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THE CANADA FARMER;

A FORTNIGHTLY JOURNAL OF

AGRICULTURE, HORTICULTURE, AND RURAL AFFAIRS,

VOLUME I.

JANUARY TO DECEMBER, 1864.

W. F. CLARKE, EDITOR.

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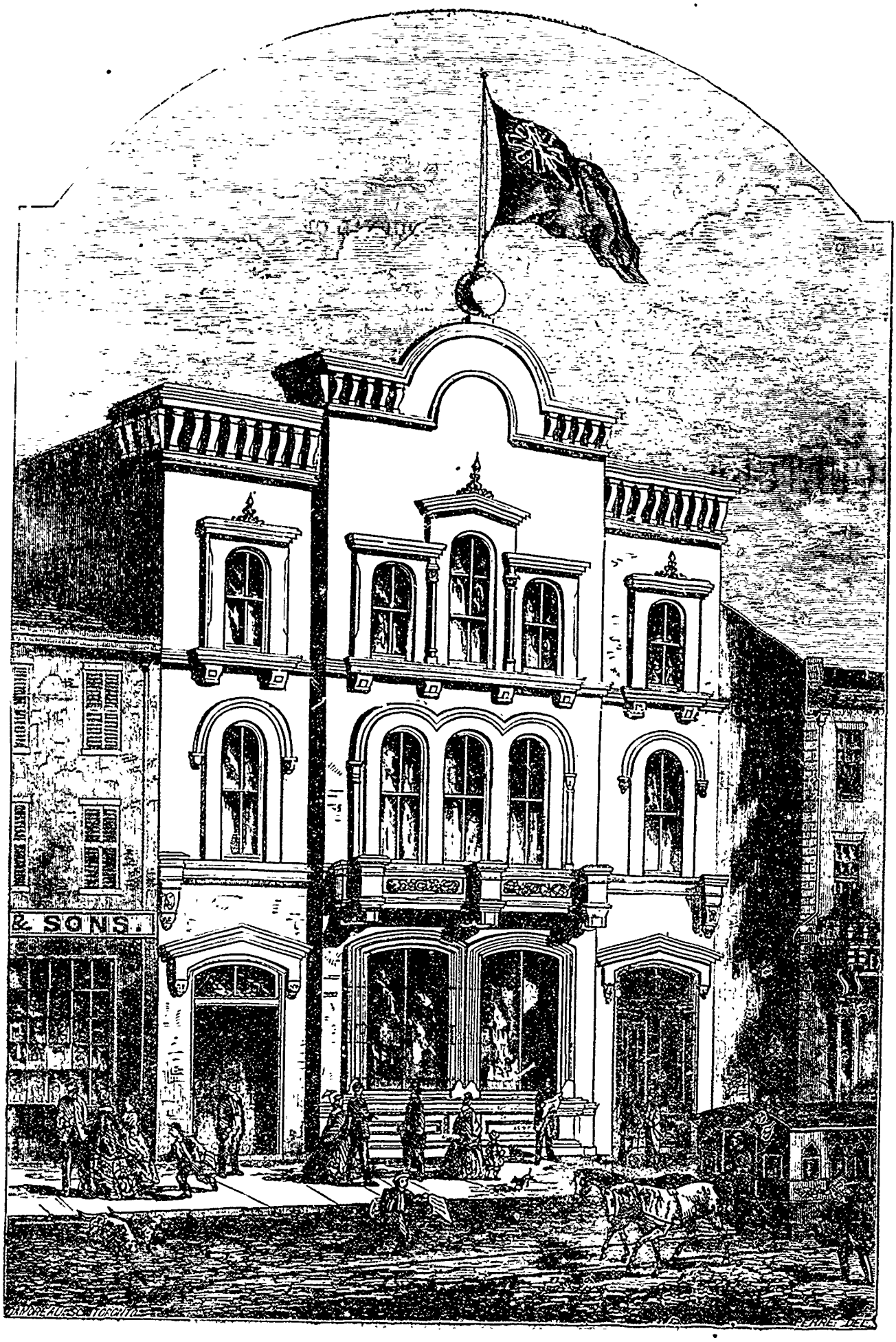


THE NEW CANADA FARMER AND GLOBE BUILDING.

INDEX.

VOL. I. No. 1.] TORONTO, UPPER CANADA, JANUARY 15, 1864. [POSTAGE FREE.

Forest Management.

SETTLERS in a new country very generally wage a war of extermination against the "trees of the wood." They come to look upon them as natural enemies and cumberers of the ground, whose inevitable doom is to be cut down and cast into the fire. Since their removal is the first step toward making a farm out of the wilderness, they sweep them away as rapidly as possible. The consequence is, that many stretches of country have come to be nearly, if not quite as bare as a Western prairie, on which no plant or shrub knee-high can be seen. A monotonous belt of woodland stretches away in the rear of the cleared portions of the farms through which the highways run, but beside that, scarcely a single tree or grove diversifies the scene. This wholesale destruction of the forests of Canada is an evil that begins, at least in many localities, to demand a check. Firewood grows scarce and dear, the landscape is becoming naked, it is difficult to procure timber suitable for various mechanical uses, the shelter needed by many crops in exposed situations is removed, and unfavorable climatic changes are taking place, which can be clearly traced to the wholesale and indiscriminate destruction of timber. A little exercise of judgment, forethought and taste, would mend matters very much. For example, why cannot some of the young wood be preserved when land is cleared, to form groups that shall at once ornament the landscape, furnish shade for stock when the scorching summer sun pours down its almost tropical rays, and act as a wind-break when cold and biting blasts sweep over the fields? It seems absurd to destroy every green thing and then set about planting anew. There are many choice forest trees that transplant with difficulty, but which, left while small where nature placed them, become objects of surpassing beauty and great utility. What is to hinder the settler from availing himself of that best natural protection in bleak situations, the woody and leafy screen which he finds ready to his hand? How much comfort might be secured to the tenants of the dwelling and the farm-yard, if the house and barn were surrounded by a grove? Why cannot the standing wood which is kept as a reserve for fuel be gradually thinned out, and so managed that it shall be an ornamental appendage to the farm and a favorite run for the stock? Moreover, is it not important that second-growths of timber needed by the carriage-builder, cooper, cabinet-maker, and others, should be encouraged, and, in fact, forest culture made a department of farm economy and management? If we mistake not, these hints and queries open fields of reflection which many of our readers would do well to look at, especially at the present season of the year, when it is so common to "cry havoc and let slip the dogs of war," in the shape of ruthless axes, wielded by relentless choppers, beneath whose fell strokes every twig and sapling quickly disappears.

There is not only great need of intelligent forest management on the farms scattered up and down the land, but the preservation of trees upon the sites of towns and villages is a most important matter. Nature has made many of these sites indescribably beautiful. Centuries have been occupied in the growth of graceful and magnificent trees; hill, plain and valley diversify the surface of the land, and sparkling rills flow musically through the sylvan dells. All is lovely till man invades the scene. Full of utilitarian ideas, bent on speculation, and having no eye for natural beauty, the founder or founders of a new town or village allow, unchecked, raw emigrants and ignorant day-laborers to begin and carry on the work of spoliation and disfigurement. Grand old oaks, graceful elms, beautiful pines, hemlocks and balsams, which furnish ornament and shade, such as generations must wait for from human planting, are mercilessly felled; the royal head of every monarch of the forest is humbled to the earth, and no vestige of a tree is left, except the unsightly trunks that, piled one upon another, form the habitations of the Goths and Vandals that have conquered the region. When the destruction is not thus complete at first, and here and there a few trees are left, some idle shanty-man or stupid road-master will destroy what settlement and time have spared. We have in our eye at present a Canadian town of some size and age which has many noble elms, maples, beeches, balsams and hemlocks in its environs, which are rapidly disappearing in the way just hinted at. Surely proprietors and municipal authorities ought to interfere and put a stop to the wholesale destruction and pillage of beautiful and valuable timber.

Cost of Fences.

MR. CORNELL says:—"To fence a farm into square fields of two and a half acres each, crediting half the fence to the adjoining field, requires forty rods of fence, or sixteen rods per acre, which at $15 per thousand for rails, and $10 per thousand for stakes, will cost at least thirty cents per rod, or $4 80 per acre, and entail an annual expense in the interest of money, natural decay of material, and labour for repairs, of nearly or quite $1 per acre. Fields of five acres each require eleven and a half rods per acre, costing $3 45 per acre. Ten-acre fields require eight rods of fence per acre, costing $2 40 per acre. Twenty-acre fields reduce the fence to five and a half rods per acre, at a cost of $1 65 per acre. Forty acres in a field require but four rods to an acre; and one hundred acres may be enclosed in one field with two and a half rods per acre, costing 75 cents per acre.

☞ CEREALS should be reaped before they are fully ripe. There is a gain of four per cent. in favour of cutting wheat a fortnight before it is actually ripe. Besides this, the straw is of a better quality, and there is a likelier chance of securing the crop.

Cultivation and Manufacture of Flax.

PERINE'S WORKS.

CONVINCED that the growth and manufacture of flax is destined to take high rank among the industrial interests of Canada, and being determined to use all the means in our power to direct public attention to a subject of such manifest practical importance, we take pleasure in laying before our readers some of the results of a personal visit of inspection to one of the establishments carried on in the western part of this Province, by the Messrs. Perine. These gentlemen deserve most honorable mention, for the persevering and successful energy with which they have introduced and fostered the culture of this valuable textile fibre. It is now about ten years since Mr. W. D. Perine located himself at Doon, Upper Canada, for the purpose of commencing an enterprise, the results of which fairly entitle him to a place among the benefactors of Canada. The farmers of Waterloo could not not at first be induced to try the experiment of flax-growing. Nothing daunted, Mr. Perine rented a quantity of land, imported seed, and while the crop was growing, prepared a scutching mill. Gradually the surrounding farmers relinquished their scepticism, and began to attempt flax culture on a small scale. Beginning with half an acre or an acre, their confidence grew with the growth of the new product, until now many who were originally unwilling to devote a single rood to flax, regularly cultivate their 15 or 20 acres annually.

As actual trial demonstrated the practicability and profitableness of the undertaking, other points beside Doon were sought as centres of operation, and Mr. W. D. Perine was joined by his two brothers, the trio forming the firm now carrying on business as Perine Brothers. They have at present four scutching mills at work in Upper Canada, located respectively at Doon, Conestogo, Drayton, and Baden. At Baden the premises are rented, but at the other places the works are owned by the firm. They consume at these establishments the product of about 1500 acres of land annually, tilling about 200 acres themselves, and depending upon the adjacent farmers for the balance. They have enlarged their business to its present dimensions mainly by a quiet exhibition of the advantages of flax-culture, in the way of personal intercourse with the farmers, whom they visit, and encourage by placing facts and figures before them, loaning them seed, and pledging them a market for the crop. They have no difficulty now in obtaining all the raw material they want. The results on the whole have been such as to encourage the Messrs. Perine, and induce them not only to increase the number of their scutching mills, but to import machinery for the manufacture of linen. At their oldest establishment, viz., in Doon, they are laying out some ten thousand dollars in this direction, and we hope by July next to be able to announce the manufacture of linen from Canadian-grown flax, as an accomplished

fact. Already they are making rope, cordage, and twine at their Doon works. We shall watch the progress of the projected pioneer linen factory with the greatest interest, and rejoice in due time to chronicle its completion and success.

A few words now in reference to the raising of flax as a farm crop, and the stages and processes of its preparation for manufacture, may not be uninteresting to our readers. This most useful plant accomodates itself to almost all the climates of the world, and may be grown successfully upon any soil of ordinary productive capacity. After thorough trial of every description of land from light sand to heavy clay, the Messrs. Perine are of opinion that flax does best on a strong loam, somewhat inclined to clay. They recommend about 70 lbs. of seed per acre as the quantity to be used when the plant is raised for both seed and fibre. In this climate the last week in April or the first week in May, may be set down as the proper time for sowing. Seasons vary, however; and nothing is gained by hurrying in the seed before the land is in proper tilth, which is sometimes as late as the second or third week in May. About the middle or end of July, the crop will be ready for pulling, a process usually performed by hand. In Ohio it is a very common practice to cut flax with a mowing machine, but this is objectionable, as it wastes a portion of the fibre, and leaves butt ends which are troublesome to the spinner and manufacturer. A flax-pulling machine which will supersede the necessarily slow hand process is greatly needed. The inventor of such a machine would be sure to make a fortune by his patent. In the meantime, hand-pulling must needs be the prevalent mode of gathering the crop.

The average yield of flax is from one-and-a-half to two tons of green straw per acre,—or about one ton when rotted,—and 12 bushels of seed. Green straw is worth about $6 per ton, at the scutching mill, and rotted straw $10. Flax seed is worth on the average $1 25 per bushel. At present it commands a higher figure, the market price being $1 50 per bushel. The above is, according to the experience of the Messrs. Perine, a safe, and if anything, a low estimate. In one instance, five acres of flax grown in the township of Waterloo, U. C., yielded 725 lbs. of dressed fibre per acre, and 15 bushels of seed, value $19 75 per acre. This was an unusual yield. The crop grew in a rich field, close to the farmer's barn,—the season was every way favorable,—pains were taken to harvest the straw properly, and on the whole, this must be taken as an instance of maximum success. Four to six hundred pounds of dressed flax to the acre is by no means uncommon, and while 12 bushels of seed per acre is perhaps about the average, as high a yield as 24 bushels has been obtained.

In reference to the cost of this crop, and its profitableness, the testimony of the Messrs. Perine is highly satisfactory. They do not consider that more labor is required for a crop of flax than for a crop of winter wheat,—indeed the most of what has been raised under their inspection has not received one-half the attention as to preparation of the land which is usually bestowed upon fall wheat. Doubtless deeper ploughing and more thorough preparation of the soil would materially increase the yield. The cost of harvesting a crop of flax and preparing it for the scutching mill does not exceed $7 per acre, while the preparation of the land costs little if any more than that of any spring crop. The average of the producer's profit, exclusive of harvesting and preparing for scutching, is something more than $30 per acre. All who have grown flax under the auspices of the Messrs. Perine, admit that it is far more remunerative than wheat, while it is perfectly safe to affirm that it is 25 per cent less risky than spring wheat, and 50 per cent less than fall wheat in this country. No instance of a failure in the flax crop has taken place when the seed has been put in at the right time, and the land has been in a proper state of cultivation. What poor crops have been raised, have been more the result of inexperience or neglect on the part of the producer than the fault of the crop itself.

The Messrs. Perine purchase the straw either in its green or its rotted state. They also receive it, and put it through the scutching process for the growers, as flour mills grind small lots of wheat for the family use of the farmer. Those who get flax scutched for their own use, spin and weave it into towelling, linsey woolsey, table-cloths, grain bags, shirting, and other articles of wearing apparel. Most of the straw sold by the farmers at the mills is dew-rotted by themselves. Some of them are beginning to be quite *au fait* at the rotting process, while many are so inexperienced in regard to it, that the straw they offer commands only an inferior price, from the imperfect manner in which it is prepared.

All the mills carried on by the Messrs. Perine are on what may be styled the old principle. The straw is broken between heavy fluted iron rollers, and scutched by means of steel-bladed knives fixed in a cast-iron wheel. The flax is first passed in handfuls between the rollers, then a man exposes the seed end to the action of the scutching knives, a process peculiar to the Messrs. Perine, and by which the seed is separated from the tow. Unless the seed be removed, it makes rough places in the manufactured article, even in cordage. In the next place, the handful passes to the roughers, who partially scutch it, the finishers then take it and complete the process of scutching. By a very simple arrangement of a framed stool and lever, the scutched flax is made up into bales, when it is ready for shipment and sale. Most of the fibre produced at the Messrs. Perine's mills finds its way to the American market, while the seed not required for next year's crop, is sold to Lyman, Clare & Co., of Montreal, who manufacture linseed oil, oil-cake, &c., from it. The works of the Messrs. Perine are simple, and might be regarded by *connoisseurs* as rather primitive in design, yet in the opinion of the proprietors, they are superior to some of the more modern arrrangements. They prefer their own method to the much-eulogised Rowan machine, more particularly for the following reasons. The Rowan machine they think fails in securing evenness of length, and leaves the flax "rat-tailed." It also breaks the ends of the bunches too much, and does not break the middle sufficiently. This arises from the fact that first one end, and then the other is put into the machine, leaving the middle only partially broken. Whether this opinion as to the merits of Rowan's machine be correct or no, certain it is that the Messrs. Perine succeed in turning out an excellent article of marketable flax. Specimens of it were kindly furnished us at our request, and will be on exhibition at the office of the CANADA FARMER, so that any parties who feel an interest in this important subject, may at any time call and inspect them. In conclusion, we have to express our sincere acknowledgements to Mr. J. S. Perine, for the polite and obliging manner in which he set himself to facilitate the object of our visit, and we cordially wish him and his enterprising brothers all the success they so richly deserve.

Rolling Pasture Lands.

The rolling of pasture lands is advisable in all cases where it is judiciously performed. The effect of the roller upon grass lands is beneficial, not merely from the fact that it smooths and consolidates the surface, but it protects the roots from the injurious effects of drought, destroys and prevents the formation of ant-hills, and will often prove destructive to moles, as well as many other enemies to pasture lands. But in order to secure these beneficial results, the greatest caution should be exercised. On this subject Dr. Wilson says:—"Rolling must be judiciously performed under suitable circumstances of the land, else it will bruise the herbage, damage the roots, close the pores of the soil, and, in general, do vastly more harm than good. It ought, if circumstances permit, to be performed about a fortnight before the field begins for the season to be depastured; and it ought never, in any circumstances, to be performed, except when the sward is quite dry, and when the soil, or the seat of the roots is sufficiently yielding to prevent the bruising of the leaves, or the rupture of the roots beneath the pressure of the roller. Sandy and semi-elastic soils, may be rolled at any time when their sward is dry; but clay lands may be rolled advantageously, only when any little lumps or inequalities on their surface crumble with the pressure of the foot and are not flattened and consolidated, but enter softly and wholly into the combination with the surrounding soil. But whenever a sward is in the compact and tenacious condition, which is technically known as hide bound, rolling even under the most favorable circumstances, would injure rather than improve it, and scarifying must be practiced instead, to loosen the surface, to give the roots new facilities for absorbing food and producing herbage, and, if thought desirable, to serve also as a powerful precurrent aid to the beneficial operation of a top-dressing of manure."—*Culturist.*

The Field.

UNDER this head we propose to discuss the various matters pertaining to crops of all sorts. Though the present is not the season for field operations, yet it is an excellent time for forming plans to be carried out when the proper period arrives. Now, when there is comparative leasure, the farmer should study such matters as the laying out of his farm to the best advantage, the adoption of a good rotation of crops, and the establishment of a system of keeping farm accounts. These are points of much importance, and by giving timely attention to them, work will be done more effectively when the rush of spring business comes on. To carry forward the labours of the farm systematically and seasonably, requires no little prior consideration. Our seasons are short and limited, much must be crowded into them, and just as a good packer will put far more into a box than a careless person will do, so will a good planner put far more work *into* the year, and get far more profit *out* of it, than his disorderly, slip-shod neighbour. Then there is immense satisfaction connected with having work under control, so that however busy one may be, he drives his work instead of letting it drive him. A skilful farmer will aim to carry on all his labors with clock-like regularity, and thereby secure efficiency and comfort.

Winter is also a good time to provide choice seed for spring sowing. When this important matter is left to the last moment, in too many cases either the favorable opportunity for sowing is lost, or seed of inferior quality must be put into the ground—both of them evils to be sedulously avoided if possible.

By chopping and hauling a supply of firewood and fence timber, getting implements into thorough repair, providing labor-saving contrivances and conveniences, and in various other ways, the thoughtful, diligent farmer, may make even the dreary season of winter contribute largely to the profits of the year.

Culture of the Grasses.

