

THE MONTHLY FARMERS' ADVOCATE

Vol. 4] DEVOTED TO THE BEST INTERESTS OF THE COUNTRY. [No. 11

WILLIAM WELD,
Editor & Proprietor.

London, November, 1869.

Postage Prepaid.
Office—Richmond St., op. City Hall

THE FARMER'S ADVOCATE FOR 1870.

NOW is the time to subscribe! The remainder of this year's numbers FREE! Fourteen months for \$1, to New Subscribers if the cash is sent in at once. This paper is Edited by a Practical Farmer, and it furnishes accounts of the

AGRICULTURAL EMPORIUM

Where Seeds are Imported, Tested and Disseminated, and where information is given in regard to Stock and Implements. It is commended by Agricultural Societies and County Councils. No farmer should be without it. Agents wanted in each township and County where they are not yet established, to take subscriptions for the paper and solicit orders for Seeds and Implements. Terms of the Paper \$1 per annum in advance. Advertisements ten cents per line. Address, W. WELD, London, Ont.

T. STREET,
Land & Loan Agent
CITY HOTEL, LONDON.

TORONTO NURSERIES
ESTABLISHED 1840.
G. LESLIE & SON
PROPRIETORS.

EXTENT - - - 150 ACRES.

THE Stock embraces Trees, Plants, and flowers of every description, suitable to the climate. Priced descriptive Catalogues sent to applicants enclosing a two cent stamp. Address, GEORGE LESLIE & SON, Toronto Nurseries, Leslie P.O.

RAILWAY TIME TABLE G.W.R.
Trains leave London, going West, at 6.30 a.m., 12.45 p.m., 5.20 p.m., 2.30 p.m., 4.10 p.m. Going East, at 6 a.m., 8.50 a.m., 12.5 a.m., 1 p.m., 3.45 p.m.,

TO LET FOR FOUR YEARS.
A FARM containing 45 acres, 35 cleared. Good orchard in a high state of cultivation. House containing seven rooms, 1 1/4 miles from the city. \$100 per annum. Crops may be taken at valuation. Apply at this office.

CENTRAL DRUG STORE, No. 113
Dundas St., London. **E. PLUMMER & CO., CHEMISTS,** etc., dealers in Drugs, Chemicals, Dye Stuffs, Patent Medicines, etc., etc. m-o



E. BELTZ,
HATTER and Furrier, sign of the Big Hat and Black Bear, 85 Dundas Street, opposite entrance to Market, London, Ontario.
Trunks, Valises, Carpet Bags, Furs of all kinds. Hats and caps made to order. Cash paid for Raw Furs.

ALLEN'S LUNG BALSAM!

THE REMEDY FOR CURING

Consumption, Coughs, Bronchitis, Asthma, Croup, Diseases of the Throat, Pains and Oppression of Chest or Lungs, Difficult Breathing, and all the Diseases of the Pulmonary Organs.

This Balsam is introduced to the suffering public after its merits for the positive cure of such diseases have been fully tested. The formula from which it is prepared is referred to by the leading medical Journals as being equal to any prescription that can be made up for or such diseases by the medical faculty. The Balsam is, consequently, recommended by physicians who have become acquainted with its great success.

As an Expectorant it has no equal

It is composed of the active principles of Roots and Plants, which are chemically extracted, so as to retain all their medicinal qualities.

Ministers and Public Speakers

Who are so often afflicted with Throat Diseases, will find a sure remedy in this Balsam. Lozenges and wafers sometimes give relief, but this Balsam, taken a few times, will insure a permanent cure. Sold by all Druggists.

RHEUMATISM, NEURALGIA, DIPHTHERIA.

A Never Failing Remedy has been Discovered!

Every farmer should have it.
Every Lumberman should have it.
Every Sailor should have it.
Every Fisherman should have it.
Every Traveller should have it.
Every Physician (does have or) should have it.
Every Family in the world should have it.
And can have it by calling at the nearest Druggist and buying a bottle of

PAIN-KILLER.

Price: 15, 25 and 50 cts. per bottle. Buy none but the genuine made by

FERRY DAVIS & SON,
CANADA BRANCH DEPOT:
380, St. Paul Street, Montreal.

L. W. WARNER & CO.

Proprietors and Manufacturers of

Dr. Herrick's Family Medicines.

DR. HERRICK'S Sugar Coated Pills. Dr. Herrick's Kid Strengthening Plasters. Dr. Perrin's Fumigator for Catarrh. Harvell's Horse and Cattle Powder. No. 67 Murray Street, New York, and 280 St. Paul Street, Montreal, Canada.

LEONARD W. WARNER, WM. HENRY HALL,
WILLIAM MOLLER.

C. D. HOLMES,
BARRISTER, ETC.
DUNDAS STREET, LONDON, ONT. m c

WANSON'S FORCE PUMPS.

THE Subscriber begs to announce to the inhabitants of Middlesex and surrounding counties, that, having made some valuable improvements in these already celebrated pumps, he is now prepared to fill with promptness and dispatch, all orders with which he may be favored.

For cheapness, durability, simplicity of construction and ease in working, these pumps are unsurpassed by any now made in the Province.

They never freeze, and never run dry, and are capable of throwing water on any part of an adjoining building, and being made of quartered timber and well painted, they never crack from the heat of the sun. Several hundreds of these pumps have been put in, during the last two years, in London and vicinity, and are giving entire satisfaction. They need not be taken apart to make any repairs that may be necessary.

PRICE OF PUMPS.

No. 1, \$5 for top, 30 cts. a foot below platform. No. 2, \$4 for top, 25 cts. a foot below platform. No. 3, \$3 for top, 20 cts. a foot below platform. No. 4, \$2 for top, 20 cts. a foot below platform. This is a Churn Pump. No. 1 will fill a pail at from two to six strokes. No. 2, from four to five. No. 3 and 4 at six strokes.

Persons calling at the shop for pumps, or sending an order requiring them to be shipped from London, and stating depth of well before platform, will get them for one dollar less than at the above prices. Please to call and examine before purchasing elsewhere. Manufactured on lot No 31, 1st con., Westminster, one half mile west of the Wharfedale Road.

JOHN D. CLEVELAND, London P.O.

FOR SALE CHEAP

In Quantities to Suit Purchasers.

200 BUSHELS of Prime Alsike Clover Seed.
100 bushels of Daniel O'Rourke, Excelstor and Crown Peas. 100 bushels Early Rose Potatoes, all warranted true to name. Address, H. M. THOMAS, Brecklin, Ont.

HARRIS'S

CHAMPION CHURN

PATENTED 15th MARCH, 1869,

IS, Without doubt, the best invention for the saving of labor in the dairy. This churn works with ease, does its work satisfactorily and expeditiously. It only requires to be tested, and it is sure to be appreciated. It is now to be seen on the Fair Grounds. Examine it. I. A. HARRIS, Kerwood P.O. Inventor and Patentee.

PATENT RIGHTS FOR SALE.

W. W. GARLICK, VETERINARY SURGEON
and John L. A. Poett, member Royal College Veterinary Surgeons, England, and graduate of the Edinburgh Veterinary College, late Veterinary Surgeon to the Royal Horse Artillery and First or Royal Dragoons. Horses and cattle attended to, and medicine always on hand for Ring Bone, Spavin, Curbs, &c. Office, next door west of engine house, North street, London Ont.

The International Industrial Exhibition.

The International Industrial Exhibition which is now about to close, was held in Buffalo, commencing on the 6th of October and continued for one month. It was originated by, and is under the control of the Mechanics' Institute. This is the first exhibition of the kind, and it is the intention of its managers to continue it annually. It is a very good commencement, and it may be pronounced a success. The collections are numerous, and nearly all kinds of mechanical manufactures are to be found there. Several were in operation, such as Mill Gearing, Drilling, Sawing, &c. The two most important and novel things in this department that interested us most, were, first, a very useful grain separator, a large machine for separating oats and other small or large impurities from wheat. They are adapted for Grist Mills, and are manufactured by James Richmond, Lockport, New York. We hope to see them introduced into Canada. Second, a very superior Shingle machine, manufactured by Pierce and Co., Buffalo, capable of sawing 50,000 shingles in ten hours; this was at work and admired by all.

