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THE CANADIAN AGRICULTURIST,

AND JOURNAL OF TRANSACTIONS

OF THE

BOARD OF AGRICULTURE, AGRICULTURAL ASSOCIATION, &c.

VOL. VIII.

TORONTO, AUGUST, 1855.

No. 8.

Agriculture, &c.

TRIAL OF MOWING MACHINES.

As many of the Mowing and Reaping machines mentioned below have been or may soon be introduced into Canada we copy the following account of a trial of their qualities from the *Rochester Rural New Yorker*. We have this year tried Manny's Machine, which took the second prize, and also the Forbush machine. Both did excellent work, but we give the preference on account of its *adjustible* arrangement to Manny's. The one used by us was made in Canada by Messrs Massey & Co., Newcastle:

In accordance with previous announcement, a trial of Mowing machines was had, June 27th, on the farm of Judge Buel, near this city, under the direction of the Monroe C. Ag. Society. The weather was favorable and there was a very large attendance of farmers and others—almost every county in Western New York being represented. We also noticed several farmers from Oswego, Jefferson and other distant sections of the State. Eight machines of six different patents, were entered in the following order:

- 1 Burrall's combined Mower and Reaper, by O. A. Swan, of Geneva.
- 2 Ketchum's Mower, by J. P. Ross, Ogden.
- 3 Manny's combined Mower and Reaper, with Wood's improvement, by J. C. Cooper, Adams, Jefferson Co.
- 4 Manny's Mower, with Wood's improvement, by Mr Blackmer, Wheatland.
- 5 Wheeler's combined Mower and Reaper, by Shoules & Mosher, Polar Kidge, New York.
- 6 Ketchum's combined Mower and Reaper, by J. Rapalje & Co, Rochester.
- 7 Forbush's combined Reaper and Mower, by E. D. Hallock, Rochester.
- 8 Russell's Mower, by R. H. Pease, Albany.

Though the ground was uneven, and grass light, several of the machines did good work. Ketchum's, and Manny's with Wood's improvement, probably at-

tracted the most attention and commendation from spectators, though Forbush's, Burrall's and Wheeler's machine cut well and had many admirers. The contest excited great interest from the large concourse present and it was evident that the "committee of the whole," were divided in opinion as to the merits of the respective machines. Each of the five machines above named, in particular, had its admirers among the practical men on the ground—and every man could give a reason for his preference. Russell's machine was not, apparently, in proper order to work on rough, uneven ground. A large number of machines, of different patents, were ordered during and at the close of the trial, and before the decision of the Committee was announced. Indeed, we have little doubt that, under favorable auspices with smooth ground and good grass—nearly, if not all, the machines exhibited would do fair work.

REPORT OF THE COMMITTEE.

The trial of Mowing Machines, under the direction of the Monroe County Agricultural Society, took place on the farm of Judge Buel near this city, on the 27th inst. The occasion called out a very large collection of farmers, manufacturers, and others who were curious to witness the scene of strife between the various parties from different parts of the State, who appeared on the ground to test the merits of their several machines. The Committee appointed to judge of the merits of the work done, found it very difficult to arrive at just conclusions as to the work performed, and the merit due to the different machines on trial, each probably possessing some advantages peculiar to itself, and whatever decision the Committee have arrived at, the great and important question is decided by the intelligent farmers who witnessed the contest.

There were eight machines entered for competition. The field was bad for working them, the surface very uneven and stony, and the grass thin and light. The work performed was not a fair test of the value of mowing machines, yet, with some exceptions, the work was satisfactory, and proved the great value of this immense labor saving invention.

The Committee were united in the opinion that the Ketchum machine, and the Manny with Wood's improvement, were the best on the ground; but were divided in opinion as to which of these two was the

best, but a majority finally decided in favor of the former, believing that that machine cut the closest to the ground, while the latter was the easiest for the team and for adjustment over uneven and stony surfaces.

The first premium the Committee awarded to Ketchum's machine, and the second premium to Manny's machine, with Wood's improvement.

The Committee had not the time to examine minutely the mechanical construction of the different machines, or their liability to get out of order, both important points upon which the Committee expressed no opinion.

Ketchum's machine was entered by James P. Ross, of Ogden, and cost \$110, and another by John Rapalje & Co., a combined Reaper and Mower, costing \$125.

The Manny machine with Wood's improvement, entered by Mr. Blackmer, of Wheatland, cost \$110. The same machine with reaper combined, entered by J. C. Cooper cost \$125.

The third premium is awarded to Wheeler's machine, of Cayuga Co., costing \$125. This machine cut with shears and performed good work, having an adjustable beam, and so arranged as to have little or no side draught.

Forbush's machine, entered by E. D. Hallock, of Rochester, is a combined Reaper and Mower, and cut equally well; did not leave the grass evenly spread. This machine cost \$110, and with the reaper \$130.

The other machines upon the ground were most of them so nearly alike in the character of the work done, that any further discrimination or expression of opinion of their respective merits is perhaps uncalled for.

F. P. ROOT,
BENJ. SMITH,
JAMES WARING,
WILLIAM BROWN,
ALEX. KELSEY,
Committee.

Rochester, June 27, 1855.

THE APPROACHING PROVINCIAL EXHIBITION.

The readers of this Journal are doubtless already aware that the next exhibition of the Provincial Association will be held at Cobourg, October 9, 10, 11 and 12. A convenient and beautiful site has been selected for holding the Fair, (the same as on a former occasion) and every thing at present seems to indicate a successful result. The contract for fencing erecting buildings &c., has been taken and preparations commenced. An efficient Local Committee has for some time been actively engaged in the important work of preparation. The following are the names of the Committee of Cobourg. Sheriff Ruttan, *Chairman*; Asa A. Burnham, *Treasurer*; Henry Jones Ruttan, *Secretary*; Sir Edward Poore, Bart, John Wade, D. E. Boutton, Alex. Alcorn, G. E. Castle, Thos. E. Re, Walter Riddell, R. Wade, Junr., C. H. Morgan, O. W. Powell, P. R. Wright, F. Burrell, W. Weller. We call the attention of our readers to the following

RULES AND REGULATIONS.

1. The payment of 5s. and upwards constitutes a person a member of the Agricultural Association of Upper Canada for one year; and £2 10s for life, when given for that specific object, and not as a contribution to the local funds.

2. No one but a member will be allowed to compete for prizes except in classes 30, 32, 34 and 35.

3. All Entries must be made on printed forms, which may be obtained of the Secretaries of Agricultural Societies, free of charge. These forms are to be filled up and signed by the exhibitor, enclosing a dollar for membership, and sent to the Secretary of the Association. Board of Agriculture, Toronto, on or before Saturday Sept 22nd, after which time a charge of 5s will be imposed on each article.

Exhibitors in the Horticultural and Ladies Department may enter articles up to Friday Evening, Oct. 9th, when the Books will be finally closed.

Blood Horses and Thorough-bred Cattle must be entered and have their full Pedigree properly attested and sent to the Secretary in Toronto, not later than Saturday, Sept. 22nd. No animals will be allowed to compete as pure breed, unless they possess regular Stud and Herd Book pedigrees, or satisfactory evidence be produced that they are directly descended from such stock.

4. Badges from the Treasurer's Office will be furnished each member, which will admit himself or herself, free to every department of the Exhibition, during the Show. Life members admitted free.

5. Tickets of admission to those who are not members, 7½d each time of admission. Carriages, including drivers, 5s; passengers to pay 7½d each. Horsemen to pay 1s 3d each admission.

6. Every article exhibited for competition must be the growth, produce, or manufacture of Canada, except Classes 34 and 35. Live Stock for breeding must be the property of persons residing in Canada. All premiums for articles, except Stock, are to be awarded to the manufacturers or producers only.

7. Discretionary Premiums will be awarded for such articles as may be considered worthy by the Judges, although not enumerated in the List, and the Directors will determine the amount of premium.

8. In the absence of competition in any of the Classes, or if the Stock or articles exhibited be of inferior quality, the Judges will exercise their discretion as to the value of the premiums they recommend.

9. The Judges, Competitors, and Officers of the Association only will be permitted to enter the Show Grounds until 12 o'clock, on Wednesday Oct. 10th, at which hour Members will be admitted. Non-members will be admitted on Thursday and Friday mornings after 8 o'clock.

10. No Articles or Stock exhibited will be allowed to be removed from the grounds, till the awards are made, without the permission of the President, under the penalty of losing the premiums. An Auctioneer will be on the spot after the premiums are announced and every facility afforded for the transaction of business.

11. Delegates, Judges and Members of the Press, are requested and expected to report themselves at the Secretary's Office immediately on their arrival.

12. The Judges are to meet at the Secretary's office on the Grounds on Wednesday morning, at 9

o'clock precisely, to make arrangements for entering immediately upon their duties.

13. Arrangements will be made for Agricultural Lectures or Discussions during the evenings of Wednesday and Thursday on the Show week.

14. While the Directors will take every possible precaution under the circumstances, to ensure the safety of articles sent to the exhibition, yet they wish it to be distinctly understood that the owners of the articles must themselves take the risk of exhibiting them; and that should any article be accidentally injured, lost or stolen, the Directors will give all the assistance in their power towards the recovery of the same, but will not make any payment for the value thereof.

15. The Treasurer will be prepared to commence paying the premiums immediately after the successful competitors have been declared, and parties who shall have prizes awarded them are particularly requested to apply for them before leaving Cobourg, or leave a written order with some person to receive them, stating the articles for which prizes are claimed.

The Local Committee will make arrangements with Steamboat and Railway proprietors for carrying the passengers at reduced rates; also with the Hotel and Boarding house Keepers, for accommodating visitors at their ordinary fixed charges. Full particulars will be published hereafter in Show Bills.

Short Horn Stock in the County of Wellington.

We gladly insert the subjoined extract from a recent number of the *Guelph Herald*. That country has had from the first a goodly number of intelligent and enterprising settlers from the mother country. We shall always remember with pleasure attending a Farmer's Dinner at Guelph, a few years since, when we were struck with the appearance and spirit of the company, so characteristically British. We could imagine ourselves again in merrie England, and blessed our stars that we were in a country so marvellously like it. At that time it would have been preposterous to have mooted even the probability of Guelph being a place for holding our great Provincial Exhibition, as it could be reached only by ordinary roads. But how soon do railways change the state of things! We are quite sure that whenever the Association may decide on holding the annual Show in Guelph, the merchants and inhabitants of that town, and the farmers and mechanics of the County of Wellington and adjoining districts, will nobly sustain it.

The County of Wellington has for several years occupied a prominent place among those districts of the Province that boast the possession of superior agricultural stock, for which honorable position she is chiefly indebted to the energy and ability of a number of skilful and enterprising proprietors in the townships adjoining her capital, ably seconded by the local agricultural societies. We have frequently had the pleasure of chronicling the arrival of superior animals selected from the herds and flocks of first class English breeders, and the sale of their progeny at what would even in the "old country," be

reckoned high prices. Recently our fellow townsman Mr. F. W. Stone, has acquired no small distinction as an importer and breeder of Short Horns," and three animals shown by him at the County Show in October last, although only imported the previous week, and consequently in poor condition, attracted general admiration, and were regarded by our best judges as likely to prove essentially beneficial in improving the stock of the vicinity. We are gratified to learn, as evidence that the value of superior stock is fully appreciated in the neighborhood, and that our judiciously enterprising farmers may safely calculate on a fair remuneration for the money and labor expended in breeding first-class animals, that Mr. Stone has sold a heifer calf, four months old, the produce of a heifer imported by him last fall, to Mr. John Iles, of Farnham Plains, Puslinch, for \$500, the largest sum, so far as we are aware, ever paid for a calf in the Province. We have not seen this "golden calf," but we feel persuaded it must be a beauty, for Mr. Iles is reckoned one of the best judges of stock in the county.

Mr Stone's herd, which may now, as regards quality, compare favorably with any in the Province, comprising over twenty Short Horns of the very highest class, kept in first rate condition, is a credit to himself, to his manager, and to the county. In addition to four splendid heifers imported by him this spring, he has at present *en route* for Canada, about a score of superior Cotswold Sheep, to be followed by a further importation of carefully selected Short Horns. The introduction of so much pure and fresh blood, combined with Mr Stone's very liberal arrangements for the accommodation of his neighbors, must obviously be largely beneficial to the locality.

While on the subject, we are induced to ask whether the Directors of the Provincial Agricultural Association are not likely soon to direct their attention to Guelph as an admirable site for one of their early exhibitions? Our two lines of railroad now on the eve of completion, will render the locality A 1 as regards transit accommodation. We are situated in the very centre of the finest and best cultivated district Canada can boast, possessing some of the best farmers and best conducted agricultural societies in the Province; and, from the astonishing rapidity with which the town is increasing, we will soon be able to accommodate a few thousand guests within new stone walls. The Town and County Municipalities, we are persuaded, would subscribe handsomely to the prize list; the citizens would make up a heavy purse; and our farmers, who are at present actually overburdened with cash they don't know what to do with, would astonish the Province by their liberality for such a purpose. We trust the Hon. A. Fergusson, Mr. Harland and other friends of "the centre of creation" at the Board of Agriculture, will exert themselves in this matter; we dare pledge ourselves they will be well supported by the county.

REAPING MACHINES.—We have been informed by a manufacturer of agricultural implements, one who is excellent authority, that between fifteen and sixteen thousand reaping machines will be manufactured and sold this year in our country. The demand is so great that manufacturers cannot make them fast enough for their orders. This affords evidence of agricultural prosperity, as the cost of these machines will amount to nearly two million of dollars. Our farmers exhibit wisdom in using and patronizing machinery. A reaping machine will save the price of itself in one season. — *Scientific American*.

SCOTTISH AGRICULTURAL WORTHY.

GLENTHORN. (NEAR COBURG), June 28, 1855.

DEAR SIR.—Permit me to request the favor of you to give the inclosed a place in the *Agriculturist*.—Mr. Brodie was an old neighbour and a much esteemed friend of mine, as well as the other persons mentioned, who were either relatives or intimate friends of mine, I am sorry to say they are all gone. There may be Scotchmen settled in Canada who may feel interested and be glad to read the inclosed

I am, Sir Yours faithfully,

WM BROWN.

To Professor Buckland, Toronto.

It is impossible to estimate too highly the obligations the agriculture of Scotland owes to those intelligent and persevering men who at the commencement of the present century occupied as tenants some of the farms of East Lothian. One—we believe the last of the name—Mr. John Brodie, Abbeymaids, has lately died at the ripe age of 75. Eminent as a practical farmer, Mr. Brodie earned a wider fame by the evidence he gave before the select committee of the House of Commons, appointed in 1826, to inquire into the then prevalent complaints of agricultural distress. This committee, as is well known, made no report, but the evidence taken sealed the fate of the Corn Law, though for ten years later that monstrous injustice remained on our Statute Book.

Mr. Brodie's evidence, with that of Mr. Andrew Howden and Mr. Robert Hope furnished some of the most decisive arguments urged against the Corn Laws, and demonstrated that the distress complained of was due to an erroneous system of husbandry which the Corn Law had encouraged and served to perpetuate. Mr. Brodie's evidence seems to have given offence to the landlord of his farm of Amisfield Maids; who refused to renew his lease, though Mr. Brodie had continued to improve by draining and manuring up to the close of his term in the full expectation of a renewal. When the lease expired in 1839 the farm was let to another tenant, the landlord profiting of course by Mr. Brodie's improvements. Of this, no doubt the law permitted, but the effect on the tenantry of the district was to create feelings of distrust and dissatisfaction.

We take from a memoir contained in the *North British Agriculturist*, a few passages of general interest. The writer says:

"Of all the great men who appeared in East Lothian towards the close of the last and beginning of the present century, and who shed a lustre over its agriculture none was more conspicuous or eminently instrumental in advancing agriculture than John Brodie. Entering the arena after Andrew Mikle had invented the thrashing machine—Lee of *Shatraw* had introduced the Swedish turnip, and, with Remie of Phantasie, had adopted the four course rotation, John Brodie along with Brown of Markle, Adam Bogue of Lippum, Robert Hope of Fenton Barns, and James Reid of Diem followed out every improvement in practice, and established on systematic basis the agriculture of that country, which has influenced and is still influencing, the whole character of Scottish husbandry.

In the year 1801 he entered on the occupancy of the farm of Fenton, on a lease of twenty one years, at a rent of £1,450, and which rent he continued to pay till the close of the lease. The occupancy did

not prove a lucrative one, as the farm at entry was in very bad order, and it was only towards the close of the lease that full crops were raised. This was effected principally by importing annually at Aberlady several cargoes of manure from Leith, a vessel being owned by him for the purpose. The quantity of manure so brought to the farm was at the time deemed extraordinary.

In 1820 he took a lease for nineteen years of Amisfield Maids Farm, near Haddington, to which he removed for the greatest convenience of educating his family. When the lease of Fenton Farm expired, the proprietor refused to let it to a non-resident tenant.

In 1826, he took a lease of nineteen years of Abbeymaids which was renewed by the proprietor Lord Blantyre. The change which a course of high cultivation can effect on the most unpromising soils, especially where the climate is favourable, has been nowhere more strikingly displayed than at Abbeymaids. Those who were familiar with this farm prior to 1830, and who remember the cold, thin, clay fields of the upper part of the farm, and the weeping and weak looking soils of those fields, through which the public road between Haddington and Dunbar passes, know what has been effected. Those not so acquainted with the farm at that time can form a very inadequate idea of what has been accomplished. The crops from being among the lowest average per acre in the county have for several years been among the highest, and the produce in grain and in roots equal to any farm in the same space in the United Kingdom. This change has been produced by the skill and capital of Mr. Brodie, a portion of the latter being however, borne by the landlords by contract on entry.—The outlay in permanent improvements, draining, subsoiling, &c. and in manures, has certainly exceeded the original value of the fee simple of the soil. That the occupant reaped and his friends will continue to reap the benefit of such improvements, is unquestionable; but had Mr. Brodie been equally unfortunate, as to a renewal of the lease, in this as in the previous farms, much of his skill, enterprise, and capital would have been expended upon improvements, the benefits of which others would mainly have reaped. In Amisfield Maids, he was engaged in extensive draining operations, up to the second year of the expiry of his lease. The increased value imparted to the soil during his occupancy, both of Amisfield and Abbeymaids, would of itself have proved a full return for his exertions, had he purchased the land previous to farming it, but farming the soil owned by others, neither skill, capital, nor honourable bearing protected him from the common fate of occupying tenants, his very position as an improving farmer being rather a disadvantage than otherwise."

Mr. Brodie's peculiar merits as an agriculturist are thus stated:—

"He was rather a pioneer than a follower, although with too sound a judgment to pursue novelty for its own sake. As an improver and as a cultivator, the same characteristic of patient perseverance was exhibited. Once resolved to undertake any improvement, he went straightforward undaunted by obstacles, and keeping steadily in view the object aimed at in the execution of any undertaking, whether in completing the draining of a field, or in preparing for, or in sowing a crop, patience in waiting for a suitable *tid*, and diligent perseverance when the weather was suitable, were alike the subject of remark. Scrupulously attentive to eradicating all weeds, such as couch and knot grass, on their first

appearance, he spared no expense to effect this. Keeping the land free from weeds and frequent applications in moderate doses of fertilisers, such as farm, town and portable manures, were the leading features of his practice. His minute attention to the details in the field exercised no considerable influence in improving the practice of those farmers, who going to and from the weekly market at Haddington, had the opportunity of witnessing the operations in progress, and strangers from a distance who came to examine into the advanced practice of the county invariably formed a highly favorable opinion of his general management. As a breeder and a feeder of stock, he was pre-eminent. Those who are familiar with the premium lists of the Highland and East Lothian Agricultural Societies, must have observed that no name occurs so often as a successful competitor as that of John Brodie, while his essays on various subjects are recorded in their transactions, and are valuable expositions of his practice, particularly as a successful feeder of stock. The number of premiums taken by Mr. Brodie was certainly greater than that of any other farmer in Scotland."—*London Economist*.

