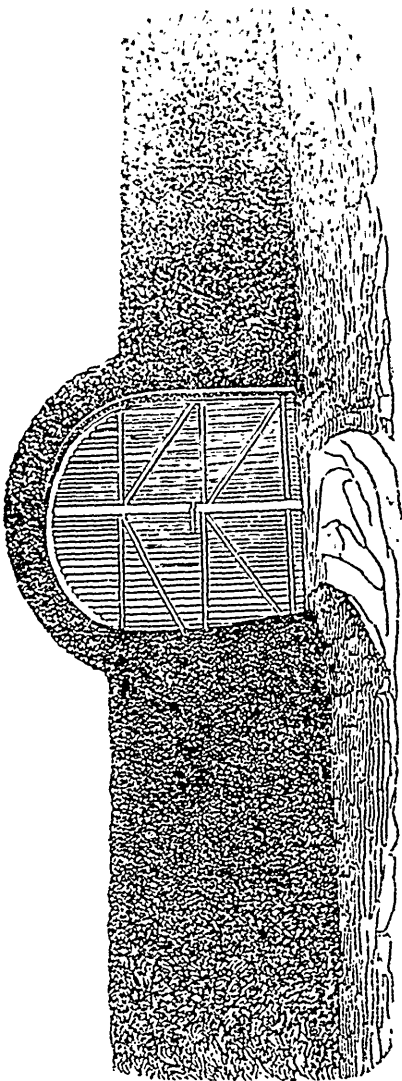
CASHMERE GOATS.—Dr. J. B. Davis, of South Carolina, has recently sold 15 three-fourth bred Cashmere kids, seven months old; and one two years old pure bred buck, for \$1,000, to a gentleman in Tennessee. The buck for \$1,000; the ewes at \$2,000 each.”

WOODEN SHOES.—In the French army, the soldiers, during the winter, wear wooden shoes. The result is, that the French army is less afflicted with toothache and rheumatism than any army in the world. A wooden-bottom shoe is always dry.

NURSERY PUDDING.—Slice some white bread, without crust; pour scalding milk on it; let it stand until well soaked, then beat it well with four eggs, a little sugar and grated nutmeg. Bake in small cups half filled.

TO CURE BROKEN HORNS.—Remove the mutilated horn, and bind the stump with a cloth well tarred or pitched; any fabric will do to bind with, if the wounded part be first well covered with warm pitch.

LIVE FENCES.—THE OSAGE ORANGE.



We are glad to find that the hedge-plant, called Osage Orange, or *Maclura*, has been introduced into Canada, and that from the experience of two winters, it promises to thrive sufficiently for the purpose of a hedge. In the south-west, where it was found growing spontaneously, it obtains the dimensions of a tree, but as it is carried north, it diminishes to the size of a bush or shrub suitable for fencing. In the North-Western States thousands of miles have already been planted. It is regarded as a *God-sent* by the inhabitants of the great timberless, stoneless prairies. The English white thorn has been tried in several parts of Canada, but so far as we can learn, it does not give satisfaction. It is too long coming to maturity, demands too much labor, is tender, and liable to be destroyed by mice and insects. We cannot learn that any thorough, properly conducted experiment has ever been made with the common thorn of the country, as a hedge plant. If any of our readers have tried it, they will much oblige us and confer a public benefit, by communicating the result of their experiments. That we shall need live fences in Canada—at a period not far distant either, is but too evident. Fencing timber is even now a very expensive item in many parts of the country, and every year, the matter becomes worse.

The Osage Orange has been cultivated for two or three years by Mr. T. B. Fraser, of Georgetown Esquesing. He is now importing the plants for sale, and will be able to supply a few thousand next season. Mr. James Petch, of Chinguacousy, John S. Fraser, of Esquesing, and several others, of the same township, certify that they have had plants exposed during the winters of 1854 and 1855 without injury from frost. We have no doubt that a

plant which endures the climate of Ohio, Michigan, &c., will flourish equally well in the western part of Canada. We shall publish directions for its cultivation, &c. in our next number, and hope some of our enterprising farmers will commence a hedge of sufficient extent to test its merits. The cut represents the *Maclura* when trimmed into a neat fence.