Agricultural Implements were not numerous represented. Carter's Ditching Machine appeared to attract more attention than any other new invention on the ground. It is considered cheap in comparison with the American prices for implements. There were several neat and efficient harvesting machines, but the prices charged for the majority of implements manufactured in the States, and the heavy duty prevent their introduction here; in fact it appeared to us that some of our implements might be taken to the other side and sold to advantage. We have long since advocated the necessity of a general trial of implements, and are pleased to see some of our exchanges taking up the question. Perhaps 1870 may have an international trial or inter-colonial test. Buffalo affords a very good position for an international trial, and Montreal would be a good position for inter-colonial trial or exhibition. The only agricultural implement in motion at the International Exhibition, was a small threshing machine from the Albany Agricultural works. There was a very small and poor display of fruit, roots, and flowers; in fact we believe that George Leslie, of Toronto, could make a far better display from his own grounds. There were numerous neat, useful and ornamental things to be found in the main building, but our business was to obtain information in regard to agricultural implements and seeds. In regard to seeds, there was no such thing to be found in the exhibition, and what more surprised us is, that we could not find such a thing as a seed ware-room or a seed establishment in Buffalo. We were informed that the seeds

are supplied by the different grocers. There are a few warehousemen near the shipping that occasionally purchase Timothy, Clover and Peas by wholesale, in connection with another business, such as butter, cheese, eggs, meat, feed, &c. Is it not surprising that in the commanding position Buffalo has, that nothing of that kind is established there? We also enquired about the nursery business, but that too is left for other localities. We could only hear of a person having some five acres near the city, and of another having fourteen acres some miles away. Leslie of Toronto, has 150 acres, and even this city will, in three years, outstrip Buffalo in regard to its capabilities of supplying fruit trees, plants, shrubs, &c.

The Emporium and its Results.

It is now some five years since we commenced to advocate the importance of establishing an Agricultural Emporium. This opinion was not hastily formed. Twenty-seven years practical acquaintance with the claims of Canadian husbandry, forced these conclusions upon us. Our climate seems to possess a power to rapidly exhaust the vitality of the most favored samples of wheat, and aside from the mere change attendant upon climate influence, the grain is assailed by various diseases, which eventually seem to become incorporated with the seed and render a change imperatively necessary. The experience of our oldest and best farmers will sustain the truthfulness of this statement. For some years we endeavored to protect ourselves from loss, by making frequent changes of seed and on a small scale laboring to prove what was best. To say that we did not often fail would be untrue, but in the aggregate we had reason to be satisfied with our efforts. Now and then we endeavored to give to others the information we had gleaned by experience, through the medium of public addresses and the press. But we were not satisfied and believed that we would be supported by the farmers in our present undertaking. The leading outlines of our plan were these:

First, to carry on a systematic course of testing seeds at our own farm, aided by others on whose care and judgment we could rely, in order to practically prove the relative value of different seeds for our climate.

Secondly, to establish an Emporium where manufacturers of agricultural machinery could store, and farmers procure, such implements as we could honestly commend.

Thirdly, to publish a paper wherein the result of these experiments would be published to the world, accompanied by general agricultural information, at the same time to pay attention to the best kinds of stock, and ascertain their different merits.

We have at our command, a large, capacious ware-room, with many valuable machines in it, and are in active correspondence with the leading manufacturers of Canada and the States. We have supplied many farmers with machines which have given general satisfaction. We will execute all orders sent to us, with promptness and our patrons can rest assured that we will

send no machine unless we can recommend it for the purpose for which it is desired. Thus have we accomplished the object for which our agricultural department was instituted. In the seed department, we have a large stock of tested varieties. To the readers of the FARMER'S ADVOCATE we can give accounts of our series of experiments. In its pages, from time to time, has appeared reports on testing, both from our own observation and from others. We have sent packages and bags of seed to almost every township in Ontario, and very few have complained. Many orders have been received from the Lower Provinces and the States. Some varieties so sent forth, have proved to be decided acquisitions to the country. Our aim has been and will be to send pure varieties, free from noxious weeds and true to name. Our efforts have been appreciated by many county councils, and resolutions of commendation have been passed. The Agricultural Association, at the London Provincial Fair, after viewing our display, passed a special resolution, calling attention to our labors, recognizing their worth, and commending the enterprise to the support of the farming community. There is no effort made to sell untried varieties, but those of proved worth. The FARMER'S ADVOCATE, started on the plan before alluded to, has become a favorite among practical farmers, and its columns have been filled during the past year with many valuable contributions to agricultural literature, not from theorists, but from men who "hold the plow and drive."

Intending purchasers of stock and sellers have been placed in communication by means of notices in its columns. Its circulation is steadily increasing, and it is, to day, winning for itself a high position in public favor. Thus we have given our plan and its fulfilment. What was at first an idea, has become a reality. But this has not been attained without labor and a large expenditure of money. We rely upon the well-wishers of agriculture to patronize us and repay the same. We are assured that our confidence is not misplaced.

SEEDS.—We wish to procure China Wheat and any good kind of Spring Wheat—the Rio Grande answered best with us this year. Every one of our readers should be sure and procure some Harrison potatoes, they will be perfectly astonished at the yield. They are of good fair quality, not badly addicted to rotting. We also commend to your notice the Norway Oats. Make money, and be the first to introduce them in your part. They will be required for seed by all your neighbors, as soon as they see them growing and hear of your yield.

TIMELY HINTS.—Feed your hogs early, it will save feed. Look to all water courses, perhaps you can make a ditch somewhere this fall. Do not spoil your turnip crops for the lack of air. There are as many spoiled from that cause as from freezing. A turnip is not much the worse for freezing, if not stored or fed when the frost is in. The least touch of frost will spoil any potato and if put with others may spoil a lot of sound ones. Protect young trees from mice, either have the ground all clean for many rods from a tree or bank up the young trees with earth about eighteen inches high. Some commend white-washing as far up the stem of the tree as mice can reach.

Abolition of Premiums.

It has been suggested, in several quarters, that the cause of agriculture would be better promoted were the system of premiums now offered entirely abolished. As fairs are now conducted a suspicion prevails that personal favoritism has more to do with awards than the real excellence of the articles to which they are assigned. As a general thing, a premium is of small consequence to the recipient aside from the notoriety it confers on the products of the party receiving it. In this sense it is a good advertisement, and probably pays well, but the trouble is that the judgment of a committee, however honestly made, is not always in accordance with that of the general public, hence the dissatisfaction frequently witnessed at the conclusion of an exhibition. By dispensing

with premiums altogether, it is thought the morals of fairs would be improved without any abatement of interest in them by the farming community. It is a question, however, which can only be solved by making a few experiments in holding fairs without the stimulant which premiums are supposed to supply.—*American Farmer, Rochester.*

Before seeing the above extract we heard two leading gentlemen from Elgin Co. advocating the above course, and suggesting the use of the money for other purposes for the advancement of agriculture. Who can estimate the amount of cash that is annually taken from our farmers by false representations of different kinds of seeds and implements. How many thousands of dollars have been lost on that patent roller scheme? How many thousands of dollars have been expended on the Surprise Oats at \$1 per quart, while the farmers could be supplied with as good a kind for \$2 per bbl., and how many thousands on the Maxamillian Strawberry. We could continue enumerating such things, but ask yourselves what papers in the Province have exposed these humbugs. Also enquire what paper has given the fullest and most reliable accounts of the testing of different kinds of seeds, and has been the means of disseminating the most information about the American Amber, the Treadwell, or the Deihl's Wheat? Has a loss been sustained by such? What paper brought the Westwell and

Emporium Oats, the Crown Peas, and the Chevalier Barley into notice? Who disseminated the Harrison potatoes over the greatest extent of country? What paper brought before the notice of the country the necessity of disinfecting the cars, to take stock to and from the Provincial Exhibition of 1868, when the cattle disease was so prevalent? What paper was the first to bring before the Agricultural Bureau the advantages of a general trial of agricultural implements? Is the testing of seeds and implements of importance, and should we have some place in the country

for such a purpose, and also a paper devoted to furnishing information about such, unbiassed by any party politics?

Now's the Time.

Send for the Prize List, get up a Club for this paper, and gain some of the Norway Oats and the Harrison and Early Rose Potatoes. Be the first to introduce them into your neighborhood. They yield enormously, almost incredibly. You will be sure to make money on them, and it will take years before all are supplied. Everyone wants them who has seen them.

in the spring. Read the directions for planting. They can heel them in, as it is termed; that is, dig a trench and bury the roots, and they will be ready for spring planting, and perhaps better than if planted this autumn. Those intending to order trees, either fruit or ornamental, for spring planting, should send their orders in early. They can send orders by us, as we imported trees last spring. We supply them from either Ellwanger and Barry's nurseries, or Geo. Leslie's. These are the best we know of, one in Canada, the other in the States. We fill orders at the same price as charged by them. We send catalogues for ten cents each, and would thank you for your orders on either nursery.



The Oak-Leaved Mountain Ash.

The above cut represents one of the varieties of these very ornamental trees of that class, as raised by the celebrated nurserymen, Ellwanger and Barry, of Rochester, N. Y. There are fifteen distinct species of the Mountain Ash supplied by that enterprising firm. The majority of farmers cannot afford these trees, as they are advertised at \$1 each, but they can, for one dollar's worth of labor, go into the woods at any time this fall, when the weather is not freezing, and procure a few maples and plant them; they may be too busy

KEEPING A FARM JOURNAL—

No doubt there are many farmers who commence business with a determination to keep a daily record of their operations on the farm, and the results of them. This resolve is carried into execution for a time, but after awhile intermissions in these jottings occur, and finally cease altogether. This delinquency does not prove that the practice is not a good one, and as an incentive to perseverance, we would cite a case of the man who commenced farm life barehanded, but eventually attained great wealth—a result he attributed in great measure to a daily journalizing of his farming operations—a practice kept up for forty-five years, and not then discontinued.