GROW YOUR OWN CLOVER SEED.

We are acquainted with intelligent practical farmers in Western New York, who believe it profitable to seed down *all* their wheat and barley land every year with red clover. A well known and successful cultivator of light land, near Rochester, has abandoned altogether, the use of the summer fallow, depending on corn and other hoe crops to enable him to keep the land clean. After corn he frequently sows barley, seeding it down with 10 lbs. of clover per acre, and, in the fall, after the barley has been harvested, the clover affords good pasture for sheep or cattle, or, if feed is abundant, it is allowed to grow uncut, and is turned under, the same fall, and the field sown with wheat on one furrow. He is satisfied that the value of the feed in the fall and the fertilizing effect the clover roots, &c., have on the subsequent wheat crop, more than pay the cost of the clover seed. Others are convinced that, where corn is to follow, it is highly profitable to seed down a wheat or barley crop, with clover, and allow it to get a good start the next spring before the land is plowed up for the corn crop. The clover, also, in this case furnishes much fertilizing matter, and the practice has the additional advantage of furnishing green food for the grubs and worms till the corn has attained a good start, and is capable of sustaining their depredations without material injury.

It is possible that, under such a system, the land may in time become exhausted—not of potash, soda, or lime or of sulphuric or phosphoric acid, but of some peculiar combinations of these or other elements of plants which, as yet, neither the chemist in his laboratory, nor the experimenter in the field has been able to discover. In other words, our fields, like the light soils of England under the four course system of rotation, may become "clover sick," and refuse to grow red clover oftener than once in eight or twelve years. But, at present, we apprehend no such result. We believe clover sickness is unknown in this country, and should be glad to hear from our correspondents on this point. Our object is rather to commend the extensive cultivation of clover, and to recommend the systems alluded to, or a modification of them, to those who have hitherto seeded down, at most, only a portion of their wheat or barley crop with clover. Be assured that, on all farms where

wheat, corn, barley, oats and other cereal grasses are extensively cultivated, *it will abundantly pay* to grow as much clover as possible.

Why clover, peas, beans, vetches, sainfoin, lupins and other leguminous plants are so advantageous in rotation with wheat, barley, oats, Indian corn and other grainaceous plants, we will not now stop to inquire. The fact that they are so cannot be denied, and whether it is owing to their requiring a different proportion of mineral substances, or whether, principally to the fact that they do not require for their growth more ammonia than they contain, while the wheat, corn, and other plants of the same order destroy large quantities of this expensive fertilizer, is a question which it is not necessary to decide before we can act upon the teachings of experience.

In order to induce farmers to sow more clover, it is very important that they be persuaded to *grow their own clover seed*; for it will be admitted that he who has to pay \$5 to \$8 per bushel to the city merchant or seedsman will be much more sparing of clover seed than the farmer who raises an abundance of his own. Fortunately this climate is not only well suited to the growth of large crops of clover for fodder, or for turning under as a fertilizer, but it is also well adapted for the production of large crops of excellent clover seed. Why, then, is it so high? why is it that every farmer, does not raise at least as much as he needs for his own use? There is certainly no more necessity for buying clover seed, than there is for buying seed wheat, corn, barley or oats.

If not already done, let every farmer select a few acres of his cleanest clover, cut it as early as possible, and then allow it to go to seed. If the land is in good heart, and clean, nothing more is required; if poor, 150 to 200 lbs. of good Peruvian guano per acre sown broadcast as soon as the first crop is removed, during showery weather, will be found a beneficial, and we have little doubt a profitable application. Plaster increases the foliage of the plants, but, it is said, retards the ripening of the seed. Four bushels of clean seed per acre is a fair, average crop; but eight bushels may easily be grown by cutting the first crop early, or by eating it off by sheep till the middle of May or first of June. If the land is not rich enough it should be well manured, early in the spring or, still better in the fall, with well rotted barn yard dung. It is important to have the clover as early as possible, since it is frequently injured by frosts in the autumn. After the seed is matured, however, *frost does not hurt it*; and, now that we have several excellent machines for taking off the heads of clover seed, thus avoiding the expense and labor of curing the clover in cool wet weather, it may be left out late in the fall without any loss or inconvenience.

We repeat, and we would that every farmer in the country could hear us, *grow your own clover seed*, and never, without special reason, sow a field of wheat or barley without seeding it down, in the spring, with from 10 to 15 lbs. of red clover per acre. We believe it will pay, even though the clover sod is plowed up the next spring. We will add, too, that, where plaster can be had for less than \$5 per ton, and where experience proves it good for clover, the practice of sowing a bushel of plaster per acre *at the time of sowing the clover seed*, is worthy of extensive adoption. We think it of great benefit in enabling the young clover plants to stand the drouth.—*Country Gentleman*.

When pinks are in flower, their beauty may be prolonged by giving them a little shade at mid day.

GRECIAN FARMERS.

Professor Felton, of Cambridge, (Mass.) in a lecture on "Life in Greece," gives the following interesting description of rural life among the ancient Greeks.

The love of rural life was one of the deepest passions of the Grecian heart, beyond the realm of *Narcadia*, real or ideal. What lovely touches of nature adorn with their exquisite beauty the dialogues of Plato and even the comedies of Aristophanes. Through the whole compass of Greek literature, the sights and sounds of the country, the sweet, calm sunshine, the fleecy cloud, the song of the lark and the nightingale, the rising sun, the rich meadow, the cattle feeding in the pastures, furnished thoughts which moved harmonious members. When the *Peloponnesian* war opened, the plains of Attica were covered with residences, elegantly furnished, which the inhabitants with regret and tears looked back upon from the walls of the city, while the Spartan armies were laying all waste with fire and sword. The country was tastefully decorated with little temples or chapels, consecrated to the nymphs and rural deities; and the lands were made holy ground, because in them were buried the ancestors of the families residing in the mansions.

The Greek gardens were laid out with lawns, groves, thickets and avenues; while fountains fed meandering rivulets. Beds of asphodel, hyacinth and violets, roses, myrtles and pomegranates, diversified the scene, or wafted perfume to the senses. Here Athenian taste and luxury displayed itself. The Greek as a farmer or city gentleman, is not the Greek of classical associations; and yet, perhaps, just in these relations, he was most intensely Greek.

Homer gives a lively sketch of the primitive country life. Hesiod was a Boeotian farmer, and gives precepts which seem to have been drawn from his experience, concerning lucky and unlucky days, weather, &c. The early Greek philosophers carefully observed the phenomena of the heavens, and were skilled in the arts of the season. The habits of animals, the properties of soils and their adaptation to different kinds of crops, were matters of which they knew. Wagons, carts, plows and harrows were manufactured on the farm or in its vicinity, and the wood used was chosen with care. Corn was ground in a mortar with a pestle, and in later times in a mill. The list of other implements, such as scythes, saws, spades, use of guano, sea-weed, and commoner substances, was perfectly understood. Land was allowed to recover its strength by lying fallow. Scarecrows were set up in the fields to scare away birds; though a "spell" was also used, viz:—having caught a toad they carried him around the field by night alive, and then put him in a jar, sealed him up, and buried him in the middle of the ground when, this representative enemy was buried, the seed was supposed to be safe from enemies. The value of hay was well understood. The time for mowing was carefully determined, and the hayricks made with due precautions against both damp and spontaneous combustion. When the time of harvest came, the laborers of Athens ranged themselves round the *agora* and waited to be employed by the farmers.

The grain was separated from the straw by horses, oxen and mules, in a circular threshing floor, usually placed on an eminence in the open field. A pole was set up in the centre, and the cattle fastened to it by a rope reaching to the circumference. They

moved round it until they were brought up at the centre by the winding up of the rope, and were then turned into the opposite direction till it was unwound. Sometimes a rude threshing machine, toothed with stones or iron, or a flail, was employed. In Homer's time a winnowing machine was used also. When the harvest was completed, the event was celebrated by a festival in honor of Demeter and Dionysius, at which cakes and fruit alone were offered.

The culture of the vine was a subject of importance, and the selection of a spot for a vineyard, the direction of its exposure, the effects of climate and particular winds, were sedulously considered. Hedging, weeding, setting out slips, the treatment of the vine were all described by writers before the time of Virgil. The appearance of a vineyard—composed of tree climbing vines, is beautifully described by Mr. St John, the trees being ash, poplar, maple or elm, and planted one row above another on a declivity, with the lower branches cut off; the vine climbed thirty to sixty feet, according to the depth of the soil, and running out on the high branches arched from tree to tree, or on bridges of reeds.

A series of lofty arches was thus created, beneath which the breezes could freely play, abundant currents of pure air being regarded as no less essential than constant sunshine to the perfect maturing of the grape. The fruit was kept fresh, or made into raisins. It would be endless to attempt a description of all the fruits and the methods of raising them. Cider and perry were made from apples and pears. The olive was perhaps most extensively raised, as its oil was used for lights and as the basis of cookery.

The farm yards had their noisy tenants. Geese and ducks often waddled into the kitchen, in one corner of which might be heard the comforting sounds of the occupant of the pig-stye. The art of enlarging the goose's liver for epicures was well known to Greek and Egyptians. *Pheasants*, furnished with roots, were attached to the kitchen so as to receive its smoke, which was supposed to be agreeable to barn-door fowls. Pigeons, peacocks, pheasants, guinea-hens, &c., were to be found at the establishment of wealthier farmers. The laboring animals were much the same as now, except that the horse was comparatively more uncommon in the working of the farm, being reserved for the chase, war, &c. The arrangements of a Greek dairy were much like ours, and though butter was little used in the classical ages, yet cheese was universally eaten, generally white, fresh and soft. Milk was sold in the Grecian markets by women, and it frequently reached the customer in milk and water. A method used for detecting the cheat, was to drop a little on the thumb-nail; if the milk was pure it would remain in its place,—if not it would flow away.

MAXIMS FOR YOUNG MEN—Never be idle; if your hands cannot be usefully employed, sit and cultivate your mind. Drink no intoxicating liquors. Always speak the truth. Keep good company. Make few promises. Live up to your engagements. Keep your own secrets. When you speak to a person look him in the face. If any one speaks evil of you, let your life be so virtuous and upright that none will believe him. You had better be poisoned in your own blood than your principles. When you retire, think what you have done during the day. Your character cannot be injured except by your own acts. Keep yourself innocent, if you would be happy.

Incorporated Drainage and Land Improvement Company of Upper Canada.

The Act of Incorporation of this Company, passed during the last session of Parliament, we publish for the information of our readers. The objects contemplated are of the most important description, and every encouragement should be given to any well digested and practicable scheme for facilitating works of drainage and sewerage upon which so materially depend the wealth and salubrity of the country. Companies of this kind have been formed of late years in the United Kingdom, and they have been attended with a large measure of success. Finally the time has arrived when something of this sort should be attempted in Canada. We ask the best attention of our readers to the subjoined Act, and our pages will always be open to communications on the subject. We understand that the preliminary conditions of the Act have been complied with and that Stock-Books will be opened immediately at all the Branches of the Bank of Upper Canada. It must be evident that an enterprise of this nature requires the prompt attention and liberal support of all that are friendly to the agricultural and general improvement of the country :—

AN ACT TO INCORPORATE THE GENERAL DRAINAGE AND LAND IMPROVEMENT COMPANY OF UPPER CANADA

Whereas land is capable of being greatly increased in productiveness and value by works of Drainage and other permanent improvements: And whereas the sanitary condition of Cities, Towns and Villages is greatly advanced by sewerage, water supply and other operations: And whereas the more general extension of such works tends to prevent and remove epidemic and other diseases, and to improve the public health, and it is therefore expedient to encourage and facilitate such operations by all fitting means, and particularly by the application of Joint Stock Capital and collective enterprise; And whereas the provisions of the Act passed in the Session held in the thirteenth and fourteenth years of Her Majesty's reign, intituled, "An Act to provide for the formation of incorporated Joint Stock Companies, for Manufacturing, Mining, Mechanical and Chemical purposes," and also of the Act passed in the sixteenth year of Her Majesty's reign, to amend the same, are of limited application and insufficient for the several operations herein contemplated: Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Legislative Council and of the Legislative Assembly of the Province of Canada, constituted and assembled by virtue of and under the authority of an Act passed in the Parliament of the United Kingdom of Great Britain and Ireland, intituled, "An Act to re-unite the Provinces of Upper and Lower Canada, and for the Government of Canada," and it is hereby enacted by the authority of the same, as follows:

1. From and after the passing of this Act, the following parties: Sir Allan N. MacNab, M. P. P., of Dundurn, The Honorable William Cayley, M. P. P., of Toronto, S. B. Freeman, Esquire, M. P. P., of Hamilton, Sir Edward Poore, Baronet, of Cobourg, E. Cartwright Thomas, Esquire, of Hamilton, Charles P. Treadwell, Esquire, of L'Orignal, President

of the Provincial Agricultural Society, George Buckland, Esquire, of Toronto, Secretary of the Board of Agriculture, E. W. Thomson, Esquire, President of the Board of Agriculture, R. L. Denison, Esquire, of Toronto, J. B. Marks, Esquire, of Kingston, Thomas C. Street, Esquire, M. P. P., of Niagara, Hugh C. Baker, Esquire, of Hamilton, J. T. Gilkinson, Esquire, of Hamilton, William Matthie, Esquire, of Kingston, the Honorable Adam Fergusson, of Woodhill, George B. Alexander, Esquire, of Woodstock, William Balkwell, Esquire of London, Hugh Barwick, Esquire, of London, William Niles, Esquire, M. P. P., of London, E. M. Simons, Esquire of Hamilton, J. S. Wetenhall, Esquire, of Hamilton, Secretary of the County Agricultural Association, J. B. Asken, Esquire, President of the Agricultural Society of Middlesex, John Harland, Esquire, of Guelph, S. C. Ruttan, Esquire, of Cobourg, David Christie, Esquire, of Brantford, W. L. Distin, Esquire, of Hamilton, and such other persons as shall become Shareholders in the undertaking hereinafter mentioned, and their successors in perpetuity, shall be and are hereby constituted and incorporated a Joint Stock Company under the style and title of "The General Drainage and Land Improvement Company of Upper Canada," for the purpose of undertaking and executing within limits of Upper or Western Canada, all such works of drainage, irrigation, clearing, fencing, building, road-making, and other permanent improvement of land, as well as all works of sewerage, water supply, sewerage application and other sanitary operations, as they shall be called upon to undertake, by the owners of land or the Municipal authorities of Counties, Townships, Cities, Towns or Villages, or other persons or bodies corporate.

II. The capital of the said incorporated Company shall be one hundred thousand pounds divided into ten thousand shares of ten pounds each, with power from time to time, at the discretion of the Directors, and with the concurrence of the majority in value of the Shareholders, to increase the said capital to two hundred and fifty thousand pounds, by an issue of fifteen thousand additional shares of ten pounds each either at par value or at such premium as the Directors shall think proper.

III. The affairs of the said Company shall be managed by a Board of eleven Directors, any six of whom shall be a quorum, and the following shall be a first Board, namely: Sir Allan N. MacNab, The Honorable Adam Fergusson, Samuel Black Freeman, George Buckland, Hugh Copart Baker, Jasper T. Gilkinson, James S. Wetenhall, Edward Cartwright Thomas, George T. Denison, John B. Marks, and William L. Distin, who shall hold their office until others shall under the provisions of this Act be elected by the Shareholders, with power to open Stock Books and call a meeting of Stockholders as hereinafter provided.

IV. The said Directors are hereby empowered to take all necessary measures for opening the Stock-Books for the subscription of parties desirous to become Shareholders in the said Company.

V. When and so soon as two thousand five hundred shares of the said Capital Stock shall have been subscribed and ten per cent. shall have been paid in thereupon, it shall be lawful for the said Directors or a majority of them, to call a meeting of the holders of such shares at such place and time as they shall think proper, giving at least fifteen days, public notice of the same, in one or more newspapers published in the City of Hamilton, and the Canada Gazette, at which meeting and at the Annual

General Meeting in the following section mentioned, the Shareholders present, either in person or by proxy, shall proceed to elect eleven Directors in manner hereinafter mentioned, which said eleven Directors shall hold office until the first Monday of June following.

VI. On the said first Monday in June, and on the first Monday in June in each year thereafter, or on such other day or place as shall be appointed by any By-law, there shall be chosen by the Shareholders eleven Directors, and public notice therefore shall be published one month before the day of election in the *Canada Gazette*, and one or more such newspapers, as aforesaid; and all elections for such Directors shall be by ballot, and the persons who shall have the greatest number of votes at any such election shall be the Directors, and if it shall happen that two or more shall have an equal number of votes, the Shareholders shall determine the election by another or other votes, until a choice is made: Provided always, that no one holding less than thirty shares shall be qualified to be a Director.

VII. It shall be lawful for the Directors to call upon the Shareholders for such instalments upon each share which they or any of them may hold in the Capital Stock of the Company, in such proportions as they may see fit, so as no such instalments shall exceed ten per cent., giving one month's notice of each call in such manner as they shall appoint.

VIII. The several clauses of the Railway Clauses Consolidation Act, with respect to Directors, their election and duties, shares and their transfer, and shareholders, shall be incorporated with this Act, and shall apply thereto, and to the undertaking herein mentioned, in such and the same manner as if the same had been herein re-enacted, and shall be included by the expression "this Act," whenever used herein.

IX. The said Directors shall appoint a Chairman and Deputy Chairman from their own body, and also a Secretary, an Engineer in Chief, and such other officers as from time to time may be requisite, and shall make such By-laws as they shall deem proper for the management of the stock and affairs of the Company, for prescribing the duties of their officers and other matters connected with the proper management of the business and affairs of the Company, and copies of such By-laws certified by the Secretary of the Company and under its Corporate Seal, shall be *prima facie* evidence of such By-laws in all courts of law and equity in this Province.

X. In pursuance of the authority herein given, the Company shall have all power, liberty and license to contract for, execute and perform all works of trunk, arterial, surface and subsoil drainage of sewerage, water supply, the collection and distribution of sewerage, and other refuse in Counties, Townships, Cities, Towns and Villages, the clearing, reclaiming, fencing, grading, and irrigating of land and for such purposes to construct, erect, work and maintain all houses, homesteads, tileries, kilns, steam engines, water wheels, embankments, sluices, reservoirs and roads, and to do and perform all and singular such other works and things not herein enumerated, as may be needful or convenient for properly and effectually carrying out all or any of the operations hereby authorized to be done.

XI. When owners of land or the authorities of Counties, Cities, Towns and Villages shall desire to avail themselves of the powers of the Company for the execution of all or any of the works herein authorized to be done, the Company shall, on applica-

tion from such owners or authorities for their approval and concurrence, when a contract shall be entered into for the due performance of the work, which shall be binding on all parties. The Company may require from such owners or authorities security for payment to the Company of such sum for preliminary expenses as shall defray the actual cost thereof if no contract for work is entered into; but if a contract be concluded between the parties those expenses shall be included in the amount of the contract.

XII. In all operations undertaken by the Company, it shall be lawful at the option of the owners of lands, or authorities of Cities, Towns or Villages, for the said Company to extend the payment of the cost of the works over any period to be agreed upon between the parties, not exceeding twenty years, and to receive the same by such yearly, half yearly or quarterly instalments, to be also agreed upon, as shall redeem the said total cost and interest within the period prescribed, the said owners or authorities giving to the Company a full and sufficient mortgage, security or rat charge upon the lands improved or the works executed, for the time over which the payment of the instalments extends.

XIII. The Company shall have power to acquire, hold by mortgage or otherwise, to improve, sell and convey a freehold and real estate, and also to hold and sell any personal and moveable property whatsoever, which may be necessary for conducting the several operations of the Company, or as security for the payment of any moneys due to them or which shall conform with the general design of the powers and provisions herein given and made.