ONE of the most important operations of the farm is the cultivation of the various grasses for pasture and hay. Grain, grass and roots comprise the means of keeping up, without exhaustion of the soil, or loss of time by fallowing, a judicious and profitable rotation of crops. When land is in proper heart for producing heavy crops of the improved grasses, most other products will grow well upon it. A thorough discussion of this branch of agriculture is a larger task than we propose now to undertake; but as an important topic, to which we shall from time to time have occasion to advert, a few words in our first number seem to be appropriate. The management of meadow and pasture lands is a matter on which too many farmers bestow very little thought and attention, from the general prevalence of the idea that man has but a very small part to play in securing a good forage crop. It is usually regarded as almost wholly a question of wet or dry weather. If the spring be showery, a good growth of pasture and a large yield of hay are expected as matters of course; and if the spring be dry, failure is looked upon as certain. Without now alluding to artificial irrigation as a remedy for drought, further than to say it is in many cases a very practicable expedient, and by no means the Utopian affair many think it, there are several ways in which the uncertainties that beset the grass crop may be lessened. Deep culture,

judicious selection and admixture of seeds, top-dressings of suitable manures both natural and artificial, care in admitting stock only at proper times, timely alternation with other crops, and culture of grass for green manure—are points upon which a great deal of thought and attention may and ought to be expended by every intelligent and prosperous tiller of the soil. Drainage is one of the best antidotes against the evil effects of drought. A meadow or pasture that is closely swarded over will bear continuous dry weather far better than one in which the grass is bunched or tufted; while top-dressing acts both as a mulch and a fertilizer. While we cannot wholly prevent those fluctuations in the grass crops, which discourage many from going largely into them, it is possible much more nearly than is generally supposed, to equalize the yield from year to year.

Care in the selection of suitable and clean seed, of good quality, is also a very important matter. Our farmers are pretty well acquainted with the merits of timothy and clover; but there are other grasses valuable to mix with these, and well suited to the soil and climate of Canada, which are not much used in this country. To these and other matters connected with grass-growing, we shall have occasion to draw attention in future issues of the CANADA FARMER.

SHRINKAGE OF HAY.—The loss upon hay weighed July 20th, when cured enough to be put in the barn, and again February 20th, has been ascertained to be 27½ per cent. So that hay at $15 a ton in the field is equal to $20 and upward when weighed from the mow in winter.

GOOD WHEAT.—J. J. Mechi, of England, writes to the *Mark Lane Express* that he has threshed three fields of wheat: the first two yielded 58 bushels per acre, and the third field 52 bushels per acre. Part of it was red wheat, and part white wheat. The red wheat weighed 66 pounds, and the white wheat 64 pounds per bushel.

TOP-DRESSING MEADOWS.—A farmer in this neighbourhood says he top-dressed a three-acre meadow, a year ago last fall, by way of experiment. He allowed the cattle to remain on it till the 28th of May, when they were taken out; and in five weeks from that time he cut two tons of good hay per acre. He thinks there is no way of using manure more profitably than as a top-dressing for grass.—*Genesee Farmer.*

SORGHUM vs. WHEAT.—A writer in the *Wisconsin State Journal* tells of a Dane County farmer who kept an exact account of all his farming operations during the past year. He found his sorghum and wheat crops to compare as follows:—After paying labour, rent of ground, expenses of marketing, &c., his wheat crop paid $2.50 per acre net profit; sugar cane, $14.00; thus making the net profit of cane as compared with wheat in the ratio of five and three-fifths to one.

SORGHUM AT THE WESTERN STATES.—Owing to the great drouth of the past summer, and the early frost, the crop of sorghum at the West has turned out badly. Mr. Mason, of the Illinois Central Railroad, planted 250 acres, and obtained from it only 105 barrels of syrup and 400 barrels of vinegar. The cost of raising and manufacturing was $2,300. After deducting the market value of the vinegar, the cost of the syrup would be about 40 cents a gallon. In an ordinary season he would have had 1,000 barrels of molasses, instead of 105 barrels, and the cost per gallon would have been very trifling. Notwithstanding the unfavorable results of the past season, Mr. Mason has concluded to plant this year from 250 to 400 acres.—*Genesee Farmer.*

PREMIUM TURNIP CROPS.—The Hamilton and Wentworth Agricultural Society having offered prizes for the best four fields of turnips, of not less than two acres, the following award was made by the judges after due examination of the crops entered for competition:—The first prize was awarded to Thomas Stock, of East Flamboro', for a field of eight acres. The yield was twenty-five tons six cwt. and forty five lbs. per acre. The second prize was awarded to John Weir, of West Flamboro', also for a field of eight acres. The yield was twenty-five tons, no cwt. and eighty-five pounds. The third prize was awarded to W. A. Cooley, of Ancaster, for a field of five acres of Purple-top Swedes. Yield, twenty tons, eighteen hundred and ninety-five pounds per acre. The fourth prize was awarded to John Kelly, of Ancaster, for two acres of Skirving's and Laing's Swedes. Yield, twenty tons, fifteen cwt. and ten pounds per acre.

RAISING BEANS.—Beans can be raised where other crops fail. The white bean will cover your barren knolls, and benefit your pocket—and be not much trouble either. The worst is to dry them, to those who are not initiated in the mysteries; and these mysteries are simple—only to get your beans when ripe *above the ground, with a chance for the air to circulate readily.* This secures your bean. The usual way is, to drive a stake into the ground, and put your beans around it, raising the column as high as you like, and can do with safety from the wind. This is shelter, air and freedom from the ground. Uniformity of *size and ripening* should be aimed at in selecting seed. This uniformity will be seen in the crop if fairly cultivated. A uniformity of size gives a good appearance to the beans—so does equal ripening. In a word, every bean clear and hard—all alike—this is what is wanted. Select them accordingly.—*St. Louis Farmer.*

GREEN CORN AS MANURE.—The following mode of increasing the fertility of land might prove useful where it is difficult to get manure:—

A farmer in Bucks Co., Pa., a few years since, made some experiments going to show the value of growing corn for manurial purposes. On a field of forty-seven acres—part of a farm that had been rented for more than ten years, and had become as most rented farms do, very much impoverished—he sowed ten acres to corn in July, at the rate of two bushels per acre. It was left to grow until it was four feet high, and then ploughed under about ten inches deep. No manure was put on this part, but the remainder of the field was heavily manured, and the whole sown to wheat. The crop averaged 34 bushels per acre, that on the ten acres fully equal to that dressed with manure. We believe that lime was applied to the whole field before sowing on the grain—assisting, with the deeper ploughing, very materially in restoring the soil to a highly productive state

The Apiary.

"So work the honey-bees,
Creatures that by a rule in nature, teach,
The art of order to a peopled kingdom."

THUS wrote England's greatest poet respecting the insect, which is universally known through one of childhood's simple rhymes, as the "little busy bee." But without stopping to dwell on the lessons in prose or poetry which have been drawn from the ways of this wonderful insect, or the pleasure which may be derived from observing its habits, our present duty is simply to introduce it as one of the workers of the farm, and to speak of its management as a not unimportant branch of rural economy. Bee-keeping may be successfully practised in most, if not all parts of Canada, and made a source of considerable profit. Honey is an important article of commerce, in universal demand, and capable of being put to many useful purposes in every household. There is no other branch of industry which requires less outlay of capital, or brings a better return from the small amount of money and labor expended in its prosecution. The profits of bee-keeping are derived from the vast domain of nature, and may be secured without the least interference with any other operation of the farm. In countries where special attention is paid to bee-keeping, every square mile maintains its hundreds of colonies. A German writer asserts that in Lunenburg, the bees pay all the taxes, and a surplus besides. No doubt the wealth of Canada might be increased by thousands of dollars annually if every family favorably circumstanced for so doing, would keep a few hives of bees. "But the sting,—the dreadful sting?" exclaim a host of readers. Fear of being stung is no doubt the chief hindrance to bee-keeping. But it appears that modern investigations and improvements render all apprehension on this subject needless. Principles have been ascertained by observing which the most timid may handle bees with the utmost freedom, and manage them with the most complete success. Mr. Langstroth, in his recent work on this subject, says.—"Acquaint yourself fully with the principles of management detailed in this treatise, and you will find that you have little more reason to dread the sting of a bee than the horns of a favourite cow, or the heels of your faithful horse."

In future issues, we shall endeavour to inform our readers as to the most approved methods of bee-management, in the hope that they will be encouraged to give this department of rural economy the attention it deserves.

Wintering Bees.

DIFFERENT methods are practised in wintering bees. It is necessary to protect them especially from two things: from being frozen and from being starved. The latter happens when they collect together closely in the coldest weather, and the comb becomes covered with frost and ice, the moisture from their bodies and from the air being there deposited and frozen, excluding them from the honey. The entrance to the hive is liable to be stopped with ice, and the bees thus suffocated. The bee never passes into the torpid state in winter like some other insects; it perishes at a degree of cold low enough to freeze it. As in the case of other kinds of farm stock, it requires less food when kept warm and comfortable. If the hives are to be carried into a house or cellar, the place for them should be cool, dry, and dark. The best method is to house them, unless sufficient protection can be given them on the stands. The Russian and Polish bee-keepers, who manage bees as extensively and successfully as any, winter their hives on the stands; but they make their hives of inch-and-half plank, and wind the upper part with twisted ropes of straw or cordage to increase the protection against extremes of the heat and cold. If left on the stands, hives made of common boards need additional covering; the entrance should also be narrowed, so as to leave only space enough for a single bee to pass. This must not be allowed to become stopped with frost and ice, or dead bees and filth. Light snow may cover the hive without danger. The practice of bee-keepers is about equally divided between these two modes of wintering. The success of out-door wintering would be greatly increased by making better hives, and by exercising more care in protecting them from severe cold, and from changes of temperature. It is easier and preferable, when the number of hives is very large, and there is no danger of theft, to manage them out doors than in-doors. With a small number it may be otherwise.—*New Am. Cyclopedia.*

ACCLAMATIZATION OF HONEY BEES.—Dr. A. Gertsacker, in concluding a very extensive memoir on the distribution of the honey-bee, observes that the most valuable form for Europe would be the Egyptian, partly on account of their beauty, and partly because of their unwillingness to use their stings, which appears to be common to all African bees, and is also one of the recommendations of the Italian bee. The Syrian bee agrees so closely with the Egyptian that it may prove equally valuable; and next to these in value are the bees of the coasts of Asia Minor.

☞ PROTECTING manure by erecting cheap sheds over it, is an item of labour that farmers can work at in the winter very advantageously and profitably. And while they do this work, they are taking a very important step towards introducing a renovating system of farm management, and of improving the fertility of their soil, not only for grain, but for grass or vegetables. Where the water from the eaves of the buildings is permitted to fall into the manure-yard, eave-troughs should be put up as soon as may be practicable, as a few heavy showers will often injure the value of manure enough to pay the expense of good eave-troughs to a barn. The skillful farmer's motto must be, in the winter, to save all the manure, and raise large crops next season.—*S. Edwards Todd.*

We commence today our Portraits of Thorough-bred Stock with that of BARON SOLWAY, the property of Mr John Snell, of Edmonton, one of our most enterprising and successful breeders. Baron Solway, as a calf, carried off the First Prize at the Provincial Exhibition at London; he carried off the First Prize at Toronto, in 1862, as a yearling; and last year he not only received the Prize at Kingston as the best two year old on the ground, but also the Society's Diploma for the best Durham Bull of any age. Baron Solway was calved on the 9th Oct., 1860. He was bred by Mr Robert Syme, of Redkirk, Dumfries, Scotland, from whom he was purchased by Mr. Snell in 1861, and imported to Canada. He was got by General Havelock (16130), bred by Mr. Unthank Netherscales, dam Snowdrop, vol 2nd page 699, by Strathmore (5647), grand dam Catherine 3rd, by Play-fellow (6297), g.g.d. Young Catherine, by Sir William (12102), g.g.g.d. Catherine, by Emperor (1974).

Mr. Snell commenced with Short Horn cattle in 1852, by purchasing the cow Red Rose, got by Young Briton, 275, in the Upper Canada Stock Register. Dam imported Lady Jane, descended from the famous stock of Mr. Booth in England. In 1857 he purchased from Mr. F. W. Stone, of Guelph, at very high figures the cows Fairy, Fancy, Polyanthus 2nd, and Lady Barrington 11th. Fairy was imported in 1854, by Mr. Stone. Fancy from Fairy and got by John O'Gaunt 2nd, imported in 1853, and bred by

THE 1 PRIZ SHORTHORN AT THE UPPER CANADA PROVINCIAL [illegible]

BARON SOLWAY.

Mr. J. S. Tanqueray, Hendon, England. John O'Gaunt 2nd has been a successful prize-taker at several Provincial Exhibitions. Polyanthus 2nd, got by John O'Gaunt 2nd, dam Polyanthus imported in 1853; bred by Messrs. Morton, Skelmergh Hall. Lady Barrington 11th, by John O'Gaunt 2nd; dam Strawberry, by Kirkleavington 2nd.

In 1861, Mr. Snell purchased from Mr. William Miller, of Pickering, the three imported cows, Syren, Sybil, and Rosa. Bred by Mr. Robert Syme, Red Kirk, Dumfries, Scotland, all got by Baron Kidsdale (11156). Bred by Mr. M. Stewart, Dumfries, Scotland. Also Bessie Bell, by imported Young England, dam Rosa.

Mr. Snell has lately added to his stock by purchasing from James Metcalf, Esq., near Toronto, the cow Conquest, bred by the Hon. Adam Fergusson, got by by Victor, (12268). Also, Nanny, from Conquest, and got by General Havelock, bred by Mr. Edward Ladd Betts, of Preston Hall, Kent, England Imported by the Hon. John Ross Toronto.

Mr. Snell's herd has been brought to its present standing by using the following bulls. First, "Belted Will 4th," No. 68, in Upper Canada Stock Register, and (12461) English Herd Book. Bred by Mr. Ralph Wade, senr., of Port Hope, C. W., got by Robin Hood (13608) dam Duchess 2nd. Belted Will 4th was the winner of two first prizes at Provincial Exhibitions. Second, "Prince of the West," got (in England,) by young Scotland (13681), dam imported "Cherry Pie," bred by Mr. Jonas Webb, of Babraham, England, by Lord of the North (11743)—by the Duke of Northumberland, bred by Mr. Bates. Prince of the West took the first prize at the Provincial Exhibition at Kingson, in 1859, as a three-year old. Third, "Cobden," 460, got (in England,) by Emperor, bred by F. Jordan, Esq., Yorkshire, Emperor by Ali Pasha (12378), dam imported Jenny Lind, bred by F. Jordan, by Lord Grey (10446), bred by the Earl of Carlisle. Cobden took two first prizes at Provincial Exhibitions. Fourth, "Baron Solway," whose pedigree is given above.

Mr. Snell's herd of Short Horns now comprises thirty-five animals, twenty-eight females, and seven males, descended from some of the best herds in England and Scotland, including those of Messrs. Booth, Bates, Tanqueray, Morton, Betts, Webb and Syme.

The Breeder and Grazier.

THE keeping of live stock to consume on the farm a large portion of the products raised is an important branch of agricultural economy. It is a very common, but most erroneous practice to grow chiefly grain crops, especially wheat, because they can be most readily turned into cash, and larger profits for the moment realized. To a great extent, hay, straw, and grain instead of being consumed on the farm, and fertilizing material for the land provided, are sold off without any regard to the necessity of keeping up the equilibrium between fertility and yield, by a liberal supply of manure. In the neighborhood of large towns and cities, it is doubtless good policy for the farmer to sell off all he can raise in the market which lies close to his own door, but when he does this, let him take care that for every load of produce he drives into town, a load of manure is teamed back to his farm. If this be neglected, the land will infallibly become more and more impoverished. Both farm and farmer grow poor on such a system. Unquestionably one of the worst characteristics of Canadian farming is the lack of attention to manure manufacture. This feature is so conspicuous as to excite the attention and provoke the comments of travellers. A New York agriculturist makes the following statements on this subject in a recent American paper. They are full of truth and reproach: "I have just returned from Canada, and it is a splendid country. But they are running the land pretty hard. They do not keep stock enough. It is all grain. I was on one farm of 150 acres, and the whole stock on it consisted of 15 sheep, 3 cows, 3 head of young cattle, and 3 or 4 horses. The farmer had a stack of peas as long as a freight train, but he seemed afraid to buy sheep to eat the straw." New land, rich in the food required by plants, bears this kind of treatment for a time, but must at length succumb to a mode of tillage so exhaustive and suicidal. The early settlers in a new country, finding that abundant crops reward even the most careless husbandry, are very apt to think the virgin soil inexhaustible. But, sooner or later, they will discover that they have made an egregious mistake. In proof of this, many facts might be given. For example, the State of Virginia, one of the most fertile of the earlier settled States, yielded at first immense crops of corn, wheat, and tobacco. But no manure being supplied to the soil, a process of deterioration set in which has gone on until now thousands of acres of what was once the best land in the State, have been abandoned altogether, or if worked at all, only give the most meagre return. The same causes are producing like results in various parts of this continent. Even the rich prairie lands of the west, show signs of diminished vigor. Many farms in those fertile regions, only yield half the number of bushels per acre which were produced at the beginning. Extensive river bottoms in Indiana that once gave from 60 to 80 bushels of corn per acre, now yield only from 30 to 40. It has been estimated that of the lands now under cultivation in the United States, four-fifths have been damaged to the extent of three dollars an acre per annum! This is indeed a prodigious and alarming deterioration, to which it is high time an effectual check were applied. In various parts of this Province, the complaint is made that it no longer pays to grow wheat, and many regard the land as poverty-stricken from some occult cause only to be sought in the realms of meteorology and climatology. But the solution is nearer home and far simpler. The land has been taxed until its resources have failed. The nature of the evil suggests the true remedy. Manure, as afforded by animals, is the great source of continued fertility, and the best means of thorough renovation. Its production depends upon the rearing, keeping, and feeding of live stock, whereby we are enabled to give back to the soil in the state of plant food, a large proportion of what is taken from it by the processes of vegetation. Nor need the farmer's gains be even temporarily diminished by a resort to the more roundabout method of raising live products for the uses of the dairy and meat market. In the long run, heavier growths and larger profits will reward a policy, which if somewhat slow, has the grand merit of being sure. By alternating forage and root crops with crops of grain, a large number of sheep and cattle can be kept, and their droppings applied to the land. It is thus that British agriculture has of late years achieved its remarkable results. Not only by the cultivation of forage and root crops, but by the outlay of almost fabulous sums upon oil-cake and other purchasable articles of food, do the more advanced agriculturists of Britain maintain their astonishing averages of wheat per acre, and still keep their land in vigorous heart. One of their number, Mr. Alderman MECHI, lets out the secrets of successful farming by saying, "My farm is overflowing with plenty, and promises a grateful return to drainage, deep tillage, plenty of manure and irrigation." Canadians must imitate such examples, or it will be impossible to maintain that place in the front rank of agricultural countries, which has been assigned us by nature, and can only be forfeited by our culpable neglect of the appliances a bountiful Providence has put into our hands.

To keep this important matter prominently before the farmers of Canada, will be one of the prime objects for which this journal will zealously and constantly labour.

☞ A cow kept on hay alone at the rate of 30 lbs. per day, would be required to secrete about 150 lbs. of saliva to prepare it for deglution, but if 60 lbs. of ruta bagas are substituted for an equivalent of the hay, reducing the latter to 13 lbs., the draft upon the system for saliva would be but 100 lbs., thus saving in this secretion alone an amount equal to the entire mass of the blood in the system.

LARGE OXEN.—At the Smithfield Club Show the following were the measurements of the first-prize animals:—

	FIRST PRIZE OX UNDER THREE YEARS.		FIRST PRIZE OX OVER THREE YEARS.	
	Girth.	Length.	Girth.	Length.
DEVONS..	.. 8 ft. 1 in.	4 ft. 1 in	8 ft. 4 in.	4 ft. 10 in.
HEREFORD.	7 ft 8 in	4 ft 3 in	9 ft. 4 in.	5 ft. 6 in.
SHORT HORN	8 ft 6 in	5 ft 4 in	9 ft. 1 in.	5 ft. 6 in.
SCOTCH-POLLED...	. ...		9 ft. 8 in.	5 ft. 4 in.
LONG-HORNED.....	. . . .		5 ft. 1 in.	5 ft. 1 in.