These daily memoranda were made in books of convenient size, each containing the records of a single year, and when full, properly labelled and filed away for future reference when desirable. They contained the number of fields farmed each year, the character of the crop, the estimated or actual yield, the amount of labor bestowed, the names of the parties employed each day, the rate of compensation, the daily receipts for stock and farm produce sold, money paid out, and for what purpose, the character of the weather, together with such reflections as the current news of the day supplied. This journal was uniformly written up each night just before retiring to rest, but when the party was absent, as was occasionally the case, it was the duty of the person in charge to make the necessary memoranda each evening.

These records were often appealed to to decide disputed points in regard to the weather and crops of particular seasons, and not unfrequently taken before the courts for the purpose of determining the date of particular local transactions. At

first these nightly records may prove rather irksome; but if the practice is kept up perseveringly for two or three years, it becomes a habit, pleasurable rather than otherwise, and profitable to the parties who steadily pursue it.

TO PRESERVE CABBAGE FRESH.—Cut the stem so that about two inches of it will remain below the leaves; scoop out the pith as far down as a pocket-knife will reach; then suspend them in an inverted position, by means of small cords, and fill the cavity from time to time with clean, cold water. By a similar treatment, cauliflower and celery may be preserved for some time in a cool place. It affords a very easy way to preserve green vegetables during a severe winter.

OUR FUTURE.

We assert most boldly that in no part of the British possessions is there a greater future than this, our Dominion of Canada, provided its government will take the matter in hand now, and prosecute public works with a vigor that would become them, and make themselves appear in the eyes of the world a progressive party, able to grapple successfully, and show they know the wants and requirements of the country, and intend to carry them into effect at once. A great deal of fuss and to do as been made in England this year about emigration to Canada, but so far it has ended in next to nothing, either through mismanagement, or else a spirit of parsimony. Let it be from what it will, the scheme is a failure here. There appears by the emigration returns at Quebec, that a much larger quantity have landed there this year than formerly; but the question for us to look at is, not how many come, but how many remain permanently. It is a notorious fact, that by far the larger majority who land there, never intend to stay, but use this route as the quickest and most direct mode of travel to the Western States—of prospects of which, and the inducements held out, they are quite conversant with. This is most unfortunate that we cannot retain a portion of these emigrants with us, more especially as other colonies and nationalities which have had their establishments and ramifications in the United Kingdom for years, to diffuse information and assistance on the places they represent. The efforts made on behalf of Canada, has caused them to look on with a jealous eye, and feeble as the attempt has been to bring our claims before the emigrating classes, it has induced these competitors to redouble their liberality, liberal as it was before; and the result is, they are alluring the majority, not only of the good sturdy agricultural laborer and mechanic, but a class that would be infinitely more of service to us—the small capitalist. While we write this, we have before us a prominent English paper, in which we see the Brazils have displayed in ten days, two ships with eleven hundred settlers. And how is this done? By having responsible agents all over, who are allowed ample scope and means to select good useful folks, and who are ever keeping the advantages of the place they represent before the public, and also by taking assiduous care of them on arriving out, and putting them in the way of procuring employment. Why cannot Canada do likewise? Our future depends upon the amount of population we can induce to come here, and now is the time to strike an energetic blow, more especially when many of the most influential of English papers are writing and exposing everything they can against Canada, and sneering at it on account of its apathy. This country and its resources are quite unknown to many thousands in the mother country. The confederation of the British North American Provinces was designed to make us stronger in every way, and that we should hold out inducements to capitalists to come here and be thus enabled to develop our resources, which in many respects remain almost untouched. Great stress has been laid on the recent acquisition of the Red River Settlement

and its advantages, but what will this avail us unless we hold out the most liberal concessions to tempt settlers to come there, and what is more, make a way to get there. We observe in a contemporary, recently—which makes some pretensions as an authority—an article advocating that England should at once build a railroad to our North-west; but perhaps there would be those at home that would ask the reason why we cannot do it ourselves, and raise the means the same as India, Australia, and the Cape of Good Hope have made theirs; and to show how such a proposition would be received there, we think we cannot do better than quote a portion of a leading article from a prominent London—England—paper. It says: "The Pacific Railway is unquestionably a success. Daily trains pass along the iron way, across the vast plains and through the thick forests. Merchants have recognized its advantages, and bullion is brought via Omaha by rail, instead of via Panama, by steamer. Every one who can afford it—and there are cheap emigrant trains to meet the wants of the poorer classes—can use the great undertaking to his or her advantage. But when so many people travel on the line and so much profit can be made out of it, it is curious the Canadians do not step forward and build a line from the Atlantic coast to the Pacific, through the Dominion. It would be a much better route than the American. There would be no such steep gradients, and fuel is far more plentiful and of much better quality. If the Canadians wish to profit by the great moor, westward, they must stay not on the order of their building, but build at once, and let all the world know and see that they are not a whit behind their Yankee neighbors across the line." We think this quotation speaks volumes, and will show us that we must rely on our own exertions and means, and we cannot see why we should not be in a position to compete with our sister colonies in every way. It is anything but gratifying to Canada to be thus plainly twitted upon our lethargy, but we must admit the soft impeachment.

If a railway is thought too great an undertaking for us, there is another invention that has been practicably tested in in England, and found to answer well, it is the wire tramway. It can be carried over any country without more engineering than a Telegraph wire. It is suspended on poles and drawn by horses, and several tons can be easily put into a car at a time, in fact it is an aerial railway, cheap to work, and could be laid down for about \$1000 per mile, and can be done as quickly as a telegraph wire. This might suffice for awhile, until we are in a better position. This tramway is very durable, and in case of an accident, is so constructed that it can be easily repaired. To conclude, we are among those who wish to see the connection between us and the North country more closely cemented if possible. We never wish to see either independence or annexation. Our motto is like the London costermongers, "stick to our standing if we don't sell a ha-porth"; but we feel certain, in order to do this, and to keep our position, we must wake up from our slumbers, and strenuously diffuse a spirit of progress in our public affairs; and those that should at once be taken in hand, are the questions

of Emigration, Agriculture, and the means of opening up a Railway communication to the Red River district. If these are at once assiduously attended to, we feel certain that our Dominion will compare favorably with any of Britain's colonies.

MOVING HARDY TREES IN AUTUMN

We were never a very ardent advocate of fall-planting. There are, however, certain kinds of hardy trees and shrubs that may be planted with safety at this time of year, even if they do not receive any special benefit from the operation. In the latitude of New York City and further south, we should not hesitate, and, in fact, think we should prefer to plant all kinds of hardy deciduous trees and shrubs in autumn, but north of this line, early spring is the safest time. But all hardy trees and shrubs, except evergreens that are to be moved in the spring, will be greatly benefited by being taken up this fall, and all broken and diseased roots cut off smoothly, and then heel-in the plants pretty deep, so that the roots will freeze but little, if at all, during winter.

One of the principal reasons why we advocate this heeling-in system is, that whenever large roots are broken or cut off in digging, it requires some considerable time for the wounds to heal sufficiently to enable them to throw out new fibres. It is well known to every horticulturist that whenever the ends of roots broken or crushed with a spade are made smooth with a knife in the fall, and then buried deeply in the earth, the healing or root-producing process will go on during winter, and new rootlets will be emitted from the wounds in spring much earlier than if this operation had been delayed until the latter season. There are many species of trees, like the maples, birch, and mulberry, that will bleed if transplanted in spring, but when taken up in the fall, their branches and roots pruned, and then heeled-in, they will be ready to grow without any further manipulation except the planting.

Tar is an excellent application for hard, dry, and cracked hoofs. It softens and penetrates the hoof, and gives it a bright, clean appearance; it also closes the cracks. Once used, the hostler will never be without it. Apply once or twice a week.

A REMEDY FOR SLEEPLESSNESS.—How to get sleep is to many persons a matter of great importance. Nervious persons, who are troubled with wakefulness and excitability, usually have a tendency of blood on the brain, with cold extremities. The pressure of blood on the brain keeps it in a stimulated or wakeful state, and the pulsations are often painful. If such rise quickly to the brain, chafe the body and extremities with a brush or towel, or rub smartly with the hands to promote circulation, and it will withdraw the excessive amount of blood from the brain, and they will fall asleep in a few minutes. A cold bath and a sponge, bathing and rubbing, or a good run or a rapid walk in the open air, or going up or down stairs a few times just before retiring, will aid in equalising circulation and promoting sleep. These rules are simple and of application in castle or cabin, mansion or cottage, and may minister to the comfort of thousands who would freely expend money for an anodyne to promote "Nature's sweet restorer, balmy sleep."