XIV. In consideration of the character of the operations to be undertaken and the nature of the security upon which the repayment of their cost is based it shall be lawful for the Company to issue Debentures in sums not less than twenty-five pounds currency each, either in currency or sterling as the Directors shall find convenient, bearing interest at the rate of six pounds per centum per annum, and payable either in this Province or elsewhere, and at such time respectively as shall correspond with the periods over which the repayment of their contracts shall extend, and so that the total amount of such Debentures issued or outstanding at any one time, shall not exceed two thirds of the entire amount of the cost of the works executed by and in progress of repayment to the Company.

XV. The Directors may and are hereby authorized to call at any time or times, as they may think needful Special Meetings of the Shareholders at the offices of the Company, or at any other place by adjournment, as may be found more convenient; and at each and all of the yearly General Meetings, the Directors shall submit a report of the state of the affairs of the Company, together with a true and correct balance-sheet and account, showing the amount of capital paid up, the amount of moneys expended and liabilities, the contracts existing and other matters requisite to the full understanding of the affairs of the Company, and such meeting shall declare the amount of dividends to be paid to the Shareholders out of the profits of the Company, and shall transact any business which may be needful.

XVI. At such Meetings it shall be lawful for executors, tutors, curators, guardians, trustees and municipal authorities, to represent a dividend on the shares in their hands, but they shall not be eligible for Directors or for any office under the Company.

XVII. Inasmuch as the works herein provided are calculated to be of essential sanitary benefit to the

inhabitants of cities, Towns and Villages, it shall be lawful for Municipalities to take and hold shares in the Capital Stock of the Company, to such extent as they may severally duly determine: Provided, that in no case the amount held shall exceed five shares to every one hundred souls of the population.

XVIII. The Company shall furnish the Bureau of Agriculture with a copy of each yearly report and statement of accounts, and shall at all times afford any further information as to the state of the affairs of the Company which may be required by the Legislature or the Government.

XIX. The interpretation Act shall apply to this Act, and this Act shall be deemed a Public Act.

MAKING CHEESE FROM A FEW COWS.

Except in the dairy districts, how seldom do we meet with good cheese on a farmer's table; how often do we meet with none at all. And yet every farmer keeps a few cows, sufficient at least to supply the family, with butter through the year, and there is no reason why every one who keeps two or three cows should not make good cheese enough for his own use. More labor indeed is required to make a pound of cheese from a small dairy than for a large one, but this is no excuse for not making it, since the same is true, to a certain extent at least, in regard to butter.

Some of our readers who make an hundred pound cheese every morning, will be inclined to smile at the following directions; but nevertheless, we can assure them that we have eaten the best of cheese made in this way. There are probably many better methods, and if our readers know of any we should be thankful to hear from them.

The difference between making cheese from a small and from a large dairy consists principally in this. In a large dairy the curd is made into a cheese every day, while in the small dairy the curd—obtained precisely as in the large dairy—is slightly pressed and laid by in a cool place till a sufficient quantity is obtained for making a cheese as large as desired.

The night's milk should be kept as cool as possible, and the next morning placed in a tub, together with the morning's milk; and the whole, by adding a portion of heated milk, raised to about 90 Fahr. The rennet is then added, the milk well stirred, and afterwards left alone till the curd is well come. The time this occupies varies from fifteen minutes to two hours, according to the amount of rennet, temperature &c.—the warmer it is put together, and the more rennet there is added, the quicker will the cheese come. As a general rule the longer it is in coming, the tenderer and sweeter will be the curd. We should seldom desire it to come sooner than 40 minutes after the rennet is added.

When the curd is come, it is broken quite fine either by hand, or by a card breaker, which cuts it, into very small pieces. After this it is allowed to stand and settle. Some persons at this stage raise the temperature of the whey and curd up to 95 or 100. This is called "scalding." The practice has its advantages, and disadvantages. If the milk is warm enough when the rennet is added, it may be dispensed with; if too cool; it may be required. If it is desired to sell the cheese when a month or six weeks old high scalding is indispensable, but in making good cheese for home use, we should scald very little if at all.

The curd is easily separated from the whey by throwing the whole into a sieve or on to a cheese

cloth. The curd is then placed in a strong cloth, and well pressed to remove as much of the whey as possible. This is very important. It is then placed in a cool place, and the operation repeated daily,—or every other day if the milk will keep sweet, as it will in a cool cellar in the fall.

When sufficient curd is obtained in this way to make a cheese of the desired size, it is all mixed together, broken quite fine, and salted. It must then be pressed for a few hours; a clean dry cloth put around it, inverted and pressed again. At first it should not have too heavy a pressure put on it, but it cannot be pressed too dry. It should have dry cloths put round it and kept under the press till it does not wet them. Many will object to so much pressure, but we speak from experience and with much confidence on this point. Less scalding, and more pressure would, in our opinion, add greatly to the real value, and cheese-like flavor; though perhaps not to the buttery appearance and saleable qualities of most American cheese.

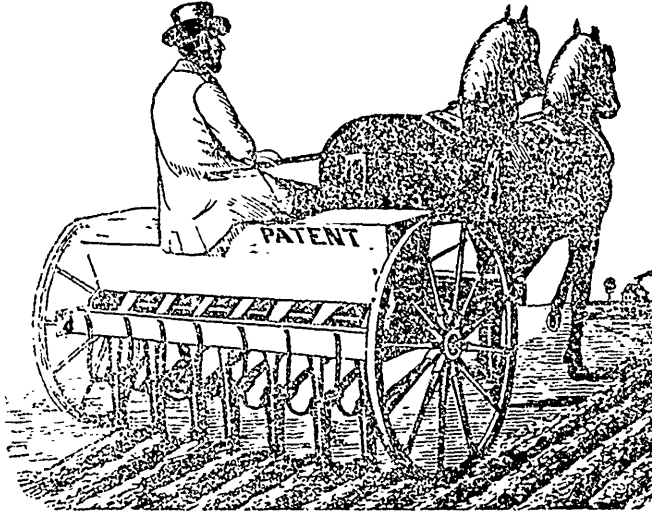
When the cheese is taken from the press it should have a little salt put on it, and be kept in the dairy, or other cool moist place for a few days. It may then be taken into a dry room, when for the first week or two it must be turned every day, or the side next the floor will mould. The room should be well ventilated and nearly dark.—*Country Gentleman*.

ABOUT GRINDSTONES.

The following is from a correspondent of the *Progressive Farmer*. As the period of harvest has approached, it furnishes a hint from which many farmers may profit:

I speak without fear of contradiction, when I say that more than one million dollars have been lost by the farmers in the United States, during the last half century, by their poor economy in the use of grindstones. Many a farmer, by using a poor grindstone loses enough in one season to buy a good one. But one farmer who is very much afraid of book farming, and never read an agricultural paper in his life steps forward and inquires how he has lost anything by grindstones? He says he uses the same one now that his father gave to him fifteen years ago—and then it was quite an old one—therefore he thinks he has been quite saving in that line of business. Perhaps it would be useless to try to convince him of his loss, for some men are wise in their own conceit, therefore there is but little hopes of improving them. Any farmer of common sense, who has ciphered through a simple multiplication, can tell very near how much he loses every year by using a poor grindstone.

We will suppose that the work can be done one-third quicker on a good stone than on a poor one: we next suppose that the time spent by a farmer and his hired man in grinding tools during the year, amounts to twelve days: then, if one-third of this could be saved by using a good stone, there is a loss of four days. These four days work, together with board, cannot be less than four dollars, which would buy a stone of the first quality and all its fixtures. But the loss of time occasioned by grinding on poor stones is far from being all the loss that arises from the use of such stones. The tools cannot be ground near as well, therefore the workman cannot perform as much labor or do it as well, as if the tools had been properly ground. In my opinion many a farmer in this country loses from two to five dollars every year by using a poor grindstone.



THE GRAIN DRILL.

The Horse Drill has been much longer in use among good farmers than reaping and mowing machines, but it has not extended itself so rapidly as the latter. One reason for its slow progress in this country, is doubtless because it is not so pre-eminently a *labor saving* machine. The great object of the grain-grower in this country, is to save the trouble and expense of manual labor, and to expedite the several processes of cultivation, harvesting and preparing for market. The Drill is not remarkable as a *labor saving* implement. If we convert the horse-labor into its equivalent, and sow by hand, we shall probably find that little is saved either in time or expense. We must look elsewhere for the benefits of using the Drill. The evenness and regularity with which the seed can be sown; the uniformity of depth at which it is deposited, and the consequent greater immunity from the effects of frost in winter and spring, are some of the advantages of *drilling* grain. It is also alleged that

wheat grows better, and is less liable to rust in drill's, than when broadcast. Repeated experiments have proved the superiority of drill-sowing in the old country, and also if we can believe the accounts we have seen, in the United States. In the few instances that have come under our notice in this country, equally beneficial results have been realized. It does not require many figures to show that if the Drill will give two or even one bushel more to the acre, other things being equal, than the broadcast method, it would *pay* to use it. They are now made in a much simpler form than the English Drill, and at much less cost. We believe they are manufactured at Hamiton, St. Catharines, Newcastle, and also imported from the United States. A very good kind called "Seymour's patent," is sold by McIntosh & Watson of this City. The above cut represents one of Messrs. Rugges Nourse and Mason's Drills, of Boston U. S.

A GOOD COMPOST FOR SANDY LAND.—Take 10 loads of stable or barnyard manure, 5 loads of clay, 20 bushels of ashes, and twenty bushels of lime; mix the whole well together, and let it remain in pile a few weeks; then turn it over, and it will be fit to apply to the land.

The above will make a better dressing for an acre of land than twenty five loads of stable or barnyard manure alone, and will last longer.—*American Farmer.*

In all composts intended for light, sandy soils, clay is one of the most valuable ingredients that can possibly be used. One reason why sandy lands are so little capable of vegetable production, is their want of adhesiveness. It is almost impossible to consolidate them sufficiently to secure that degree of retention so essentially and indispensably necessary to the decomposition of those organic matters which are applied in the course of cultivation as manure.

The quantity of clay required to change the constitutional texture of such lands, is necessarily great; yet with copious applications of putrescent substances, and the regular and systematic manipulations of judicious husbandry, the task of supplying as much as may be necessary effectually to ameliorate and permanently to improve the texture and productive capacity is by no means tedious.

There are few farmers who could not devote three or four days in the year, with their teams, to carting on clay from the low grounds, or to accumulating it in their yards and bog-styes, to be then worked up and composted with the voidings of the animals and other materials capable of imparting fertility to their lands.

The more clay one can afford on such improvements, the better; for there is little danger, in any case of applying too much. Sand on clay lands, is equally beneficial, and perhaps, in most cases, even more so.

PRIZE ESSAY ON CANADA.

We have received a copy of the Essay which obtained the first prize from the Paris Exhibition, Committee, and find it as was to be expected, a very interesting and succinct history of this noble province, its natural resources, and the character and condition of its inhabitants. The author is Mr J. Sheridan Hoan, a young gentleman connected with the political press, and for some time a resident of Hamilton, U C. We notice some omissions and a few not very important errors, but as a whole the essay is a very creditable performance. We select a short chapter:—

AGRICULTURE AND ITS PROGRESS. THE SAME COMPARED WITH THE UNITED STATES.

Canada, but especially the Western Province, is and has been essentially an agricultural country. Acting upon a policy which it is neither necessary to explain, nor to discuss the merits of here, England has always desired to make Canada, and indeed all her North American colonies, markets for the consumption of her manufactures. The consequence is, that Canada's energy has been chiefly directed to agriculture. It is true that she has valuable minerals, but it is only recently that public attention has been directed to them, and that capital has been applied to their production. Whatever prosperity the Canadian people enjoy, it is emphatically to the soil, the use they have made of it, and the timber they found upon it, that they owe it. To follow the plough, therefore, is to follow what has led to Canada's wealth. To count her stacks of corn is to tell what she has to show for her labour. The statistics which mark her annual production are the mile stones on her road to prosperity; and if the reader has a fancy for well-stored granaries, rich harvest fields, farm yards teeming with plenty, and beautiful animals—for they are not the less so for being domestic and useful.—I would invite him to take a short excursion upon upon this pleasant road of Canadian prosperity.

The value of all the vegetable productions of Canada in 1851 was estimated at £9,200,000,—grain being £5,630,000, other products £3,570,000. The wheat crop of that year in Upper Canada was 12,682,550 bushels, or nearly $1\frac{1}{2}$ bushels for every inhabitant, while that of the United States in the same year gave only about $4\frac{1}{2}$ bushels to each inhabitant.

It would exceed the limits of an Essay to trace the large increase in the vegetable production of Canada. The progress of the American States, unexampled perhaps in the history of the world, afford, by contrast, the best proofs of the agricultural advancement of Canada. Ohio, the best of these States for agricultural purposes, and where land is held, on an average, at double the price of that of the whole Union, produces, with nearly acre for acre under wheat cultivation, one-seventh less in quantity than Upper Canada, there being one and a half bushels less to each inhabitant.

In the last ten years the growth of wheat in the whole United States increased 48 per cent., and that of Canada, in the same period, increased 400 per cent. Even in Indian corn the production of Canada compares most favorably with the States, the increase in the States, for a period of ten years, up to 1851, being 56 per cent.; and for nine years, up to the same period, that of Canada was 163 per cent.

Of oats, the growth in Upper Canada has, in nine years, increased 133 per cent., and in Lower, seventy,

against 17 per cent. during the same period in the United States.

The amount of live stock is justly considered one of the most important features in agriculture, and one of primary consideration in good farming, as without it the properties of the soil could not be sustained, the expense and difficulty of introducing Guano, Nitrate of Soda, and other costly manures pressing too heavily upon the farmer in a young country. In addition to this, stock is a source of wealth, as affording butter, cheese, wool, and other marketable produce.

In 1851, Canada possessed 592,622 milch cows, being two to every 64 persons, and 46,939 more than the State of Ohio, which had in this year about an equal number of inhabitants. In sheep, Upper Canada had ten, and Lower Canada eight to every one hundred inhabitants, whilst the whole United States had 7 1 6th. In ten years the increase in the States of the latter animals was equal to 10 per cent., and in the weight of their fleece 32 per cent. In Canada, for the same period, the increase in animals was 35 per cent., and in wool 64, the quality of Canadian wool being declared, at the Great Exhibition, to be nearly equal to the finest samples of German.

Canada possesses one horse to every five inhabitants, and the increase in ten years has been 50 per cent. The best cattle increased 64 per cent. in six years, and the total live stock, according to the Census, in 1851, was 4,249,314 head. The increase since that period must have been very large; and the importation of the finest European breeds, carefully selected, has enabled the Canadian farmer to compete, in stock, with any part of the world.

From a summary of the facts elucidated by the last Census of Canada and the United States, taken within a year of each other, it appears that Canada far exceeds the most productive State of the Union in wheat, peas, rye, barley, oats, buckwheat, hay, hemp, flax, hops, maple sugar, and potatoes, Ohio largely exceeding Canada in butter, cheese, grass seed, wool, tobacco, beef and pork; and if the produce of the forest be added, of which Canada exported in 1851 to the value of upwards of a million and a half of pounds, the relative wealth is greatly in favor of Canada.

Already the population of Canada is more than one-thirtieth of the United States, the area in square miles, exclusive of territories, being one-sixth; her growth of wheat is one-sixth that of the American Union, and possessing, as she does, the great highway of the St. Lawrence to the West, her resources present an unrivalled field for energy and enterprise.

As a wheat exporting country Canada has made great progress; and as the improved methods of agriculture are more generally adopted, and her rich territories in the west become better settled, her exports of breadstuffs will be immense. It would appear that the United States, on the contrary, during the last twenty years, have been unable, even with the temptation of famine prices, to increase their export, for in 1831 their export of wheat and flour was equal to 9,441,091 bushels, and the value \$10,461,715. In 1851 the export was 11,028,397 bushels, the value \$11,543,063, the increase in twenty years being only 1,587,306 bushels.

In 1838 Canada exported 296,020 bushels of wheat, and in 1852, 5,196,718 bushels, thus increasing eighteen times. Her exports in grain have doubled our times in fifteen years, or more than once in every four years. They are now equal to one-half the entire exports of the United States.

There are, however, two articles which, until lately occupied little attention in Canada, namely, hops and flax. Of the former a considerable amount has been already exported, and the quality was considered fully equal to the British at the Great Exhibition. The growth of flax is likely to become a very important feature in Canadian industrial wealth, for the soil and climate of Canada are regarded as better suited for its growth than the great flax producing countries. The fibre is of the best description, and Canadian hemp is fully equal to that from the Baltic. The Government have already shown a disposition to foster and encourage this new source of national wealth, and its manufacture will soon become very general in the country.

[The prediction respecting flax manufacture will not be verified in Upper Canada.—Ed.]

WASH FROM SINK.

There is probably no article that can be applied to growing vegetables, more decidedly valuable, than the wash from the sink spout. And yet this is not generally understood by farmers, and few efforts are made even by the most economical, to economize an article in which are to be found all the elements which contribute to the sustenance of vegetables in a state of perfect solution, and consequently in a condition the most readily appropriable by the organs that they designed to nourish, invigorate and sustain.

It has been computed by chemical men that the amount of *pabulum*, or a nutritive matter, contained in the urine of animals, is equal to that of the solid voidings. It has also been asserted that one hogshead of soap suds, if applied in irrigation, would produce effects upon the corn crop as obvious and enduring, as those resulting from a cord of the best manure. This assertion is, perhaps, erroneous; but that the effects of the article applied in the manner specified, would be highly salutary, no one who has witnessed the effects of soap-suds upon cucumbers, squashes, house plants, &c., can indulge a doubt. But the most economical method, probably, of saving and appropriating this liquid to the purposes of vegetable enrichment, is to mix it with the materials of the compost heap. Any substance which will absorb it, may be made a vehicle for conveying it to the fields such as swamp muck, which, in a dry state, readily absorbs three times its weight of water, loam, old tan, rotten leaves, straw or saw dust, all of which are highly valuable, and act favorably both on the soil and crop.

If it found inconvenient to convey the sink waste to the piggery or barn cellar, dig a hole near the house six feet square, and two or three feet deep, according to the amount of water from the sink. If this is designed as a permanent arrangement it would be well to stone or brick it and cover the bottom and sides with water cement. But it will answer very well without either, by laying some old timber, joist or stones round the edge, and banking the earth up against it so that it may be covered up and not be offensive to the sight or smell.

On the bottom of this, lay meadow mud, straw, leaves, weeds, or common loam, and let the water on. These materials should be frequently supplied in small quantities until the place is full, when it may be carted away and the operation continued.

A Farmer who had adopted this plan, thinks he can make by it at least, twenty dollars' worth of the best of manure in a year, though the operations of the kitchen are limited, the family being small.
—N. E. Farmer.

THE MONTHS.—AUGUST.

"Oh tis a goodly sight and fair,
To see the fields their produce bear,
Waved by the breezes lingering wing,
To think they seem to laugh and sing;
And call the heart to feel delight,
Rejoicing in that glorious sight,
And call the reapers skilful hand
To cull the riches of the land."

The name of this month was given by the Romans in honor of Augustus Caesar upon his assuming the consulship, who had been successful in subduing Egypt and putting to an end the civil war. Prior to this it had been known as *Sestilis*, as being the sixth month from March, which was considered the first month of the Roman year. The Anglo-Saxons called it *Armonath*; *Arn* signifying harvest. It was also designated in accordance with its characteristic natural features; *Barn-Monath*, and *Harvest-Monath*.

LAMMAS DAY, which falls on the first of August has been supposed to signify LAMB-MASS, because on that day the tenants who held lands belonging to the Cathedral Church of York, which is dedicated to St. Peter ad Vincular, were bound by their tenancy to bring a live lamb into the church at high mass. Others give the same derivation, but explain it by saying that "lamb's were not then fit to eat, they were grown too big." Others again have imagined that it came from the Anglo Saxon *HLAFMAESSA*, that is LEAF-MASS, "because on that day the English made an offering of bread made of new wheat." It is a pleasing feature in the character of our ancestors that they were accustomed to express their gratitude for the gifts of Providence by special acts of thanksgiving in public worship: an example founded in the true spirit of philosophy, and most obviously in accordance with the Divine will.