The Devons appear to be looking up.

☞ Calves should be fed in winter very differently from the manner in which, we may say, they are almost universally treated in this country. They should be fed on fine English or Interval hay, with a quart of oats apiece, or an equivalent in turnips or carrots. They should be fed regularly and allowed to run loose, with enough bedding to keep them dry. Observant farmers say one quart of grain per day during the first winter, will do more towards fitting the animal for the butcher when it is rising three, than four quarts a day fed at that period. This is a fact well worthy of attention, and one, the economy of which cannot be questioned.—*New Brunswick Farmer.*

BEAUTY IN STOCK has no invariable standard. In the estimation of some it results from small bones and close, compact frames; while others consider that structure the most perfect, and therefore the most beautiful, which is best adapted to the use for which it is destined. With such, beauty is relative. It is not the same in an animal designed for beef and in one designed for the dairy or for work. The beauty of a milch cow is the result of her good qualities. Large milkers are rarely cows that please the eye of any but a skillful judge. They are generally poor, since their food goes mainly to the production of milk.—*Jennings' Cattle and their Diseases.*

FEEDING OATS TO HORSES.—A correspondent of the *Rural Register* gives his experience as follows, on feeding horses. He says:—"the same quantity of oats given to a horse produces different effects according to the time they are administered. There is, decidedly, a great advantage in giving horses water before corn, and an injury in giving water after corn. There is a bad habit prevalent, namely, that of giving corn and hay on their return to the stable after hard work. Being very hungry, they devour it eagerly and do not masticate, the consequence is, it is not so well digested. When a horse returns from work, perspiring and out of breath, he should be allowed to rest for a time, then give a little hay, a half an hour afterward water, then oats. By this plan water may be given without risk of cold."

NEGLECT OF CATTLE IN WINTER.—The Maine Board of Agriculture forcibly remarks on the above subject:—"A good-sized one-year-old, in usual flesh at the commencement of winter, will weigh about 600 pounds, a four or five year-old ox, 1,500 pounds. It is not so uncommon as it ought to be for them to fall off during the winter, from one-fourth to one-third in weight, for want of proper food and shelter. The result is the owner has lost on the year-old 200 pounds, and on the ox 500 pounds of beef during the winter, which is worth in the one case $8, and in the other $20. The animals have really consumed one-third of themselves to carry them through the winter Often our neat cattle are fed in the winter on beef and tallow, sheep on mutton, hogs on pork and lard, horses on horse-flesh – all expensive articles of food, compared with hay, grain, and the various root crops."

Overfeeding with young succulent clover produces indigestion, resulting in what is termed "hooven." The best preventive is to allow them to eat but moderately of this material; and the best remedy is to give about half a teacupful of finely pulverized charcoal to each animal—to large animals a teacupful may be given. It must be fresh, and must be prepared for the occasion by taking live coals from a wood fire, and pounding them immediately in a mortar. Hard wood, such as beech, maple, and oak, is too hard to pulverize easily; and very soft wood, such as pine and bass wood, forms too light a powder; an intermediate hardness is best, such as soft maple, white wood or tulip tree, &c., but this is not a matter of great consequence, as any kind will do. Mix the charcoal with a junk bottle of water, and pour it down the animal's throat, drawing the head upwards as usual, by throwing the halter over a beam. The cure which this medicine accomplishes, will be effected in a surprisingly short time.—*Country Gentleman.*

☞ We find an article going the rounds of the papers upon the use of *salt for fattening swine.* The writer states that he "selected two pairs of barrow hogs weighing 200 each. One pair received, with their daily allowance of food, two ounces of salt; the other, similarly fed, none. In the course of a week it was easily seen that the salted pair had a much stronger appetite than the others, and after a fortnight it was increased to two ounces a-piece. After four months, the weight of the salted hogs was 350 pounds, while that of the unsalted, five weeks later, reached only 300 pounds. The experiment was repeated with almost precisely the same results." Another neglect of swine—and sometimes it must be a cruel one—is that of not giving them a *plentiful supply of pure cold water.* Why it is supposed that the hog should not need water as well as the cow and sheep is more than we can tell. They do require it. When water is not given them, although fed with swill, they will drink heartily of the water collected in the yard or barn-cellar, after visiting their trough several times, and finding it empty and dry. Nothing is more grateful to them in a hot day than a bucket of cold water, drank from a clean, sweet trough.

Animals—The Best Breeds for Canada.

THE HORSE.

It is proposed within the limits of two or three short papers to consider some of the more prominent characteristics of the Domesticated Animals, not so much with a view of determining which breeds or varieties are absolutely the best for Canada, as to elicit information and the results of experience of practical men in different parts of the country. By carefully collating facts, comparing notes, and guarding against hasty generalizations, safe and valuable conclusions may be ultimately reached. The Cattle question, in its relations to an improving and profitable system of agriculture, is from its nature involved in considerable complexity, and variously affected by prejudice, self interest and a traditionary routine. Instead of blindly adopting the dogmatism of empiricism, as is too frequently done, the enlightened and progressive farmer will be careful to form correct habits of observation on the varied phenomena presented in the breeding and rearing of the different kinds of live stock in their relation to soils, climate, markets, &c.

In the breeding and rearing of cattle and sheep, the principal qualifications to be considered have reference to the production of food and clothing for man. It is not so with the Horse. He is mainly regarded as a beast of burthen or draught, and forms an indispensable instrument in aiding man to develop the latent resources of the soil. The Horse, therefore, occupies the highest position in the agricultural scale, as he does also in that of field sports and the turf.

As this noble and most useful animal, everywhere the servant and companion of man, has to perform so many different duties under an almost endless variety of physical conditions, Providence has wisely endowed it with a capability, greatly aided and improved by human art, of adapting itself, however slowly, to the different states or circumstances in which it may be placed. Hence the different breeds and varieties which are found adapted to different climates and the varying wants and purposes of man. In point of size, for instance, what a contrast does the tiny and beautiful Shetlander present to the huge and powerful dray horse, and in regard to the power of locomotion, how different is the latter to the swift-footed racer! It is from the study of these differences, and the laws which govern them, that we are enabled to form a proper estimate of the qualifications of the various breeds for the race-course, field sports, or the labors of the farm. All that can be done within the limits of a single article is to seize on a few of the more salient points of so extensive and complicated a subject, and to offer such suggestions as seem to have a practical application.

Two of the greatest mistakes, if not *the greatest* of the present day in the breeding and training of the Horse, consist in an injudicious selection of the parents, particularly of the dam, and the subjecting of the young animal to too severe and continuous work or exercise before his frame is sufficiently matured, and its various parts consolidated. What a change has been coming of late years over the once beautiful and valuable breed of Irish horses, so well adapted to the pleasures of the chase, or the ordinary work of the farm. In consequence of the neglect of the above mentioned conditions, we are told that it has become a matter often of no small difficulty to select in that country, (and the remark will apply, with certain limitations, to other portions of the United Kingdom,) well-suited and unexceptionable animals for the chase, the plough, or the carriage. Speaking of the former races of the Irish horse, a modern and most competent observer remarks:—"They had neat and lively looking heads; light and well-set up necks; elevated, sharp, and far-back shoulders; full and very deep chests; strong, sinewy, and sound legs; good feet; short backs; and all-powerful quarters, which were so placed under them that they could spring with ease over any fence. Their size, strength and shape fitted them, in an eminent degree, for the field, the road and the farm. Besides, they were never trained till they were four or five years old. Their constitutions had then arrived at a pitch of great perfection. The extremities of the long bones were then completely solidified, and, consequently, were less liable to become diseased from the effects of labour than they would have been at a previous period, when in a state of cartilaginous softness."

The severe work to which young horses are now subjected is the chief cause of their present great liability to disease. If they were well fed, and allowed to mature their constitutions before being trained, they would, in all probability, remain sound for a considerable time. Blood horses suffer much from this cause, and not a few become utterly broken down and useless. Besides, we have here, in Canada, not recognized system nor rules for training or breaking in horses. A duty of such importance should be entrusted only to careful and experienced hands. Discrimination, a knowledge of the animal's peculiar temperament, combined with unyielding and good-natured perseverance, are among the essential qualifications of a good horse-trainer. As the work is now too often done, it is characterized by blundering ignorance and ebullition of temper, fruitful sources of bad action, unsteady work, baulkiness, and a host of evils. No animal, perhaps, repays its owner so largely for enlightened and kind treatment as the horse. We defer until our next issue, some remarks upon particular breeds of horses.

Sheep Husbandry.

☞ SHEEP should be kept under shelter, and their fine condition maintained by a feeding of about half a pint of corn daily to each, giving less early in winter, and more towards spring. A small regular feeding of roots would assist in keeping up their excellent condition.—*Genesee Farmer.*

DAMAGE TO SHEEP.—In the report of the State Board of Agriculture for Ohio it is stated that the number of sheep killed by dogs, in 1862, was thirty-six thousand seven hundred and seventy-eight, and during the same period, twenty-four thousand nine hundred and seventy-two were injured—the total value of the canine destruction being $136,347.

WATER FOR THE SHEEP.—A very false notion prevails among farmers as to whether sheep require water in winter; some asserting that they have need of none at all, in any form, and others that they are able to slake their thirst by eating snow. No theory could be more erroneous. The physical constitution of the sheep, in this respect, differs not from that of other domestic animals, and it has immunity from thirst no more than they. By certain experiments on this point, recently made by Mr. Lawes, of England, it was clearly established that sheep do require a considerable amount of water—the average being 40½ lbs. per week, or nearly 6 lbs. per day for such as were kept on dry feed.

SALT.—Salt is not perhaps quite as necessary to the health of sheep in winter as in the summer, but still all good shepherds regard it as indispensable. It should be fed as often as once a week, in the feeding troughs, or by brining a quantity of hay or straw. The Vermont breeders almost universally keep it standing constantly before their sheep in boxes placed in the sheep-houses. My friend Gen. Otto F Marshall, of Steuben County, New York, has an excellent and economical mode of feeding it. The orts when taken from the sheep racks are thrown into a box-rack, wider and considerably higher than the common ones, and placed under a shed. The orts are sprinkled with brine, and the sheep when hungry for salt go to the ort rack and consume them. Then all the hay is saved.—*Practical Shepherd.*

Oil Cake for Ewes.—John Johnston writes to the *Country Gentleman* says: "You may feed oil cake meal to ewes with perfect safety, and thought nothing I ever fed made such good lambs, or so much wool. I also feed some to my cows every spring. I answered a letter from Pennsylvania a few days ago, asking about feeding oil cake meal to breeding ewes. Now all who read this need make no further inquiry of me, as I never fed anything that gave me more satisfaction, and when it don't cost more than corn it is better to sell the corn and buy oil meal although for fattening cattle or sheep I don t know but it may be better to feed half oil meal and half corn meal; but, as I have often written, I think buckwheat a good substitute for oil meal to mix or alternate with corn. Oil meal keeps both cattle and sheep in good health. I am feeding it this year at $40 per ton the first I fed (about 25 years ago) I paid $9 for same quantity."

Dividing Sheep Flocks for Winter.—In latitudes where sheep are fed dry feed, and are kept confined to stables and small yards in winter, even Merinos will not bear herding together in large numbers. They should be divided into separate lots before, and preparatory to going into winter quarters. It is better that these lots be made as small as convenience permits, and not exceed 100 each. The sheep in each should be as nearly uniform in size and strength as practicable, or otherwise the stronger will rob the weaker, both at the rack and trough, and drive them about whenever they come in contact. Breeding ewes, wethers and weaned lambs, should always be kept in separate parcels from each other, in well regulated flocks. Sheep which are old and feeble, late born lambs, etc., had better be sold at any price or given to a poor neighbor who has time to nurse and take care of them. But if kept by the flock-master, they should be put by themselves in a particularly sheltered and comfortable place where they can receive extra feed and attention. This is usually called "the hospital." English sheep should be divided into still smaller parcels, and with the same regard to age, condition and sex.—*Randall.*

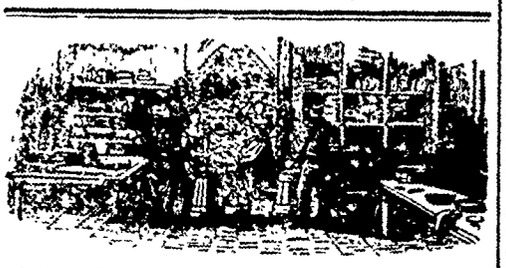
Best Climate for Sheep.—Sheep can stand cold weather without injury if it is *dry*. Sudden changes and cold rains are very injurious. We believe sheep require shelter quite as much in the South-west as at the North. The weather is not as cold, but is more changeable, and the sheep frequently get thoroughly soaked to the skin. In this condition, a cold, raw wind and a damp soil can not help but carry off much of the heat which is necessary to the well being of the sheep. The natural heat of the body of sheep (105°) is much higher than that of horses and cattle. This heat is kept up by the consumption of food (or burning of fuel) in the lungs, etc., of the animal. To prevent this heat from flying off, the sheep are provided with a good warm coat of wool. To be effectual, however, the coat must be kept dry. In a cold, dry climate, if the wool gets a little wet on the outside it is soon frozen, and this acts as a coat of mail, with a good warm lining of dry wool inside, so that the heat from the warm body within does not fly off. It is said that the Scotch Highlanders, in olden times, when exposed during frosty nights, wet their plaids before lying down to sleep, and by holding them a short time from their bodies they were frozen in a stiff hard board, sufficiently thick and impervious to defend them from the cold. The slight coat of frozen wool acts in the same way. But in wet weather there is no such protection, and so it is that you will find it equally important to provide shelter in the warm, but wet and changeable climate of the South-western States.—*Am. Stock. Journal.*

Fattening Sheep in Winter.—The present ordinary mode of fattening sheep in winter in New York, is thus described in a letter to me from John Johnston, Esq., of Geneva, New York, who is one of the oldest and most experienced feeders, as well as grain farmers in the United States.

"I generally buy my sheep in October. Then I have good pasture to put them on, and they gain a good deal before winter sets in. I have generally had to put them in the yards about the first of December. For the last twenty-three years I have fed straw the first two or two and a half months, a pound of oil cake, meal or grain to each sheep. When I commence feeding hay, if it is good, early cut clover, I generally reduce the quantity of meal or grain one-half; but that depends on the condition of the sheep. If they are not pretty fat, I continue the full feed of meal or grain with their clover, and on both they fatten wonderfully fast. This year (1862-3) I fed buckwheat, a pound to each per day, half in the morning and half at 4 o'clock, P. M., with wheat and barley straw. I found the sheep gained a little over a pound each per week. It was never profitable for me to commence fattening lean sheep or very fat ones. Sheep should be tolerably fair mutton when yarded I keep their yards and sheds thoroughly littered with straw.

"Last year I only fed straw one month. The sheep were fed a pound of buckwheat each. From the 20th of October to the 1st of March, they gained nearly 1½ pounds each per week. They were full-blood Merinoes- but not those with the large *cratats* around their necks. I have fed sheep for the eastern markets for more than 30 years, and I always made a profit on them except in 1841-2. I then fed at a loss. It was a tight squeeze in 1860-1 to get their dung for profit. Some years I have made largely. I did so this year, (1862-3,) and if I had held on two weeks longer, I should have much more. Taking altogether it has been a good business for me."

Mr. Johnson by under-draining and by the manure obtained by fattening sheep, has almost *created* one of the finest farms in New York. I think his land is not adapted to turnips.—*Practical Shepherd.*



The Dairy.

The care of milk and the manufacture of butter and cheese, constitute an important part of indoor farm management. These products differ greatly in quality and are so affected in value by the modes in which they are prepared for market, that it becomes highly necessary for all engaged in their production to ascertain if possible, and to put in constant practice, the best methods of doing dairy work. The extreme sensitiveness of milk to all external influences, renders it needful to secure thorough cleanliness and sweetness in the room, pails, pans, and strainers, while the delicacy of the processes by which it is transformed into butter and cheese, renders the most vigilant attention indispensible. On large farms where a dairy house furnished with every convenience can be had, the task is much easier of accomplishment, and there is little excuse for not turning out a good article; but the mass of our farmers are straitened in building accommodation of all sorts, and dairying, like the other operations carried on, must be performed under difficulties. Still, despite this very general drawback, there is a possibility of no little improvement being effected. With that improvement, would come an advance of price for dairy products, which would greatly increase the profits of many a farm. Quality is everything in such articles as butter and cheese. We forbear farther enlargement on this subject at present, in order to save space for some selections which will amply repay careful perusal.

Dairy Farming.

We urge upon dairy farmers the importance of their bestowing more attention upon the feeding and general comfort of the cows and of the stock reared upon the farm, as by improved management of the dairy stock the farm may be rendered a source of profit, and not of loss, and from those farms from which a small profit was realized, a larger profit may be secured.

The yield of rich milk being chiefly dependent upon the quality and amount of food eaten by the cows, the dairy farmer should calmly consider the best methods whereby an increased amount of nutritious food is to be secured, and at an outlay which will leave a profit after the money expended has been returned

Pastures can be improved by the application of lime, lime compost, marl, shell sand, earth and dung compost, farm-yard manure, bone-dust, fermented bones, phosphatic guano and superphosphate. The most suitable time for applying any of these fertilizers is in autumn. The manure can be put on the field previous to commencing harvest operations. The cows should be changed to another field for not less than two weeks. Fertilizers, such as Peruvian guano, sulphate of ammonia, and nitrate of soda, should be applied to the pasture early in spring, but not until the grass has commenced to grow. April will generally prove a suitable period. Of the fertilizers, the most permanent in its effects is bone-dust; next to it are phosphatic guanos, and as these are generally to be had at lower rates than bone-dust, they are to be preferred. The quantities of any one of the enumerated fertilizers to apply, must be regulated by circumstances. A mixture composed of more than one manure should be preferred. In Cheshire, bones have generally produced such decided changes in the growth of pastures that bone-dust has acquired a high position as a fertilizer for dairy farms. The phosphoric acid removed in the milk, and in the bones of the animals reared upon the lands, is thus restored to the soil. It is now considered essential in the best dairy districts to manure with bones or with fertilizers prepared from bones. It will generally prove a satisfactory method of top-dressing to apply bones or phosphatic guano in autumn, and afterwards to supplement this with a small quantity of nitrate of soda or Peruvian guano in spring.

Good pastures should not be ploughed except there are imperative reasons for breaking them up for a course of cropping; but bad pastures can be broken up with advantage, provided means are adopted to improve the condition of the soil by draining, deeper cultivation and liberal manuring during the period the land is under corn and root crops. The re-seeding with superior grasses can be best effected by sowing out without a grain crop.

Pastures should not be overstocked. Sometimes this mistake may be made. To meet such a contingency, provision should be made to supplement the pastures with green forage, such as rye, clover, [and Indian corn.] Nothing is more common than to stock up to the utmost limit the pastures will furnish full keep for. If the season proves a good grazing one, the cows continue in fair condition, and yield an abundant supply of milk. When the season proves somewhat adverse to the growth of grass, owing to an excess of moisture with a low temperature, the consequence is the cows are half starved, they lose condition, and while the flow of milk is diminished it contains less butter or casein. Nothing is to be gained by overstocking, except by the experience a sounder practice is resolved upon. Not frequently, however, the practice continues from some vague impression that the ensuing year will prove a more favourable one for grass.

Were the sound principle more generally acted upon—the largest return of produce from each cow—dairy farming would prove much more profitable than it is at present.—*North British Agriculturist.*

Cheese Making.