MARK TWAIN ON MR. BEECHER.

The Rev. Henry Ward Beecher's private habits are the subject of Mark Twain's latest contribution to the Buffalo Express. The whole article is extremely funny, but that portion which relates to Mr. Beecher's farming experience, is in the humorist's most extravagant vein, and quite equal to his best efforts. It is as follows:

"Mr. Beecher's farm consists of thirty-six acres, and is carried on strict scientific principles. He never puts in any part of a crop without consulting his book. He plows and reaps and digs and sows according to the best authorities—and the authorities cost more than the other farming implements do. As soon as the library is complete, the farm will begin to be a profitable investment. But book farming has its drawbacks. Upon one occasion, when it seemed morally certain that the hay ought to be cut, the hay book could not be found—and before it was found it was too late and the hay was all spoiled.

"Mr. Beecher raises some of the finest crops of wheat in the country, but the unfavorable difference between the cost of producing it and its market value after it is produced has interfered considerably with its success as a commercial enterprise. His special weakness is hogs, however. He considers hogs the best game a farm produces. He buys the original pig for a dollar and a half, and feeds him forty dollars worth of corn, and then sells him for about nine dollars. This is the only crop he ever makes any money on. He loses on the corn, but he makes seven dollars and a half on the hog. He does not mind this, because he never expects to make anything on corn, anyway. And any way it turns out, he has the excitement of raising the hog, anyhow, whether he gets the worth of him or not. His strawberries would be a comfortable success if the robbers would eat turnips, but they won't, and hence the difficulty.

"One of Mr. Beecher's most harrowing difficulties in his farming operations comes of the close resemblance of different sorts of seeds and plants to each other. Two years ago, his farsightedness warned him that there was going to be a great scarcity of water melons, and therefore he put in a crop of twenty-seven acres of that fruit. But when they came up they turned out to be pumpkins, and a dead loss was the consequence. Sometimes a portion of his crop goes into the ground the most promising sweet potatoes, and comes up the infernalists carrots, though I have never heard him express it just in that way. When he bought his farm, he found one egg in every hen's nest on the place. He said that there was just the reason why so many farmers failed—they scatter their forces too much—concentration was the idea. So he gathered those eggs together and put them all under one experienced old hen. The hen roosted over that contract night and day for eleven weeks, under the anxious personal supervision of Mr. Beecher himself, but she could not "phase" those eggs. Why? Because they were those infamous porcelain things which are used by ingenious and fraudulent farmers as 'nest eggs.' But perhaps Mr. Beecher's most disastrous experience was the time he tried to raise an immense crop of dried apples. He planted fifteen hundred dollars' worth, but never one of them sprouted. He has never been able to understand to this day, what was the matter with those apples."

Mark Twain concludes his sketch with a glowing eulogy, in which humor gives place to genuine admiration. "He has set his mark upon his epoch," says Mr. Clemens, "and years hence, when the people turn over the bales and bundles of this generation's ideas, they will find H. W. B.' stencilled on a good many of them."

DRAINAGE FOR ORCHARDS.

Every season may be said to teach a new lesson to the cultivator of the soil, fruit grower as well as farmer.

Let us consider what is the lesson taught by the season of 1869, and first, in what way has it been remarkable? It has been one of the wettest ever known. Rain, rain, from early spring to mid summer, with a very short intermission, has been the rule; until the soil has been soaked full and surface washed to a degree seldom known before.

It is needless to say that cultivation and a proper care of crops, have been simply impossible. If crops have grown at all, in many cases it has been in conflict with weeds which could not be destroyed.

Then what is the lesson taught us by this experience? It is written so that those who run may read DRAINAGE!

I think no one will differ with me in this statement. It is a thing which we partially realized before; but which the year 1869 has doubly demonstrated. I will briefly allude to a few of the reasons for drainage.

1. It renders the subsoil porous, and allows the water to pass through it, leaving it in a tillable condition, long before lands undrained can be tilled at all.
2. It presents to a large degree all surface washings.
3. It prevents baking and hardening on exposure to suns after rains.

Other valid reasons might be given, but these will suffice. To the question—what lands need under-draining, I would reply, all—or nearly so. Boggy soils need it to be rendered tillable at all. Flat lands need it, in order that the superabundant water may pass off. Nearly all land need it to give mellowness and moisture, and to prevent wasting. I conceive of no soil that would not be benefitted by draining except those sandy or gravelly subsoils sometimes found in our river bottoms.

What would be called good drainage may vary as to the character of the soil. Some require more, some less. Clay soils can scarcely be drained too much. Farms will not, soon, be drained half enough.

I have thus briefly hinted at what I conceive to be the lesson of 1869: I will add, that I believe a dry season, will teach the same lesson. Drainage is a panacea for excessive moisture, drainage is a panacea for drought. Complete and sufficient drainage will doubtless double the crops of many farmers.

But the cost, aye, there's the rub! It is a formidable item—whether we contemplate using tile and doing the work in the most thorough manner; or whether we only design to cut ditches. One thing is certain, it is in the power of every one to begin. The owner of a flat farm can this year open a ditch through it—next year he can do more. The owner of a village acre can lay one drain through it—next year add another,—and so on.

I shall inform myself more fully about cost, and give results in future.

We hope to see Carter's Improved Ditching Machine in every section we may visit. By what we have already seen, we believe it will be a profitable investment. Farmers can join together, if not needed by one alone, and order one.—[E.]

THE LARGEST VINEYARD IN THE WORLD.

California claims to have, in the Buena Vista estate, near Sonoma, the largest vineyard in the world. Some of the most noted vineyards in Europe do not exceed twenty or thirty, or sixty or seventy acres. The Buena

Vista has eight hundred acres suitable to the vine, and four hundred and fifty acres actually covered now. There are on the estate some vines planted thirty years, but the bulk of them were set out from 1854 to 1858, and additions have been made every year since. This year the grape crop is light. The vintage season will begin in Mid October and continue nearly to the end of November, during which time this estate will employ about 100 men; Chinamen of course. California champagne is the principal manufacture of this vineyard, and the inventory of last November showed a stock of 126,000 gallons of sparkling wines, with 40,000 bottles of champagne, on hand at that time.

WHEN TO REAP.—M. Isadore Pierre, Professor of Chemistry, at Caen, in France, has recently subjected the question of early reaping to a practical test. From the same field he cut a certain quantity of ears of grain on the 6th, 11th, 15th, 20th, and 25th of July extending his operations on each occasion over an equal space of ground. On the 6th the grain was rapidly increasing; on the 25th it was fully ripe, and was in the regular course of being reaped. M. Pierre carefully dried each sample of grain, and then compared them together as to weight. That reaped on the 6th was but little more than half the weight of that reaped on the 25th, the exact ratio being as 25 to 27. Another important advantage of the later reaping was in the greater nutritive power of the grain, which was much richer in nitrogenous substances and phosphoric acid, the early reaping suspending those important chemical changes in seed which are so necessary to fit it for the proper nourishment of man.

NEW VEGETABLE.—The Cheyenne correspondent of the Chicago Tribune mentions a new vegetable as follows: We have been enjoying the luxury of a new vegetable that has lately been discovered in great abundance on the plains. Mushrooms, of gigantic size and extraordinary flavor, have been found growing by hundreds of thousands all around Cheyenne. The writer saw one that weighed one pound, was twenty-one inches in circumference, and seven inches in diameter; stem two inches thick and five inches long. When prepared for cooking, the meat was thirteen inches from one rim to the other, and from one to two and one-half inches thick. I ate some of this monster fried in butter—and it would be safe to say, if the mushroom beds around Cheyenne were near your city, they would be worth \$100,000. Thus, every day, some valuable discovery is made in this new country.

Plaster of Paris or Gypsum on Wheat.

Plaster, chemically Sulphate of Lime, though one of the best fertilizers on grass, especially clover, does not answer for wheat. It encourages the growth of the straw at the expense of the grain, and causes it to remain green and succulent days after it should be ripe.

This exposes wheat to attacks of rust, and to the wheat midge. Fertilizers containing phosphates and potash should be applied to wheat soils to insure heavy crops. Their effect is always beneficial, and the chances for a good crop are greatly increased by ploughing down a crop of green clover a few months before the time for putting in the seed.—FARM JOURNAL.

The Value of Patents Contrasted.