The grand feature of this month is the GRAIN HARVEST, which is usually commenced in this country in July, but can seldom be said to be completed before the middle, or in late districts, the end of August. The farmer is now about realizing the fruits of his skill and toil. Howitt thus truthfully describes this joyous season: "It is a time for universal gladness of heart. Nature has completed her most important operations. She has ripened her first fruits, and a thousand hands are ready to reap them with joy. It is a gladdening sight to stand upon some eminence and behold the yellow lines of harvest amid the dark relief of hedges and trees, to see the shocks standing thickly in a land of peace; the partly reaped fields, and the clear cloudless sky shedding over all its lustre. There is a solemn splendour, a mellowness and maturity of beauty thrown over the landscape. The wheat crops shine on the hills and slopes, as Woodsworth expresses it like golden shields cast down from the sun." For the lovers of solitary

rambles, for all who desire to feel the pleasures of a thankful heart, and to participate in the happiness of the simple and the lowly, now is the time to stroll abroad. They will find beauty and enjoyment spread abundantly before them. They will find the mowers sweeping down the crops of pale barley, every spiked ear of which, so lately looked up bravely at the sun, is now bent downwards in a modest and graceful curve, as if abashed at his ardent and incessant gaze. They will find them cutting down the nestling oats, each followed by an attendant rustic who gathers the swath into sheaves from the tender green of the young clover, which commonly sown with-oats to constitute the future crop, is now showing itself luxuriantly. But it is in the wheat field that all the joy lity and gladness, and picturesqueness of harvest is concentrated. Wheat is more particularly the food of man. Barley affords him a wholesome but much abused potation; the oat is welcome to the homely board of the hardy mountaineers, but wheat is especially, and everywhere the "*staff of life*." To reap and gather it in, every creature of the hamlet is assembled. The farmer is in the field, like a rural king amid his people—the laborer, old or young, is there to collect what he has sown with toil, and watched in its growth with pride; the dame has left her wheel and her shady cottage, and, with sleeve-defended arms, scorns to do less than the best of them; the blooming damsel is there adding her sunny beauty to that of universal nature, the boy cuts down the stalk which overtops his head; children gleam among the shocks; and even the unwalkable infant, sits propt with sheaves, and plays with the stubble, and

With all its twined flowers,

Such groups are often seen in the wheat field as deserve the immortality of the pencil. There is something too about wheat-harvest which carries back the mind, and feasts it with the pleasures of antiquity. The sickle is almost the only implement which has descended from the olden time in its pristine simplicity—to the present hour neither altering its form nor becoming obsolete amid all the fashions and improvements of the world. It is the same now as it was in those scenes of much beauty which the scripture history without any labored description, often by a single stroke, presents so livingly to the imagination, as it was when tender thoughts passed

Through the sad heart of Ruth, when sick for home,
She stood in tears amid the alien corn;

When the minstrel-king wandered through the solitudes of Paran, or fields reposing at the feet of Carmel; or as it fell on a day, that the child of the good Shunamite went out to his father to the reapers. "And he said unto his father, My head! my head! And he said to a lad, carry him to his mother. And

when he had taken him, and brought him to his mother, he sat on her knees till noon, and then died." 2 Kings iv. 18-20,

Let no one say it is not a season of happiness to the toiling peasantry: I know that it is. In the days of my boyhood I have partaken of their harvest labors, and listened to the overflowings of their hearts as they sat amid the sheaves beneath the fine blue sky, or among the rich herbage of some green headland beneath the shade of trees, while the cool keg plentifully replenished the horn, and sweet after exertion were the contents of the harvest-field basket. I know that the poor harvesters are amongst the most thankful contemplaters of the bounty of Providence, though so little of it falls to their share. To them harvest comes as an annual festivity. To their healthful frames, the heat of the open fields, which would oppress the languid and relaxed, is but an exhilarating and pleasant glow. The inspiration of the clear sky above, and of scenes of plenty around them of the very circumstance of their being drawn from several dwellings at this bright season, open their hearts and give a lip to their memories and many an anecdote and history from "the simple annals of the poor" are there related, which need only to pass through the mind of a Woodsworth or a Crabbe, to become immortal in their mirth or woe.

The description of harvest work given as above by Mr. Howitt requires considerable modification in reference to the conducting of such matters on this continent. The "cradle" has for a long time almost wholly displaced the sickle, and such of late years has been the progress of agricultural mechanics that the reaping machine is rapidly superseding the former in many districts. In this country it is of the utmost importance to gather the harvest quickly and cheaply; an object which improved machinery only can facilitate. Even in Britain within the last three or four years the Reaping Machine has been not only introduced, but successfully and extensively employed in several counties; and it is every year making progress. It is a curious fact that we owe the invention of this valuable implement to a Scotch clergyman, now living; and it is generally conceded by the farmer at home that Bell's Improved Reaper is upon the whole the best Machine yet introduced, although most or all of the more celebrated American machines have had their comparative merits tested by repeated trials. It must certainly be confessed that these modern changes which must be after all regarded as great improvements, have to some extent interfered with our early and poetical associations in connection with the season and work of Harvest. Like the modern Railway, mowing, reaping and thrashing machines are great innovators on old and often pleasing associations and customs, which are destined to yield to the progress of improvement.

With regard to the warmer portion of the year it has been observed that in the three months previous to harvest, there has been more of actual beauty to please the eye, as there has been also greater melody to charm the ear. The loveliness of Spring, "when wheat is green and hawthorn birds appear," when all is fresh, dewy, and bright, and the hand of man has not yet swept away with scythe or sickle, the fair produce of the meadows and fields,—that loveliness is not to be equalled, far less surpassed by any of the glories of autumn. Sweetly does Bishop Heber describe a journey taken at this most beautiful of seasons.

"The thrush from the holly, the lark from the cloud,
Their chorus of rapture sung jocular and loud;
From the soft vernal sky to the soft grassy ground,
There was beauty above us, beneath and around.

"The mild southern breeze brought a shower from the hill,
And yet though it left me all dripping and chill,
I felt a new pleasure as onward I sped,
To gaze where the rainbow gleamed broad overhead.

"Oh! such be life's journey, and such be our skill,
To lose in its blessings the sense of its ill;
Through sunshine and shower, may our progress be even,
And our tears add a charm to our progress to Heaven!"

The twelfth of August, when grouse and ptarmigan shooting begins, forms quite an epoch in the life of a sportsman in the old country. And this is the twelfth of August," says Christopher North. "and all the Highland mountains have since dawn been astir, and thundering to the impetuous sportsman's joys! Our spirit burns within! Lo! how beautiful those fast travelling pointers do their work on that black mountain's breast, intersecting it into parallel lograms, and square's, and circles, and now all asleep on a sudden, as if frozen to death! Higher up among the rocks and cliffs and stones, we see a stripping whose ambition is to strike the sky with his forehead, and wet his hair in the misty cloud, pursuing the ptarmigan, now in their variegated summer dress, seen even among the unmelted snows. The scene shifts, and high up in the heath above the Linn of Dee, in the forest of Braemar, the Thane—God bless him—has stalked the red deer to his lair, and now lays his unerring rifle at the rest on the stump of the witches' oak. Never shall Eld deaden our sympathies with the pastimes of our fellow men, any more than with their highest raptures, their profoundest griefs. Blessings on the head of every true sportsman of flood, or field or fell!"

We are tempted to give another extract from the pen of the same inimitable writer in reference to this joyous season. "At this season of nature's abundant, we might almost persuade ourselves that human want was a fiction; see yonder line of lusty mowers sweeping down the abundant crop of pale barley, how vigorous, how cheerful their appearance. These are not the sons of misery and starvation, they

have made acquaintance with barley long before this, and in a form quite as congenial to them, whether in the brown loaf or the foaming tankard; and now turn to the wheat field, which is still more an attractive scene. * * * * All is beautiful, all is tender and touching; and as we walk in the corn field, even now, these glorious old scenes live again, and still continue to do so long as corn grows. An average crop is satisfactory, but a crop that soars high above an average—a golden year of golden ears, sends joy into the heart of heaven. Let the people eat—let them have food for their bodies, and then they will have a heart to care for their souls."

We have abundant reason to feel thankful to a bountiful Providence for the liberal manner in which the husbandman's labors have been crowned with success in this highly favored portion of the British Empire. Most of the crops will be good, several of them abundant, far more so than there was any reason to expect a month or two ago. With a fortnight's fine weather most of the crops will be safely gathered in. How appropriate the lines of the Poet of the Seasons:—

"THE HARVEST treasures all
Now gathered in beyond the rage of storms,
Sure to the swain; the circling fence shut up;
And instant winer's utmost rage defied,
While loose to festive joy, the country round
Laughs with the loud sincerity of mirth,
Shook to the wind their cares."

Reverting for a moment to the festivities which accompanied the *Harvest Home* in the olden time, we may appropriately conclude our somewhat eclectic remarks in the words of Tusser, with the simple observation that however times and customs may change in the course of the different generations of mankind, the spirit of kindness,—of wide-embracing human sympathies, remain for ever the same.

"Once ended thy harvest, let none be beguiled,
Please such as did help thee, man, woman and child,
Thus doing, with alway such help as they can,
Thou winnest the praise of the labouring man."

B.

NOE WHEAT FOR DISTRIBUTION.—At the Agricultural Bureau of the Patent Office there have been received parcels of the early Noe wheat, in beautiful varieties. This fine grain was introduced into France by M. De Noe. It has been adopted and spread extensively through the centre of the country under the name of "blue wheat," is hardy, productive, and in quality surpasses the well-known Sauman wheat, which it is fast replacing. Preference is also given to it on account of its precocity, and accords better with the eye. As an early spring wheat reaching maturity before the fly or rust can effect its progress, it challenges attention especially in the middle of the Southern States. No time will be lost in transmitting samples of this grain to proper hands in the respective States and Territories for experiments and reports.

Horticulture.

OSAGE ORANGE HEDGES.

We copy the following from the June number of the Wisconsin Iowa Farmer. The Osage Orange has been most thoroughly tried in the West:—

We are well aware that considerable prejudice exists against this species of live fence as not being adapted to our climate and soil; and that this prejudice is entertained by many who are supposed to have experience enough in such matters to give their opinions good authority. We have never felt certain of the value of this hedge-plant until of late, and have therefore recommended a trial of it more as a proper experiment, than as a certain and valuable investment. Now, however, we have become well satisfied that this plant is well suited to the climate and soil of Wisconsin, Iowa, and we will give our reasons why.

A few weeks since we happened to call at the house of Mr. WM. TRUESDELL, in the city of Janesville, and were shown a young Osage Orange hedge, three years from the seed, and having stood two years in its present position. It had stood uninjured the two last very hard winters—not one plant in fifty having died either winter, except where some plants were exposed on the edge of a high wall, with little soil to guard them. The plants were alive to the very bud below where they had been pruned, which was about twelve to fifteen inches above the ground. If these plants, then, can thus stand two such winters, and grow thickly and rapidly, they can stand every effect of our climate. We are well aware that others have not been so fortunate as Mr. Truesdell, but they have not used the pruning shears as liberally as he has. They have attempted to raise walking-sticks, while he has tried to raise a hedge. They may have been unsuccessful in their attempts; he has been successful in his. You can succeed as well as he did, if you will do thus:—

There is yet time to transplant and sow the seed this season—though rather late for the former. We are told the last of May is the best time for transplanting—perhaps the lateness of this spring will allow it to be done early in June, hence we will give some directions how to commence:

Prepare the line of your hedge by deep ploughing (trenching with a spade is of course still better), three feet, or even four feet wide. Set your plants either in one row or two, according to your fancy. If in one, 8 inches apart—If in two, a foot apart, breaking joints, thus—

* * * * *

The two parallel rows being about 4 or 6 in. apart. Cut down your plants early in the season (in August) to three buds. Again, in the fall, cut them down, not to any particular height, but so that the lateral branches of one plant may interlace with those of another, and form an impenetrable mass, so that you cannot thrust your open hand through. As the base close to the ground, becomes dense, allow the plant to rise, still keeping lateral bracing running out and interlacing. After they have been set two years they will run up the height of an ordinary fence in six or eight weeks after pruning. We think in one year more, a very insufficient fence will, with the aid of the hedge, be sufficient protection; and in two years more, you may take away all fence, and leave the hedge as a protection, that will last half a century.

In pruning down as closely as we have recommended, you lose nothing, for the upright stems will instantly grow up to a sufficient height for protection, and the tops will not be winter killed. Remember, however, that the line of your hedge is to be kept perfectly clean and free from weeds. This will require very little labor after the first year, as the plants overshadow the ground too much to allow any great growth of weeds.

The Cost.—A gentleman in Janesville, desirous of forming such a hedge, told Mr. Truesdell that an offer had been made him to set out and raise for four years, at seventy five cents per rod. Mr. T. insisted, that by buying the plants at four dollars per thousand, and paying cash for all the labor, it could be done at twenty five cents the rod. This may appear low, but by raising the plants from seed, it could certainly be done for that sum, if not for less.

If you get the seed, get that that has been raised as far north as it can be well ripened.—The colder the climate the seed is raised in, the better it will fit a cold climate; but with close pruning seed will do well, even if brought from Texas. Plant immediately.

REMARKS ON BUDDING AND GRAFTING.

Buds should always be set before the stock or bud has ceased to grow for the season. In setting pears in pear stocks, it is important to commence earlier than apples, as the former do not grow so long as the latter. Plum and cherry stocks also stop growing early, unless the development is kept up by stimulating manure, and careful tillage. Apple trees, if healthy and in a good growing condition, may be budded late in August. Peach trees continue to grow even longer than apple trees, and it is never advisable to bud them early. In all trees, when budded, there should be sufficient sap to cause the bark to peel freely. Of the proper time for performing this operation in the several kinds of trees above mentioned, the ready peeling of the bark is the only criterion to be relied on. In grafting it is frequently necessary for those who are engaged extensively in the business, to preserve scions for some months before the time arrives for inserting them. For this purpose, no material has yet been discovered superior to damp sawdust. In regard to its efficiency the editor of the *Albany Cultivator* says:

"The mode first suggested to us by T. G. Yeomans, of Walworth, N. Y., of preserving the scions of fruit trees in moist sawdust, has proved superior to any other. It is better than damp moss, in the facility with which the scion may be perfectly imbedded in it, leaving no interstices; and it excels moist sand, it being lighter, more spongy, and entirely free from a grit which may injure a knife. We have without difficulty preserved scions, which were cut in the summer for budding, till the following spring, and inserted them as grafts with entire success; and we have kept winter cut grafts till midsummer perfectly fresh, and employed them successfully in budding. A bushel of sawdust will retain its moisture for many weeks nearly unaltered, but water must not be applied too copiously or water soaking and decay will be the result. The north side of a building or a cool cellar is the best place."

In *Kenwick's Work on Orcharding*, we have the following remarks on Inoculating;

"Inoculating is the operation of transferring any desirable variety of tree upon the stock of an inferior or wild variety. The operation is principally

practised on small trees, and only during the time the sap flows freely, and chiefly during the months of August and September. Select for the buds the ripest young twigs of the present year, and cut off the leaves, leaving the footstalk entire. Having selected a smooth place in the stock, make a perpendicular slit downward, quite through the bark, an inch or a little more in length. Make a cross cut at the top of this slit quite through to the wood, a little slanting downward; next with the ivory haft of the budding knife, raise the bark on both sides from top to bottom, being very careful not to injure in the least the cambium or sap wood. Next and with expedition proceed to take off a bud; this is effected by entering the knife a little more than half an inch below the bud or eye, quite through the bark, and separating the bark from the wood to the same distance above the eye, always leaving a very thin slip of wood of about one-third of the length of the bud, this thin slip of wood occupies the middle section of its length. The bud is to be inserted in the stock to the bottom of the slit, and between the bark and wood; and the top of the bud being squared even with the cross cut, every part except the eye, is firmly bound and covered with strong wet bass string or matting."

DEFORMED ROOTS.—English farmers are much troubled with deformed roots, in their culture of carrots, parsnips, and other root crops. They form what are called fingers and toes, instead of the conical and regular shapes usual in successful root-growing. On a large scale this becomes a serious evil. A great amount of discussion has been had in their papers as to the cause of this difficulty, and the remedy for it. A late writer in the *Agricultural Gazette* states that the difficulty is in the seed-growing, and not in the root culture. His remedy is to cut out the central umbel, in seed-growing, and thus distribute the sap in to the lateral ones, when a healthy seed is produced. In this way, "fingers and toes" never disturb him. In using the seed of the central and large umbels, he always gets the deformed roots.—*Prairie Farmer*.

Communications.

(To the Editor of the Canadian Agriculturist.)

SIR,—In the year 1849 I visited the farm of the late John Delafield Esqr. situated on the North-Eastern border of Seneca Lake, one of the most beautiful and the largest of the Lakes of Western New York. For order and systematic arrangement in the house and in the field, this stood first among the farms of the State.

A set of rules was uniformly shown to laborers before they were indentured, and to which they were required to subscribe. They were somewhat similar to those given by London, and were conspicuously hung up in the cow-house, the stable, and the barn. A tool room, simple as it may seem, is too seldom seen among farm buildings; here it was a reality, and contained a place for every tool and every tool in its place. Each laborer had his own spade and shovel, pitch-fork and scythe, of which he was expected to be proud, because if they were not "his brave

associates" they were at least "the partners of his toil."

A plan of the farm was kept by its proprietor having its field divisions subsidiary to an accurate registration of rotation of crops, whether of four, five, or seven years. The treatment a field had undergone could thus be seen at a glance, its prospective treatment kept before the view, and the success or its opposite, of its experimental path easily noted; for the latter was an important object at the Oaklands and afforded much scope for intellectual enjoyment by the investigation of the results of the application of composts and artificial manures.

Numerous specimens of spear and arrow heads used by the Indian tribes have been turned up by the plough in the locality under notice. But the geological features of the neighbourhood are much more interesting. In the list given below there are a few minerals, some unstratified rocks, and several fossils. These were all collected on the farm, and are now deposited in the museum of the New York State Agricultural Society.

"In crossing a heath" says Paley "suppose I pitched my foot against a stone, and never asked how the stone came to be there; I might possibly answer that for anything I know to the contrary, it had lain there forever: nor would it perhaps be very easy to show the absurdity of this answer." This reasoning the science of geology readily confutes. Many of the specimens enumerated below contain the petrified remains of fossil animals, and these must have lived anterior to the formation of the rocks in which they are found.

Different rock formations present themselves in the County of Seneca. In its northern part we find the Onondaga salt group of New York geologists, deeply covered with alluvium, and corniferous limestone, distinguished from that of Onondaga by the absence of crinoidal columns. The soil covering these rocks is clayey, but in the neighbourhood of the Oaklands is of a more or less loamy character, as it is more or less mixed with the northern drift. It may also be denominated calcareous, from containing lime liberated by the constant disintegration of fragments of the rock.

The Marcellous shale and the Hamilton group occupy a large portion of the County. These contain many fossils and produce a calcareous soil. Next come the Tully limestone, Genesee slate and shales of the Portage group.

The groups of rocks here enumerated belong to the New York system, which is analogous to the Silurian system of Murchison, equivalent to the Transition series of Werner, and anterior to the old red sandstone and carboniferous periods.

The following list is in the order in which the

specimens are arranged in their case. It may appear dry to some of our young farmers, but it was collected during the ordinary vacations of a farm laborer's life, and proved a valuable source of recreation after his daily toil.

Those named more than once are of different varieties.

1st Shelf—Limestone, feldspar, silix, greenstone, orthite in slate, quartz, tentaculites roestone, or this contrilunata [Hudson river group].

2nd Shelf—Granite, ambronychia, trilobite, slate with encrinure, [Hudson river group] orthite, calymene senaria, tail of trilobite.