At the meeting of the Massachusetts Board of Agriculture held at Springfield lately, S. L. Goodale, the Secretary, read a valuable paper on cheese-making, the following brief notes of which we take from an exchange:—

"He said that a milch cow furnished the best and cheapest method of getting human food. The feed necessary to make a pound of meat will make at least 25 pounds of milk. Eight and a half pounds of milk on an average make a pound of cheese. In Herkimer county, N. Y., the cows average 600 pounds of cheese per annum. A cow that will make less than her dressed weight of cheese in Scotland is sent to the butcher. England is our great cheese market, for the English eat more cheese than we; 200,000 cows are kept in the single county of Cheshire. Herkimer county, N. Y., first taught the English to use American cheese, and now we ship there more than forty million pounds a-year. Cheese factories are modern but labor-saving inventions. They require the milk of at least 500 cows to make them profitable, and a force of five or six persons to do the work. There are more than thirty such factories in Oneida county, N. Y., and the cheese commands a higher price than that made in families. Carrying milk from one to five miles in a waggon improves it for cheese as much as it hurts it for butter. There is little difference in the labor for a pound of cheese or a pound of butter, and the milk necessary for a pound of the latter will make two and a half pounds of the former. Hay cheese is less valuable than that made from grass."

Mr. Pratt's Dairy Farm.

COLONEL PRATT, a very successful dairy farmer at Prattsville, Green County, in the State of New York, is in the habit of sending annually to the *Country Gentleman*, a statement of the product of his farm. He has just done so for the year 1863. Colonel Pratt's farm contains 365 acres, and the average number of cows during the dairying season of eight months was eighty. The following is Colonel Pratt's statement for 1863 :—

MILK.

	Pounds.	Gallons.
Whole product,	362,871	46,731
Average per cow,	4,535	584
Average per day,	1,343	173
Average per day for each cow,	16 7-10	2 1-10
Greatest average in one day per cow,	25.2	3.2

BUTTER.

Whole product,	17,976 pounds.
Average per cow,	224.7 do.
Average per day,	66.5 do.
Average per day for each cow,	13.3 ounces.
Av'ge milk to 1 lb. butter,	20 1-10 lbs. or 10 3-10 qts.

PORK.

Amount made,	10,389 pounds.
Average pork for each cow milked,	129 do.

SALES.

Butter, at 27c. per lb,	$4,853.52
Pork,	571.39
Calves,	16.00
Poultry,	119.94
Deacon skins,	60.00
	$5,620,85
Expenses of working farm, over proceeds of same, not enumerated above, including $700 for interest on investment of $10,000 in farm and stock,	1,916.45
Net profit,	$3,704.40
Amount realized for each cow :	
For butter sold,	$60.66
For Pork sold,	7.14
	$67.80

OTHER PRODUCTS.

1,107 bus. of Corn in the ear from 8 1-4 acres.
1,500 bus. of Carrots and Beets.
139 loads of Pumpkins.
80 tons of Hay.
100 bus. of Oats.
$54.16 value of Honey sold and on hand.
$74.00 value of new Hives of Bees' increase.

We would be very glad to receive a few such statements from some of our Canadian friends.

Feed Cows Well.

THE farmers in the dairy districts make a great mistake in not feeding their cows with richer food. If it requires twenty-five pounds of hay per day to keep a cow in a condition in which she can neither lay on fat nor give milk, it is evident that the butter and cheese which we get is derived from the food she eats over and above this twenty-five pounds necessary to keep her in a stationary condition. To feed only twenty-five pounds would manifestly be absurd. Twenty-five pounds of hay are required to keep the cow alone going, and if we feed another five pounds all the milk is derived from the five pounds extra feed. You feed thirty-pounds of hay per day, but it is only the five pounds that produces milk. Now do you not think it would be better to feed another extra five pounds, and get as much milk for it as you have from the first thirty pounds? But, you say, the cow's stomach will only hold thirty pounds of hay or straw. Very well, then take out a few pounds and supply the place with some richer food, such as pea or bean meal, mixed with a little corn meal or shorts. In this way you can get the cow to eat the other extra five pounds. You will get more and richer milk, and more and better manure. When the cows have plenty of food their milk is richer in butter and cream, or curd, in the fall of the year than at any other season. Dr. Voelcker found the milk of a dairy in August contained 3 1-2 per cent. of butter and 3 of curd. In November the milk of the same cows contained 5 per cent. of butter and 5 1-2 of curd. One gallon of the November milk would make nearly twice as much saleable cheese as a gallon of the August milk. The great aim of dairy farmers should be, therefore, to provide the cows with a sufficiency of good food at this season of the year. I have never tried it, but it strikes me that oats cut *while green* would make excellent fodder for milch cows. I know they are excellent for horses, and if a few peas are sown with the oats it is quite an improvement.—*Joseph Harris, of Rochester.*

NOTE BY EDITOR "CANADA FARMER."— Oats, Peas, and Tares mixed are better still. We have tried it.

TURNIPY TASTE IN MILK.—The unpleasant taste given to milk and butter when the cows are fed upon turnips, is effectually corrected by the use of a little common nitre, or saltpetre, but the common mode of using this preventive is not the best. It has been usual to put a lump of saltpetre into the milk-pail, but it sometimes happens that the nitre remains undissolved, and the milk retains the objectionable flavor. Instead of this, make a strong solution of saltpetre—say a pint of boiling water upon an ounce of saltpetre; when thoroughly dissolved, put it in a bottle and stand in a cool place. Before milking, put into the milk pail a spoonful of this solution, or more, according to the quantity of milk expected, and the turnip flavor will be entirely destroyed. It also, in a great degree, destroys the bad flavor given to butter by the yellow crowsfoot or buttercup. This has been tried in our family, and found serviceable.—*Country Gent.*

AYRSHIRE COWS.—Probably no *breed* of cattle, unless we except the Jerseys, is superior to Ayrshires as milkers; but the obstacles in the way of making up a dairy of Ayrshires are several: First, being blood stock and bred at considerable expense, they cost too much to compete with well selected native cows, which can be picked up at half the price, and will give nearly or quite as much milk. Second, after their milking days are over they will not lay on flesh for beef like grade short horns, and consequently cannot be *used up* to so good profit. Where feed is plenty, as it is in all parts of Ohio, we suppose that an infusion of short horn blood, is the best in all respects for diary purposes, taking into account the beef to be made from the old cows when they are no longer fit for the dairy. But the cheapest and most popular mode of making up a herd of dairy cows, is to select natives, which had proved themselves to be good milkers. The idea of breeding dairy stock is little thought of. Cows which prove good, are kept for the dairy, and the rest turned over to the butcher. —*Ohii Cultivator.*

CLEANING MILK VESSELS.—A correspondent of the Cincinnati *Gazette* says there is no product of the farm that presents so much difference as butter. This arises chiefly from using vessels for holding milk, and utensils in making the butter, which are soured. Milk has a peculiar acid, very easily formed, which entirely takes away that rich, sweet flavor belonging to good butter. A very little soured milk or cream on vessels rapidly generates enough acid to take it away. To avoid this, great care is requisite. Cleanliness only is not sufficient, in having the vessels well washed, but they must be carefully washed in boiling hot water, and should be boiled in it also. But as cream is very apt to stick, even in good washing, when the vessels are boiled in water, some pearlash or soda should be put in it, which destroys any acidity that may be about the vessels. They should then be sunned. I have known some good butter-makers who dispensed with the sunning when soda was used, but both are recommended.

TURNING HEAVY CHEESES has always been a severe tax upon the strength of most dairy women. I saw a device for accomplishing this work in a safe and easy manner, in the cheese factory of Mr. Cox, Mesopotamia. In his curing room, Mr. Cox uses, as supports for his cheese, two stringers of scantling, some ten inches apart; on these scantling stand the cheese, each upon the inverted cover of a cheese of a size a trifle larger than the size of the cheese. When the attendant goes to turn the cheese, she takes another cover of the same size, and puts it on the top of the cheese to be turned, then, with one hand on top of this cover and the other hand at the bottom cover, flops the cheese over, with only the strength of a child, since, when the cheese is tilted up a little to one side, the opposite side balances down between the two scantling, and the cheese goes over easily. Another and greater advantage of this method of turning cheese, is that there is no danger of bruising or breaking the corners in turning, as they are perfectly protected by the rim of the cover. This mode of handling is equally applicable to cheese on shelves, but in that case you do not have the advantage of self-balancing, the same as on stringers.—*Ohio Farmer.*

CHURNING IN WINTER.—The frequent inquiries for a sure method of always churning butter as quickly and of producing as good an article in winter as in summer, we cannot well answer, for the substantial reason that we knew of no such method. Good mixed feed for the cows, keeping the milk and cream from freezing, and bringing the cream to a proper temperature before beginning to churn, comprehend about all we can say on the subject. A lady at Locust Valley, Queen's County, New York, communicates to the *American Agriculturist* her method of making butter inwinter, which she thinks far surpasses any other plan which she is acquainted with. She writes that "by this method the full quantity of butter is obtained, the quality is equal to that of grass butter, the buttermilk is rich and remains sweet for drinking or culinary purposes, such as making rice puddings, and the process is certain and simple, and attended with little trouble. It is as follows:—The cream is skimmed each day, and placed at once in a kettle, and the kettle put into hot water (to prevent scorching), and put over the fire. The cream is allowed to scald, without boiling. It is then put into a vessel and set aside; each day's cream being in like manner scalded, and added to the mass, until enough for a churning is obtained. The churning is commenced immediately after adding the last day's cream, which brings the whole to a proper temperature, without thinning by the addition of hot water."

Canadian Farm Architecture.

ARCHITECTURE is perh s a complimentary word when used in reference to most of the structures which have been erected upon the farms of Canada. There are not wanting here and there excellent farm residences which, in accommodation, form, proportion, picturesqueness, colour, light and shade, are all that can be desired; together with out-buildings in admirable keeping, and marked by convenience, spaciousness, neatness. But, as might be expected in a comparatively new country, it is the few, and not the many, of which this can be said; while the style of building in general is such as leaves vast room for improvement. A well-planned, harmonious, agreeable-looking edifice costs no more than an unsightly, ill-planned one; nay, there are often large sums expended in unsuitable and tawdry ornament, which would have been much better turned to useful account. It is rather a matter of study *before* building than additional cost *in* building which makes the difference between the pleasing and ungainly in architecture. Want of a true appreciation of the beautiful has, no doubt, much to do with the evil under consideration. But taste needs educating, and the misfortune is that so many set themselves up as educators of it who have yet to learn its first principles themselves. As to the result, many of our more costly buildings consist of monotonous, commonplace work, loaded with attempts at decoration and ornament; while the most important and self-evident rules of architecture are often glaringly violated.

To guard against these and other mistakes, those who intend to build should go about the matter deliberately, and avail themselves of all accessible helps, such as consultation with those who have had experience in the matter, study of one or more of the many excellent and cheap works on the subject of rural architecture, inspection of buildings already erected, &c. In most cases, if the contemplated structure be of considerable size and cost, it will be well to call in the aid of a thoroughly-competent architect. If he be properly qualified for his business, his fees for the elevation, plans, specifications, and, if need be, superintendence, will be more than saved in the avoidance of unnecessary expense, to say nothing of the satisfaction resulting from having a job done that will bear criticism. The maxims of a correct taste are not arbitrary. Wherever there is truthfulness, harmony, naturalness in architecture, universal admiration and pleasure will be excited.

Let no one dismiss this subject with the reflection that since his means are small, and the buildings he thinks of erecting humble in character, and limited in accommodation, all that has been said is inapplicable to him. A log-house may be built tastefully. A wood-shed, poultry-house, piggery, or dog-kennel even, may be either an ornament or an eye-sore.

By the publication of occasional articles, engravings, plans, &c., we hope to do somewhat toward improving the style of rural architecture in Canada.

Correspondence.

COMMUNICATIONS INVITED In our Prospectus, we state it to be one of the main objects of this journal "to afford the Farmers of Canada an ever-open medium for addressing their brother Agriculturists throughout the Province," and we earnestly desire to make this a leading feature of the CANADA FARMER. In order to be enabled to do so, our readers must betake themselves to the pen, and send us jottings on all manner of subjects connected with farm experience and rural life. Topics are plentiful, and there are thousands of practical, experienced, and observant men in Canada, who are quite capable of discussing them in an interesting and instructive manner. Various hinderances, however, are apt to deter those who are every way fit for the task. Modesty, fear of criticism, horror of appearing in print, conscious defects of style, grammar, spelling or handwriting, a spirit of procrastination—these, and the like, prevent many who ought to write, from doing so. We beg our readers to lay aside all excuses, and do their best. Note down whatever you think likely to be useful to your fellow-cultivators, give us your facts, figures, experiences, observations and suggestions—never mind if the style be homely, the grammar defective, the spelling incorrect, or the writing ungraceful. It will be our care to whip into shape whatever may need improvement. We do not, of course, promise to publish whatever may come to hand. Several communications may be sent on the same topic, or a contribution may be of value, but may require abbreviating or condensing. Our correspondents must not conclude that they have wasted their labour, even though they may not recognize their productions in our columns. They may indicate subjects, supply ideas, furnish facts and suggestions, which may form material for editorial articles, and in that shape be helpful and valuable in promoting that end for which, we trust, all our readers will earnestly co-operate with us, viz: *the advancement of Canadian Agriculture.*

LEACHED ASHES.—A correspondent in the County of Oxford wishes to know what is the chemical analysis and manurial value of wood ashes after lixiviation or leaching, and whether it will pay to haul a hundred loads from an ashery eight miles distant from his farm? Ashes consist of salts, such as silicates, phosphates, sulphates and carbonates. The carbonates and sulphates of potash and soda, as found in ashes, are soluble, and are dissolved out by the leaching process. The silicates, phosphates and carbonates of lime, magnesia, iron, and manganese, are insoluble, and thus remain in leached ashes. A portion also of silicate of potash remains undissolved. Far the larger part of leached ashes is carbonate of lime. The next is phosphate of lime or bone dust. The quantity of this constituent varies much in different kinds of timber. The ashes of oak contain only about 6 per cent. of phosphate, while those of the beech have been found to yield as much as 20 per cent. of their whole weight of this valuable fertilizer. The ashes of the fir and the pine contain from 10 to 15 per cent. of phosphate. A cord of leached wood ashes (or 100 bushels) contains 50 to 60 lbs. of potash. In one cord of leached ashes, dry weight, there are, according to Dana:—

Phosphoric acid	117 lbs.
Silex	146 "
Oxide of iron	17 "
Oxide of manganese	51 "
Magnesia	119 "
Carbonate of lime	3072 "
Potash combined with silica	50 "

Leached ashes, though of less general value than unleached, are still a very valuable fertilizer. The salts which water alone fails to dissolve, are rendered soluble in the soil by the influence of other salts, the atmosphere, and contact with vegetable life. They may be used either as a top-dressing, or after being mixed with other manures in the compost-heap. Whether it will pay to haul them eight miles is a question, the answer to which must depend on circumstances. Leached ashes are very heavy, and though perhaps in good sleighing, with a team and teamster who have little else to do, it might be wise economy to draw them that distance, we are inclined to think that, ordinarily, the cost of hauling so far would purchase a larger amount of fertilizing material in more concentrated form. But there are plenty of Canadian farmers within half a mile or a mile of an ashery who could not do better than devote their spare time to hauling and applying leached ashes to their land. On this general subject, and especially on such points as the value of leached ashes compared with barn-yard manure the description of soil and crop to which they are best adapted, and the quantity to be applied per acre, we shall be glad to receive communications from our readers who have had experience in these directions.

DRAINING.—*J. B.*, of Tyrconnel, writes:—"With your permission, if nothing turns out to prevent me, it is my intention to write a piece on draining by-and-by, as I have been doing a little at it this last fall, and may I ask you if you would be so good as to give it a touch of your pen to correct my mistakes and fix it in a reasonable shape to come before the public, should you find it worthy a place in your paper?" Certainly: with the greatest of pleasure. Tell us all about your drain-laying, both with wood and tile, and whatever seems likely to be a stimulus or a guide to others, we shall gladly insert.

"OUTSIDE CONTRIBUTORS."—W. T. G. asks:—"Will you receive articles on Horticultural subjects, including Pomology from *outside* contributors?" Ans. Yes, very gladly.

W. S. Woburn. Your letter on "Planting Apple Trees" will appear in our next.

The Canada Farmer.

TORONTO, UPPER CANADA, JANUARY 15, 1864.

TO THE FARMERS OF CANADA!

IN presenting the first number of THE CANADA FARMER to the Agriculturists of Canada, THE PUBLISHER desires to say a very few words by way of introduction.

The publication of this Journal has been commenced under the earnest conviction that the future prosperity of Canada must rest on the condition of her Agriculture; and that every Canadian, whatever his occupation, is personally and deeply interested in having the Agricultural capabilities of our country fully understood, and the system of husbandry brought to the highest possible point of excellence. THE PUBLISHER is fully convinced that the circulation of a first-class Agricultural Journal in Canada would tend greatly to promote these ends; and he is resolved that THE CANADA FARMER shall be such a Journal.

THE FARMER will be exclusively devoted to the advancement of the Agricultural interest. All party political questions will be studiously avoided. The desire is to establish a Journal which Farmers and Horticulturists of all parties and creeds can support with confidence; and through which they can send their views to their brother Agriculturists throughout the Province. In the discussion of Agricultural questions, a candid and conciliatory tone will be aimed at; and while the aids of science will be systematically invoked, the great end constantly kept in view will be to gather up the matured opinions of practical men on practical matters.

No labour and no reasonable expenditure will be wanting to make the paper a worthy representative of the Farming Interests of Canada. Already has a most efficient staff of able writers been secured. Mr. W. F. CLARKE, of Guelph, a talented and experienced writer, will take the chief charge of the Editorial department. Dr CROFT, the eminent Professor of Chemistry in University College, lends his great ability and reputation to the department of Agricultural Chemistry. Mr. BUCKLAND, the experienced Professor of Agriculture in Toronto University, takes charge of the Live Stock department. Mr. BEADLE, of St. Catharines, the accomplished Secretary of the Horticultural Society of Canada, takes charge of the Floral and Horticultural department. Professor SMITH, a highly qualified professional man from the schools of Edinburgh, presides over the Veterinary department. Mr. SMITH, a successful and rising Architect of Toronto, will make important contributions to the Architectural department. Artists have been engaged to prepare illustrations; and a number of Reporters, Contributors, and Correspondents have promised their valuable aid in making THE CANADA FARMER a true reflex of the best Agricultural minds of our country.

It is gratifying to THE PUBLISHER that the Provincial Board of Agriculture heartily sustain the enterprise. He has purchased from the Board the copyright and good-will of the *Canadian Agriculturist*, their official organ—it is now merged in THE CANADA FARMER, and the official announcements of the Board will hereafter be sent to the public through these columns.

It is for the Agriculturists of Canada to say whether THE CANADA FARMER shall receive a fair trial at their hands. If the paper is to be made what it ought to be, it must be generously, unitedly sustained. It is the only Agricultural Journal published in Upper Canada—and a very little exertion on the part of those interested will place it in a position of unsurpassed efficiency.

The Farming Interest of Canada.

IN commencing our labors as the special advocate of the farming interest of Canada, it may not be without advantage to show the enormous extent of the agricultural productions of our country, and the commanding position occupied by the Agriculturist in the industrial progress of the Province. The official census taken in January, 1861, fortunately furnishes reliable *data* for arriving at the agricultural condition of the country, and an official Report from the Bureau of Agriculture, issued in 1863, provides us with estimates of two years' later date. From these returns, it appears that the number of persons in actual occupation of land in Upper Canada, in the year 1860, was not less than 131,983, and in Lower Canada, 105,671. The quantity of land held was as follows:—

Persons holding in	U. Canada.	L. Canada.
10 acres and under	4,424	6,822
10 acres to 20	2,675	3,186
20 acres to 50	26,630	20,074
50 acres to 100	64,891	44,041
100 acres to 200	28,386	24,739
Above 200 acres	5,027	6,809
Total occupiers	131,983	105,671

It thus appears that there were, three years ago, not fewer than 237,654 persons in Canada who cultivated their own land; and if we add the army of farm servants, choppers, carpenters, blacksmiths, waggon-makers, harness-makers, &c., directly employed on farm-work, it will be seen at once how vast a proportion of the half-million of male adults in Canada are directly employed in the cultivation of the soil.