We extract the following from the PRAIRIE FARMER:

"It may be asked what proportion of all patented inventions prove to be valuable to their projectors or to the public—One tenth? Probably not much more than that; but let it be remembered, there are few failures so harmless as that of a useless invention. The patent gives it a chance to prove itself worthy of the public patronage. It simply declares that if it be good, it shall not be stolen; but if it be useless nobody will want to steal it. But of all those who enter upon any occupation of life, how many succeed, and how many fail? How many young men have entered the bar, and have failed to take rank with Everts, O'Connor, or Brady? How many have launched their barks, laden with mercantile ventures, and have stranded, while Claffin and Stewart were sailing into port? How many have been moved to "start a paper," who have lived as long, but not to as much purpose, as Raymond, Bennett, and Greeley? I suppose that nine failures to one success is a very fair portion for the professions of the world, including that of the inventor; or, at all events, I do not suppose that the failures among inventors are more numerous than among every other class of workmen. As to property in inventions, I shall not stop to discuss it. That a man having, by long experiment, by patient thought, by brilliant genius, by the expenditure of time and means, conceived and brought to perfection and embodiment, some new idea, having created some new substance, put in motion some new machine, put some old force to new work, or given to some new force a field for labor, is not entitled to call this which he has done his own and to set his price upon it, need not, I think, be argued before honest men. If we owe nothing to the men who have made this century so illustrious by their great conceptions, then we owe nothing to anybody, and repudiation ought to be the watchword of the age.

A CASH DEBT DUE INVENTORS—HOW TO REWARD THEM.

"We do owe them much, not merely a debt of sentimental gratitude, but a debt payable in cash, which shall lift them above want, and place them upon such a pinnacle of happiness that the world shall say, "Thus shall it be done unto the man whom the nation delighted to honor!" How shall we give pecuniary consideration for inventions? There are two ways in which this might be done. One is by the purchase, for cash, by the Government, of all inventions for the use of the nation. This plan is met at the outset by the impossibility of determining the value. Every inventor supposes himself to have a fortune in every conception that he puts into wood and iron. Stealing tremblingly and furtively up the steps of the Patent Office with his model carefully concealed under his coat, lest some sharper shall see it and rob him of his darling thought, he hopes to come down those steps with the precious parchment that shall insure him a present competency and that shall enrich his children. I should think if he were offered a million, in the first flush of his triumph, that he would hesitate about touching it without sleeping over it for a night. Yet fourteen thousand millions would be a pretty heavy bill to pay from a treasury not over full.—Fourteen hundred millions might be thought an important addition to the National debt, or even one million four hundred thousand, which would be just \$100 apiece for all the patented inventions of 1869. I think, therefore, that we may set aside the plan of purchase as impracticable.

HOW TO DEAL JUSTLY BY THE INVENTOR.

"No commission could satisfy the inventor, and no price that we could afford to pay would take the place of the stimulus of the hope of unlimited wealth which now lightens his toils and shines like a beacon at the entrance of the harbor that he hopes to make. The other plan is to offer protection for a limited time, in payment for the new discovery. We may say to the inventor: "You have a valuable secret, which may benefit us. To disclose it without protection would be to lose it. To keep it would deprive us of its use. If you will disclose it to us by so describing it and illustrating it, as that we may fully understand it and may avail ourselves of it without difficulty, we will agree that for seventeen years you shall be protected in its use. You may make out of it what you can. When your limit of time has expired, we shall have it without further payment. We cannot pay you in money, we will pay you in time." I submit that this is a fair bargain. A new thought developed, explained, described, illustrated, put on record for the use of nation—this on the one side. The right to the exclusive benefit of this new thought for a limited time, and protection in that right—this on the other. This is the patent system. A fair contract between the inventor and the public—ideas paid for by time. It is manifest that the utmost good faith is required upon both sides. On the one hand there must really be an invention; no stealing of the ideas of other men; no crude notions resulting only in experiment. The inventor must have something to sell. On the other hand, there must be protection—no infringement, no piracy, no stealing of the soul of the invention, by clothing it in immaterial changes of form."

There may be plans for the advancement of public good brought forward, that cost quite as much as the invention of a machine, and when found to be of worth, the originators should be rewarded.—(Ed.)

DRAINING.—We are now instructed by Mr. Carter, the patentee of the First Prize Ditching Machine, to offer to the public this necessary and useful implement on such advantageous terms as you never yet heard of. Any reliable person in any part of the Dominion where they have not yet been introduced, may have one sent to them on trial, and if it does not perform the work to the entire satisfaction of the person wishing for a ditching machine, the machine will be taken back. Every one we have heard of, since it has been improved, says it gives satisfaction; and not one has been returned that we have heard of. For machine, apply to us; for rights to manufacture, apply to D. Stewart, Aylmer.

HOW TO MAKE MONEY!**Get up a Club for the "Farmer's Advocate" 1870,**

And gain the Norway Oats and the Harrison Potatoes. 90 bushels of Norway oats can be raised to the acre. 700 bushels of Harrison potatoes can be raised to the acre; many have exceeded these figures. Save the increase and your neighbors will repay you a handsome profit.

The FARMER'S ADVOCATE is a practical paper, devoted to Agricultural interests, and gives valuable information of the testing of seeds which is carried on in connection with the EMPORIUM. By taking it you obtain accurate knowledge of the best SEED STOCK and Implements and the best place to procure them. It is edited by a practical farmer, uninfluenced by politics and without government aid.

READ AND REFLECT.

The Governor General says our "undertaking is commendable, and should be continued."

The Provincial Board of Agriculture passed the following resolution at London in September, 1869:

Resolved, That the exertions made by Mr. Weld in improving and testing various kinds of Farm Ceals, and in diffusing a knowledge thereof through the medium of the Press, are deserving the encouragement and support of the farmers of this Province, and that this council will give to the object of improving and testing seed; its best consideration. Certified,

HUGH C. THOMPSON, Secretary.

Office Agricultural Association, Toronto, Sept. 30th, 1868.

The County Council approves of our course in this manner:—

We earnestly recommend the usefulness of the Agricultural Emporium established by Mr. Wm. Weld, of London, for the dissemination of superior stock, seeds and implements among the farmers of the Dominion, more especially at this time, when from the ravages of the midge and other causes, our wheat crops are diminishing yearly. The exertions of Mr. Weld to procure new kinds of seed are praiseworthy. We also recommend his paper, the FARMER'S ADVOCATE, to the support of all persons interested in the success of Agriculture. And your committee would also recommend Mr. Weld to the favorable consideration of the Legislature of Ontario, praying that honorable body not to overlook the claims of Mr. Weld to encouragement in the efforts he is making for the advancement of our Agricultural interests. J. KEEFER, County Clerk.

PRIZES FOR GETTING UP CLUBS

1st prize—Carter's Patent Ditching Machine	\$150
2nd do —The Little Giant Threshing Machine	100
3rd do —The Empire Seed Drill	70
4th do —Sell's Patent Cider Mill	30

The above prizes will be awarded on the 10th day of March to those that send in the four largest clubs. The cash sent must be double the value of the prize at not less than 75c. each.

Certain prizes to every one getting up a club for 50 subscribers at 75c. each, 1 barrel, 30 cents; 2 bags, 45 cents, containing 1 bush Norway oats, 45¢; 1½ bush. Harrison, \$1.25; half-bush. early rose, \$2. Total	\$8 00
Clubs for 20, 1 bag, 50 cents; half-bush Norway oats, \$2.50; ½ bush. Harrison's early rose, 1 peck, \$1. Total	5 00
Clubs for 20, 1 bag, 50 cents; 1 bush. Harrison's, \$1; 1 peck Norway, \$1.50; half-peck, early rose, 62½c. Total	3 12½
Clubs for 10, 1 bag, 25 cents; half-bush. Harrison's, 62½ cents; 4 lbs. early rose, 40 cents; 1 lb. Norway oats, 25 cents. Total	1 50
Clubs for 6, 4 oz. Harrison; 4 oz. Norway oats; 4 oz. early rose, per mail, post paid to any part of the Dominion. Total	75
Clubs of 4 at 75 cents each, 1 package, 4 oz. of any kind of seed, per mail. Total	25

Agent wanted in each Township to canvass for the paper and take orders for seeds, stock and implements.

The price of the paper is \$1 per annum, in advance, or 12½ cents per month, if in arrears. Agents can collect \$1, as we take nothing less for single subscribers at the office.

FOR SALE AT A GREAT BARGAIN 150 ACRES

Within 4 miles of this City. This must be disposed of at once, and no application responded to without knowing the parties to be bona fide persons in want of a farm. Apply to this office. 1-in.

DRAINING.—We are now instructed by Mr. Carter, the patentee of the First Prize Ditching Machine, to offer to the public this necessary and useful implement on such advantageous terms as you never yet heard of. Any reliable person in any part of the Dominion where they have not yet been introduced, may have one sent to them on trial, and if it does not perform the work to the entire satisfaction of the person wishing for a ditching machine, the machine will be taken back. Every one we have heard of, since it has been improved, says it gives satisfaction; and not one has been returned that we have heard of. For machine, apply to us; for rights to manufacture, apply to D. Stewart, Aylmer.

CHURNING IN WINTER.