3rd Shelf.—Silix, granite, quartz, garnet in quartz, hornstone and orthite, horn-blende hydraulic lime with sulphate of magnesia, micaceous quartz, cyathophyllum basaltiforme, encrinure.

4th Shelf—Conglomerate, feldspar, augite, pearl spar in limestone, pleurogonaria, cyathophyllum and atrypa, concentric columns and rings.

The last are called Entrochi, or wheel stones, and in the Northern part of England retain the name of St. Cuthbert's beads.

"On a rock by Lindisfarn
Saint Cuthbert sits and toils to frame
The sea-born beads that bear his name."

MARMION.

5th Shelf.—Siliceous limestone with encrinures, sandstone (Clinton group) with atrypa hemispherica, cyathophyllum strombodes, favosites polymorpha, cyathophyllum.

6th Shelf—Encrinural limestone, hornstone, granite, limestone with orthite, micaceous quartz, orthoceras, water lime with calc spar and fluor spar, niagara limestone with corallines, loxomena in Onondaga limestone.

7th Shelf. Granite, Hudson river sandstone with orthoceras, Onondaga limestone with crinoidal joints gneiss with garnet, limestone with shells, limestone with cyathophyllum, leptæne in sandstone.

Descriptions and illustrations of the above fossils will be found in the Palæontology of New York by Professor Hall, to which work I would refer the reader for information.

Quebec 27th July 1855.

A. K.

VIGOROUS APPLE TREES.

(To the Editor of the Agriculturist.)

SEYMOUR, June, 21st 1855.

SIR:—Having observed in a late Number of the *Agriculturist* that some one in the United States had received a premium for the size of his apple trees—some of which measure 16 inches in circumference,

a though planted so lately, as 1849. I beg to inform you, that, to-day I assisted to measure several trees in an orchard belonging to Mr William Humphries, of the Township of Percy, in the County of Northumberland, which were planted in the *Spring* of 1850. We found one to measure full 17—several 16 inches. A blue plum measured 16 inches. These trees were purchased from an apple-tree pedlar who stated they were grown at Toronto. They were, when planted, the usual size of Pedlar's trees, except that Mr. H. picked the smallest, considering them the most likely to thrive. Their height averages between 14 and 15 feet—the plum is over 15 feet. The branches commence between 5 and 6 feet from the ground. Of course their appearance is unusually healthy. Mr. H. has simply kept the earth well worked in green crop; and washes the trees occasionally with weak lime. The soil is a rich loam. I am troubling you with this to show how our much abused climate affects fruit trees, if the trees meet with the commonest care—They produced fruit last year; and this year are well loaded. Indeed if I did not know to the contrary, I should consider them of ten years' growth at least.

I am, Sir, Yours very truly

H. ROWED,

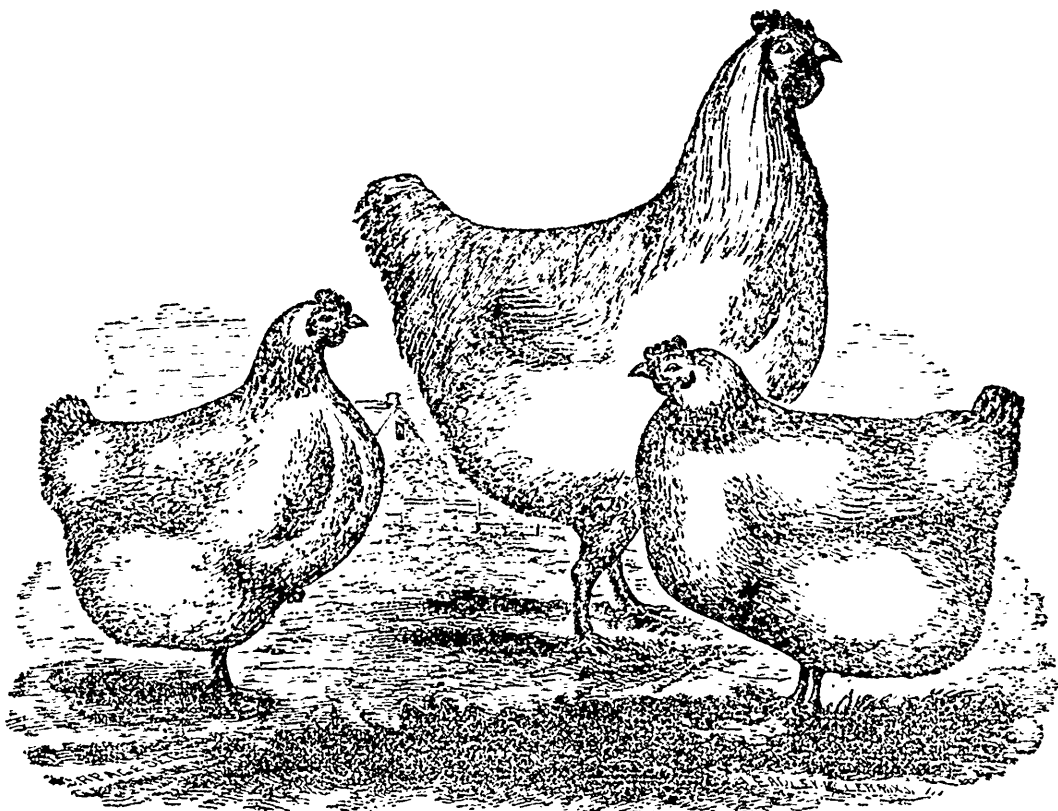
Pres't of the Seymour Ag. Society.

The trees referred to, were probably grown at the "Toronto Nursery," so successfully managed by its enterprising proprietor, Mr. Geo. Leslie.

We set out last spring upwards of fifty trees of Mr: Leslie's choicest varieties of apples, cherries, plums, pears, &c., and only one,—a Bolmar Washington, has failed. They were all well-formed, vigorous trees; and have put forth an abundant foliage. Some of the cherry trees are bearing fruit, the present season.

We have no doubt that hardy fruit-trees will flourish as well, and bear as abundantly on Canadian soil as any where else on this continent. We have seen as fine peaches from trees growing in the neighborhood of Toronto, as we have seen in New York. Tropical plants will not of course, thrive in this latitude, but with *care* and *good cultivation*, we can grow as good fruit as any State in the Union.

While speaking of the Toronto Nursery, we may remark, that persons planting out a young orchard should be careful to purchase their trees of responsible parties. Yankee pedlars have made frequent inroads into this province with "cheap" and *worthless* trees,—the extent of the imposition being unknown until years afterwards. We believe Mr. Leslie does not "peddle" his trees; but pedlars have purchased occasionally from him to fill out their orders. We would advise, in all cases, to purchase from a good Nursery, direct.



BRAHMAH FOWLS.

MOUNT PLEASANT FARM.
CLOCKVILLE, MADISON CO., N. Y.
June 14, 1855.

MY DEAR SIR:—I have your kind favour of the 9th inst., and with much pleasure send you a description of my Prize Brahmas, to accompany their portraits; and perhaps it may not be inappropriate to remark in this connection, that, last season, I kept fourteen distinct breeds of fowls, as I wished to form my own opinion as to the merits of the different varieties. Out of these fourteen varieties, I have selected the Brahmas and Black Spanish for future use. Mr. David Ely, of Rochester, N. Y., has very kindly sent me some eggs from his Pheasant coloured Chittiegongs. These are large and beautiful birds, but I have not yet tested their excellence. Mr. Ely thinks they can hardly be excelled.

The colour of my Prize Brahmas is white, with beautifully pencilled necks, running in very regular black streaks, or marks, from their heads nearly to their shoulders; their tails, which are very short, are nearly black; they have two or three black feathers in the tip of the wing, but these do not show when the wing is in its natural position. They

are short-legged, compact, heavy fowls, with very full, plump breasts, and are very fine boned. The rooster is not so distinctly pencilled as the hens are, and his long feathers have more of a creamy shade.

The two hens weighed in November last, (being spring chicks,) 8lbs each; the rooster, a year older, 12lbs. They are very docile, are easily confined with a picket fence three feet high, and, in fact, are just the kind of fowls to become the pet of the farm yard. They are excellent layers, but I have not yet tested their table qualities, though the half-bred fowls are excellent in this respect.

The portraits sent you are very accurate, being drawn from life by J. R. Page, Esq., of Lennett, N. Y., who is unquestionably the best animal delineator in this country. They were engraved by Leadly, Miller & Mix, of Rochester, N. Y. They are very superior fowls of the breed, as may be inferred from the fact that they easily won the first prize at the last Show of the New York State Poultry Society, being in competition with the fowls of most of the oldest and best breeders in the State.

If I am successful with my chicks this season, I

will send you a pair from the prize fowls. You can then see their beauty and test their excellencies and form your own opinion of their merits.

Very respectfully Yours,
S. P. CHAPMAN.

GEO. BUCKLAND, ESQ.

[We are obliged to Mr Chapman for his kind offer, and shall be happy to test for ourselves; although we feel no inclination to impugn, in the slightest degree, either his authority or judgment. We wish Mr. Chapman as equal a measure of success with poultry, as he has achieved in Durhams.]

—B

THE CROPS.—WHEAT FLY, &c.

(To the Editor of the Canadian Agriculturist)

DEAR SIR.—Having been absent a few weeks on a tour through some of the neighbouring States I find, on my return, the July No. of the *Agriculturist* in which is expressed a hope that some of your readers, in the neighbourhoods that had suffered from the fly, would give you some specific statements in reference to the extent, &c. for your next number. In sending you these statements it is not so much my object to give you information as to the extent of the damage done by the fly, which I am aware must be quite considerable, though perhaps it would be hard to determine the amount, as, I am inclined to think, the late rains have been favourable to the injured fields of wheat, as it is to make some remarks on the different varieties of wheat that are now being sown.

When the spring opened, the prospect was that our wheat crop this year, would exceed that of any former, but as the season advanced, it was in many fields especially those on high or rolling land, observed that the wheat, instead of improving, was wasting away; this, at first, was attributed by some farmers, to the effects of the drought that then prevailed, but it was soon ascertained that the insect as we sometimes call them, were thick in the joints, and many fields, that looked well in the spring, were perishing; but these ravages of the fly, were, almost entirely, confined to the red chaff, white wheat, of which unfortunately, there was more sown than of any other variety, as it had long been looked upon as the best, or most productive kind; but many Farmers, in consequence of its being so liable of late years to mildew, or rust, had sown earlier varieties, such as the wild goose, or Mediterranean, white flint, blue stem, and particularly the Sou'e of which, I believe, not any have suffered materially from the fly.

The blue stem grows large and hard straw, and is particularly adapted to the poorer soils; but the Sou'e grows the least, and, I believe, the hardest straw, and is, perhaps, a little the earliest variety,

and, consequently, the best adapted to rich soils, and in this vicinity is sown to considerable extent.

What damage the weevil, or worm in the grain will do this year has not as yet been ascertained, but for several years past it has been on the increase; last year I had nearly two barrels of worms that went through the screen into the box, [the crop was thrashed immediately after harvest] In many parts of the United States they have ceased growing wheat in consequence, as I was told, of the ravages of the weevil, but I saw, while on my late tour, that in New Jersey and Pennsylvania they have again commenced to grow wheat, to a considerable extent, but all of the Mediterranean variety, [large chaff and bearded,] which, I was told was not subject to being troubled by the weevil.

I remain yours very sincerely,
P. FISHER.

Port Nelson, 19th July, 1855.

(To the Editor of the Agriculturist)

DEAR SIR.—Having been travelling the last few weeks through different sections of the country, and my business leading me to observe the growing crops, perhaps a short account of my travels and the prospect of the harvest, may be interesting to some of your readers; and if you think it worthy of a place in your interesting paper, you are at liberty to publish it.

As the wheat crop is the most important, I shall direct my attention chiefly to that. Through this section, and eastward along the front, the winter wheat was more or less injured by the severe winter, but the fine growing summer has, in a measure made up the deficiency, and there will be a very fair crop, especially as the spring wheat is unusually heavy. Near Toronto, and northward all the way to Lake Simcoe, the wheat crop, spring and winter, looks remarkably well. I saw many fields that were far above the fences, and my curiosity led me in several instances to examine and measure the height, which I found to be over six feet. It was also very thick and stout, and, in a few instances, badly down. Taking into account the breadth sown throughout the country, there must be an abundant harvest, far above the average.

Yet wheat is not the only good crop, for all kinds of grain look well, and bid fair to yield abundantly, except Indian corn, which is backward. Meadows, generally speaking were good.

Perhaps you will allow me to say a word about my business. It is the introduction of the Combined Mowing and Reaping Machines, which we are manufacturing and spreading over the Province as widely as possible, that the public may judge for themselves—the only true way of judging. I am happy to say that in every instance where I have

started them, they have given perfect satisfaction. In many cases the trials were made in heavy lodged clover; and in one case, on Mr. Caspary's farm, Youge Street, I started one upon a low piece of interval land, where the crop was as heavy as I ever saw it, and all laid down; but still I went through without any stopping, did the work well, far beyond my own expectations, and to the surprise of all present, who acknowledged they never expected to see such a machine capable of cutting crops in that state.

Yours truly,

DANIEL MASSEY.

Newcastle July 20, 1855.

Miscellaneous.

PRESERVATION OF FRUIT.

The art of preserving fruits, especially the more perishable kind, such as Raspberries, currants, cherries, &c. is not generally understood or practised as it ought to be. For the last two or three years the plan of preserving the more delicate fruits of the garden by placing them in cans or tight vessels, expelling the air and sealing them up hermetically, has been extensively practised in the States, and by several persons in this country, with the fullest success. It is found to be far better than the old plan of *drying* these fruits. By the old plan we preserve only a portion of the fruit. Dry them ever so carefully, and there escapes with the water some portion of the original aroma and flavour of the fruit. Currants and gooseberries have frequently been preserved by being put into bottles while green, and the bottles afterwards sealed up. Currants have been kept in this way twenty years. But it is possible to take the perfectly ripened fruit and preserve it for months and years.

In the first place prepare a suitable number of cans made, of the best tin, to hold the quantity you wish to preserve. It is best to have these cans small, holding only what will be eaten soon after one has been opened; for it is observable that anything that has been kept preserved from decay by an arrest of natural laws, for a long time, when restored to the influence of those laws, undergoes chemical changes with great rapidity. Let those cans be, say seven or eight inches long and four or five inches in diameter, a hole being left in the cap of one end, an inch perhaps in diameter. The fruit selected should be perfectly ripe and sound, having no spots of decay upon it. The softer fruits, such as strawberries, raspberries &c., had better be crushed, as the air may then be more entirely expelled. Currants, gooseberries, cherries, plums, and peaches, may be put in whole. When the cans are filled a piece of tin is to be soldered

over the hole in the end, having in it a small hole of the size to admit a pin. The canisters are then to be placed in boiling water, and so kept until the air has ceased to issue from the pin hole. This can be easily known by dropping a drop of water on the hole; if it bubble, then the air is still issuing from the canister; if it does not bubble then the process is complete, and a drop of solder on this hole hermetically seals it. If these canisters be now kept in a cool place the fruit will have all the freshness at the end of a year's time that it had when put up.

Almost every family in the summer and fall make what they call their preserves. To do this an amount of sugar is used, equal in weight to the fruit to be preserved. A day's boiling, skimming and packing, and the thing is done for the time. But at sundry times afterwards, unless the luck is unusual, the preserves are "working," and the boiling and skimming has to be gone over again.

Now at an expense a trifle only greater than that of making the "preserves," of one year, a stock of canisters is obtained that will last many years, and in which fruit, with no more trouble, can be preserved with all its unchanged original flavour upon it; and this too, when the work is well done, requiring no subsequent operation.

The following recipe is highly spoken of by those who have tried it. The principle is much the same as that already recommended:

A lady sends us the following recipe for preserving fruit through the year,—or a dozen years—with the flavour as rich as if plucked from the stem to-day. In mid April in southern Ohio, she fasted on fresh peaches, cherries, plums, pears, &c., preserved in this manner, rendering the luscious peach and fragrant berry, eaten simply with cream and sugar, far preferable to the usual indigestible preparation of fruit cooked so hard in sugar that it is impossible, from the taste to name it. The fixed air removed, and external air excluded, the most perishable substance will remain unchanged indefinitely. With an air pump fruit may be preserved whole; but here is a process every one can follow:—Prepare your fruit for eating; remove the stone and pare it if necessary, then, in a close vessel, with water to keep it from burning, over the fire—or, which is better without water in an oven—give it a scalding heat, which does not cook it, or injure the flavor; then, filling a jar or jug, stop it close or seal it. Keep in a dry, cool place. This labour once performed, you have a desert always ready.—*Ohio Farmer.*

RASPBERRY VINEGAR.—To every pint of vinegar put three pints of raspberries. Let them lie together two or three days; then mash them up and put them in a bag to strain. To every pint when strained, put a pound of crushed sugar. Boil in twenty minutes and skim it. Bottle it when cold.

INFORMATION FOR INTENDING EMIGRANTS.

INFORMATION FOR INTENDING EMIGRANTS OF ALL CLASSES TO UPPER CANADA. By FREDERICK WIDDER, Esq., Commissioner of the Canada Company. Toronto: Thompson, & Co, 1855.

This is a *fourth* edition, revised and much extended of a very useful publication; ten thousand copies of previous editions having been circulated in the United Kingdom, besides a German edition of two thousand copies. In this small pamphlet a vast deal of the most recent and reliable information is brought together in a convenient form, adapted to the wants of intending Emigrants of all classes. It is in short just such a manual or directory as those who are looking for a home in our shores required, and its extensive circulation in Europe, under the sanction of so respectable and influential a body as the CANADA COMPANY, cannot fail in being beneficial to the country. It would be well if emigrants had always so true a worthy a guide as Mr. WIDDER, whose scrupulous exactness and painstaking, evinced in the character and arrangement of so large a body of facts, are like creditable to his judgment and industry. The free and extensive circulation of information of this kind is one of several ways in which the Company have benefitted Canada. We require no puffing, no arts of the time, to draw attention to the obvious and substantial advantages, which this country offers to capital and industry. All that is needed is an honest statement of indisputable facts, and this Mr. Widder has done in a business like and straightforward manner. We make room for the following extracts from the introduction to the present edition, although the information is of course intended for Europeans, or even Americans, more than our own people:—

"During the last three years, a combination of circumstances has caused a most extraordinary change in the relative position of everything. The price of land, of labour, of provisions,—in fact, of everything, has advanced. The inducing causes have, no doubt, been most materially the introduction of railroads,—the demand for labour arising from them,—the large amount of money disbursed for the works, and also brought to this Province for investment,—together with the high prices obtained for the past two years' harvests; to which must be added the large emigration from Europe, and of settlers from the United States, seeking this Province as their adopted home.

"These events continued to stimulate great progress in our affairs, until the effects of the Russian war acted upon the money market in England, and were more deeply felt in Canada, superinduced upon the very large importations of goods from Europe and the United States, and the great depreciation in the price of lumber.

"A check was given to our Railway Works—and remittances for investments became limited. No monetary crisis, however, arose from these occurrences—they merely caused a suspension in our rapid

advancement. At the same time, the wealthy condition of the farmers, and the great demand for produce, advanced the prices of their productions, and that of wild land, and of all real estate, and affirmed the substantial position which the Province has acquired. It may be said we are simply pausing for breath, after the recent excitement, and that we are about recruiting ourselves for a new start in our career; which it is believed will be a more permanent and important one, in its results of positive progress and prosperity, than has hitherto been witnessed. But this state of transition throws embarrassment around the desire to give perfect data and unchangeable prices, such as is desired in a work of this description; for a continuance of the war, the scarcity of money, and the suspension of our public works, or bad harvests, may seriously affect the data given; on the other hand, a contrary position of those affairs, would place this Province in a most extraordinary state of prosperity. Nor should it be forgotten, that we are about reaping the advantages of an extended commerce with the United States, through the Reciprocity Act, which cannot fail to be of great importance to us.