Then as to the capital employed. The estimated cash value of the farms and farming implements was, in January, 1861, as follows:—

In Upper Canada	$ 306,442,662
In Lower Canada	178,870,271
Total value	$ 485,312,933

And this enormous sum does not include the live stock and crops on hand. The last census showed the live stock to have been then as follows:—

	U. Canada.	L. Canada.
Milch cows, No. of head	451,640	328,370
Oxen and steers	99,605	200,991
Young cattle	464,083	287,611
Horses, all kinds	377,681	248,515
Sheep	1,170,225	682,829
Pigs	776,001	286,400

At present prices, these cannot be valued at much under $100,000,000; and the amazing rapidity with

which the live stock of the country is increasing in number and value can readily be seen by a comparison of the census returns of 1851 and 1861.

But perhaps a more satisfactory idea of the agricultural industry of the Province can be gained from a statement of the annual product of our farms. In the year 1860 the crop was as follows:—

	U. Canada.	L. Canada.	Total.
Wheat, bushels,	21,620,425	2,654,354	27,274,779
Barley, do.	2,821,962	2,281,674	5,103,636
Rye, do.	973,181	844,192	1,817,373
Peas, do.	9,601,396	2,648,777	12,250,173
Oats, do.	21,220,874	17,551,296	38,772,170
Buckwheat, do.	1,248,637	1,250,025	2,498,662
Ind. Corn, do.	2,256,290	334,861	2,591,151
Potatoes, do.	15,325,920	12,770,471	28,096,391
Turnips, do.	18,206,959	892,434	19,099,393
Man. Wurz. do.	546,971	207,256	754,227
Carrots, do.	1,905,598	293,067	2,198,665
Beans, do.	49,143	21,384	70,527
Clover and Timothy Seeds, bsh.	61,818	33,954	95,772
Hay, tons - -	861,844	689,977	1,551,821
Hops, do. - -	247,052	53,387	300,439
Maple Sugar, lbs.	6,970,605	9,325,147	16,295,752
Cider, gallons -	1,567,831	21,011	1,588,842
Wool, lbs. - - -	3,659,766	1,967,388	5,627,154
Butter, lbs. - -	26,828,264	15,906,949	42,735,213
Cheese, lbs. - -	2,687,172	686,297	3,373,469
Flax and Hemp, lbs. - - - -	1,225,934	975,827	2,201,761

The total value of these products of the farm in 1860 was close upon one hundred millions of dollars! And if we add the increase of that same year on the live stock, the improvements made on old farms, and the new lands brought into cultivation, a pretty good estimate may be formed of the highly satisfactory condition of the farming interest in Canada.

And then—the work is but begun. The total number of acres that have passed from the Government into private hands is—

In Upper Canada - - - - -		13,354,907
In Lower Canada - - - - -		10,375,418
Total acres sold - - - -		23,730,325
Of this, there are in cultivation, acres:—		
In Upper Canada - -	6,051,619	
In Lower Canada - -	4,804,235	10,855,854
Leaving yet wild - - - -		12,874,471

Not one-half of the land already in private hands, therefore, is yet cultivated, to say nothing of the many millions of wild lands still undisposed of by Government. The war on the wilderness has but begun, and assuredly the prospects before our agriculturists is encouraging enough, and the field of exertion wide enough to stimulate the best and most ambitious among us to active and persevering exertion for the advancement of this greatest interest of our country.

Our Pedigree.

THE first Agricultural Journal published in Upper Canada was, we believe, *The British American Cultivator*, started by the late Mr. W. G. Edmundson in the year 1842, and printed for some years at THE GLOBE office. It was published up to the year 1848, when it was incorporated with a paper that had been started the previous year by Mr. Wm. McDougall and Mr. Charles Lindsey. The title then became *The Agriculturist and Canadian Journal*, and the proprietors were Messrs. Edmundson and McDougall.

In 1849, Mr. Edmundson ceased his connection with the paper, and it was continued by Mr. McDougall and Mr. (now Professor) Buckland for about eight years, under the title of *The Canadian Agriculturist*. The Board of Agriculture used this journal for the publication of their transactions; and Mr. McDougall desiring to retire from the enterprise in 1857, the Board became the proprietors and publishers of the paper. The journal has been in their hands ever since, under the editorial conduct of Mr. Hugh C. Thomson, Secretary of the Board, and Professor Buckland.

The proprietor of THE CANADA FARMER having purchased from the Board of Agriculture the copyright and good-will of *The Canadian Agriculturist*, that paper has become merged in this journal. THE CANADA FARMER is now the only Agricultural Journal in Upper Canada, and it has the cordial support of the Board of Agriculture. The official announcements of the Board will be sent to the public through our columns.

No Postage on The Canada Farmer.

By the 6th clause of the 13th section of the Post-Office Act, it is provided that "periodicals printed "and published in this Province other than News-"papers, when specially devoted to Religious Edu-"cation, to General Education, to Agriculture, or to "Temperance, or to any branch of Science, and ad-"dressed directly from the office of publication, shall "be transmitted from the Post-Office where mailed to "any other Post-Office in this Province FREE OF "POSTAGE." Under the terms of this section THE CANADA FARMER will pass FREE through the mails.

The Post-Office department has added to the clause a regulation that journals passing free of postage shall not publish any advertisements which do not relate to the subject to which they are devoted. We regret that our journal should be thus deprived of a large source of income, the proceeds of which would have been spent for the benefit of Agriculture, but the rule of the department it seems is imperative, and we have therefore been compelled to keep out a very large number of general advertisements that were sent in for publication in THE FARMER.

THE "CANADIAN AGRICULTURIST."

THE Editors of this late periodical desire to tender an apology to their readers for the great delay in the issuing of the last number. It was owing partly to negotiations connected with the transfer of the copyright of the paper to the proprietor of the CANADA FARMER, and still more to an accident that befel the press on which the paper has been printed, by which it has been kept back a fortnight after being entirely ready for working off.

☞ THE ANNUAL MEETING of the Fruit Growers' Association will be held at the Mechanics' Institute, Hamilton, on Wednesday, the 20th day of January, 1864, at two o'clock p.m. Members are requested to bring samples of fruit for exhibition.

☞ THE TORONTO GARDENERS' IMPROVEMENT SOCIETY will hold its first Annual Meeting at the Board of Agriculture Rooms, Agricultural Hall, on Monday evening, the 18th inst., at half-past seven o'clock, when the Directors will submit their Annual Report, and *Professor Buckland* will deliver an Address on the Relations of Science to Horticulture. All interested in Horticultural pursuits are respectfully invited to attend.

FAT SHEEP FROM CANADA.—Robert Burrows, of Winter Hill, Medford, exhibited in this city a few days since, forty long-wooled sheep, which he purchased near Guelph, C. W. They were from a year to three years old last spring. Some were of the Leicester breed, some Cotswold, and some a cross of the Leicester and Cotswold. They were a very fine lot—estimated by some to weigh 200 lbs. each. The owner refused an offer for them of nine cents per pound, live weight.—*Boston Cultivator, January 2.*

☞ THE Quebec Agricultural Society has recently brought out from England the Short-horn bull, "Sweetmeat," roan, calved in 1851; bred by Mr. Robinson, of Clifton Pastures, England; got by Duke of Leinster, (17724)—dam Sweetheart 2d by Earl of Dublin, (10178) &c., being a direct descendant of the famous cow "sylph." Also the thorough-bred horse "Canwell," by Stockwell out of May Bell; bred by Lord Northport. By last accounts from England, Stockwell was standing for £100 a mare.

IMPORTED CLYDESDALE STALLION.—A fine stallion has been recently imported from Scotland by Mr. Andrew Harvie, who resides in the neighborhood of Galt. Mr. Harvie bought him last summer, from Wm. Kirkwood, Esq., of Shankston farm, Patna, Ayrshire, Scotland, after a thorough inspection of some of the finest specimens of horse flesh to be found in that or adjoining districts. He is of the Clydesdale breed, was got by Sir Charles Napier, who was purchased for the Australian market at a handsome price, his dam being a superior brood mare in Mr. Kirkwood's possession. His height is 16 hands 1 inch—he is only 3 years old. His colour is dark brown, slightly dappled, and he possesses extraordinary bone, powerful muscle, and good action.

LECTURES ON AGRICULTURE AND THE VETERINARY ART.—This course, under the auspices of the Board of Agriculture and University College, will commence January 21st, 1864, and will be completed in four or five weeks. The subjects embraced will be the leading facts and doctrines of Chemistry, Geology, Botany, and Meteorology, in their relation to the Science and Practice of Agriculture, in which Professor Buckland will receive important assistance from the respective Professors of these departments of Science in the Provincial University. Mr. Smith, the able Veterinary Surgeon to the Board of Agriculture, will treat on the anatomy, physiology, and diseases of farm animals, and give practical instructions in dissecting.

This course, like that of last winter, will be specially adapted to the wants of young men practically engaged in the work of the farm, with a view of eliciting a spirit of enquiry, and the love of knowledge, in relation to their every day pursuits: a principal object being *to put them in a way of observing and studying for themselves.*

The course will be open to all, *free of charge;* so that the only expense, except for a few text works, would be board and lodging for a few weeks. Further particulars may be obtained by addressing Professor Buckland, University College, Toronto.

MR. GEORGE MILLER'S SALE OF THOROUGH-BRED STOCK.—On the 17th ult., Mr. George Miller, of Markham, had a sale by auction of his surplus stock, and a number of animals were disposed of at very reasonable prices. Mr. W. B. Telfer, of Elora, carried off a short-horn yearling Bull for $56, and a Bull Calf for $50. Mr. Robert Calicot, of Tyrone, purchased a Short Horn Bull Calf for $80. Mr. James Somerville, of Vaughan, got a Short Horn Bull Calf for $71. Mr. J. J. Davidson, of Ashburn, bought a three-year old Durham Heifer for $84. Mr. John Thomson, of Whitby, got another for $69. Mr. William Weld another for $78, and a third for $131½. Mr. Weld also got an Ayrshire Bull Calf for $28, and a Yearling Ayrshire Heifer for $50. Mr. G. Story, of Brougham, carried of an Ayrshire Yearling Bull for $55, and Mr. Robert Miller, of Brougham, a Cow of the same breed for $90. In the Galloways, Mr. Wm. Hood, of Guelph, picked up a Bull Calf for $70, a three-year old Heifer for $80, a Yearling Heifer for $52½. Mr. George Sheppard, of Thornhill, bought a Galloway Bull Calf for $42, and a three-year old Heifer for $42½; Mr. Alex. A. Brodie, of Uxbridge, a three-year old Galloway Heifer for $43; and Mr. R. L. Denison, of Toronto, a Galloway Yearling Heifer for $41, and a three-year old for $45.

A number of Grade Cows and other stock, went off at fair prices.

"LADIES' COLUMN" AND "BOYS' CORNER."—"*Frank Fairfield*" has our best thanks for his lively letter. He will see that we have anticipated his wishes to some extent in the Household Department. Our Correspondent says:—

"A certain Gallic King once said, 'I rule France, and the Queen rules me!' Now, without saying we 'men' are all in the delectable position of his French Majesty, it must, nevertheless, be admitted that the ladies are not without great influence; many of them are admirable gardeners and florists; and many a beautiful residence in Canada owes its perfection to their superintendence and care. Then the boys—they are to be the men of twenty to thirty years hence—if they are to be imbued with principles of improvement and progress, and taught physical as well as moral beauty, it is all-important to interest *them* as early as possible. If, therefore, you wish your little journal speedily to become 'Familiar in our mouth as Household Words' in every family throughout the country, do not overlook devoting a space to matter interesting to these important sections of the community.

"The lighter department, in which really much useful advice and suggestion, much 'fact and fancy,' may be contained, occasionally prettily illustrated, need not occupy any inordinate space; and funny little things suitable for the boys, likely to attract their attention to graver things, bye-and-bye, would follow. And if it be true that even

"'A little nonsense now and then
"'Is relished by the wisest men,'

how much more likely by the boys and the little misses, not forgetting their mothers and grown up sisters. Therefore, provide mental food suitable for all. Papa may, in the first instance, send in his subscription, but if not reminded by those about him he may happen to forget to renew it at the year's end. Only interest all his household and *they won't let him.*

Horticultural Department.

In assuming the duty of conducting this Department, we hope to be able to make it indispensable to every one who cultivates a rood of ground in Canada, and to so fill these columns that our readers shall turn to them with the assurance that they are faithfully devoted to their interests, and that here they will be sure of finding the latest and most reliable information upon all subjects affecting Canadian Horticulture. If the Ladies desire to plant a Flower Garden, we hope to be able to give them valuable hints to aid them in the selection of suitable plants and seeds, and in the best method of growing them, so that there shall be no want of beautiful flowers from earliest Spring to latest Autumn. Is it desired that the Lawn should be set with Ornamental Trees and Flowering Shrubs, we hope to be of service in guiding to the choice of those that are not only desirable for their beauty but for their hardihood and ability to endure the rigor of our climate. In the Fruit Garden also we shall try to make ourselves useful, by showing which are the most luscious and prolific kinds of strawberries, rasberries, currants, grapes, and other fruits, and by giving some practical suggestions as to the best methods of planting and training. And in planting an Orchard we expect to be of essential service, by showing what fruits and which kinds have been found to be hardy and productive, or may be expected to prove so in the several parts of the Province; by giving the results of our own and of others' experience upon the most suitable soils and aspects, the best mode of planting, pruning and cultivating, the kinds to be selected for family supply, or those to be chosen with a view to profit for marketing

Profits of Apple-Growing in Canada.

THE products of horticultural skill have already assumed commercial relations of no inconsiderable magnitude, and the trade in fruit, even now a large business, is increasing in importance with every year. The growing of fruit for market has been found in many parts of the adjoining Republic to be a very profitable employment, and it may not be amiss if we here inquire whether we might not hope to find it equally remunerative. In the examination of this question we will, for the present at least, pass by the finer fruits and consider only the apple. Not that pears, peaches, grapes, strawberries, &c., cannot be grown with profit, but because we are all better acquainted with the raising of apples, and knowing something of what is the usual yield, and for what they will sell, will be able to form an opinion upon the correctness of our estimates. To write about pears and estimate their value at from eight to fifteen dollars per barrel, or about strawberries, and estimate the yield at one hundred bushels per acre, might seem to some as anything but a satisfactory basis for rational calculation.

That there are portions of the Province eminently adapted to the cultivation of the apple is abundantly shewn by the beautiful samples of this fruit that are exhibited every Autumn, and which, on being sent home to the Exhibition of the Royal Horticultural Society, elicited expressions of admiration and surprise. Which those sections are is even now in a good degree indicated by the recent Report of the Fruit Growers' Association of Upper Canada, and their more exact limits will before long be determined by actual experiment The selection of the right locality, one where the climate is such that the trees grow well and bear regularly, and where the soil is adapted to the perfect development of both tree and fruit, is a most essential element of success. Another important element will be the selection of the proper varieties, those that combine in the highest attainable degree attractiveness of appearance, excellence of quality, exemption from injury in transportation, and from decay by keeping, combined with vigor of the tree and early and continued fruitfulness. On these points much might be said, and at some future time we may recur to them, but for the present we must content ourselves with supposing that all these things have been duly considered and judiciously decided.

In submitting the following estimates we are aware that it is impossible to make them strictly accurate, but we believe they are placed so low that no one can be misguided; that, in fact, the experience of the careful cultivator will prove the growing of apples to be much more profitable than we make it to be; but we prefer, if we err, to err on the side of caution, and to base our estimates upon no questionable assumptions. We will therefore suppose that such land as is required for a good orchard will bring the large rental of eight dollars per acre per annum. Taking a piece containing twenty acres, it will require to plant it, at forty feet apart each way, six hundred trees. These can be had of reliable nurserymen, of the very best quality, for twenty dollars per hundred. We will put down the cost of planting them at forty dollars, and the cost of keeping the ground thoroughly cultivated at $150 per annum. The expense for the first year will be:—rent of 20 acres, $160; cost of trees, $120; planting, $40; cultivating, $150; total, $470; for the second and subsequent years the expense will be, rent and cultivation, $310. We will suppose that no crop is taken from the ground after it is planted with trees, and that the trees do not yield any fruit for the first five year. At the end of five years we shall have expended:—first year, $470; four subsequent years, at $310 each, $1,240; total, $1,710. Taking the sixth and seventh years together, we may expect enough fruit to make the average yield for each year from each tree to be worth twenty-five cents, and that the yield will now begin to increase, so that we may safely estimate the value of the fruit from each tree to be, for the eighth year, fifty cents; for the ninth year, one dollar; for the tenth year, one dollar and fifty cents; and for the eleventh year, two dollars. Should we realize this very moderate sum from each tree we shall have received at the end of the eleventh year from our orchard the sum of $3,300, and it will have cost us for the first year $470, and the subsequent ten years $3,100, making in the whole $3,570, leaving only a balance of $270 against the orchard. Suppose we allow another year's crop, or $1,200 more, to cover this balance, and any unforeseen casualties, errors, or other unestimated expense, then at the end of twelve years we shall have an orchard that has produced enough to repay the first cost of trees, planting and cultivation, and an annual rental of eight dollars per acre. If the orchard should now die would the investment prove a failure? How many farmers make their crops of grain, extending over a period of twelve years, to yield a clear annual rental of eight dollars per acre?

An orchard at twelve years from planting is in truth but at the commencement of its productiveness, and having, upon our supposition, been well cultivated, may now be expected to yield for the next twenty years an average annual crop of four barrels to each tree. This fruit is worth, on the tree, not less than fifty cents per barrel, and in some seasons is worth twenty-five or fifty per cent. more. But we will not increase the estimated value of the crop beyond the sum set down for the twelfth year, and will suppose that the cost of cultivation is now increased to two hundred dollars a year. We shall then be reaping from this twenty acres a clear annual rental of fifty dollars per acre, or the snug little income of ten hundred dollars per annum.

But twenty years is a long time, and perhaps apples will not be worth fifty cents a barrel on the tree during all that period. Perhaps they will not; but do apples sell for any less now than they did twenty years ago? Are you aware that we are each year consuming two hundred and fifty thousand dollars worth of fruit beyond what we produce? and that this excess of consumption over production is steadily increasing? By looking into the trade returns it will be seen that the importation of fruit into Canada for the year 1859 was $252,000; for 1860, was $285,000; for 1861, was $310,000; and for 1862, was $454,600. During the year 1861 the value of the fruit exported was $12,258, and in 1862 it was $18,032, thus showing that in 1861 we imported more than we exported to the value of over $297,000, and that in 1862 our importations of fruit exceeded our exportations by over $436,000. How much of this is fruit that might have been grown in Canada may be inferred from the fact that of this the amount that came from the United States, under the operation of the Reciprocity Treaty, was $284,600 in 1860, $309,000 in 1861, and in 1862 $431,600. There can be no doubt then that we have been consuming in Canada, at a cost to the country that has risen from $270,000 in 1860, to $413,000 in 1862, a quantity of fruit that might have been grown by our own farmers. Were we to reduce the amount imported for home consumption in 1862 to apples at the prices allowed in the above estimates, it would be equal to 826,000 barrels of apples, requiring, at the yield per acre above estimated, six thousand eight hundred and eighty-three acres of apple orchard to meet the present deficiency of production. It is no doubt true that a considerable part of this importation consists of peaches, pears, grapes, &c.; how much, it is not in our power to show; yet we know enough to be certain that we are importing or home consumption a quantity of apples alone, that will require many hundreds of acres of orchard to be brought into full bearing before our own home wants will be supplied. And when we shall have succeeded in meeting the full measure of the home demand, what an illimitable field stretches beyond! The fruit growing region—that in which the apple can be produced in perfection—is comparatively very small. The apples of Ohio, of the entire West and South-west, will not keep throughout the winter, as do those of Western New York and Canada. The whole of the vast Prairie country has been found to be not well adapted to the growing of apples. The fruit dealers of Boston, New York, Philadelphia, Chicago and St. Louis, now look for their supply of long-keeping varieties to a few counties of Western New York. Besides all this, away across the Atlantic, the Home Country even now can afford a satisfactory advance upon apples worth a dollar and a half per barrel at our own door. And yet we have made no allowance for increase of population. Are our cities to grow no larger, our villages not to become towns, and our towns cities? The fear, in truth, is not that we shall have too much fruit, but that we shall not be able ever to come up with the demand that has already got so far the start.