"Churning under Difficulties," is the caption of an article in your Dairy Department, in which the writer wants to know if the trouble in churning is in consequence of his cows being old. The trouble is that cream raised in cold weather must be warmer when it is churned than cream raised in warm weather. While 60° to 62° is about the right temperature for summer, churning in winter it must be as high as 67°. Stir the cream and warm it till you get it to that pitch, and your butter will come in a few minutes and be solid and good and of good flavor, while if you attempt to churn it at 63° it will froth and foam and swell up, and if you succeed in getting butter at all, it will be white, frothy and bitter. The cream from old cows, treated in this way, will make butter as quick as cream from young cows. It is worth the price of your paper one year for butter makers to know this.—ONE WHO KNOWS, in *Country Gentleman*.

NORWAY OATS.—There has been various opinions expressed as to the comparative value of these oats. Many pronounced them a failure, owing to the vast quantity of spurious seed sold. This is usual on the introduction of new varieties, owing to the high price demanded, offering, as it does, such temptations to dishonesty. We have received several letters from our subscribers, praising the Norway oats, and the opinion seems to be gaining ground, that they are a most valuable addition to the seed grain of the country. In the States they are highly spoken of, and we give a few quotations from letters:

"The increase in yield is fully 100 per cent. over the other varieties, and the quality better."—W. P. Elliott, Knoxville, Tenn.

"My crop weighs 40 lbs. to the bushel. They are just what every farmer wants."—W. I. Anderson, Altoona, Pa.

"I will not sow any other kind hereafter."—W. B. Seymour, Iowa City, Iowa.

"The Norway Oats are not a humbug, as some suppose, but will yield more than any other variety in this country."—Report St. Clair Co. (Mo.) Farmers' Club.

"They are an improvement of vast importance to the West. Our farmers are advised to secure this seed."—Report of Meeting of Illinois Grain Growers, at Chicago.

"I measured one head 25 inches long, and any quantity over 20 inches. The oats 'pile right up on the heads,' and the stalks are strong enough to hold them up."—John Marks, Smyrna, Me.

"My Norways stood five to six feet high, and no lodging; common oats all lay flat."—J. H. Whitson, Boise City, Idaho.

"I raised as many Norways on one acre, as

I did of common oats on two acres equally as good land; and besides, the Norways are far better in quality, weighing 40 to 45 lbs. to the bushel."—W. H. Bishop, Leesburg, Ind.

"They are a most valuable addition to the grain resources of the country. They yield fully twice as much as other varieties of better quality."—W. Larimer, Crab Tree, Pa.

"I have been raising the large Irish oat; but my Norways have more than doubled on the other kinds, and are heavy, and of excellent quality."—E. F. Dodd, Van Buren, Pa.

COUNTY AND TOWNSHIP FAIRS.

We give the following items on the many fairs. If incomplete, will our subscribers supply the information in another issue.

The annual Exhibition of the Agricultural Society of the County of Lennox, held at Napanee, had 1,006 entries, and made \$466 at the gate.

Quite a number of cattle-buyers attended the Fall Show of Warwick, at Watford, last week. The fair was very successful, over 2,000 people being present.

The agricultural fall show of North Middlesex was held at Ailsa Craig last Tuesday and Wednesday. As usual in that section the show of brood mares, and colts and fillies, down to yearling stock, was large and excellent. The entries numbered in all twelve hundred.

The Agricultural show of the township of Howard was held at Ridgetown, on the 12th inst. Mr. Wright showed a bag of English horse beans said to be the first grown in Canada. Six hundred entries.

The first cattle fair for Parkhill, county of Middlesex, was held on the 5th inst., at which about 500 head of excellent cattle stood for sale.

The agricultural fair of the South Riding of Huron, held at Seaforth, realized \$372 at the gates.

The East Gwillimbury agricultural show was held on the ninth inst., at the picturesque village of Sharon. Sheep were the special excellency.

The fall show of the Bertie Agricultural Society, was held at Ridgeway. The entries amounted to 387.

Over 300 head of cattle were brought to the Elmira monthly fair last week, and about 200 head changed hands at fair prices. Butter to the amount of 4,000 lbs. was sold.

There were over two hundred cattle at the last Harriston Fair, and buyers mustered in strong force. Cows and steers averaged about \$25.

The annual Agricultural show of the South Brant Society was attended on the second day by about 6,000 persons. The cattle and sheep exhibited were excellent.

The Agricultural fair for the county of Peel, held last week at Brampton, was like a Provincial Fair on a smaller scale. It is estimated that 15,000 people attended it, and the entries were 500 over last year.

The Bothwell agricultural exhibition held at Thamesville on the 6th inst., was attended by an immense crowd of people. There were altogether 1139 entries. The cattle were excellent, and in grain, roots, dairy and domestic products, the show was equal to any held in the eastern districts.

The annual fall show of South Riding of Perth took place in St. Mary's on Tuesday and Wednesday, and was beyond question the best, largest, and most successful exhibition ever held by the Society. Two thousand tickets were sold, realizing the handsome sum of \$200 for the Society's funds.

The eighth annual exhibition of the Grey Branch Agricultural Society, was held at Ainleyville on Tuesday the 12th inst., and the exhibition, in all its departments, was decidedly in advance of anything formerly seen in this Society. The entry of horses, cattle and sheep, was unusually large.

The Usborne Township Show came off at Rogerville, on Wednesday, 7th inst. The exhibition in sheep was really fine; in horses passable; in cattle scarcely ordinary.

The Erin Township show held on the 19th inst., was a magnificent display of horses, grain, and general products. In horses alone, 116 competitors were shown in the ring. There were about 1,100 entries, nearly one-seventh the number at the Provincial Exhibition, and about 2,500 people visited the show grounds.

Paris had two great days during the holding of the North Brant Agricultural Exhibition. Some of the finest stock and products of the Province were shown. There were 260 entries in horses alone, and the total entries reached nearly 2,000.

The annual fair of the township of Chatham, held at Wallaceburg, on the 14th inst., was one of the best township exhibitions ever held in the county, in produce, cattle and horses.

The Pakenham Falls Cattle Fair, held at Pakenham village last week, was largely attended by buyers, and all the cattle brought to the ground were sold to parties chiefly from a distance. Beeves sold for \$35 and upwards, the average being five cents per pound. Milch cows sold for \$20.

The Agricultural Show of the North Riding of Waterloo received at the gate \$167 on one day alone. About 4,000 persons present, and the entries exceeded 1,400.

Ingersoll had a Union Exhibition last week, composed of the South Riding and North and West Oxford and Ingersoll Agricultural Societies. The arrangements were complete, and the show was a success. The receipts at the gate were about \$300. The exhibition of dairy, produce, and roots, is said to have been superior to that of the Provincial Exhibition.

The Drayton fair last week brought together nearly 300 head of cattle for sale.

The Trafalgar Township show had no less than 1011 entries in the different classes. About \$86 was taken in for tickets at 10 cents.

Hay Fall Exhibition came off on Tuesday, at the flourishing Dutch Village of Zurich.

The Annual Fall Show of Howick, held on the 11th inst., is said to exceed anything of the kind ever held here, both as regards quantity and quality.

The Stanley Branch Agricultural Society show took place in Varna on Wednesday, 7th inst. The display was fair.

READING FOR FARMERS' BOYS

But for the co-operation of my boys I should have failed. I worked hard and so did they. The eldest is nearly twenty-one, and, other boys in the neighborhood, younger, have left their parents; mine have stuck by me when I most needed their services. And I attribute this result to the fact that I have tried to make home pleasant for them. I have furnished them with attractive and useful reading; and when night comes and the day's labor is ended, instead of running with other boys to the railway station and adjoining towns, they gather around the great lamp, and become absorbed in their books and papers. Such is substantially the testimony of a farmer who has known how hard the struggle for a footing on free soil without capital is, and how valuable and comparatively cheap are the aids which good reading brings to him.—FIRESIDE.

FAIRS—UNITED STATE.

We will attempt to give a brief sketch of the leading fairs held among our neighbors for the current year.

NEW ENGLAND FAIR—Met at Portland, Maine, on September, 9. The number of entries was very large. The show of cattle was large and of superior quality. Several of the most prominent herdsmen of the continent, were represented. The herd of Short Horns of Mr. Cochrane of Quebec, was a noted feature. Horses were few in number, but some fine animals were shown. The celebrated Norman horse "Conqueror" was entered, and attracted crowds. A change in breed was noticeable. Hithert's light built roadsters have been the prevailing taste, but now there is a demand for a heavier style. The other departments were fairly filled.

NEW YORK STATE FAIR.—The 29th exhibition was held at Elmira, on the 29th. Sept.,

fairs at the same time. The total number of entries was only 2,086, or a little more than one fourth the number of our Provincial Exhibition.