"The views adopted in Europe, upon railroads, are not applicable to this country. *There*, railroads are the consequence of the requirements for quick and cheap conveyance of a dense population, and of its manufactures and productions; *here*, railroads are self-creative of support, by raising population,—through opening up a new and fertile country, which transmits its productions, in return for the supplies of its wants.

"The effects of railroads upon the prices of produce, will probably be, to equalize them throughout the Province; whilst it can scarcely be expected they will reduce the cost of living in the towns and ports where the railroads have their termini and depots for exportation and importation. The requisite shipping, the great trade and commerce, combined with the docks for ship-building, and manufactories, that will necessarily arise, will induce a consequent increased permanent and transient population, who must be supplied, and can well pay for their wants. Such has been the effect upon the cities of New York and Boston, and other places similarly situated. As to real estate, it must, from the same causes, be affected in a like manner, in the towns and ports; whilst farm lands will, in every manner, be greatly benefited by railroads. About five years since, the price per acre for lands in the Genesee county, and other parts of the State of New York, was from £12 10s. to £18 10s.; they are now selling at £18 to £25 per acre, including the ordinary farm-buildings; these are cleared lands, but the value of the timber would have been greater than the cost of clearing. The prices of wild lands, in Upper Canada, have undergone a very great advance, during the past three years; but, circumstanced as this Province is, and considering its comparative small amount of population, it will not, perhaps, be taking a too sanguine view, if we anticipate, that we shall, in a year or two, approach the prices now paid in the State of New York, for lands in this section of the Province enjoying an equally fertile soil, and having the like facilities of railroad and water communications.

"It has been well observed by Professor Johnson, in a recent article of the *Journal of the Royal Agricultural Society of England*, on the relations of Geology to Agriculture in North America, that the *Peninsula of Upper Canada*, encircled by Lakes Ontario, Erie, and Huron, has a much wider expansion of those happily combined soils, which are so eminently distinguished for the growth of the finest quality of wheat, in large abundance, than even the far-famed Genesee District of the neighbouring State of New York.

"In this extensive range of country, (bounded by the great Lakes,) there is absolutely no land that is naturally sterile; and, probably, there is no other tract of equal area on the North American Continent, so well adapted, from circumstances of soil and climate, to the general purposes of agriculture. This interesting region has already been materially benefited by the opening of the Great Western, and the Ontario, Simcoe, and Huron Railways; and is rapidly settling by a persevering and industrious class of people. It will in a few years be the Garden of Canada, if not of North America.

"It is considered that the altered position of this Province will much attract the attention of a class of people possessed of considerable means; who will make Canada a home for themselves and families. With this view, some pains has been bestowed upon the educational matter,—procured from the heads of the various departments,—and which cannot fail to be of interest to those families contemplating settlement in Canada."

FISH FOR FOOD.

There is much nourishment in fish, little less than in butcher's meat, weight for weight; and in effect it may be more nourishing, considering that, from its softer fibre, fish is more easily digested. Moreover, I find there is in fish a substance which does not exist in the flesh of land animals, viz., iodine—a substance which may have a beneficial effect on the health, and tend to prevent the production of scrofulous and tuberculous disease, the latter in the form of pulmonary consumption, one of the most cruel and fatal with which civilized society, and the highly educated and refined, are afflicted. Comparative trials prove that, in the majority of fish, the proportion of solid matter—that is, the matter which remains after perfect desiccation, or the expulsion of the aqueous part—is little inferior to that of the several kinds of butcher's meat, game or poultry. And if we give our attention to classes of people—classified as to the quality of food they principally subsist on—we find that the ichthyophagous class are especially strong, healthy and prolific. In no class than that of fishers do we see larger families, handsomer women, or more robust and active men, or a greater exemption from the maladies just alluded to.—*Dr. Dary's Angler and his Friend.*

SORE TEATS—Colic is the very best application to heal the cracks in the teats of milk cows or the bites of the sucking calf. Wash the udder with cold water before applying the molasses. Nothing I have ever tried cures so quickly. A kicking cow is frequently cured by the same remedy, provided the milker is careful to keep short finger nails.

CISTERN BUILDING.

A good Cistern is an essential appendage to every Farm House. The mode of building is various. We find the following directions in an exchange paper:—

In the first place strike a circle about 7 feet in diameter, and excavate to the depth of from 6 to 10 inches, leaving the surface level, then within this strike another circle some 5½ or 6 feet in diameter, and excavate to the proper depth, leaving the diameter at the bottom somewhat less than the top; making the sides as smooth as possible to receive the cement.

Now with 300 or 400 of what is termed hard bricks, form an arch or dome over the cistern, instead of covering in the old way with timber; this can be done by laying down the first course of bricks end to end on a layer of mortar that is somewhat thicker at the outer than the inner edge, so as to elevate the outer edges a little; now lay the second course with very little mortar between the inner edges of the bricks, and considerable between the outer edges so that the latter course shall have a greater inclination than the former by about half an inch; continue on in this way until the bricks have attained an inclination of about 45 degrees; now reverse the order of laying them, putting very little mortar between the outer, and considerable between the inner edges, until they come to lie level; the thing must be so managed as to leave an aperture at the top sufficiently large to admit a man to clean the cistern, (about 41 to 20 inches.) The mouth should be somewhat elevated, so as to bank up sufficiently to place the dome below the action of the frost, the dome must be covered with cement both inside and outside.

My cistern was plastered on the bank, which I think preferable when the earth is sufficiently tenacious; one barrel of cement lime was used. Proportion for first coat—2 parts rather coarse sand, and 1 of lime; for second coat, equal parts of lime and fine sand. My cistern has been built 6 years, and there is no reason apparent why it should not endure for ages. A waste pipe should be inserted near the top, to discharge surplus water.

TO DESTROY CANADA THISTLES—A Correspondent of the Rural New Yorker says.—It is well known to many farmers that plowing will destroy Canada thistles though there is some difference in the mode of operation. Most generally the ground is plowed four or five times during the summer, which will nearly or quite exterminate them, but my treatment of these customs I think better will. Five years ago I purchased a farm on which were a number of patches of Canada thistles. On one field of six acres they were from two to four feet high, and so thick that neither grass nor anything else could grow with them. About the end of June I harrowed down the thistles and sand, I weeded them under and the first week in July plowed the field again and sowed buckwheat.—It yielded a good crop and some thistles; thrashed the buckwheat on the lot, and burnt the straw and chaff. I treated this field in like manner to three years in succession, sowing down with clover and timothy the last year, and have completely eradicated the thistles. By sowing the buckwheat, the farmer will not only be remunerated for his labour, but there is no kind of crop so good as this to free the land from daisies, thistles, and other noxious weeds. To subdue patches growing in corners of fences and on highways, mow them off in the old of the moon, Dutch rule, in July and August. I have tried this rule and have exterminated many patches in this way.

Farmer Pennywise and Farmer Poundwise.

There is a Farmer Pennywise with whom I am acquainted, who will occasionally raise a good heifer, steer or colt for his neighbors who keep good breeds, and he is by accident occasionally benefitted thereby. When he has such an animal in his flock, he is apparently useless until it is disposed of; and after selling such an animal, as a heifer for instance, you may hear something like the following.

"Well, my dear, I have sold the big heifer for fifteen dollars; is that not a good price for a heifer of her age?"

"Good price indeed!" his wife would reply. "you had better have sold two of them cat hammed, crooked legged, scrawny things that you always keep for cows. The reason that our cattle always look so bad, and that we sell so little butter and cheese is, that you always sell the best heifers."

Poor woman! I pity her; her pride and ambition are injured, her children and self in rags, because her native industry and economy are cramped by the foolish and niggardly policy of her husband.

The picture is reversed in farmer Poundwise, who always keeps his best animals until full grown; then selecting his best breeders for his own use, he sells the rest. If he had a good young horse, he will say that he will make a fine team horse; a mare she will make a fine brood mare.

"And what will you do with that?" says his neighbor, pointing to an ordinary animal.

"Between you and I," says he, "I shall sell that colt the first chance. Such an animal spoils the looks of all the rest and will not pay for his keeping."

Thus he will sell his poor steers, heifers, sheep, and pigs at the first offer. If not sold, he would fatten those that would pay the expense, and give away those that would not. Not pay the expense of fattening! Are there any cattle, sheep or hogs that will not pay the expense of fattening?—Readers, take some of each—the real Pharaoh breed—feed them until fat; keep an exact account of the expenses, and you can answer this question yourself. In this way Farmer Poundwise always has valuable stock; his steers are ready sale, and command a good price; his horses are the best in the neighborhood, and the first to be looked at by purchasers. So with all the animals he raises. Pennywise, on the contrary, is thronged with an ill-shaped, worthless stock, that none will buy or pay the expense of raising; which are continually eating out his substance and making no return. Thus Pennywise drags on a miserable life in the road to ruin, while Poundwise moves easily and happily along in the road to wealth.—*Maine Farmer.*

TOMATO PRESERVE.—Take the round yellow variety as soon as ripe, scald and peel; then to seven pounds of tomatoes add seven pounds of white sugar, and let them stand over night. Take the tomatoes out of the sugar and boil the syrup, removing the scum. Put in the tomatoes, and boil gently fifteen or twenty minutes; remove the fruit again and boil until the syrup thickens. On cooling put the fruit into jars and pour the syrup over it, and add a few slices of lemon to each jar, and you will have something to please the taste of the most fastidious.

TO BLEACH STRAW.—Straw may be bleached by putting it in a cask into which a few brimstone matches are placed lighted. The same effect may be produced by dipping the straw into chloride of lime dissolved in water.

WASHING DISHES.

In clearing the table scrape all the plates as clean as possible and pile them the largest at the bottom, and set them in regular rank and file around the borders of the sink or table. Put the knives and forks in a mug or pitcher, with the water just up to the handles. Arrange the cups and saucers near the dish-tub, with the spoons and all silver articles in a tray together. Place the wooden dishes by themselves. Have two wooden dish-tubs, painted on the outside, but not on the inside. Some people use milk pans or bread trays for washing dishes; but this is decidedly filthy. The dish-tub should be used for no other than its appropriate purpose, and there should be one for washing the dishes and one for rinsing them. Some people fill the dish-tub with water when they begin, and cool it to the possibility of holding their hands in it, so before they are half through it is covered with a coat of grease and unfit to wash a pig's trough.

It is better to take a little water at first, and make a good suds, and keep adding as it cools, both hot water and soap. Wash the spoons, and silver articles, of all kinds, and glass, before anything else is put into the water, and wipe them on a towel which is never used for anything else. Next in order come the covers and such earthen articles as are comparatively clean. Then the knives, which should have been previously wiped out of the water in which they were first immersed. Then plates, and meat and vegetable dishes. By this time an entire new water is needed, for tin and iron vessels, and especially wooden ones need a water as clean as for silver. Every towel should be thoroughly washed in suds and scalded after being once used, and the dish-tubs should go through the same process. And I have washed dishes after this fashion weeks and months and years, without a trace of the "menial labours upon my hands!"

All the articles in the castor, and the salt-cellar should be washed and filled anew once a-week. And where oil lamps are used, they should be thoroughly cleansed as often as once a-month, else the oil forms a glue upon the inside and upon the wick that prevents a clear light. Milk-pans and cream-pots, and every thing in which milk is set, should be thoroughly scalded every morning, and nothing but milk should ever soil their bright faces.

Tea pots and coffee-pots should be rinsed in clear hot water and dried, every using. Some rub all the silver in daily use with soft deer-skin, after washing, and this keeps it very bright. I have a great aversion to scouring knives, and never touch brick dust if I can help it; but if their brightness depends on me, I prefer to rub them three times a day rather than once, for it is less labour, and they last longer.

MINNIE MYRTLE.

NUTRIMENT OF ONIONS.—Prof. Johnson gives his opinion in favor of onions as a very nutritious vegetable, and for laboring men with strong digestive powers quite healthy. It is not merely as a relish that onions are used so largely by many people, but because they give strength as well as a satisfaction of appetite. Prof. Johnson ranks onion in point of nutriment with peas.

IT CAN'T BE HELPED.

"Can't be helped," is one of the thousand convenient phrases, with which men cheat and deceive themselves. It is one on which the helpless and idle take refuge as the last and only comfort—it can't be helped. Your energetic man is for helping everything. If he sees an evil, and clearly discerns its cause, he is for taking steps forthwith to remove it. He busies himself with ways and means, devises practical plans and methods, and will not let the world rest until he has done something in a remedial way. The indolent man spares himself the trouble. He will not budge. He sits with his arms folded, and is always ready with his unvarying observation, "It can't be helped," as much as to say—"If it is, it ought to be, and we need not bestir ourselves to alter it." Wash your face you dirty little school boy: you are vile, and repulsive, and vicious, by reason of your neglect of cleanliness. "It can't be helped."—Far away your refuse, sweep your streets, cleanse your drains and gutters, purify your atmosphere, you indolent corporations, for the cholera is coming. "It can't be helped!" Educate your children, train them up in virtuous habits, teach them to be industrious, obedient, frugal and thoughtful, you thoughtless communities, for they are now growing up vicious, ignorant and careless, a source of future peril to the nation. "It can't be helped." But it can be helped. Every evil can be abated, every nuisance got rid of, every abomination swept away; though this will never be done by the "Can't-be-helped" people. Man is not helpless, but can both help himself and help others. He can act individually and unitedly against wrong and evil. He has the power to abate and eventually to uproot them. But, alas! the greatest obstacle of all in the way of such beneficial action, is the feeling and disposition out of which arises the miserable, and idle ejaculation of "It can't be helped."

CHEAP SOAP.

A correspondent of the "Southern Banner" gives the following recipe for soap-making, and adds, that it would be worth a thousand pounds in the hands of a selfish person, and the world would have to untie the purse string to get at it, but here it is free gratis:

Take six pounds of potash - - - -	75
Four pounds of lard - - - -	50
One-fourth pound of rosin - - - -	25

All amounting to - - - - - \$1 50

Beat up the rosin, mix all together well, and set aside for five days, then put the whole into a ten gallon cask of warm water and stir twice a day for ten days, at the expiration of which time, or sooner, you will have one hundred pounds of excellent soap for one dollar and a half.

COURTESIES OF LIFE.—In our intercourse one with another, there are many little ways which we may assume without imputation of littleness or foppishness. A smile, a cordial bow, an earnestness of manner in addressing a friend or more especially a stranger, costs but a slight effort, and generally will ensure a corresponding pleasantness, even from the ill-tempered. There would be but a melancholy world if all the courtesies of life were disregarded and a sulky, mistaken kind of straightforwardness adopted.

HOUSEHOLD MEASURES.

As all families are not provided with scales and weights referring to ingredients in common use by every housewife, the following may be useful:—

Wheat flour, one pound is one quart.

Indian meal, one pound two ounces is one quart.

Butter, when soft, one pound one ounce is one quart.

Loaf sugar, one pound is one quart.

White sugar, powdered, one pound one ounce is one quart.

Best brown sugar, one pound two ounces is one quart.

Eggs, average size, ten eggs are one pound.

Sixteen large table-spoonfuls are half a pint, eight are one gill, four half a gill, &c.

NUTRITIVE QUALITIES OF MILK.—In the Medical Convention, lately in session at Philadelphia, Dr. N. S. Davis, of Chicago, presented a report on the nutritive qualities of milk, and also on the question whether there is not some mode by which the nutritive constituents of milk can be preserved in their purity and sweetness, and furnished to the inhabitants of cities in such quantities as to supersede the present defective and often unwholesome modes of supply. The report says that when railroads were opened into the interior of the country it was said that milk would be furnished to the residents of cities in the purity that was found on farms, but a sufficient time has elapsed to demonstrate that such is not the case. The conveyance of the milk from the farm to the cars, the transit on the railway, and the time lost in its delivery throughout the city, it was clearly shown, had the effect of making it unfit for the nourishment of a child. During the past half century, experiments had been made with a view of preserving milk in its pure state; yet it was but recently that a discovery was made, by a gentleman in New York, which was to evaporate the water and mix with it white sugar, which rendered it what is termed solidified milk. In his practice he had used this improved milk for the nourishment of infants with the most gratifying results, and after having kept it for three months; and he knew of its having been kept twelve months without any injury to its qualities.

SIMPLE REMEDIES.—Cotton wool, wet with sweet oil and paregoric, relieves the earache very soon.

Black or green tea steeped in boiling milk and sweetening with loaf sugar, is excellent for the dysentery.

A good quantity of old cheese is one of the best things to eat when distressed by eating too much fruit, or oppressed with any kind of food. Physicians have given it in cases of great danger.

Blackberries are extremely useful in cases of dysentery to eat the berries very plentifully. Tea made of the roots and leaves is very beneficial, and a syrup made of the berries is still better.

Whortleberries, commonly called huckleberries, dried, are a useful medicine for children. Made into tea and sweetened, they are very beneficial when the system is in a restricted state, and the digestive powers out of order.

THE HIVE AND HONEY BEE. The Rev. L. S. Langstroth a writer of some note on Bees, says—Many persons have not the slightest idea that *any thing* may be *seen* that takes place in a beehive. But hives have for many years been in use, containing only one large comb, enclosed on both sides by glass. These hives are darkened by shutters, and when opened, the queen is exposed to observation as well as all the other bees. Within the last two years, I have discovered that with proper precautions, colonies can be made to work in observing hives, without shutters, and exposed continually to the *full light of day*; so that observations may be made *at all times*, without in the least interrupting the ordinary operations of the bees. By the aid of such hives, some of the most intelligent citizens of Philadelphia have seen in my Apiary, the queen bee depositing her eggs in the cells, and constantly surrounded by an affectionate circle of her devoted children. They have also witnessed, with astonishment and delight, all the steps in the mysterious process of raising queens from eggs which with the ordinary development, would have produced only the common bees. For more than three months, there was not a day in which some of my colonies were not engaged in making new queens to supply the place of those taken from them, and I had the pleasure of exhibiting all the facts to bee keepers who never before felt willing to credit them. As *all* my hives are so made that each comb can be taken out, and examined at pleasure, those who use them, can obtain from them all the information which they need, and are no longer forced to take any thing upon trust.

Loss of Stock in Ohio.—The losses of sheep and cattle from starvation have been very extensive throughout the northeast section of Ohio. Many a flockmaster has lost from 200 to 500 sheep, while dairymen have lost from 30 to 40 cows each, in some localities. In a number of counties the losses were very general, and it will require years for some farmers to recover from the damage sustained in consequence of the severe drouth of last season, and the hard winter which followed. It is estimated that in the section named—say one fourth of the State—full two thirds of the sheep, and one half the cattle have died during the winter, a loss which is very large in the aggregate, and must greatly affect the interests of the farmers, and the prosperity of that portion of the State.

HEDGE OR LIVE FENCE.—Efforts to establish a permanent hedge of various plants in England with so much success, have failed in the dry, hot climate of the United States. Numerous plants, indigenous to our country, have also been tried with no better success, until Professor J. B. Turner, of Illinois College, introduced the Osage orange from the wilds of Texas. His success has induced other farmers upon the western prairies, and also in the timbered portions of the country to make trial of this plant for hedging purposes. These experiments have established beyond a doubt the perfect adaptation of this plant to the purpose of live-fence in our climate. Owing to its peculiar growth, both root and branch, it is not affected by the heat and drought of our summers, as the tap-rooted plants are which form the beautiful hedges of England. A few weeks since the editor of the *Louisville Journal* visited the farm of Mr. James McGrew, of Montgomery county, Ohio, for the purpose of examining a most perfect specimen of this hedge. The plants have been set four years, and the hedge is now so compact and broad at the ground that neither fowl nor pigs can pass it, and so high that the most unruly animal would not attempt to jump it.