BUCKWHEAT PORRIDGE.—Take a quart of rich milk, and after boiling it hard, stir in as much buck-wheat meal as will make it of the consistency of thick mush, adding one teaspoonful of salt and a tablespoonful of fresh butter. In five minutes after it is thick enough to take from the fire. If the milk is boiling hard and continues to boil while the meal is being stirred in, very little more cooking will be required. It should be placed on the table hot, and eaten with butter and sugar, or with molasses and butter. This is sometimes called a five minute pudding; it is excellent for children as a plain dessert, or for supper. Some add a seasoning of ginger or grated nutmeg before sending it to the table.

PROPOSAL TO BRING OUT AGRICULTURAL LABORERS FROM ENGLAND.

SHEEP WALK, Brantford, Dec. 15, 1855.

SIR ALLAN,

As a Canadian Farmer and Member of our Provincial Agricultural Society, I address you as Chief Minister in Her Majesty's Canadian Government, to urge on your consideration the important fact that the success of Canadian Farmers in the production of wheat at this eventful period, will very much depend on the assistance given by our Government to aid in the emigration of Agricultural labourers in the ensuing summer.

It will be recollected that during the last harvest, labour could not, in many cases, be obtained at any price, and the breadth of land sown with wheat has consequently been less than usual; from a concurrence of various causes high prices are inevitable, and the supplies that will be required from Canada will become of great importance in England. Exactly similar results occurred during the last war, when the chief ports of Europe were closed against England. This fact left an impression on my mind, having been at that time the Land Agent of the late Marquis of Anglesea's estates, when the gallant General lost his leg at Waterloo.

There can be no doubt but the general introduction of horse-power Reapers and Mowers will in a few years materially affect the labour market and render a continuance of any emigration scheme unnecessary; but it will require two or three years before these machines will become general, improvements being constantly suggested. The present high prices of farm produce have induced a great many labourers to take up lands for themselves, and very many more intend to do so in the ensuing spring, so that the difficulties of last summer will again recur in 1856, aggravated by an organization, said to be already understood, to obtain their own terms. I was prevented attending the Cobourg meeting by our Assizes, but sent an outline of my suggestions to our Secretary: from my own knowledge of the localities to which I have referred in the letter alluded to, I am aware that men of the description desired can be procured, and as I have some intention of visiting England on business of my own in the ensuing spring, if health permit, I shall be willing, if requested, to make a selection of the first shipment, and will also, as before stated, select some good Shepherds and Flax managers. The former are indeed most important, although not appreciated, because, as Flock-masters, the capabilities of their farms are not practically understood. Our Presidents and Directors are indeed fine speech makers and theorists, but where is the man we can refer to his own experience in a well managed flock of one thousand sheep,—except perhaps our worthy Secretary. The day is not far distant when it will be found by Canadian Farmers, however good our land for wheat, we cannot continue to grow good crops and good samples without the aid of sheep's manure, and other benefits particularly known to result from the sheep stock in the production of the best samples. It is an old maxim, often learned too late, that over-cropped land is never remunerative, and the samples are sure to deteriorate.

I have only to add, to show the probability of being assisted by some of the chief landed proprietors in England in an effort so mutually desirable at this time, the section of country from whence the proposed emigration is partly intended to be drawn, is owned by the Earl of Sutherland, as chief proprietor, with some exceptions. I was for many years a tenant of the Earl, and appointed by the late Earl one of the Commissioners for the division of an extensive tract, known as "the Damham Inclosure Act," in the Imperial Statutes.

In some of the Parishes alluded to, the labours of several excellent Clergymen, introduced by the late and present Earls to benefices in their presentation, have in many cases produced a delightful change in the rural population. Such men and women as alluded to, would indeed be valued as emigrants and settlers in any country.

I have the honour to be,

Sir Allan,

Your obedient humble Servant,

HENRY MOYLE.

Hon'ble SIR ALLAN MACNAB.

DOMESTIC RECIPES.

INDIAN MUFFINS.—A pint and a half of yellow Indian meal sifted. A handful of wheat flour. A quarter of a pound of fresh butter. A quart of milk. Four fresh eggs. A very small teaspoonful of salt. Put the milk into a saucepan. Cut the butter into it. Set over the fire and warm it until the butter is very soft, but not until it melts. Then take it off, Stir it well till all is mixed, and set it away to cool. Beat four eggs very light; and when the milk is cold, stir them into it alternately with the meal, a little at a time of each. Add the salt. Beat the whole very hard after it is all mixed. Then butter some muffin-rings on the inside. Set them in a hot oven, or on a heated griddle; pour some of the batter into each; and bake the muffins well. Send them hot to table, continuing to bake while a fresh supply is wanted. Pull them open with your fingers, and eat them with butter, to which you may add molasses or honey.