But if the price should fall, what then? How much must it fall to make the apple orchard an unprofitable investment? It is not like a fall in most articles of commerce, where a decline of twenty-five per cent. is a very serious affair, and a decline of fifty per cent., involves bankruptcy; but after sustaining a decline of fifty per cent. it will still yield a clear annual rental of twenty dollars per acre. So that in all the contingencies that seem likely to happen, we find that an apple orchard of good fruit, judiciously selected and carefully cultivated, promises to be a desirable investment.

But it is objected that not many of our farmers can afford to spend three thousand dollars and wait twelve years for their returns. This may, indeed, seem to many to be a formidable difficulty, but it is only in the seeming. Only a very small part of this sum is actually money spent. The land is his own upon which the trees are planted, the horses and implements are his with which it is cultivated. His only real outlay is one hundred and twenty dollars for the trees, and perhaps an extra hand on the farm for six months in the year, to cultivate them. He is cultivating twenty acres, against which he writes down for rent $160, and $150 for cultivation each year, expecting that at the end of twelve years they will have yielded him a sum equal to the sum total of these amounts in return for the labor he is bestowing. And who that deserves to be called a farmer is not doing the same continually? He builds a barn at a much larger immediate expense, not expecting the cost to be returned until after years of patient waiting. He purchases choice stock at high prices, looking to the improvement of his herd and flock in coming years for repayment. He lays down draining tile at considerable immediate outlay, hoping to reap it again in larger and better crops to be grown in years to come. In like manner he plants an orchard and waits for the returns. If he seem to wait long, is he not well paid for his waiting? A clear yearly income of ten hundred dollars, from twenty acres, that have already paid back all outlay, is worth how many years of waiting?

THE AGRICULTURAL COLLEGE IN PENNSYLVANIA is now in successful operation. It is situated near the Alleghany Mountains. Four hundred acres of land are connected with it. The college building is immense, costing one hundred thousand dollars. The course is four years, and students are educated for practical and scientific farming.

When to Plant Fruit Trees—Fall or Spring?

The Fruit Growers' Association addressed this inquiry to every Horticultural and Agricultural society in Upper Canada, besides sending it to many gentlemen interested in the culture of fruit. About fifty replies were received, and the committee charged with the preparation of the report, state that not more than one-fourth of them were in favor of fall planting; a few expressed the opinion that the time *when* is not of as much importance as the manner *how*. A letter was received from a gentleman who stated that he had for some time been engaged in selling trees, and had made large deliveries, both in the fall and spring; that on going over the ground the following season, he had invariably found on all soils that the trees planted in the spring succeeded best; and states, as the result of his observation, that the spring is the most favorable by at least twelve per cent. Some of the answers received recommend that the trees should be procured in the fall, laid in by the heel during the winter, and planted out in the spring; others recommend the spring for stone fruit, while some again make it to depend upon the soil—preferring the spring if the soil be clay; on light soils, the fall. We prefer to set out in the spring; for the reason that the frosty winds, so prevalent during the winter, seem to dry up the trees when transplanted in the fall, thereby injuring and sometimes destroying their vitality. There can be no objection to taking up the tree in the fall and laying it in by the heel, if it be properly done, for in this way it is not exposed to wind and frost as much even as if left standing where it grew. It is often desirable to pursue this method in order to have the trees at hand, ready to be planted at any convenient time in the spring, and that we may obtain a better selection from the nurseries than sometimes it is possible to do in the spring. Before another season we shall endeavor to express our views of the proper method of heeling in, at least in Canada, and so illustrate the matter by appropriate engravings that the merest novice need not err.

Fruit Culture.

Never since the settlement of the country, we think, have the fruit growers of Western New York reaped such a golden harvest as the present season. The crop was large, the fruit fair, and the prices have been more than remunerative, for streets in the neighborhood of the docks and shipping warehouses have been blockaded with barrels of apples, and we observe the same state of things along the line of railroad and canal, all through the Western part of this State. The local papers in several of the leading villages have given estimates of the amounts received by the farmers in their s[illegible] localities, and also the number of barrels s[illegible]ed, but these, in most cases, are quite incomplete.

We have long thought that the leading business of Western New York would be the production of fruit for shipping. This opinion we have expressed on several occasions, and time only confirms the statement. Many this year will agree with us, who would not have done so before. The farmer who has in his pockets $500 or $1000, as the profits of a small orchard has an argument on this subject which he is not anxious to resist.—*Rural New Yorker.*

Cranberry Culture.

Why is it that this fruit is not cultivated and sent to market by more of our enterprising farmers? The *Boston Cultivator* gives an account of a swamp belonging to Dr. A. D. Miller, located about twenty-five miles from Boston, Mass., across which he constructed a dam; in the winter the swamp was flowed, and gravel drawn on to the ice and spread. In the spring the water was let off, and the ground planted with Cranberry plants, in drills, eighteen inches apart. The part planted contained about fourteen acres, and was so arranged that it could be covered with water, retained in a reservoir higher up on the brook, in a little more than an hour; thus protecting the plants from frost at any season. The crop this season was 1,100 barrels of very choice fruit, some of which brought fifteen dollars per barrel, though the average price was about twelve dollars per barrel. If the Canadian producer cannot get more than five dollars per barrel, in what way will he make fourteen acres of swamp yield him a harvest of five thousand dollars more easily than by planting it with cranberries?

Double Portulaca.

This beautiful novelty is proving itself worthy of all the praises that heralded its introduction last spring. It was hard to believe that we were to have portulacas as double as roses, and of not less than half a dozen different colours. But these astonishing promises were very satisfactorily fulfilled. About seventy-five of the plants produced perfectly double flowers, nearly an inch in diameter, of several shades of yellow and red, and a few of them striped. In habit, the plant resembles the common portulaca, flowering even more profusely. It does not bloom well in a cool or shady place, and in wet or protracted cloudy weather, the buds dropping off without opening; but under a cloudless sky, exposed to the full rays of the sun, it flowers abundantly. The seeds do not germinate fully, and, for the present at least, we must be satisfied if we succeed in getting more than half of them to grow.

Grape Culture.

The *Maine Farmer*, speaking of the cultivation of grapes in that cold State, says that he is more than ever encouraged to believe that they will succeed in raising grapes not only for the table but for wine, and gives as his reasons, 1st, the introduction of new and earlier varieties, such as the Hartford Prolific, Clinton, Concord, Northern Muscadine and Delaware; 2nd, that although the past season was not a favorable one for the grape, the show of fruit was of a superior character; and 3rd, because they now had nurseries in the State where plants could be obtained that had become acclimated, and could, therefore, be planted with but little risk of loss.

If such expectations are correctly based upon such reasons, there surely can be no doubt but that we can grow grapes abundantly in Canada. Care is needed in the selection of vines to procure only those that have been grown from sound, healthy, well ripened wood; else the plants, if they live at all, will be feeble and unproductive.

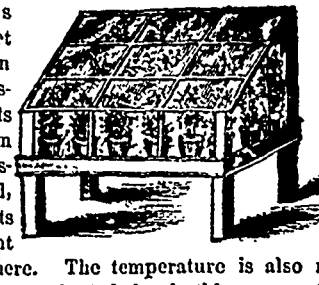
Protecting Trees in Winter.

Young trees are liable to the attacks of field-mice at this season, and no time should be lost in securing them from their ravages. Any one who has had a nice young orchard girdled by these little depredators, or even lost some favorite tree by reason of their sharp teeth, will appreciate the amount of mischief they are capable of doing. One very desirable point is to keep the ground in the vicinity of the trees so perfectly clean, free from weeds, grass, and all other material wherewith they can make themselves comfortable, that they will not stay with you, but seek their winter quarters where they can find something wherewith to build their "nests." But if this has not been done, a couple of horse-shoe draining tiles set so as to inclose the tree will prevent them from getting their teeth to the bark, though if the snow should fall so deep as to cover the tile, it would be necessary to add another story, lest they take advantage of the increased elevation afforded by the snow. Common wrapping paper thickly coated with tar, and wound around the trunk of each tree so as to reach from the ground above the snow line, and securely fastened by a little wire, will be found to keep them off. Heaping the earth around the tree to the height of a foot or so, and trampling the snow around the tree after each fall of snow, may be of some benefit, but is not a sure protection.

Preparing Soil for Gardens.—There are several reasons why the soils of gardens should be made better than for ordinary farm crops. 1. Most of the products of gardens are of a succulent nature, or will otherwise bear high feeding, such as garden *roots* in general, plants whose *leaves* furnish food, as lettuce, cabbages, &c., or those which produce large and succulent fruits, as cucumbers, melons, squashes, &c. 2. As nearly all garden crops are the immediate food of man, while many farm crops are only the coarser food of animals, greater care and skill may properly be applied in bringing the former forward to a high degree of perfection. 3. The great amount of family supplies which may be obtained from a half acre garden, provided the best soil is prepared for their growth, renders it a matter of equal importance and economy to give the soil the very best preparation. It rarely happens that there is much selection to be made in soils as we find them in nature, for gardening purposes, unless particular attention is given to the subject in choosing a site for a new dwelling. Generally, we have to take the land as we find it. Unless, therefore, we happen to find it just right, we should endeavor to improve it in the best manner. The principal means for making a perfect garden soil, are *draining*, *trenching*, and *manuring*.—*Annual Register.*

House Plants in Winter.

We present our readers with an engraving of a very neat, convenient, and cheap flower stand. It is made of wood, the sides glazed with ordinary window glass, and the top can be covered with a window sash, either fastened with hinges or not, just as you please.



This stand is much better than an open one, for the reason that the plants are kept free from dust, and the moisture is confined, so that the plants have a constant humid atmosphere. The temperature is also made more uniform, the plants being in this way protected from sudden alternations of heat and cold that may take place in the room. The great difficulties in growing plants in the house are the excessive dryness of the air, the great heat of the rooms, and the frequent changes of temperature. All these are in a great degree obviated by this simple contrivance. Let it face the window where the bright sunlight streams in the longest, for plants will not be vigorous unless they have the direct sunlight during some part of the day. Never use a glazed pot or porcelain jar, but always a common clay pot. Let there be an inch of broken crock or charcoal at the bottom of the pot, that any surplus water may readily drain off; and never allow water to stand in the saucer, if you use one. At night, if there be danger of the plants being chilled by remaining near the window, the stand may be rolled out into the middle of the room. In this way there may be no lack of flowers all the winter. A few of the profuse-blooming roses, such as Hermosa, which is a pale rose colour; Aimee Vibert, pure white; Gloire de Dijon, beautiful creamy yellow; and Sanguinea, a rich deep crimson; with the scarlet Tom Thumb geranium, and a few of the most distinct Verbenas, such as Africa, a dark purple; Defiance, a brilliant scarlet; King of Sardinia, a deep crimson; and Evening Star, a scarlet with lemon eye; will make a most delightful collection of plants that will keep up a constant bloom all the winter.

The Planting of the Apple Tree.

BY WILLIAM CULLEN BRYANT.

Come, let us plant the apple tree!
Cleave the tough greensward with the spade,
Wide let its hollow bed be made
There gently lay the roots, and there
Sift the dark mould with kindly care,
And press it o'er them tenderly,
As round the sleeping infant's feet
We softly fold the cradle sheet,
So plant we the apple tree.

What plant we in the apple tree?
Buds, which the breath of summer days
Shall lengthen into leafy sprays;
Boughs, where the thrush with crimson breast
Shall haunt, and sing, and hide her nest
We plant upon the sunny lea
A shadow for the noontide hour,
A shelter from the summer shower,
When we plant the apple tree

What plant we in the apple tree?
Sweets for a hundred flowery springs,
To load the May wind's restless wings,
When, from the orchard-row, he pours
Its fragrance through our open doors,
A world of blossoms for the bee;
Flowers for the sick girl's silent room
For the glad infant sprigs of bloom,
We plant with the apple tree

What plant we in the apple tree?
Fruits that shall swell in sunny June
And redden in the August noon,
And drop, as gently airs come by
That fan the blue September sky,
While children, wild with roisy glee,
Shall scent their fragrance as they pass,
And search for them the tufted grass
At the foot of the apple tree.

And when above this apple tree
The winter stars are quivering bright,
And winds are howling through the night,
Girls whose young eyes o'erflow with mirth,
Shall peel its fruit by cottage hearth
And guests in prouder homes shall see,
Heaped with the orange and the grape,
As fair as they in tint and shape,
The fruit of the apple tree

Each year shall give this apple tree
A broader flush of roseate bloom,
A deeper maze of verdurous gloom
And loosen when the frost-clad wave,
The crisp brown leaves in the air shower,
The years shall come and pass but we
Shall hear no longer, where we lie,
The summer's songs, the autumn's sigh,
In the boughs of the apple tree

And time shall waste this apple tree,
O, when its aged branches throw
Thin shadows on the sward below,
Shall fraud and force and iron will,
Oppress the weak and helpless still?
What shall the task of mercy be
Amid the toils, the strife, the tears
Of those who live when length of years
Shall waste this apple tree?

Atlantic Monthly for January

VARIEGATED HEMLOCK.—Quite an addition has been made to our variegated evergreens by the accidental growth of a variegated variety of our hardy and well-known hemlock. This beautiful plant originated at the Evergreens, the residence of Dr. E. G Kelley of Newburyport. The discovery of this Silver Hemlock a hedge of small seedling hemlocks, this one showing was as follows:—In the Spring of 1856 Dr Kelley set out a marked difference in appearance, but not enough to discard it. Supposing it to be less healthy than the rest, he gave it a close trimming The new growth was still so very white and apparently fading, that he cut it the second time, and again every shoot was so destitute of the normal green that he concluded it would only survive for that year. The next spring the obstinate little tree grew more rampantly than ever, but with the same persistent haracter, and it then, for the first time, occurred to the proprietor that it was a distinct variety. It was, however, too late to incur the risk of losing it by removal, and it was not till the following spring after growing it in the hedge-row two years, that it was transplanted to where it could receive proper attention and development. The tree is now about seven feet high, in a very flourishing condition, and, indeed one of the most beautiful specimens of silver or variegated foliage. This is probably the only known variety of Abies Canadensis, the most graceful and hardy of all our indigenous evergreen trees. Dr Kelley proposes to call it *Argentea Kelleyi*.—*Hovey's Magazine.*

☞ CORN keeps best on the cob. Shell such only as is needed for winter use. The second quality, or smaller ears, if kept in narrow, well ventilated cribs, will make good food for commencing the fattening of swine next autumn.—*Genesee Farmer.*

Poultry Yard.

THE production and rearing of domestic fowls, though one of the lesser interests of the farm, is well deserving of more attention than it usually receives. It is an old proverb, that what is worth doing at all is worth doing well, and comparatively insignificant as this branch of rural economy may seem, it can be made to pay a handsome return for the time and trouble devoted to it. Moreover, a good supply of poultry and eggs all the year round, is no mean item among the conveniences and comforts of the farmer's home No agricultural interest, however small, can possibly be thrifty and prosperous if left to take care of itself. Many a farmer shakes his head in grave doubt whether it is profitable to keep poultry and what wonder if the hens are left to steal their nests; rats, &c., permitted to rob them of their eggs and the only taste of chicken ever got is now and then a half-starved biped, that has lived precariously, and been caught and killed "promiscuously" Every tiller of the soil has the facilities for keeping poultry profitably, and can, if he will, make them comfortable and thrifty. But in order to this, he must be willing to take a little care and trouble, in the way of providing houses, nests, and other conveniences With simple, inexpensive, yet suitable arrangements, very little attention will be required to make poultry-keeping both pleasant and profitable. The daily care of the poultry-yard,—feeding, watering and otherwise attending to the comfort of its inmates, may usually be left to the farmer's household. Properly managed, it will be rather an ammusement than a toil to them.

Taken in the aggregate, poultry and eggs form important articles of commerce, and could we get at the exact value of their annual production and consumption we should be surprised at the accumulations of wealth into immense totals. It is, however, only approximate estimates that can be made, yet these give some idea of the real importance of a branch of agricultural economy, which at first strikes the mind as trivial. Thus it is computed from reliable data, that the annual production and consumption of poultry and eggs in the United States cannot be less than $175,000,000. Monsieur de Lavergne estimates that the poultry of Great Britain for 1861-2 was of the value of twenty million francs ($4,000,000); while the total value of the two products—poultry and eggs—in France, at the same period, reaches two hundred millions of francs ($10,000,000.) This last estimated product leaves a large margin for exportation from France over and above the requirements for home consumption, which surplus is sent chiefly to England. In 1861, the whole value of poultry and eggs imported into England was £385,000 stg., or nearly $1,800,000. This, of course is independent of the large quantities raised by England on her own soil These figures are quoted briefly, to show the importance of this branch of rural economy in other countries, and thus to suggest its magnitude in our own. In relation to Canada, the only figures at hand are those furnished by the Trade Returns for 1862, viz.: Poultry exported, $20,546; Eggs ditto, $53,940; total, $74,486. All the poultry, and nearly all the eggs, were sent to the United States, and but for the unfavorable state of the money market, an immense poultry and egg trade might have been done in that direction. If there be added to the export returns the quantity and value of these articles consumed at home, it will be seen that the tenants of the poultry-yard are by no means to be despised, but are entitled to more appreciation and encouragement. While, therefore, we dilate on the merits of the Short-horns and Galloways, Southdowns and Cotswolds, Suffolks and Berkshires, we shall not forget the Dorkings, Spanish and Cochins, and their congeners of the poultry-yard.

FRESH EGGS ALL WINTER.—Hens will lay about as well in winter as in summer, if "circumstances" permit. To produce eggs well, fowls must be *comfortable*, and must have animal food. When the ground is open, and worms and insects abound, they get their own material. They must have gravel to keep their grist-mills in good working order, and lime to make the shells. Sometimes a hen drops a shell-less egg, but she is ashamed of the skinny, unprotected thing, and seldom does it twice. Sometimes she will drop an egg where its life is sure to be frozen out, but her instinct teaches her better, and she stops doing so, if possible. Here is the whole secret of having plenty of eggs all winter,—we have tried it long, and so have others, with good success always; and as eggs will sell well this year, owing to the high price of meats, we advise attention to the matter:

1. Give the fowls some warm, thoroughly sheltered place of retreat, and keep it clean. Take out all the droppings at least once a week: they are excellent guano, worth half the cost of the food. (We have a nice, plastered, warm room in the sunny south-east corner of the second story of the barn, provided with roosts and laying boxes, having the entrances turned so as to be out of sight of the rest of the poultry. Hens are modest animals, always seeking hidden places for nests A narrow enclosed stairs leading up from the barn-yard is freely used.)

2. Let them have unfrozen water always accessible. Semi-fluid eggs cannot be made out of dry grain.

3. Hens are not gluttons. Let them have grain in abundance, and they will eat only what they need.

4. Provide a wide box of gravel, earth, sand, ashes, and old plaster, or finely-broken oyster shells, for them to roll in, and to pick out such materials as they require.