THE BEVERAGES WE INFUSE.—Infused beverages are drunk hot. fermented drinks are usually taken cold. The love of such warm drinks prevails almost universally. In frozen Labrador and snowy Russia, the climate might account for this predilection; but the craving is really deeper seated. The practice prevails equally in tropical and in arctic regions. In Central America the Indian of native blood, and the people of mixed European race indulge alike in their ancient chocolate. In southern America the tea of Paraguay is an almost universal beverage. The native North-American tribes have their Apalachian tea, their Oswego tea, their Labrador tea, and many others. From Florida to Georgia in the United States, and all over the West India islands, the naturalised European races sipping their coffee; while over the Northern States of the Union, and in the British provinces, the tea of China is in constant and daily use. All Europe, too, has chosen its prevailing beverage. Spain and Italy delight in chocolate; France and Germany and Sweden and Turkey, in coffee; Russia, Holland, and England in tea; while poor Ireland makes its warm drink of the husks of the cocoa, the refuse of the chocolate mills of Italy and Spain. All Asia feels the same want and in different ways has long gratified it. Coffee, indigenous in Arabia or the adjoining countries, has followed the banner of the prophet, wherever in Asia or Africa his false faith has triumphed. Tea, a native of China, has spread spontaneously over the hill country of the Himalayas, the table lands of Tartary and the plains of Siberia—has climbed the Altai, overspread all Russia, and is equally despotic in Moscow as in St. Petersburg. In Sumatra, the coffee leaf yields the favourite tea of the dark-skinned population, while Central Africa boasts of its Abyssinian *chaat* as the indigenous warm drink of its Ethiopian people. Everywhere unintoxicating and non-narcotic beverages are in general use, among tribes of every colour, beneath every sun, and every condition of life. The custom, therefore, must meet some universal want of our poor human nature. *Professor Johnston's Chemistry of Common Life.*

TUNNEL UNDER THE NIAGARA RIVER.—William Wallace the distinguished railroad engineer, who has been prominent in railroad enterprises in Western New York, has submitted a project for tunnelling the Niagara at Buffalo, for railroad and other purposes. The work is a feasible one, and in view of the increased commercial and general business relation between the United States and Canada, an important one. It is proposed to be at the termination of the Buffalo and Brantford railway. In England railroad tunnelling is a matter of common occurrence. The Kilsby Tunnel, on the London and Birmingham railway, is over a mile and half in length. There are eight tunnels on the Manchester and Leeds railway, in a distance of sixty miles, one of these at the summit, being one mile and five eighths in length. On the Liverpool and Manchester railroad there are three tunnels; one of them is six thousand six hundred feet long. The Abbot Cliff tunnel is six thousand six hundred and nine feet long, and between Manchester and Huddersfield there is a tunnel through Blackstone ledge three miles long.

THE POWER OF LOVE.—Love is the spring and spirit of the universe. Thank God, it is notwithstanding our depravity, the strongest force in our nature. It gives life to life; in its warm embraces we spend the childhood of our days, and through each successive period to the grave, it appears to us in a thousand angel forms, soothing us with its tender words, blessing us with its gifts, and brightening our path with its smiles.—*Literary Journal.*

INFLUENCE OF ARDENT SPIRITS.—In the ardour of this crusade against fermented liquors, statements have been made by over zealous champions of total abstinence, which are not quite borne out by chemical and physiological researches. Ardent spirits of every variety are little else than alcohol diluted with a large proportion of water, and flavoured with a minute admixture of volatile oil, the precise action of which upon the system is not known. They contain none, therefore, of the common forms of nutritive matter which exist in our usual varieties of animal and vegetable food. It does not follow from this, however, as some have too broadly alleged, that they are incapable of serving any useful purpose in the animal economy. On the contrary, it is ascertained of ardent spirits—First, That they directly warm the body and by the changes they undergo in the blood, supply a portion of that carbonic acid and watery vapour which, as a necessity of life, are constantly being given off by the lungs. They so far, therefore, supply the place of food, of the fat and starch for example, which we usually eat. Hence a schnapps, in Germany, with a slice of lean dried meat, make a mixture like that of the starch and gluten in our bread, which is capable of feeding the body. So we either add sugar to milk, or take spirits along with it (old men's milk), for the purpose of adjusting the proportions of the ingredients more suitably to the constitution or to the circumstances in which it is to be consumed. Second, That they diminish the absolute amount of matter usually given off by the lungs and kidneys. They thus lessen, as tea and coffee do, the natural waste of the fat and tissues, and they necessarily diminish, in an equal degree, the quantity of ordinary food which is necessary to keep up the weight of the body. In other words, they have the property of making a given weight of food go further in sustaining the bulk of the body. And, in addition to the saving of material thus effected, they ease and lighten the labour of the digestive organs, which, when the stomach is weak, is often a most valuable result. Hence, fermented liquors, if otherwise suitable to the constitution, exercise a beneficial influence upon old people, and other weakly persons whose fat and tissues have begun to waste, in whom the process of digestion, that is, does not replace the tissues as fast as they naturally waste.—*Chemistry of Common Life.*

CLARIFYING MAPLE SUGAR.—A Vermont farmer says the following is a sure method of clarifying maple sugar. Filter all your sap before boiling, through a hopper or box of sand, which will take out, not only the stains derived from leaves, tubs, crumbs of bark, but all other coloring matter that can prevent the sugar from being pure white. We doubt whether sand can remove the coloring matter of the sugar, but the method is simple, and it will cost little to try it.

ENGLISH GUNPOWDER.—On first straying amidst the Syrian hills with a gun in my hand, I was puzzled by the manner in which I was frequently accosted by the people. Some times a man would run towards me, and suspecting very naturally that I understood a little Arabic, he would earnestly repeat the one word *baroot* [gunpowder]. Imagining he asked if I came from Beirut, I answered *etwa* (yes), which, of course, caused him to expect he was about to receive some of the coveted commodity. There are no words that one sooner learns in Syria than *baroot* and *ush* [powder and shot], and even the smallest quantity of our finely-ground "cauister" is much desired to prime the firelocks, the Arab powder being generally as large, and sometimes larger in the grain than wheat.—*Journal of Eastern Travel in Hogg's Instructor.*

WASHING WINDOWS.—A correspondent of the American Agriculturist gives the following improved mode of washing windows, which, although not new to us, may be valuable to many of our readers:—

"The nicest article for washing windows is deer-skin, as no particles come off to adhere to the glass and make it look as if washed with feathers. There is no need of any thing larger than a hand basin for washing windows. The great splashing some people make in the exercise of their art is entirely useless, and is, moreover deleterious. When the water is permitted to run down in great quantities upon the glass, it dissolves the putty and soon loosens the panes from their setting and also stains the glass. Two pieces of nice wash leather and a bowl of suds are all that are necessary. Wipe the glass first with the wet cloth or leather, and after it has become dry, with the clean cloth, and it will look clear, and far more so than if rinsed in a dozen pails of water."

TASTE OF TURNIPS IN BUTTER.—A correspondent at Philadelphia writes us that he had abandoned the use of turnips as feed for milch cows on account of the disagreeable taste imparted to the milk and butter. He met with the following easy method of removing this objection, and has practised it for five years with perfect success, both with common flat turnips and with ruta bagas:—slice the turnips 12 hours before they are wanted, put them in a heap or basket, and sprinkle over them a slight coating of fine salt. After they have lain in a heap 12 hours, mix them well together and give to the cows.—*Country Gentleman.*

RE-CHURNING BUTTER.—The neighbours of a certain lady in the Fourth District of New Orleans, have recently discovered something that has seemed a miracle, for months past. They knew the lady had but one cow, says the *Crescent*, and they knew also, that the lady's two little negroes peddled as much Creole butter daily as could be produced by half a dozen common cows. Inquisition got so high on the subject at last, that the lady has let out the secret, and in its travels it has reached us. She told a friend that her cow was only a common cow, and did not produce any butter, but yielded milk enough in which to re-churn any quantity of strong Goshen butter, which she buys by wholesale at the groceries, and converts by the said re-churning in new milk, to that pale sweet delicacy, known as Creole butter, which always commands the highest of prices. She added also, that by this process she had made a clear profit, since June last, of *twelve hundred dollars!* One cow is not much, but one cow and Yankee ingenuity together are considerable. Our authority in this matter is indisputable, and the speculation is worth imitating.—*Petersburgh Express.*

INDIAN LIGHT BISCUIT.—A quart of Indian meal a pint of sifted wheat flour; a very small teaspoonful of salt; three pints of milk; four eggs.

Sift the Indian and wheat meal into a pan, and add the salt. Mix them well. Beat the whites and yolks of the eggs separately. The yolk must be beaten until very thick and smooth; the whites to a stiff froth that will stand alone of itself. Then stir the yolks gradually, [a little at a time] into the milk. Add by degrees the meal. Lastly, stir in the beaten white of egg, and give the whole a long and hard stirring. Butter a sufficient number of cups, or small deep tins—nearly fill them with the batter. Set them immediately into a hot oven, and bake them fast. Turn them out of the cups. Send them warm to table, pull them open, and eat them with butter.

They will puff up finely, if at the last you stir in a level tea-spoonful of soda, melted in a little warm water.—*Extract.*

WHITWASH FOR OUTHOUSES AND FENCES—We find the following in some of the agricultural papers, credited to the *Scientific American*. Credit should have been given to "Downing's Country Houses," from which it is taken:—

As this is the season of the year when considerable whitewashing is performed, and as we have been inquired of for a good whitewashing receipt by numbers of new subscribers who have not read our receipt in a former volume, we present it again, knowing that a good story is never the worse to be twice told:—

Take a clean barrel that will hold water. Put into it half a bushel of quicklime, and slack it by pouring over it boiling water sufficient to cover it over four or five inches deep and stirring it until slacked. When quite slacked dissolve it in water, and add two pounds of sulphate of zinc and one of common salt, which may be had at any of the druggists, and which in a few days will cause the white wash to harden on the wood-work. Add sufficient water to bring it to the consistency of thick white wash.

To make the above wash of a pleasant cream color, add 3 lbs. yellow ochre.

For fawn color, add 4 lbs. umber, 1 lb. Indian red, and 1 lb. lampblack.

For grey or stone color, add 4 lbs. raw umber, and 2 lbs. lampblack.

The color may be put on with a common whitewash brush and will be found much more durable than common whitewash.

FOUR SPANISH PROVERBS—What the fool does in the end, the wise man does in the beginning.—Voltaire defined a physician as an unfortunate person leman, expected every day to perform a miracle, namely, to reconcile health with intemperance. The most insignificant people are the most apt to sneer at others; they are safe from reprisals, and have no hope of rising in their own esteem but in lowering their neighbours.—All vice stands upon a precipice; to engage in any sinful course is to run down the hill; if we once let loose the propensities of our nature we cannot gather in the reins and govern them as we please, it is much easier not to begin a bad course than to stop when begun.

TO MAKE JOHNNY CAKE—Having used the following receipt for making Johnny Cake, we consider it excellent and worthy an insertion:—1 pint meal; 1 pint flour; 1 pint sweet milk; 2 eggs; $\frac{1}{2}$ tea cup sugar; 2 teaspoonfuls cream tartar; 1 teaspoonful super soda. Stir the cream tartar in the flour, and the soda in the milk. Bake in tins in a quick oven.—S. S., *Milan, Ohio*.

MOWING MACHINES VS. SCYTHES—Now let us compare a little the two modes of cutting grass. Pay laborers, hired at \$1 per day, will probably mow in medium grass $1\frac{1}{2}$ acres to the hand; that is, it will cost \$5 or \$6 to mow 8 acres, and 25 cents each hand for boarding will be \$1.50 more, which, added to \$1.50 makes \$7 for mowing 8 acres. Now hire a man with a span of horses and a machine to cut the 8 acres, at 50 cts per acre, and he will cut it in a day—\$4.00, and \$1.00 more will pay their boarding, making in all \$5.00, and the grass will be spread better for curing than a man will spread it after the 5 hands, which, in the estimate, will make \$3.00 advantage to the mower. At that rate, the machine will pay for itself in 40 days' mowing, besides saving so much hard labor.—Jos. Mosher, in *Ohio Farmer*.

Editorial Notices.

TO CORRESPONDENTS—We regret to state that the letters of one or two correspondents, and particularly one on the subject of unburnt Brick Houses have been mislaid or lost. If our friend, the writer of the last, thinks the matter of his communication of sufficient importance to reproduce it, we shall be happy to insert it next month. Mr. Farmer's communication on the subject of the dispute between the Ingersoll Branch Agricultural Society, and the County of Oxford Society was, by mistake, not put in type until the forms were ready for press. It will appear next month. Mr. Jones's remarks on Strawberries, will receive attention in our next.

DEVON HERD BOOK.

We beg to inform our readers that a parcel of these Books are now at our office, and copies can be sent, to those who wish them, on application. The price is \$5. See the advertisement.

IMPORTATION OF SHORT HORNS INTO CANADA.

We are informed that Mr. Geo. Robson of London, O. W., has recently purchased some very fine animals from the excellent and well known herd of Mr. L. P. CHAPMAN, of Clarkville, Madison County, N. Y. Two Heifers, *Fashion* 2d, and *Fashion* 3d, are descendants from Mr. Vail's celebrated *milking family* of short horns; the "*Holly*" *Fashion* 3d, has brought a beautiful roan bull calf. *Fashion* 2d is a very superior milker. Mr. Robson has likewise procured from the same herd, a *Butes's* heifer calf Agat 2d dam imported Agati, and sired by Halton, (1552.) Also another heifer calf, *Duchess*, (514) Dam *Duchess*, and sired by Halton.

It is pleasing to see most excellent blood introduced into Canada, and we have no doubt that Mr. Robson will meet with that degree of encouragement which his enterprise deserves.—B.

JOURNAL OF TRANSACTIONS OF THE BOARD OF AGRICULTURE OF UPPER CANADA. Nos. 1 & 2 vol. 1 Toronto: Thompson & Co. 1855.

For some time past a strong desire has been expressed that the Board of Agriculture should publish periodically its transactions, incorporating therewith the Prize Essays which are annually obtained, and a condensed statement of the condition of each Agricultural Society receiving Government aid, compiled from the annual Reports, which by law, have to be prepared and sent to the Board. The two numbers already published contain a history of the Provincial Association from its commencement, the establishment of the Board, a synopsis of the various agricultural statutes, bringing these matters down to the Provincial Show at Hamilton, in 1853. It is intimated that the next two numbers, completing the

first volume, will embody all matters to the termination of the present year, and that in future the information and papers composing the journal will be of greater and fresher interest. In compiling a work of this kind, a duty involving no inconsiderable deal of care and trouble, different opinions will obtain as to the extent in which the materials are to be abridged. A sort of medium seems to have been adopted—the computations and comments without being too laconic so as to leave an imperfect impression after perusal, are sufficiently diffuse for all practical purposes. The work is not intended to interfere with the circulation of such periodicals as the *Agriculturist*, most of its articles being too long, and in other respects unsuitable to our pages. The subscription for the year is one dollar; sufficiently low when it is considered that the annual volume will consist of not less than 640 octavo pages.—B.

OUTLINES OF FLEMISH HUSBANDRY, AS APPLICABLE TO THE IMPROVEMENT OF AGRICULTURE IN CANADA. Quebec: Republished by the Bureau of Agriculture, 1855.

This very valuable work was originally published by the Society for diffusing useful knowledge, and was written by the late lamented Rev. W. L. RHAM, a parish Clergyman in Berkshire, who was, we believe, a native of the Netherlands, and occupied in England during a period of many years a prominent position as a writer on agricultural subjects. Mr. HUTTON, the indefatigable Secretary of the Bureau of Agriculture and Statistics, informs us in the preface, that the work was strongly recommended to the Bureau for re-publication in this Province, by REBT. S. ARCHESON, Esq. "It contains a fund of information, valuable to the whole country, but especially to the Lower Province, from the similarity of the habits, character, and circumstances of the people to those of the natives of Flanders,—a similarity extending in many instances, even to the soil, extent and nature of their farms."

The work consists of seventeen chapters—one of which we were enabled by the kindness of Mr. Hutton, to publish in the *Agriculturist*, a few numbers back. A large edition both in French and English has been printed for distribution. Whether it can be procured of the booksellers we are not informed; but from the large numbers printed for gratuitous distribution, their will be little or no difficulty we presume, in any person interested in the subject, obtaining a copy. We are glad to perceive several signs of increased activity in the Bureau, in promoting the public good, and the present attempt to diffuse far and wide amongst the tillers of the soil, so excellent, and in many respects opportune a work, is an evidence of sound judgment and healthful progress, in the most important direction.—B.

CHAMBERS'S JOURNAL, July, 1855. A. H. Armour & Co., Toronto.

This part completes the third volume of this world-renowned periodical. We have no space to particularise. Suffice it to say that the Messrs. Chambers never give insertion to a single article in their Journal that is not worth reading, and many of their papers possess high literary and scientific merit, adapted to the wants and tastes of the thinking portion of the community. Rational amusement combined with sound instruction, characterises every number of this truly popular periodical, which ought to find a place in every well ordered family. The *Edinburgh* edition, which is greatly superior in the "getting up" to the American reprint, can be obtained monthly of Messrs. Armour & Co. of this city, or of any of the principal booksellers in the Province, within about a fortnight after its publication in Britain, at the remarkably low charge of ten shillings per annum.—B.

THE CANADIAN LITERARY NEWS LETTER. No. 6 vol. 1. Montreal: H. Ramsey. Toronto: A. Armour & Co., 1855.

This monthly serial is of much convenience and utility to all persons who may be in some way or other,—(and who now-a-days is not?)—interested in books. Each number contains a list of publications with their prices attached of all works issued in in the preceding month in Europe and the United States, with a number of reviews and notices of the more important works. To Clergymen, Schoolmasters, Officers of Mechanic's Institutes, and we may also add, of *Agricultural Societies*, who must not in the present age lag behind other bodies in these matters,—"*The Canadian Literary News Letter*" will be found of much service. The publishers we are informed will forward it to individuals interested in books and literary subjects, upon receiving a pre-paid application, *without charge*. A pleasing fact this, showing that the Book-trade has reached a status in this Province to which it was an entire stranger a very few years since.—B.

THE ANGLO-AMERICAN MAGAZINE for July. Toronto: Maclear & Co., 1855.

This No. completes the seventh volume of this interesting native production. The present number is embellished by a portrait of Mr. Robert Stevenson, the world-renowned Civil Engineer, and an engraving of the Tubular Bridge over the St. Lawrence at Montreal, for the Grand Trunk Railway. These productions are highly creditable to Mr. Maclear's establishment, affording the most satisfactory evidence of the rapid progress which this department of art is making among us. The literary articles, of which there is a good variety, will be read with interest.—B.

MORRISON'S CYCLOPEDIA OF AGRICULTURE—parts 27 & 28. Blackie & Son, Glasgow, Edinburgh & London. Toronto: Macleay & Co.,

These two parts complete, his original and valuable work, making two handsome volumes, illustrated with upwards of a thousand Engravings in wood and steel. The work is "got up" in the Messrs. Blackie's best style, and its pages are enriched by the contributions of a large number of the best practical agriculturists and Scientific men, the United Kingdom can produce. Altogether it is unquestionably *the best exposition* of the condition of British Agriculture, both in its science and practice, to be found in the English or any other language. To the enquiring and improving farmer it will form an invaluable acquisition, and many portions of it may be consulted with pleasure and advantage by the general reader.—B

Market Review.

MARKETS, &c.

TORONTO, August 1, 1855.

Harvest having commenced in all parts of the country adjacent to Toronto, the usual supply of produce brought into the market by farmers has been much less than formerly, and a general dullness pervades the market. The wet weather with which we were visited during last week, it was feared, would do much to injure the growing wheat crop; but we are happy to hear that the damage was not so great as was anticipated—at least in the neighbourhood—and that, notwithstanding the long winter, the weevil, the Hessian fly, and the rainy season, the fall crop in the vicinity of Toronto will be an average yield. Spring crops, too, generally look well, and promise an abundant return.