HOW TO MAKE NO-MATTERS.—This is an article of food which has for many years been confined to the descendants of a single family. Its excellence will commend it to the attention of those housewives who wish to make a good display of culinary skill upon their tables, at the same time having a due regard to economy. The lady who furnishes the recipe has given frequent opportunities of tasting their delicious flavor; and if any are inquisitive, perhaps she might be induced to inform them how the cakes obtained their homely name.—“To three tea-cupfuls of buttermilk add three table-spoonfuls of rich cream, and a small quantity of sugar. Stir in flour until it is of the consistency of paste for doughnuts. Roll out size of a large breakfast plate, and fry in lard to a rich brown color. As each cake comes from the fire, cover with apple-sauce made from tart apples sweetened to taste, and spiced with nutmeg or cinnamon, and continue the process till the plate is well heaped.”

* **USE OF SALT IN COOKING VEGETABLES.**—Here is something everybody ought to have known long ago, and that everybody should now read and remember:—“If one portion of vegetables be boiled in pure distilled or rain water, and another in water to which a little salt has been added, a decided difference is perceptible in the tenderness of the two. Vegetables boiled in pure water are vastly inferior. This inferiority may go so far, in the case of onions, that they are almost entirely destitute of either taste or color, though when cooked in salted water, in addition to the pleasant salt taste, a peculiar sweetness and a strong aroma. They also contain more soluble matter than when cooked in pure water. Water which contains 1-420th of salt is far better for cooking vegetables than pure water, because the salt hinders the solution and evaporation of the soluble and flavoring principles of the vegetables.—*Scientific American.*”

INDIAN CORN.—HINTS ON ITS CULTURE.

To the Editor of the Agriculturist.

SIR,—A few remarks, at this season, on this most important grain, may not be out of place. I find them in my note-book, where they were inserted from time to time, as the results of farm practice.

The yellow eight-rowed corn is preferable for this locality. It contains more oil and gluten than the white corn of the Southern States. The average yield of corn in this Province is about twenty-five bushels per acre; a good yield is forty to fifty bushels; while ninety to one hundred bushels have at times been raised.

The roots run very deep. A bushel of corn will shrink from the time of harvesting till thoroughly dry, about 22 per cent.

Two bushels of ears will generally make one bushel of grain.

For the proper cultivation of this cereal the soil should be dry. Standing water or moist soils do not produce good crops. The soil must be made rich and deep, as this plant feeds

strongly, and carries the root deep. Prepare your seed by selecting the most perfect grains, and previous to planting, soak them for a few hours to promote rapid vegetation, but do not allow them to swell and dry. It destroys vitality.

Spread broadcast on your fields a top-dressing of ashes, lime, and plaster; or add it to your hills or drills. Do not hill your corn. If planted in hills let them be at least three feet six inches apart; if in drills, let them be four feet apart, and each plant eight inches asunder. do not top your corn, but cut it at the butts and shock it. The corn ripens better, and keeps better; gives a greater weight of grain, and better fodder.

Plant not over one inch and a half deep. Plant from 1st to 15th May. Avoid frosts. Keep your crop free from grass and weeds; use the hoe and cultivator freely; do not wound the corn; and keep the soil loose. Do not cut off the suckers unless your corn stands too thick. Air and sunshine are necessary; but it is very doubtful whether the taking away the suckers produces any benefit.

As a steep for corn I would use soft water sufficient to cover the quantity to be used in a day, and add to it two ounces of sal ammoniac. Leave it in the steep till the corn begins to swell slightly. Nitre instead of sal ammoniac is excellent. Muriate of ammonia, one ounce for every quart is good.

As a compost for corn use the following:—gypsum 1 bushel, ashes unleached, 2 bushels, mixed; and add a gill to each hill when you plant, and before it is covered. When the corn is up, add another gill to a hill.