5. Give them two or three times a week, if not daily, a moderate supply of *fresh* meat, (never any salt.) Nothing comes amiss—bits of cartilage, intestines, any waste scraps. They will pick bones very clean We depend upon a cake of scraps from the bone or glue boiler's. The hard scrap-cakes, of 50 to 100 lbs. each, which are sold at ¾ to 1½ cents a pound, are just the thing. This material does not decay, and the hens amuse and feed themselves by picking off little bits from time to time. The waste vegetables, clippings from cabbages, potato skins, cold potatoes left over (if not cooked in salt water,) are relished by the poultry, and turned to account.

The above simple directions, if rightly followed, seldom if ever fail to secure a full and profitable supply of eggs all winter.—*Am. Agriculturist.*

A PROFITABLE STOCK OF FOWLS.—The *Boston Cultivator* of December 12, makes the following statement:—Knowing that Hiram W. Jones, of Dover, Mass., had for several years paid considerable attention to the raising of chickens and the production of eggs for market, we requested him to furnish a statement in regard to the business. In compliance with that request, he has given us certain memoranda, from which it appears that on the first of January last he had 15 hens and two cocks, worth $8.50. From January 1st to November 30th, (eleven months,) the cost of food, consisting of Indian corn, buckwheat, and boiled potatoes, consumed by all the fowls on the place, was $23.75, making the outlay $32.25. During this period he sold 123 7-12 dozen eggs for an aggregate amount of $27.95. He also sold during the same time, 101 fowls of various ages, for $50.80. The stock on hand on the 30th of November, was twenty-seven hens and one cock, worth $14. The aggregate returns are therefore $92.75, deducting from which the value of the original stock and expenses, $32.25, and there remains $60.25.

No account was made of all the eggs required by a family of eight persons, which may be offset against the care of attendance, this being given by Mrs. Jones. All the eggs and chickens were taken by the market-man, who sold them in Boston, and the sums named were returned to Mr. Jones. The highest price obtained for eggs was 30 cents per dozen, and the lowest 18 cents, the average being a fraction less than 24 cents. More than half of the chickens were hatched before March 13th, and the sales commenced on the 6th of May, when six chickens were sold for $4.20. Of the eggs set 70 per cent., hatched, and of the chickens brought out, 90 per cent. were saved.

Mr. Jones states that his fowls are a cross between the Dorking and "old-fashioned barn-yard fowls." They have heavy bodies, with short, yellow legs. They are kept most of the time in their house and and yard, which is warm in winter and cool in summer.

A MAN'S boots get tight by imbibing water, but the wearer never does.

LADIES, please be sweet, but don't be too formal. Be roses, but dont be *prim* roses.

WHY is wealth left by a miserly parent like a grub

The Household.

"Good husband without it is needful there be,
Good housewife within is as needful as he."

So wrote, two hundred years ago, Thomas Tusser, a noted farmer and poet, in a quaint old book entitled, "Five Hundreth Points of Good Husbandry, united to as many of Good Huswiferie." The lapse of time has not diminished a whit the truth of this homely couplet. The maxim, "if a man would succeed well in his livelihood, he must ask his wife," is more applicable, perhaps, to the farmer's calling than to any other. No matter how well things may be carried on out of doors, unless there be thrifty and judicious management within doors, all will go wrong. The exercise of skill, prudence, and good judgment on the part of the farmer's wife, is called for in a great variety of ways. The poultry are usually her charge. She must superintend or personally perform the operations of the dairy. The flower-garden is also her sphere. Items of information concerning these matters, will be found under their appropriate headings in this journal. But there is also the department of the household proper, which we cannot but regard as quite important enough to claim a distinct place. Bread-making, the realm of cookery, and the entire round of domestic economy, furnish a vast number of topics on which it will be our aim from time to time to furnish useful and valuable information. The farmer and his family should thoroughly understand, and if need require, as it does in most cases, be able themselves to perform the duties respectively of the farm and farm-house. There is a happy medium between unintelligent drudgery and genteel contempt for household work, at which the farmer's wife and daughters should aim. They should be equally at home in the spheres of labor, and of intelligence and taste.

Among Hone's works there is this rhymed advice to the agriculturists of the date 1722 :

Man, to the plow,
Wife, to the cow;
Girl, to the sow;
Boy, to the mow;
And your rents will be netted.

These lines were happily travestied in the *Times* newspaper under the title of *The Farmer's Centenary Contrasted*, in 1822—in illustration of the causes of agricultural distress:

Man, tally-ho!
Miss, piano;
Wife, silk and satin;
Boy, Greek and Latin:
And you'll be *Gazetted*.

The above rhymes exhibit the two extremes between which there is a golden mean, whose realization is the true conception of a well-regulated farmer's household. We would by no means deprive the miss of her music, the wife of her nice dresses, or the boy of his classics,—but to aspire to these in ignorance and neglect of the essential every-day duties of busy prosy life, were folly indeed. Henry Coleman, one of the most distinguished of agricultural writers, after describing a farmer's daughter perfectly at home in the accomplishments of the parlour, but deplorably ignorant of the manipulations of the kitchen, and unwilling to touch broom, scrubbing-brush, or wash-board—the vulgar things!—very well observes, that Lot's wife would be of more use as a help-meet to a young farmer than such a dressed-up doll,—"for *she* could at least *salt his bacon.*"

The best legacy parents can leave their children is the knowledge and ability to help and take care of themselves. This is far better than a large fortune. In any circumstances, they will always have a couple of excellent servants ready to do their bidding, viz.: *their own two hands.* Ignorant incapables who need to be waited on, are indeed helpless and pitiable beings, easily disheartened at the troubles and difficulties of life, while the well taught and self reliant rise above them, and push forward to success.

As a first instalment of what we intend to do in the department of "The Household," we subjoin a number of items culled and condensed from our exchange papers, and from various other sources.

Sausage-making.—As this is the time for making sausages there are many who would be glad to see the following recipe, which has been tried and ascertained to be good:—10 lbs. meat; one pound of salt; three oz. pepper; half-pint of sage after it is pulverized.

Geranium Leaves for Cuts.—Miss Fry says it is not generally known that the leaves of geraniums are an excellent application for cuts, where the skin is rubbed off, and other wounds of that kind. One or two leaves must be bruised, and applied on linen to the part, and the wound will become cicatrized in a very short time.

Treatment of Burns and Scalds.—Cold water is the readiest, surest, most plentiful, and for these reasons the best remedy for burns and scalds. Use it instantly, it will remove pain and smarting; keep a cloth wet and cold upon the affected part four or five hours after the injury has occurred, a blister will never rise, and the skin will be quite free from pain afterward.

To make Head-Cheese, or Potted-Head.—Take the heads, tongues, feet, and other pieces, if you choose. Make them clean and soak them. Then boil until they will slip from the bones easily. Chop and season with salt, black pepper, cloves, sage or sweet marjoram rubbed fine. Mix well and place it in a pan; set a tablet on the top with a weight upon it. In two days it will be cold and fit for use. Turn it out and cut it in slices for tea, or suppers.

Winter Soup.—Take carrots, turnips, and the heart of a head of celery, cut into dice, with a dozen button onions; half boil them in salt and water, with a little sugar in it; then throw them into the broth; and, when tender, serve up the soup; or use rice, dried peas, and lentils, and pulp them into the soup to thicken it. With many of these soups, small suet dumplings, very lightly made, and not larger than an egg, are boiled either in broth or water, and put into the tureen just before serving, and are by most persons thought an improvement, but are more usually put in plain gravy soup than in any other, and should be made light enough to swim in it.

Salting and Packing Pork.—A correspondent of the *American Agriculturist* gives the following directions on this subject:—"I will tell you my mode after an experience of forty years. I allow the hogs to cool after killing; take out the bones [ribs and spine;] cut off the hams and shoulders; then cut the side pork into strips of convenient width; put in a quantity of salt in the bottom of the cask; then put in a course of meat, laying the pieces on the edges; then a covering of salt; then another course of meat, and so on until the cask is full. The whole is carefully kept covered with brine as strong as salt and boiling water will make, skimming the boiling brine so long as anything rises. The brine is put on cold, and I am careful to know that there is always undissolved salt in the barrel. It is not found necessary to scald the brine in spring. I sometimes use saltpetre and sometimes not. Hams and shoulders are salted in separate casks."

Carpet Sweeping.—Take a common wash-tub or some vessel large enough to admit a broom freely, and put in clean cold water to the depth of a foot or more Then take a broom (one partly worn, so as to be a little stiff, is the best), dip it in six inches or so, and hold over the tub, or go out of doors and knock off all the drops of water. This can be done most effectually by holding it in one hand and rapping it with the other on the broom corn above where it is wet. Commence brushing lightly at first, going over with it a second time, or more, and if your carpet is very dusty, do not sweep more than a square yard or two before dipping your broom into the water again; this will rinse off all the particles of dust adhering to the broom. Rap off the drops of water, as before, and begin again; continue to do so till the whole is cleaned. Should the water get very dirty before completing the room, it can be changed. One who has never tried the experiment will probably be surprised at the quantity of dirt which will be washed from the broom into the water. A carpet can be cleaned more effectually in this way than it can possibly be done with a dry broom, as the particles of dust adhere to the broom instead of rising to fall back on the carpet. There is no danger of injuring even a fancy carpet, if the drops of water are thoroughly removed from the broom. Let no one try this who has not time and patience.

How to Make Good Coffee.—"Thick as mud," muttered the husband of a shiftless wife who never made good coffee. "How is it that at C.'s and B.'s we always get such delicious coffee. Clear as amber, dashed with real cream, it is a dish fit for the gods—but this!" and a wry mouth, made in expressive silence, finished the remark. His wife fretted, and made some peevish reply. Had we known the parties we could have told them how clear, good coffee may always be had with little trouble or expense—thus:—To have good coffee it is best to buy a bag—if your purse be large enough—and roast it yourself, as required. When ground, beat it up well with a little cold water and white of egg, (one egg will do for three times), pour boiling water on it; then boil ten minutes; after which again pour in about a cup of hot water, and stand aside to settle for five minutes. In this way you cannot fail to have good coffee.

Three Hints for the Season.—Be sure and cover the bits of your bridles with leather, to prevent the frost making the mouths of your horses sore. It is downright cruelty to put an iron bit into a horse's mouth on a cold morning. If you doubt it, bit yourself some day when the mercury stands below zero.

When you cut India rubber, keep the blade of your knife wet, and you can then cut it without difficulty.

We have heard of and tested a great many kinds of waterproof blacking for winter boots. Let us tell you what we have tried for two winters, and found to be the best article we know of. When your boots are stiff and you think need oiling, wash them in castile soap-suds—oil before the leather dries, (you may use blackball or any kind of grease;) have a saturated solution of gum shellac in alcohol—anybody can make it, as all there is to be done is to dissolve in a pint or half-pint of alcohol just as much shellac as the liquid will take up—and apply this solution with a sponge to the oiled boots. In two or three minutes the shellac will dry and harden, and you will have a coating on your boots through which the water cannot by any possibility penetrate. Try it, reader.—*Germantown Telegraph*

A Dark House.—A dark house is always an unhealthy house, always an ill-aired house, always a dirty house. Want of light stops growth, and promotes scrofula, rickets, &c., among children. People lose their health in a dark house, and if they get ill they cannot get well again in it. Three out of many negligences and ignorances in managing the health of houses generally, I will here mention as specimens. First, that the female head in charge of any building does not think it necessary to visit every hole and corner of it every day. How can she expect that those under her will be more careful to maintain her house in a healthy condition than she who is in charge of it? Second, that it is not considered essential to air, to sun and clean rooms while uninhabited; which is simply ignoring the first elementary notion of sanitary things, and laying the ground for all kinds of diseases. Third, that one window is considered enough to air a room. Don't imagine that if you who are in charge dont't look to all these things yourself, those under you will be more careful than you are. It appears as if the part of the mistress was to complain of her servants and to accept their excuses—not to show them how there need be neither complaints nor excuses made.—*Florence Nightingale.*

Malaria.—This atmospheric poison has been proved to be caused by the decomposition of organized matter, and it exists to some extent everywhere. Vegetation both grows and dies, and in the soil its decomposition goes on at various rates. Soils generally are acidulous; but a rich, highly-manured, warm soil is alkaline. Where most alkali exists, there is a greater facility for the escape of vapours, such as we suppose to be hurtful. The extreme condition of putrescence may be very readily produced in a soil by artificial means; the use of a little ammonia, for example, more than vegetation will bear. The substances putrify until the whole becomes fetid in the highest degree. We have then a soil rich in organic matter and undrained—a swamp of the worst form if the soil be not very poor; worse, perhaps, than was ever seen in nature. It is artificial malaria. We can, then, produce malaria from the soil by fostering some of its tendencies.

Cold weather tends to produce acidity of the soil; hence malaria is always diminished with a lower temperature. When a warm alkaline soil is washed with water and exposed to the air, decomposition is stopped, and it sends forth less malaria. Drainage is the most effectual method of preventing malaria arising from swampy districts.

Why is a tender hearted person like a housekeeper with little furniture?

Desire is the bud, hope the flower, and enjoyment the fruit

Curing a Kicking Cow.

Among the early purchases, and among the animals that promised well, was a dun cow, which it was found necessary, after a few weeks of full feeding, to cumber with a complicated piece of neck furniture, to forbid her filching surreptitiously what properly belonged to the pail. Self-milkers are not profitable. I have faith in the doctrine of rotation, and the quick reconversion of farm products into the elements of new growth. But here was a case of reconversion so rapid, as to be fatal to all the laws of economy. It suggested nothing so strongly as that rapid issue of government money, which finds immediate absorption among the Governmental officials. Does the Government really milk itself? and can no preventive be found in the way of neck machinery, or other?

Another animal was admirable in every point of view. I found her upon one of the North River wharves, and the perfect outline of her form and high-bred action, induced a purchase, even at a long figure; but the beast proved an inveterate kicker.

The books recommended gentleness for the cure of this propensity; so does humanity; I concurred with both, in suggesting that treatment to Patrick.

"Gintle is it? And bedad, sir, she's too ould for a cure. I'm thinking we must tie her legs, sir; but if ye orders it, bedad i's meself can be gintle."

"Soh, Mooly—soh—(and a kick;)—soh, ye baste, (a little livelier,) soh (and a kick)—soh, blast ye!—soh, Mooley—sou—Katy—SOH—(and a crash;) och, you oul' baste ye,—take that!" and there is a thud of the milking stool in the ribs.

The "gintleness" of Patrick is unavailing. But the cow is an excellent animal, and not to be hastily discarded. Milker after milker undertook the conquest, but with no better success. The task became the measure of a man's long-suffering disposition; some gave over and lost their tempers before the first trial was finished; others conjured down the spirit by all sorts of endearing epithets and tenderness, until the conquest seemed almost made, when suddenly pail, stool and man would lapse together, and a stream of curses carry away all record of the kindness. We came back at last to Patrick's original suggestion—the legs must be tied. A short bit of thick rope passed around one foot and loosely knotted, then passed around the second and tied tightly in double knot, rendered her powerless. There was a slight struggle, but it was soon at an end; and she made no opposition to the removal of the thong, after the milking was over. With this simple provision, the trouble was all done away; and for a whole year matters went well. But after this there came a reformer into control of the dairy. The rope was barbarous; he didn't believe in such things; he had seen kicking cows before. A little firmness and gentleness would accomplish the object better; God didn't make cows' legs to be tied. The position was a humane one, if not logical. And the thong was discarded.

"Well, Patrick," said I, two days after, "how fares the cow?"

"And begorra, it's the same ould baste, sir."

A few days later I enquired again after the new regimen of gentleness and firmness.

"Begorra," said Patrick, "she's kicked him again."

A week passed, and I repeated the enquiries.

"Begorra, she's kicked him *again!*" screamed Patrick; "and it's a divil's own bating he's been giving the ould baste."

Sure enough, the poor cow was injured sadly; her milking days were over; and in a month she went to the butcher. And this advocate of gentleness and firmness was one of the warmest and most impassioned philanthropists I ever met with.

The moral of the story is—if a cow is an inveterate kicker, tie her legs with a gentle hand, or kill her. Beating will never cure, whether it come in successive thuds, or in an explosive outbreak of outrageous violence. I suspect the same ruling is applicable to a great many disorderly members of society.—*Ik Marvell.*

GIVE THE BOYS TOOLS.—We have so frequently spoken of the importance of a good set of tools on every farm, that we fear our readers will think the subject a favorite one with us. So it is, and at the risk of trespassing upon the reader's patience, we again present it. There is, in man, what may be termed, a "*making* instinct," and our houses, garments, ships, machinery, and in fact, everything we use, are the practical results of this instinct. How important then that this faculty be cultivated, and that the idea be at once and forever abandoned that none but mechanics require this great element of usefulness and happiness. Whatever a man's occupation, whether he be a farmer, a merchant, an artist or a mechanic, there are hourly occasions for its practical application. Being thus general in its usefulness, the cultivation of this constructive faculty should be a primary consideration with parents, but more particularly with farmers, who have sons whom they design to be their successors upon the farm. Skill in the use of tools is of incalculable advantage to him who tills the soil. It enables him to do many things which others cannot well do for him, and do them better and cheaper. It gives useful employment to many an otherwise idle hour. It prompts him to add a thousand little conveniences to the house and farm, which but for this skill would never be made. In a word, it is the carrying out, in a fuller sense, of the design of the Creator, when he implanted this faculty of constructiveness within him. Let it then be cultivated in children. Indulge the propensity to make water-wheels and miniature waggons, kites and toy boats, sleds and houses, anything in fact which will serve to develop it and render it practically useful. Give the boys good pocket knives, and what is better, give them a good workshop. Employed in it, they will not only be kept out of mischief, but they will be strengthening their muscles, exercising their mental powers, and fitting themselves for greater usefulness, when they shall be called upon to take their places in the ranks of men.—*Philadelphia Culturist.*

CARE OF HARNESS.—T. Oliver Ayres, a practical harness-maker, Kent Co., Del., contributes to the *American Agriculturist* the following suggestions: "Harness should be kept hung up on wooden pegs in a clean dry room with a plank floor, so that it may be free from dampness. When soiled, it should be washed with castile soap-suds. Harness that is in constant use needs oiling four times a year; if only occasionally brought out, as carriage harness, etc., twice a year will be sufficient, if the washing be not neglected. To oil harness, separate all the pieces, and lay them in water until thoroughly wet through. Then wash them clean, and allow them to dry sufficiently. To know when they are in good condition for oiling, bend a strap, and if the water does not ooze out, it is dry enough. Train-oil (whale oil) is sometimes used, but neats foot-oil is much better. Mix with it a little lamp-black, and with a brush apply it to both sides of the straps. About six hours after oiling, wash the whole with Castile soap and warm water, let them dry, rub well with a woolen cloth, and buckle them together."

Markets.

Toronto Markets.

"CANADA FARMER" Office, Jany. 11, 1864.

The supply of grain on the market is light. *Flour* in better demand for home consumption. Wholesale—Superfine $3 60 to $3 70 per bbl; Fancy $3 90 to $4; Extra $4 25 to $4 40; double Extra, $4 70 to $5. A good family flour may be had at retail for $4 25 to $4 75 a bbl., and Extra at $5.

Fall Wheat—in limited supply but good demand at from 80c to 95c for common to good; 95c to $1 03 for good to choice; $1 04 to $1 05 for extra.

Spring Wheat—very active and firm at 75c to 80c for common to good; 80c to 82c for good to choice.

Barley—steady and firm at 70c to 78c per bush.: extra samples bring 80c to 82c.

Peas—very active at 50c to 53c per bush.; extra 54c to even as high as 56c per bush.

Oats——in good demand at 40c to 42c per bush

Beef—on the street by the quarter 3c to 3½c per lb for fore-quarters; 4c to 4½c per lb. for hind-quarters; extra, 5c per lb. Retail 3½c to 6½c per lb.

Mutton—in the carcase on the street 3½c to 4c per lb.