FLOUR.—The flour market has been poorly supplied, and prices have remained firm. Sales have taken place, for immediate consumption only, at \$9 for good brands—and that figure can be realized for all that will be brought in. There has been but very little farmer's flour selling at retail in the market, and none at all for the last four days; but it would probably bring \$9 @ $9\frac{1}{4}$ for good kinds. There is hardly any milling going on in the country at present—the mills are nearly all undergoing repair for the fall trade—while some are enlarging and increasing their facilities for grinding. It is said, that the market for new flour will open at \$9 per bbl, and will be readily bought at that. It may be the case with the first lots offered; but as soon as the supplies come down from the west, and reach the Atlantic cities, that figure will hardly continue to be paid. It is likely that new flour will come in by large lots, as soon as it can be thrashed and ground, so as to realize present high prices. The price of flour to-day may be quoted at \$9, and is held firmly at

that. Spring wheat flour, of an inferior quality, has been purchased at \$3 per bbl. from farmers' waggoners. The shipments of flour for the month foot up to 5990 bbls, the greater part of which has been in store for some time. There are not over 800 bbls. in store here at present.

WHEAT.—The granaries within forty miles of Toronto appear at last to be exhausted, and it is a matter of surprise that the supply has lasted so long. There has been no wheat of any kind in the market for the last five days, and there will not likely be much more of the crop brought forward. The supply has been gradually diminishing—there being only 11,788 bush purchased in the month of July hardly as much as was brought in each week of April and May. The average price for the month may be said to be 9s 4d per bushel; and whether that figure will be offered for the new crop, it would be impossible at present to say. The demand, however, is still active; and, as in flour, the first lots offered will likely bring a good price. The matter will soon be tested, and probably we will have samples of the new crop offering within the two next weeks. The shipments of wheat for the month amount to 12,882 bushels—mainly to Oswego and Cape Vincent. There is very little in store at present, and it is probable all that is here will be required for milling purposes.

OATS.—Have been scarce, and, but for a small lot brought down from Chicago, the market would have been bare. This lot sold at 3s 3d @ 3s 7d per bush. There have been only a few loads brought in by farmers, and were sold at rather a higher figure. There were some offering to-day at 4s, but were held too high to suit buyers—they only bidding 3s 6d @ 3s bush. The new crop is heading out finely; and as there is a good breadth sown, large supplies may be soon expected. Prices will probably improve until the new crop comes in.

HAY.—Has been rather plenty, and an active demand makes business brisk. Old, of good quality, brings from \$25 @ 30 per ton, and new \$15 @ 25. The samples of the new crop already brought in are rather inferior—it being probably injured by rain, and brought in for immediate consumption, as it would "heat" if allowed to remain long in the barn. During the past month, 144 loads of hay have been purchased on the market. This month is the dullest in the year, and is not a criterion of the amount usually bought.

WOOL.—This staple is still poorly supplied, and although the demand is active, prices have not improved. That bought during the week has been got for 1s 1d @ 1s 2d @ 3 lb. Farmers are too much engaged at present to bring wool forward, and no great amount may be expected until after harvest.

POTATOES.—Of the old crop, are no longer to be bought on the market, they being among the things

that were. They have been succeeded by plentiful supplies of the new crop, which generally are of a good quality, and, as a sample, promise well for the whole yield. They bring from 6s @ 8s per bush, and are in demand.

BUTTER—Has been better supplied during the week, but is still in great demand, at 1s @ 1s 3d per lb.

BEEF—Is still plentiful, and prices have declined. Good beef were bought at \$5½ @ 6½ per cwt. during the week. Milch cows bring \$27. and cows with calves \$30. They are plentifully supplied, and are not in demand. Calves bring \$4½ @ 5.

NEW YORK MARKETS—Aug. 1.

FLOUR—Market firm, with better demand. Sales 6,000 barrels at \$7 87½ @ \$8 25 for common to straight and extra State, and \$8 @ \$8 62½ for mix'd to fancy Western. Canadian—Sales 1,200 barrels at \$8 25 @ \$9 62½

WHEAT advanced 3 @ 5 cts per bushel. Sales 1,000 bush. at \$1 78 @ \$1 85 for red southern, and \$1 95 @ \$2 15 for white do.

RYE held higher.

CORN lower. Sales 40,000 bushels, at 83½ @ 87½ for mixed Western.

OAT: steady—58c for State and Western.

CHICKENS—Bring 3s 4d @ 3s 9d per pair, and ducks 2s 6d, and are not plenty.

CHERRIES—Sell at 6d. and black currants at 5d per qrt., and are in demand for preserving.

EGGS—Are also more plenty, and bring 11d @ 1s 2d per dozen.

PROVISIONS.—Pork firmer. Sales 400 barrels at \$19 68 @ \$19 75 for mess—\$16 62½ for prime.

STOCKS active and better. Money plenty and easy at 6 per cent on call, and first class paper. Sterling exchange dull at 11½. Erie R. R. 52.

LARD unchanged.

SUFFOLK PIGS, (Directly from Imported Stock.)

THE Subscriber offers for sale, a few of these incomparable Pigs, singly, or in properly selected pairs.

PATRICK R. WRIGHT.

CASTLETON FARM,
Cobourg, N. W., July, 1855.

S—tr.

PURE DOWN SHEEP.

JUST Received from England, a fresh supply of the latest improved breeds of **SOUTH DOWN SHEEP**, of the Hampshire and Sussex breeds, selected with much care and expense, by my son in England, from the best flocks of Dorset's, Hants's, Mr. Jonas Webb's and the Duke of Richmond's.

JOHN SPENCER.

DORSET FARM, Whitby, July, 1855.

TO BE SOLD,

The Property of the East Zorra Agricultural Society :

A Fine Agricultural Stallion

16 hands high, dark dappled bay with black mane, tail, and legs by Old Hyde, out of a leveland mare. He is five years old this month, and has taken 6 first and 1 second prizes at different Shows. For particulars apply to the Secretary of the East Zorra Agricultural Society, Woodstock.

Woodstock, July 18th, 1855.

8-3

GALLOWAY BULLS FOR SALE.

THE Subscriber will offer for sale at the Provincial Exhibition, to be held at Cobourg, 2 PURE-BRED BULL CALVES, from imported cows; also, 4 IMPORTED CHEVIOT RAMS, to be seen at the premises of the subscriber, near Cobourg.

WILLIAM RODDICK.

Cobourg, June, 1855.

7.

DAVY'S DEVON HERD BOOK,

NOW ready, a LARGE SUPPLY of both 1st and 2nd vols bound in one book, and containing all the subject connected with the Devon records, of both England and America up to the present time; also as a frontispiece, the beautiful engraving of the celebrated picture known as the "Quarely Testimonial" which is a full length portrait of Mr. Francis Quarely, now living, at 91 years of age. It is also illustrated with two animals, Prize-winners in England. Price, \$5. can be had by enclosing the amount to B. P. Johnson, Cor. Sec. of N. Y. State Society, Albany, N. Y., Luther Tucker, Ed. of *Country Gent*, Albany N. Y., Sandford Howard, Boston, Mass., D. D. T. Moore, Ed. of *W. G. & S. Register* N. Y., A. B. Allen, Ed. of *American Agriculturist*, N. Y., Saml. Sands, Ed. of *American Farmer*, Baltimore, Md., A. M. Spangler, Ed. of *Progressive Farmer*, Philadelphia, Pa., Lee and Redmond, Eds. of *Southern Cultivator*, Augusta, Ga., and Wm McDougall, Ed. of *Canadian Agriculturist*, Toronto, C.W. It gives me pleasure to state that Mr. Davy has solicited Mr. S. Howard, of the *Boston Cultivator*, to collect pedigrees and illustrations in this country for the 3rd. vol. and has authorised Mr. H. to obtain information as to any and all mistakes which may have been made as to the recording of American animals in Davy's 2nd. vol. and such corrections will be made in the 3rd. vol. The Plan proposes that a copy of all the pedigrees and illustrations collected by Mr. H. as the Editor in America, shall be forwarded to Mr. Davy, and a copy of those collected by Mr. D. will be sent to Mr. H. in this country. The whole matter will be published in America for our use, and in England for their use, by which means an American and English Devon Herd Book will be united, and the price reasonable, as the expense of English printing and duties will be saved. This concert of action has been brought about by Mr. Davy's good feeling and liberality towards this country; and I am only the instrument through which Mr. Davy acts; and from this time forth Mr. Howard will receive all communications on the subject, as will appear by reference to his advertisement.

All Editors who will give the above three insertions, will receive a copy of the 1st 2nd and 3rd vols.

L. G. MORRIS,

Agent for J. Farmer Davy's Devon Herd Book.

133

EMBRACING

HADHAM HALL.

*Two Miles from Bishops Stortford Station, on the
Eastern Counties Railway, and 32 Miles
from London.*

To secure importers against losses that are liable to occur to cattle on seaboard, Messrs. Betts beg to inform gentlemen they can be insured when desired, against all accidents and disease, from the day of purchase in England till the day of delivery in America, on application to our agent.

Horse,	each,	-	-	-	\$9
Bulls or Cows,	"	-	-	-	6
Ram or Ewe,	"	-	-	-	3
Three Sheep from the same owner, each,	-	-	-	-	2
Ten do	"	-	-	-	11
Twenty Ewes,	"	-	-	-	8
Three Swine from the same owner, each,	-	-	-	-	22
Ten " " " " "	"	"	"	"	11

Horse,	each,	-	-	-	-	-	-	\$10
Bull or Cow,	"	-	-	-	-	-	-	25
Sheep or Swine.	"	-	-	-	-	-	-	15

<i>Expense by Sea on Board the Steamers.</i>				
Horse,	each,	-	-	\$125
Bull or Cow,	"	-	-	100
Sheep or Swine,	"	-	-	25

Bull or Cow,	"	-	-	-	-	-	25
Sheep or Swine,	"	-	-	-	-	-	8

Horse,	each,	-	-	-	-	\$100
Bull or Cow,	"	-	-	-	-	80
Sheep or Swine,	"	-	-	-	-	18

Keep and attendance by Sailing Vessels, provision for 60 days				
Horse,	each,	-	-	£70
Bull or Cow,	"	-	-	50
Sheep or Swine,	"	-	-	15

JAMES M. MILLER,
81, Maiden Lane. New-York City.

BREED.	Horse.	No. of Bulls required.	No. of cows required.	About the age required.	It is done by Steamer or Sailing Vessel	If insured.
Horse, - - -						
Short-Horned, - - -						
North Devons, - - -						
Herefords, - - -						
Ayrshire, - - -						
Alderney, - - -						
—						
South Down Sheep, -	Rams.	Ewes.				
Cotswolds, - - -						
Leicester, - - -						
—						
Suffolk Swine, - - -	Boars.	ows.				
Essex do. - - -						
Berkshire, - - -						

		P.	S.	S.
Thorough Bred Horses, from	-	1-60	to 2-0	12) 0
Short Horn or Durham Bull	-	4-0	" 150	7-0
Do Cows	-	2-0	" 8-0	40)
Do yearling Bull	-	2-0	" 1-0	500
Do do Heifer	-	1-75	" 4-0	25)
Herefords Bull	-	3-00	" 8-0	5-0
Do Cows	-	2-10	" 6-0	25)
Devons Bull	-	3-0	" 8-0	4-0
Do Cows	-	2-00	" 5-0	25)
Ayrshire Bull	-	15-	" 3-3	3-0
Do Cows	-	1-0	" 2-50	2-0
Alderney Bull	-	15-	" 2-25	1-75
Do Cows	-	10-	" 1-50	1-25

		And dressed wool	
Cotswold Sheep	Ram	100 to	3 6 13 lbs 125 12to15lbs
Do	Ewe	25 "	3 3 "
Leicester Sheep	Ram	1 0 "	2 0 12 lbs 10 1
Do	Ewe	2 1 "	8 1 "
South Down Sheep	Ram	1 10 "	3 1 12lbs 125 6 to 9lbs
Do	Ewe	25 "	100 30
Hampshire do	Ram	75 "	125 12lbs 1 0 6to10lbs
Do	Ewe	15 "	25 23
Swine	Boars	25 "	50 40
Do	Sows	15 "	40 25

Merino Sheep from Spain					
Mules from Spain.					5

THE Subscriber offers for sale, 3 Thorough Bred Short-Horn Durham Bull Calves, descendants of the celebrated Bull, "Bellville," champion of England, Ireland and Scotland.

Spring Cottage, Hope.
6—3t.

May 22, 1855.

THE Journal and transactions of the Board of Agriculture of Upper Canada, No. 1, Vol. 1st, pp. 169 To Ontario; printed and published by Thompson & Co. for the Board of Agriculture. This work will be issued in quarterly parts, four of which will form a volume. The first part embodies the transactions of this Provincial Association from its institution in 1846, down to the commencement of the year 1851. The next number will contain an account of the further proceedings of the Association and the Board of Agriculture, Prize Essays, Abstract of County Reports, &c.

The work will be sent free by post for 5s per annum. All communications and remittances to be addressed to the Secretary of the Board of Agriculture, Toronto.

TORONTO, May 1, 1855.

UPPER CANADA STOCK REGISTRY.

To Owners and Breeders of Thorough Bred Horses and Cattle.

THE BOARD OF AGRICULTURE FOR UPPER CANADA, having determined to open a REGISTER, at their Office, in this city, for thorough Bred Horses and Cattle, Notice is hereby given, that any person desiring to avail himself of such register, can do so under the restrictions herein mentioned, furnishing duly certified particulars to this office; and can obtain a certificate of the same, which shall be held as officially correct in all future transactions relating to the stock so registered.

No Animal shall be registered, unless a clear and distinct connection be established, to the satisfaction of the Board, both on Sire and Dam, with the British or American Stud and Herd Books.

Where the Animal to be registered has been purchased by the person desiring to register, or has been imported for breeding purposes, a correct statement must be given of all particulars before a certificate can be issued.

It is desirable, in order facilitate the taking of entries for the Provincial Exhibition at Oshawa in October next, that persons desiring to register stock should do so at an early date, as all animals for which Register certificates shall have been given will be entered without further inquiry. Owners of stock are recommended to keep Duplicates of Pedigrees.

G. BUCKLAND, *Secretary.*

Office of the Board of Agriculture }
Toronto, March, 1855.

DRAINAGE AND SEWERAGE PIPE MACHINE

CHARNOCK'S PATENT.

BY this Machine, Drainage and Sewerage Pipes of all descriptions, as well as perforated and other Brick, Flooring Tiles &c., are molded with the greatest facility and precision.

A man and three boys can turn out from 5, 6 to 12, 10 feet of pipes per day, according to sizes; and if worked by horse, steam or water power, a proportionate increase will be obtained.

This Machine is in extensive operation in England, where, in addition to the testimony of numerous Tile Makers, as well as that of the first Mechanists of the day, the following Prizes have been awarded to it.

- By the Yorkshire Agricultural Society, at its annual meeting, 1845, as the first Tile Machine with a continuous motion, ----- £5 0 0
- By the same Society, the following year as the best Machine of the day, ----- 10 0 0
- By the Lancashire Agricultural Society, at its annual meeting, 1845, ----- Silver Medal
- By the Highland Agricultural Society, at its annual meeting in 1846, as the best machine ----- 5 0 0

At the meeting of the New York State Agricultural Society, at Saratoga (1853), a working model of this Machine was awarded the Silver Medal and Diploma; and at the Fall Exhibition the same year of Lower and Upper Canada, held respectively at Montreal and Hamilton, the same Model was awarded a Diploma from each Society. It was awarded the First Prize and Diploma at the recent Exhibition in London Canada West.

The price of the Machine is £54 (half cash and remainder at six months), with five Dies for Pipes. Brick and other Dies at a moderate charge.

The Patentee guarantees the effective working of the Machine.

All orders to be addressed to

JOHN H CHARNOCK,

Drainage Engineer, Hamilton, C. W., the Patentee.
Hamilton, March, 1855.

SPRING STOCK OF IMPLEMENTS.

THE Subscriber begs to inform Agriculturists and Horticulturists, that they have received large and varied assortment of

FARM & GARDEN IMPLEMENTS

And would solicit a call from parties about to purchase, at No. 77, corner of Yonge and Adelaide streets, Toronto. They have on hand a quantity of the most improved Lap Furrow Ploughs, which have of late been so much in demand. Reaping and Mowing Machines on the most improved principles, will be for sale in their season.

McINTOSH & WALTON.

Toronto, 1st May, 1855.

TO BREEDERS.

THE Thorough Bred Short-horned Bull, "JOHN O'GAUNT," Second, Bred by John S. Tanqueray, Esq., Hendon, Middlesex., England, imported by Frederick Wm. Stone of Guelph, October last.

This very superior Young Bull will be kept at the Subscriber's Farm, Farnham, Puslinch, five miles from Guelph.

Terms for Service—Thorough bred, Five Pounds; if grade, ££s.

Parties wishing it, can have pasture at a reasonable rate. No risk by subscriber.

His sire, "John O'Gaunt" (1621 English Herd Book), was sold in 183 for \$4,000.

FREDERICK WM. STONE.

Guelph, April 24, 1855.

COMBINED REAPER AND MOWER.

Manny's Patent with Wood's Improvement.

THE Undersigned are now manufacturing the above Machinery which has been thoroughly tried through the United States, and have given entire satisfaction. In the frequent trials made with every machine that has any claim to reputation it has proved the best in the following points, viz:

Its perfect adaptation to uneven surfaces—its means of adjustability to various heights of cutting—its lightness of draught—the ease and facility with which it can be removed from field to field upon its own wheels, and changed from a reaper to a mower, and vice versa—the construction, for strength and durability—and its capacity for doing business.

By means of suspending the frame to the axle of the wheels the joint and lever, the driver is enabled at his will to elevate or depress the cutters from one to fifteen inches from the ground; and with the oblique platform the raker is enabled to discharge the grain in gazels, at a sufficient distance from the standing grain to allow the team to pass, so that the whole field may be cut without removing any of the grain.

Price, with two sets knives, \$130. We are also manufacturing Burall's Reaper, price \$120; and Ketchum's Mower as improved, price, with two sets of knives, \$110, warranted. These machines are capable of mowing or reaping from ten to fifteen acres per day on smooth land, as well as can be done with scythe or cradle.

H. A. MASSEY & Co.

Newcastle, May 6, 1855.

THE CANADIAN AGRICULTURIST.

IS PUBLISHED MONTHLY, at Toronto, Upper Canada, and devoted to the improvement of *Agriculture Horticulture Farm Mechanics*, and to the advancement of the *Farmers' interests generally*. It commences its SEVENTH Volume this year, 1855. Each number contains 32 large octavo pages.

The *Agriculturist* is illustrated with Engravings of Cattle, Implements, Farm Houses, Farm Buildings, &c., and is the only Agricultural paper printed and published in Upper Canada. Receiving as exchanges the leading Agricultural Journals of the United States and Great Britain, the Editors are able to select and lay before their readers every thing of value that may appear in these papers.

The *Agriculturist* contains, beside Editorial and Miscellaneous matter, Reports of Farmers' Clubs Essays, Proceedings of the Board of Agriculture, Prize List of the Agricultural Association, Information and Hints to Agricultural Societies, &c. &c. It is strictly a CANADIAN work, and should be taken in by every Farmer who desires to improve himself, or who feels any pride in the advancement of his country.

Professor BUCKLAND, of Toronto University, continues to assist as Editor.

Some of the most intelligent Practical Farmers in the Province are contributors to this journal.

The *Agriculturist* is not a second edition of the *Genesee Farmer*, nor of any other foreign publication. It is a home production and asks no man's support under a false name. It is a true not a spurious *Canada Farmer*.

TERMS

Twenty copies or upwards, each - - - - 2s. 6d.
Single copy - - - - - 5s.

*. The *Agriculturist* is not liable to Postage.

Newsletters inserting the above will do us a favour, and entitle themselves to a copy without exchange.

WM. McDOUGALL,

Publisher, Toronto.

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