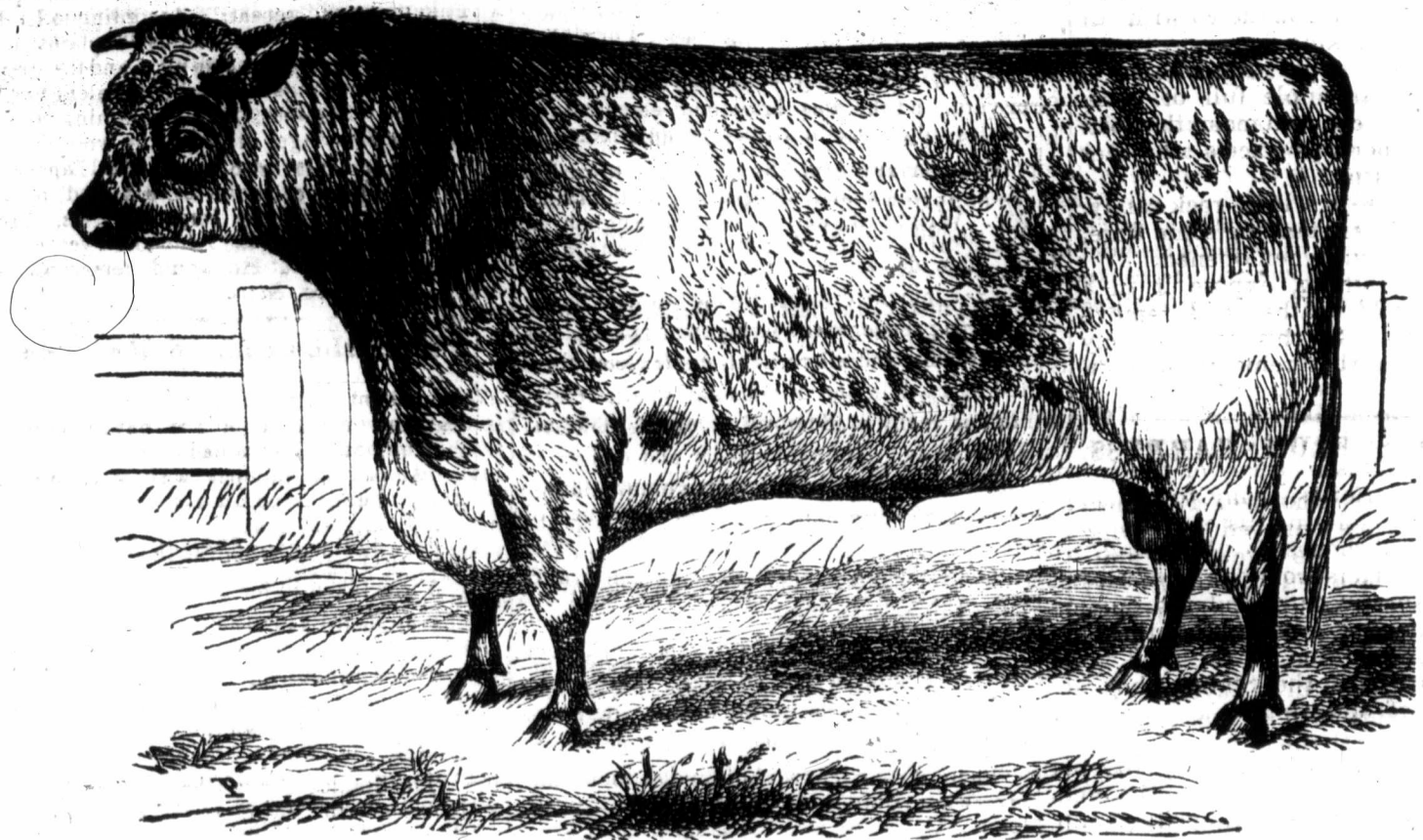
AGRICULTURAL LITERATURE.—The first agricultural newspaper printed in America, the *American Farmer*, made its appearance in 1830, less than fifty years ago. How would the enterprise and ambition of its valiant editor, John S. Skinner, have been excited by the idea that, within half a century, some of its successors would enroll on their subscription lists the names of one hundred and fifty thousand persons, thereby exciting the surprise and admiration of the old world! Magazines, periodicals, and papers devoted to horticulture furnish testimony equally gratifying; and where, within the knowledge of some present, there was but one horticultural journal published in our country, there are now numerous monthlies and other periodicals whose columns of editorial and other appropriate matter compare favorably with the best European publications of the day. Nor is this all. Thousands of secular and even religious papers have special columns on these subjects, without which their success would be doubtful.

Lavina.....Hon. Geo. Brown.....	90
Lady Harrington, Samuel Ferguson, Chinguacony	95
Betty Bedford.....Samuel McColl, Elgin.....	130
Rosalie.....Irvine Diamond, Prince Edward	126
Louden Tom.....Hon. Geo. Brown.....	189
Telegram.....Geo. Purvis, South Lanark.....	225
Louden Duke of Solway, John Gowan, Jarvis	156
Albert Edward.....W. Whitlaw, Gueiph.....	130
Darling Duke of Solway, N. Bethel St. Catherine	125
Clifton.....B. Watson, Chinguacony.....	100
Prince Imperial.....E. Jeffs, Bonc Head.....	175
Rams brought from \$25 to \$105; Ewes from \$10 to \$21	
each. South Downs \$11 each. Berkshire Pigs, six	
months old, \$15 to \$30 each; six weeks old, \$10 each;	
one sow and nine small pigs went to Kentucky at \$85.	
Total amount of sale \$4040.	

STRINGHALT IN HORSES.

This blemish in horses has been defined to be "a nervous affection for which there is no cure." Until recently this definition would have been accepted as genuine. A more thorough knowledge of the veterinary art, in connection with a closer anatomical knowledge of the horse, has rendered that version obsolete.

This affection is now shown to be not one originating in nervous debility, but one arising from the strain and consequent inflammation of an elastic cord, extending from



BARON SOLWAY.

and was well attended. The entries were fewer in number than was anticipated, yet the articles shown were of superior quality. The show of Short Horns was meagre; Devons, fair; Ayrshires was one of the classes claiming special attention. This breed seems to be steadily gaining in favor among the farmers of the Empire State. Of Jerseys, there was only about a dozen present. Horses were but poorly represented, and but a few claim special attention. A Draught Stallion shown by Mr. Quinn of Richmond Hill in this Province, was highly commended. The poultry exhibition was the best in the history of the Society. Implements in good number. Nothing special in sheep. The interest in this gathering was greatly lessened by the holding of several county and district

The above cut represents Mr. Snell's celebrated Bull, "Baron Solway." Mr. J. Snell, of Edmonton, has for years past devoted his means and time to establish himself as one of our breeders of Short horns, and he has succeeded this year in carrying off the Prince of Wales' prize for the best herd of Durhams. He has undergone great loss and expenditure at first, but now his annual sales are making him good returns, besides the amount that is realized by private sales.

The following is a list of prices obtained at his last sale, for the cattle, with the names of purchasers:—

Music.....Hon. Geo. Brown.....	\$200
Nina.....Daniel Woodriff, Kincardine.....	200
Coral.....Samuel Ferguson, Chinguacony	100
Minnie Herman Seth Heacock, King.....	100

the hock to the hoof joint. This cord lies immediately under the main middle vein, and in case of strain, the inflammation which ensues may affect the nerves and other parts in sympathy, calling off the mucous secretions, rendering this cord elastic, and thus causing a bitch or halt.

If the skin is slit by a skillful and steady hand, four inches above the hoof of the affected leg, and this cord be carefully drawn with an awl and severed, it will relieve the horse of all lameness as soon as the wound is healed, and experience has shown that no injury results from the operation. The incision should be washed often with warm castile soap suds, and anointed with sweet oil, or some healing ointment, and the horse kept quiet till the cure is effected.—RURAL AMERICAN.

J. A. McKellar, Belmont, raised five bushels of potatoes from two pounds of Early Rose.

TO MAKE CIDER.

Pick all the apples, rejecting those not sound, wash them clean, and afterwards let them lie and get dry. Grind and press them using no water or straw, or any substance that will give the cider an unpleasant taste, as on the purity and cleanliness of the apples depends the quality of cider. Strain the juice through woollen or other close bag, put into clean barrels, and set in a moderately cool place, keeping the barrel full all the time, so that the impurities may work off at the bung. After it has done fermenting, carefully rack it off, let it stand a few days, and bung it up. As the air tends to sour the cider, it is a good plan to provide a bent tin tube, one end fastened in the bung and the other to drop down into a bucket of water. This will let all of the gas pass off, and not let the air get to the cider. The quicker the pomace is pressed after being ground the lighter will the color be, and darker if not pressed for twenty-four hours after being ground. The cider from the second and third pressing will be the richest. The reverse is the case in making wine, as a severe pressure on the must makes sour wine. Cider-making should be conducted with all the care that wine-making is.