To estimate the quantity of shelled corn contained on the cobs in any given space, level the corn, and measure the length, breadth and depth; then multiply these dimensions together, and the product by four, cut off the last figure, and you will have the number of bushels of shelled corn, and the decimal of a bushel. If you desire to know the number of bushels of ears multiply by eight instead of four as above, and cut off one figure as before.

AGRICOLA.

Toronto, 21st Jan., 1856.

A CANADIAN IN EUROPE.

Sheriff Treadwell, Ex-president of the Provincial Association, having lately returned from a visit to Europe, gives us his impressions in a brief communication, part of which we take the liberty of laying before our readers. The zeal and patriotic efforts of the Sheriff in behalf of Canadian agriculture are well known, and require no eulogy from us. He says:—

“I returned home on the 17th inst., after an absence of nearly four months, during which time I visited Vermont, Maine, New Brunswick, and Nova Scotia, embarking on Board one of the Cunard steamers at Halifax; thus far I saw no agricultural improvements to surpass those of Upper Canada. Upon reaching England, I found the same remark not applicable. The value of land, the amount of capital which the farmer can command, the facility of obtaining labor, and the proximity to market, gives an advantage to the English farmer which leaves us far behind.

“The day I left Liverpool for London, being about the middle of August, was one of the finest days I ever saw. We crossed the Mersey to Birkenhead, thence to Chester, where we change cars, thence by Birmingham and Oxford to London. The crops appeared beautiful, and the only thing to be regretted was, that a strong wind had passed over the country and a good deal of the wheat was lying. The view of the landscape, as we passed through the

country at railroad speed, was enchanting, and the Impression made upon my mind, I think, will never be effaced. In reference to London it is not necessary that I should say anything; it is a great world of itself, and where the choice products of the earth centre. After spending a week in London, I proceeded to Paris, taking Southampton, Portsmouth, and the Isle of Wight in my route, and entering France at Havre. From Havre to Paris we had a most delightful day, and the country through which we passed had a fine appearance; but I must say, I think our Canadian agriculture much before that of France in general. The splitting up of farms into narrow strips is an evil; to get rid of which is a difficulty I see no remedy for; nevertheless the Imperial school of Grignon, and several other schools of like nature, established in different Provinces in France, will, in twenty years, place her second to no agricultural country on the continent. I spent a considerable portion of eight days in the Universal Exhibition, and it is impossible for me to say anything which will add to the credit of Canada more than what has been said. In the Exhibition of 1851, we were much indebted to Mr. Logan, and we are again much indebted to him, and to Mr. Perry, of Montreal, for the arrangement of the products of Canada in Paris. The essays published must be of the highest possible advantage, and will make Canada known throughout the world. I scarcely know anything that could occur to place her in a higher position than that which she now holds before the French and British public.

"After spending between three and four weeks in France, I returned to London by Boulogne and the Thames, and this gave me a good view of the Thames from Gravesend to London. Among other things I saw the immense iron vessel of 20,000 tons, now building; by Scott, Russell, & Co. After spending a few days more in London, I went to Edinburgh and called upon James Usher, Esq., and examined his steam plough, which I hope will yet prove a successful undertaking. I then went to the Lowlands to examine the high state to which farming had been carried in East Lothian. I was much pleased to find that their best agricultural implements were made after the same model as our own; there were very few implements indeed that we have not as good in Canada. The steam-engine and high chimneys are nearly the only things in which we are deficient. On enquiry of a most intelligent Lowland Scotch farmer, he informed me that the secret of success in their farming consisted in three things—*underdraining*, the *rotation of crops*, in which the root crop bears a very prominent part, and the *application of Guano*.

If the Sheriff can find time to give us any facts of a practical nature, bearing on the subject of agricultural improvement, which he may have noted during his tour, we shall be glad to give them insertion in the *Agriculturist*.