Pork—in good demand, but the supply has been short for the last week, it is in consequence firmer and a shade higher; $4 37½ to $4 50 per 100 lbs. for common to good; $4 60 to $4 90 for good to choice; extra choice and heavy brings $4 90 to $5.

Hay—$9 50 to $10 per ton for good; $10 50 per ton for extra.

Straw—in good supply at $5 to $6 per ton.

Bran—$10 per ton; *Shorts*, $13 to $15 per ton.

Hides—(green) 5c to 6c per lb.

Calfskins—7c, 8c, and 9c, per lb.

Sheepskins—$1 60 to $1 90. *Lambskins* at this season of the year the same price as Sheepskins. Pelts 30c to 45c.

Calves—$4 and upwards.

Butter—scarce. Fresh, wholesale at 11c to 15c per lb., retail 15c to 25c per lb. Tub butter, dairy packed, wholesale, 15c to 18c per lb. for choice—inferior 10c to 14c per lb.

Eggs—wholesale, 12½c to 17c per dozen; retail, 18c to 20c and 25c per dozen.

Potatoes—25c to 40c per bush. wholesale, 50c to 62½c retail.

Chickens—plentiful at 25c to 40c per pair.

Ducks—30c to 45c each.

Geese—30c to 60c each.

Salt—$1 50 to $2 per bbl.

Water Lime—$1 50 per bbl.

Apples—common to good $1 to $1 75 per bbl: extra $2 to $3 per bbl.

London Markets. London, January 9, 1864. *Pork* trade brisk. Current rates $4 to $4 75. *Fall Wheat* 90c to 95c per bushel. Spring, 70c to 75c for extra. *Oats*, 35c to 40c. *Peas*, 50c to 53c. *Beef*, $3 to $4 50. *Butter*, fresh, per lb., 14c to 17c; do. keg, per lb., 12c. *Potatoes*, 75c to $1. *Eggs*, per doz. 20c *Wool*, per lb., 39c to 40c. *Hides*, dry, per lb., 09c to 10c; do. green, 04c. to 05c. *Sheepskins*, $1 25 to $2. —*Free Press.*

Montreal Markets.—JANUARY 9th.—*Flour.*—Pollards, $2.25 to $2.50; Middlings, $2.60 to $2.90; Fine, $3.20 to $3.40; Super. No 2, $3.70 to $3.80; Superfine, No. 1, $4.20 to $4.30; Fancy, $4.50 to $4.60; Extra, $4.80 to $4.90; Superior Extra, $5.25 to $5.50. *Wheat.*—U. C. Spring 90c. to 93c. ex-cars; U. C. Winter, 95c. to $1. *Oatmeal.*—$5.00 per brl. of 200 lbs. *Barley.*—70c. to 75c. per 50 lbs. *Peas.*—Good, 65c. to 70c. per 66 lbs. *Oats.*—About 40c. per 32 lbs. *Butter*—Fair to choice, 15c. to 18c.. *Pork.*—Mess, $13.50 to $14; Prime, dull, $10 to $10.50. *Dressed Hogs.*—$5 to $5.50. *Lard.*—Steady; barrels, 9c. to 9½c.; kegs 9½c. to 10c. *Tallow.*—8½c to 9½c. Fair business doing. *Cut-Meats.*—Hams, sugar-cured, canvassed, 9c. to 10c.; do. smoked, 6c. to 8c., Bacon, 5c. to 6½c.; Shoulders, 4c. to 5c. Prices strictly nominal; nothing doing. *Ashes* per 100 lbs., Pots, $5.17½ to $5.20; Inferiors, $5.20 to $5.22½; Pearls, $5.50 to $5.55. *Petroleum.*—Dull, at 35c. to 40c.—*Witness.*

Chicago Markets—JAN. 6.—Sales were at the range of $1 17½ to $1 18½ for No. 2 spring, and $1 11½ to $1 12 for No. 2 in store—closing firm but quiet. *Corn*—92c. to 92½c. for No. 1, and 91c. to 91½c. for No. 2 in store. New corn was in demand at 82c. to 84c. in store. *Oats*—Quiet; No. 1 in store at 66½c. to 66¾c. and at 63½c. to 64c. for No. 2 in store. *Rye*—$1 06 to $1 07 for No. 1 in store, and at $1 03 for No. 2 in store. *Barley*—Sales on track at $1 25 for No. 2, and $1 09 for rejected. *Beef Cattle*—firm at 3c to 4c for medium grades. *Dressed Hogs*—Were in light supply; sales at $6 10 to $7 35.—*Times.*

CATTLE MARKET—*Hogs*—The entered sales to-day at the various yards amount to 2,057 hogs at $5 00 to $6 50; but the bulk of the transactions have taken place at $5 70 to $6 50 per 100 pounds—the highest range on record for a considerable period. *Beef Cattle*—The whole receipts to-day amount to about 60 head of beef cattle; and the entered sales to 106, at prices ranging from $3 25 to $4 37½ per 100 lbs.—*Tribune.*

Albany Cattle Markets—January 9.—*Beeves* of every quality have advanced half cent. per lb. live weight. Prices ranging from 5c to 6¾c for the outside for choice extra. Demand quick. No premium in market. Receipts 2,500. *Sheep*—In active request at 6¼c per lb. for light common to 7c for fair; 7½c to 8c for good to extra heavy fine wooled. Receipts for week 5,000. *Hogs*—Sell quick at 7½c to 8c. Receipts light. Dressed hogs 9c to 9¾c.

Brighton (U.S.) Cattle Markets—Jan. 6. *Beef Cattle*—Extra $9 00 to $9 50; 1st quality $8 50 to $8 75; 2nd do $7 50 to $8; 3rd do $6 to $7 50 per 100 lbs (the total weight of hides, tallow and dressed beef.) *Hides*—9¼c per lb. *Tallow* at 9c per lb. *Lambskins*—$2 25 to $2 50. *Sheepskins*—$2 25 to $2 50. *Stores*—Two years old $16 to $25; three years old $25 to $50. *Working Oxen*—$85, $100 to $125. *Milch Cows*—$25 to $60. *Sheep and Lambs*—Lambs $4 50 to $7. Sheep 6c to 7c per lb; extra 7¼c. *Fat Hogs*—7c per lb.

Buffalo Markets—Jan. 8.—*Flour* at $6 00 for extra State; $6 25 for extra Wisconsin; $6 75 for Canada bakers'; $7 00 to $7 50 for double extra Ohio and Indiana. *Corn* nominal at $1 15 to $1 20. *Oats*—Market nominal at 71c to 72c for Canadian. Western 75c from store. *Barley*—$1 30 to $1 35. *Rye*—Nominal at $1 25 to $1 30. *Peas*—Quiet at $1 04 to $1 05. *Seed*—Timothy quiet at $2 75 to $3 for fair to choice. *Clover* quiet at $7 00. *Dressed Hogs*—Sale 77 Canadian this morning at 8¼c averaging 220 lbs.

New York Markets.—Jan. 11.—*Flour*—market firm; superfine State $6 30 to $6 50; extra $6 80 to $7 00; common to medium extra Western $6 96 to $7 65; Canadian flour steady; common $6 80 to $6 95, good to choice extra $7 00 to $8 90. *Wheat* firmer; Chicago spring $1 46 to $1 50; Milwaukee club $1 48 to $1 52; very choice amber Michigan to 56 to $1 61; winter red Western $1 56 to $1 61. *Corn* quiet; shipping mixed Western in store $1 26

to $1 27. *Oats* active; Canada 89c to 91½c; Western 91½c to 93c. *Pork* firmer; mess $.0 25; old mess $19 31 to $19 50; new mess $23 00; old and new prime $15 00 to $16 25. *Lard* firm—13c to 13¾c. *Gold* 152¾.

Cattle Market—very brisk. Beef Cattle from ½c to 1c per lb. higher than last week. Range of prices from 8c to 13c per lb. net. The bulk of the stock sells at 10c to 12c per lb. A lot of 40 Ohio Durhams took the highest figure. *Hogs*, excited; supply light; prices 6¾c to 7¼c per lb. live weight.

Wool.—The *N. Y. Journal* says:—"There is a good enquiry for fleeces at full prices. Coarse foreign is quiet, while clothing grades are firm and in good request. We notice sales of 75,000 lbs. fleeces at 75c to 80c; 28,000 lbs. super and extra pulled at 72c to 77c; 50 bales Mestiza at 27c to 36c—and 60 bales Cordova on private terms."

Advertisements.

CARDS OF THANKS.

AMELIASBURG, September 11, 1863.

TO THE PRESIDENT, Beaver Mutual F. I. Association.

SIR,—I beg to thank you for the liberal settlement of my claim against your office for loss by fire of my barn.

(Signed) DARIUS ORSER.

LOT 25, 6TH CONCESSION, ERIN, September 22nd, 1863.

TO THE PRESIDENT, Beaver Mutual F. I. Association.

SIR,—I beg to return you my thanks for your prompt and satisfactory settlement of my claim of $146 75cts., for loss of grain and barns destroyed by fire on the night of the 11th inst., which was caused by lightning.

(Signed) JOHN BURT.

Witness, W HOW, Sen., J. P.

OWEN SOUND, Oct. 16th, 1863.

TO THE DIRECTORS of the Beaver Mutual Insurance Association.

GENTLEMEN,—I beg to return you my thanks for the promptitude and satisfactory manner in which you have settled my claim for loss on my House and Furniture amounting to $466 35c. The fire occurred through defect in the stove-pipe, on the night of the 8th of October, and immediately on the notice of it being received by you, your inspector came up, and within a week from the time of the fire settled my claim,

I am, your obedient servant

JOHN GRAY.

LOT 5TH, 9TH CONCESSION, TOWNSEND, December 19th, 1863.

TO THE MANAGER of the Beaver Mutual Fire Association, Toronto

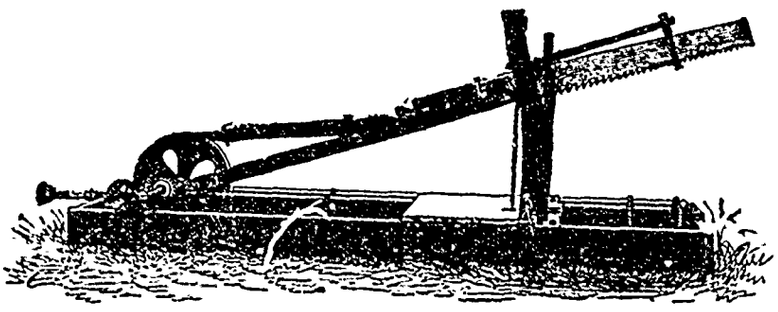
SIR,—I beg to thank you for your prompt and satisfactory settlement of my claim for loss by fire on my property on the 12th inst., amounting to One Hundred Dollars. The fire was the act of an incendiary.

I am, yours truly,

CHARLES H. GRANGER.

THOS. J. THOMPSON,
Secretary

Toronto, January 8, 1864. 1-1t



NOXON'S PATENT IMPROVED SAWING MACHINE, was awarded the EXTRA PRIZE at the Provincial Exhibition held in Toronto in 1862. It raises the Saw and zigs up the log by its own action, and is so simple that a child can operate it. They are not liable to get out of order, and are warranted capable of cutting from 70 to 80 cords of Wood per day.

All orders addressed to us at Ingersoll, C. W., will receive prompt attention.

J. & S. NOXON.

Ingersoll, January 6, 1864. 1

IMPORTANT TO FARMERS.—COE'S Super-Phosphate of Lime a Standard Manure prepared from Bones For all Field and Garden Crops *it matures the crops from ten to twenty days earlier.*

(Testimonial from Mr. GEO. MATTHEWS, Montreal)

COE'S SUPER-PHOSPHATE OF LIME.—Mr. Coe has received the following letter from Mr. Geo. Matthews, a gentleman whose testimony may be taken as conclusive of the value of the excellent fertilizer which Mr. Coe has introduced to the attention of the agriculturists of the Province:—

"MONTREAL, Nov. 3rd, 1863. MR. COE,—Dear Sir. I purchased from you last Spring half a ton of your Super-Phosphate of Lime. I used it on Indian Corn, Mangolds, Turnips, Carrots and Pumpkins, and at the same time I used a very powerful home made manure on similar roots, corn, &c., the result was, those manured with the home-made fertilizer produced very fine crops, but those manured with your Super-Phosphate far surpassed them, i.e. weight, colour and productiveness generally. I intend for the future to use it liberally.

I am, dear sir, yours truly,
G. MATTHEWS."

Manufactured at Montreal and Toronto by
ANDREW COE.

Put up in Barrels containing 250 lbs. each.

Offices { 38 St. Francois Xavier Street, Montreal. 3 Masonic Building, Toronto St., Toronto.

January 8, 1864. 1-1t

TO DAIRYMEN. A Dairy of One Hundred Good Cows, with the right of increase to two hundred, is offered to rent for one or more years The proprietor will furnish the necessary Buildings, Feed, Pasture, and attendance, and be entitled to the manure and the calves. The tenant to milk the cows, and pay for the milk he gets at a price per gallon to be agreed on, or the proprietor will provide the Cows and Buildings for a yearly price per cow, to be agreed on, and contract to deliver straw, hay and roots, and provide pasture, at fair rates.

No one but a thoroughly experienced and successful Butter or Cheese maker need apply; but with a really competent man, having sufficient means to carry on the business, a favourable arrangement will be made Apply, by letter post paid, to Mr. GEORGE BROWN, M.P.P., Toronto.

Toronto, January 8, 1864. 1-tf

EWES WANTED. Wanted Fifty good stock Ewes—Leicesters, pretty well bred. Address, stating ages and price ROBERT GOLLAN care of the Editor of the CANADA FARMER, Toronto.

Toronto, January 8, 1864 1-1t*

ST. CATHARINES NURSERIES.—D. W. BEADLE, Proprietor. Having enjoyed an experience of nearly ten years in connection with the late Dr. Beadle, I hope by careful attention to the wishes of my patrons to maintain the reputation of these celebrated Nurseries. I invite attention to my large Stock of Fruit Trees, Grape Vines, Ornamental Trees, Flowering Shrubs, Plants and Seeds. At the last Exhibition at Kingston I received the First Prize for the best thirty varieties of Apples; the First Prize for the best twenty varieties of Pears, and the First Prize for the best display of Fruit, and trust that these facts will be accepted as an evidence of my determination to furnish articles of first quality. My Salesmen receive a new Certificate every month. Beware of impostors.

St. Catharines, January 8, 1864. 1-1t

AGRICULTURAL BOOKS.—Farmers, Florists, and all interested in Agricultural Affairs, can find the best assortment of Agricultural Books, &c., at

JAMES BAIN'S,
16 KING STREET.

Langstroth on Bees,	$1 25
Quinby on Bees,	1 00
French on Farm Drainage,	1 00
Barry's Fruit Garden,	1 25
Allen's Rural Architecture,	1 25
Johnston's Agricultural Chemistry,	1 25
Thomas's American Fruit Culturist,	1 25
Phin on Grape Culture and Wine Making	1 25
Thomson on the Grape,	1 50
Dadd's American Cattle Doctor,	1 00
Flax and Hemp,	0 25
Tobacco,	0 25

Toronto, January 8, 1864. 1-1t

SEED AND IMPLEMENT WAREHOUSE.

ESTABLISHED 1836.

AGRICULTURAL HALL,
CORNER OF YONGE AND QUEEN STREETS, TORONTO.

THE Subscribers beg to inform the Farming Community and the Public generally, that they keep an extensive Stock of

Field, Garden, & Flower Seeds,

Of the best quality; and in connection with their

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They have on hand a large and varied assortment of the most improved Agricultural Implements, Horticultural Tools, and useful Books for Farmers and Gardeners. Merchants, and Dealers in Seeds furnished with price lists on application.

JAMES FLEMING & CO.,
Seedsmen to the Agricultural Association of U. C.

Toronto, January 10, 1864 1-1t

THOROUGHBRED STOCK FOR SALE.—I have for sale SIX Durham and Four Galloway bulls, from 9 to 25 months old, and a few Females of the above Breeds. Cotswold and Leicester Sheep, male and female.

JOHN SNELL,
1-tf Edmonton, C. W.

CHEAP LAND. Lot Number Four in the Fourth Concession of Enniskillen, 200 Acres, and the West part of West half of Number fourteen, in the third Concession of Metcalf, 62 Acres—will be sold cheap. Apply to

I. G. HARPER,
1-1t London, C. W.

WINDSOR NURSERIES.—The Stock is very large and finely grown.—Particular attention is called to the following:—

DWARF PEARS 2 to 6 years old very fine, best varieties.
DWARF APPLES 2 to 6 do do do
STANDARD APPLES, extra size, commencing to bear.
Grape Vines, Currants, Roses, Ornamental Trees, Shrubs, &c.

Will be sold very low. Orders must be sent to the Subscriber, as no agents are employed. Catalogues will be sent to applicants.

JAMES DOUGALL.
Windsor, January 9th 1864. 1-1t*

PROSPECTUS
OF
The Canada Farmer,

A NEW (FORTNIGHTLY) JOURNAL,

AGRICULTURE, HORTICULTURE,
AND
RURAL AFFAIRS.

THE Subscriber has determined to make the experiment whether a first-class Agricultural Journal can be sustained in Canada. The services of an able agricultural writer as EDITOR-IN-CHIEF have been secured, and he will be assisted by an efficient Staff of Writers, Reporters, and Correspondents. First-class Artists and Engravers have also been retained to prepare Illustrations for the Paper. No exertion or expenditure will be spared to render the new Journal a worthy representative and advocate of the Agricultural interests of Canada.

In the conduct of THE CANADA FARMER, the following ends will be zealously laboured for:—

1.—To arouse public attention, by frank and temperate discussion, to all questions scientific, commercial, legislative or otherwise, specially affecting the farming interest.

2.—To stimulate the Agriculturists of our country to adopt an improved system of husbandry, by blending the lessons of modern science with the practical experience of the Canadian Farmer.

3.—To bring under the attention of our Farmers all improvements at home or abroad, worthy of adoption, affecting the management of FIELD CROPS—the BARN-YARD—the STABLE—the DAIRY—the ORCHARD—the POULTRY YARD—the APIARY—the KITCHEN-GARDEN—and the FLOWER GARDEN, and to excite an interest in the progress of Rural Architecture and Landscape Gardening, and in all that concerns the Domestic Economy of the Farm-house.

4.—To mark and report all improvements in Agricultural Machinery—foster new inventions—and promote the adoption of all labour-saving machines in the work of the farm and garden.

5.—To keep prominently under attention all that specially concerns the Dairy farmer and the [Grazier;—the best breeds of cattle—the best systems of feeding—the most approved process of cheese and butter making—the best mode of packing—and the best markets to sell in.

6.—To keep prominently in view whatever is specially interesting to the Sheep-raiser and Wool-grower—the breeds best adapted to our climate—the best systems of winter and summer management—and the varying prospects of the wool market.

7.—To afford the Farmers of Canada an ever open medium for addressing their brother Agriculturists throughout the Province, suggesting matters of common interest and advantage, and eliciting information or advice on practical questions of difficulty or doubt.

8.—To report concisely the Proceedings at Agricultural Shows, Fairs and Sales throughout the Province—note the condition and progress of the Herds and Flocks of prominent Stock-breeders, record the Importation of Thorough-bred stock from abroad, and publish Engravings of First Class Prize Animals.

9.—To watch and report carefully and promptly the actual state and probable prospects of the Produce Markets at home and abroad; and specially promote all movements designed to secure the best prices in the best markets for Canadian Farm Produce.

10.—To afford the Farmers of Canada a common medium where all who have for sale Live Stock, or Seed Grain, or Land, or who may wish to buy such, can make their desires known directly to the whole farming population of Canada.

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Communications on Agricultural subjects are invited, addressed to "*The Editor of the Canada Farmer,*" and all orders for the paper will be sent to

GEORGE BROWN,
Proprietor and Publisher.

Toronto, Jan. 1, 1864.