LORD REDESDALE.—Judging from Lord Redesdale's uncomplimentary allusion to the ladies who thronged the galleries of the House of Peers on a great debate night last session—that their presence made the House resemble a casino—one would be led to suppose that the aforesaid Lord Redesdale was a somewhat crusty, musty, &c., old bachelor. However, nothing of the kind. Instead of being cross-grained, yellow, shrivelled, bloodless, Lord Redesdale is plump and good-looking, with a fresh colour, not gained by sitting up o' nights, or by bachelor irregularities. If appearances are any guide in such matters, he is a man to whom few ladies would like to say No. But then, he is undeniably eccentric—wears no gloves, always affects a yellow nankeen waistcoat, a shabby hat, and a blue coat with brass buttons—and is altogether an odd person. An anecdote is told of him which shows at once what the outward man must be. His lordship called one morning at the house of a friend, a peer, and was set down without hesitation by the footman, who opened the door to him as a brother servant with a message for personal delivery to "my lord." Acting on this conclusion, Jeames, who happened to be thirsty, accosted the caller with a "I say, there's nobody in just now to send; I wish you'd go to the corner, and bring up a pint of half-and-half—there's a good feller." The supposed footman entered into the joke, not only ordered, but brought the mixture of Barclay and Perkins, in its native pewter, with his own (ungloved) hands, and entered into friendly converse with the "precious dry" hall Cerberus. Presently "my lord" came in, and shook the shabby person by both hands. "Halloa, Redesdale! In the hall? How's this? Hope you haven't been waiting long." What Jeames's feelings were on the occasion the story does not pretend to relate; they may be left to the imagination.

EDITORIAL MISCELLANY.

The Farmer's Guide to Scientific and Practical Agriculture, by Henry Stephens, F. R. S., E. assisted by J. P. Norton, Professor of Scientific Agriculture, Yale College, U. S., new edition, 1855, 2 vols.

This admirable work is now placed within the reach of the farmer's of Canada, at the low price of \$6. We have made arrangements with the New York Publishers by which we are able to supply our friends in Canada with a work which is a library in itself, at about *one third* of the price at which it was published in Scotland and England. This edition moreover, has the advantage of Professor Norton's Notes, which adapt the work to this continent. It is the most complete treatise on Scientific and Practical Agriculture extant, illustrated with some twenty engravings on steel, and about *six hundred* on wood. It is arranged under four distinct heads representing the seasons, and every branch of Agricultural practice as now followed on the best Farms in the best districts of England and Scotland, especially the latter are minutely explained.

It is an admirable prize to be awarded at agricultural shows instead of money which is soon spent—perhaps wasted—and carries no *improving* influence with it. We shall be happy to supply Agricultural Societies and Clubs with copies even at a small reduction from the price stated. Canvassing Agents for this paper will be supplied with copies on terms that will leave them a good profit. Our object is to introduce the work as extensively as possible, and on the lowest terms at which it can be afforded.

OUR TERMS.—There appears to be some misunderstanding as to the commission we pay to Agents. We allow the $33\frac{1}{3}$ per cent out of 3s. 9d. the subscription price of single subscribers to Agents or otherwise. We can throw off no commission from 2s. 6d. the club price.

AGENTS.—Agents have been appointed in a good number of townships, but we require

one in each. Young men with a few weeks to spare can do a good work, and make pocket money enough for the next year. We require good references.

THANKS.—We must express our grateful thanks to many kind friends who have aided in extending the circulation of our paper during the last month. We require yet however, a large number of subscribers, to enable us to publish a first-class paper, and we trust none of our well-wishers will grow weary in well-doing.

HAY CARS.—The communication from G. W. Baker, Esq., of Ottawa, is again unavoidably crowded out. It shall appear in our next number.

TORONTO MARKETS.

January 28.

The supply on the produce market during the month has been unusually small, and previous quotations for the majority of articles are more than sustained. Farmers hold their products very firmly, and little or no speculation has been going on.

WHEAT.—The supply of wheat has hardly been sufficient for city milling, and with the exception of a prime load now and then, none has been brought for export. The price has ranged from 7s. 6d. to 8s. 6d. per bushel. Inferior samples have been purchased at 7s.

FLOUR.—Little or nothing doing among wholesale dealers. Prices for superfine have ranged from \$6 $\frac{1}{2}$ to \$7 $\frac{1}{2}$. Farmers' flour has been in moderate supply at \$7 $\frac{1}{2}$ a \$8 $\frac{1}{2}$ per bl. in bags.

POTATOES have been very scarce, and the demand is very active. Sales are made at 4s a 4s 6d and for some prime lots 5s have been realized.

OATS.—In good supply throughout the month. The usual price paid has been from 2s 6d to 2s 10d per bushel.