Most any good sour apple will make cider, but more generally an apple full of juice, and not very good to eat, will make the best. The Virginia crab perhaps excels all other apples for cider-making.

When bottled up with a little rock candy, and wired, it will, after standing some time, sparkle like champagne when opened.

To get cider very strong, expose it in a tub in extremely cold weather, and remove the ice that forms. As this can be only water, it leaves cider that remains of additional strength.

TO KEEP RATS FROM HARNESS.

Almost every person who uses a harness has been more or less annoyed by having them injured by rats. We give a few hints as to how this may be avoided, though every body knows, or affects to know, what is best. The recipes here given are collected from different sources:

Take about a teaspoonful of Cayenne pepper, mix it thoroughly with a quart of oil, and rub the harness with the mixture. This, it is claimed, will not only keep rats and mice from gnawing the harness, but it will also prevent horses and colts from chewing the lines or halters.

Take two quarts of green leeks, pour over them one gallon of oil, and let it stand a few days before using; the longer it stands the better.

A little benzine rubbed over the harness after it has been oiled is said to be a sure preventative, but it is not recommended by many, on account of the idea that it injures the leather.

One ounce of aloes to one gallon of oil will prevent rats from destroying the harness.

It is also claimed that by mixing a small quantity, say a tablespoonful, of pine tar to one quart of oil, harness will be most effectually protected from any injury; but if too much is put on the leather will not absorb it. It will collect dirt, besides making the harness unpleasant to handle.—HARNESS AND CARRIAGE JOURNAL.

J. Nesbitt, of Moore P.O., enquires the cause and remedy of matted or cotted wool. Also

the best mode to destroy curled tares. Who will reply to him? Some one of our readers might aid agriculture by aiding us in giving information.

The Sheep-fold vs. Farmyard Manure.

There is nothing like the sheep-fold! How frequently we are told this by practical men. The treading of the land does so much good; yes, if it is very light land, but if it is heavy land the sheep-treading is most injurious. It is not the sheep's feet that do the good, but the sheep's tails; but we wish to show our brother farmers that there is something like the sheep-fold, and something quite equal to it, and that is the voidances of well fed cattle, on floors, under cover, carried immediately from the shed to the field. When sheep are on land, the whole of their voidances are at once appropriated by the soil; nothing is wasted: there is no washing, drying, or turning over with weeks or months of exposure; the soluble portions are all washed into the soil; there is much less manual or horse labor and wear and tear of carting. The reverse of all this takes place with the respected old, open farm yard, and the untroughed buildings around it; here it is all washing, drying and mangling, sopping up heavy rainfalls with mops, in the shape of huge waggon loads of valuable straw, which should be used as food rather than mops. How often do we see farmers letting off the strong tea into the ditches, owing to the heavy rain having rendered the farmyard impassible or impracticable, and after all this the tea leaves are carried to the field and unmistakably called dung. All this is really a bitter value on agricultural commerciality. The real objects and causes of this mistaken, costly, and injurious manipulation, were no doubt originally two fold; to keep the cattle dry and rot the straw. But the practice must be altered now. The time will come when farmers will as soon think of treading their grain as their straw under foot, seeing that it has much greater value as food than as litter. There is no straw put under sheep, yet no farmer complains that his land is insufficiently manured where sheep lay. Farmers, generally, don't know that for every pound of solid voidance made by the animal, there are twelve or thirteen pounds of liquid, the insoluble matter of the solid being comparatively worthless. Well may they prefer the sheep-fold to the old open farmyard, where not only so much runs away, but also where so much precious fluid sinks into the floor or ground. The accumulated voidances of twenty bullocks—equal to 140 sheep—for two months may be placed on the land at once, and spread ready for ploughing at a trifling cost, and it will beat any guano, or artificial manure known.

SABBATH PIETY.

Here is a bit of spicy suggestion from some anonymous source:—"There is a mystery about this effect of the weather on piety. Sabbath heat seems hotter, Sabbath cold seems colder, and Sabbath rain wetter than that of any other day. For the same measure of heat or cold or rain on a weekday will not keep one from his usual business. We need a Sabbath Almanac, circulated for our churches, that will show by its weather

scale when it will be safe for a vigorous Christian, a weak and sickly Christian, and a common Christian, to expose himself on the Sabbath by going to the house of God. Such an Almanac would enable pastors and superintendents of Sabbath schools to know whom they could depend on in church, Sabbath school, and prayer meeting. I have recently been examining microscopic views of the different snow flakes, a hundred or so of them. I would suggest to our curious savans an examination of Sabbath snow, to see if it has a peculiarly sharp and injurious crystal."

SELAH.

The translators of the Bible have left the word Selah, which occurs so often in the Psalms, as they found it; and of course it is not uncommon for an English reader to ask his minister or some learned friend what it means; but the minister or learned friend has very frequently been obliged to confess ignorance, because it is a matter in regard to which the learned have been by no means of one mind.

The Targums and most of the Jewish commentators give to the word the meaning of "eternally for ever." Kimchi regards it a sign to elevate the voice. The authors of the Septuagint translation regarded it as a musical tone, equivalent to the word "repeat." According to Luther it means "silence." Gesenius explains it to mean, "Let the instruments play, and the singers stop." Wocher regards it as equivalent to "Up my soul!" Somner, after examining all the seventy-four passages in which the word occurs, recognizes in every case "an actual appeal to Jehovah." They are calls for aid and prayers to be heard, if not in the imperative, as, "Here, Jehovah!" or, "Awake, Jehovah!" yet earnest addresses to God that He would remember and hear.—*Bibliotheca Sacra.*

THE ROLL-CALL IN HEAVEN.

An incident is related by a chaplain who was in the army during one of our hard-fought battles. The hospital tents had been brought to the rear. Among the number was a young man mortally wounded and not able to speak. It was near midnight, and many a loved one from our homes lay sleeping on the battlefield—that sleep that knows no waking until Jesus shall call for them.

The surgeons had been their rounds of duty, and for a moment all was quiet. Suddenly this young man, before speechless, calls in a clear, distinct voice, "Here." The surgeon hastened to his side and asked what he wished. "Nothing," said he, "they are calling the roll in heaven, and I was answering to my name." He turned his head and was gone—gone to join the great army, whose uniform is washed white in the blood of the Lamb. Reader, in the great roll-call of Eternity, your name will be heard; can you answer "Here?" Are you one of the soldiers of Christ, the great Captain of Salvation?—*Christian at Work.*

PROGRESS IN PRAYER.

Mr. Moody says that two years ago, when the daily noon prayer-meeting was started in London, everybody began praying for the world—the whole world. About the second week the prayers began to be limited, in the main, to Europe, the third week to England, the fourth to London; and about the fifth week the burden of prayer began to be, "O, Lord! have mercy on me; break up the fallow ground of my soul; give me a broken heart."

How often does the stealthy slander, whence no man knows, destroy character, if not life. Like the good Baldur, in the Scandinavian Edda, who was slain by the mistletoe the blind Hodur threw, how many a reputation has been destroyed by a slander springing from shadow.

An error appeared in the Secretary's books in regard to the 1st prize on Improved Berkshire Boar under one year old. It should have read G. Roach, of Hamilton, instead of J. Lamb, London. The Association paid, erroneously, Mr. Lamb, the cash, and we hear Mr. Lamb refuses to refund it. There are circumstances connected with this, that show that Mr. Lamb has no more honesty or principle about him than he should have, although he is in receipt of a public salary.

A Live Editor and A Bad Weed.

We are glad to acknowledge a hasty call from Rev. S. V. Blakeslee, editor of the "Pacific," published at San Francisco, and feel that we do more than our duty when we thank him, on behalf of the farmers of Oregon, for the information he gave us in reference to the presence in Portland of one of the worst weed pests that the careful farmers of the Atlantic States have to contend against. We allude to the

CANADA THISTLE,

which Mr. Blakeslee informs us he found in the city of Portland, on the lot of Mr. Shindler, who, it seems, received the seed of this pestiferous weed in a box containing furniture made at the East. Mr. Shindler, knowing the tenacious nature of the weed, has been carefully cutting it down every year before it goes to seed, but yet it steadily gains on him, and Mr. B. found that its roots had spread under the sidewalk, and the weed is now growing on the side of the street. Should this pest once get out into the country, it will prove worse than fern, sorrel, or even the dagger cockle-bur, for the extermination of which it has been deemed wise to make provision by law. No time should be lost. Either the city of Portland or the county of Multnomah should see that the weed is not allowed to spread, else it will, in all probability, cost tens of thousands of dollars not many years hence in fruitless efforts at its destruction. Mr. Shindler deserves praise for endeavoring to keep it under. Will not some public spirited citizens of Portland look after this matter before it is too late? The Canada Thistle is not known to exist anywhere else on the Pacific coast, and should it be permitted to spread over the country from this small beginning in Portland, the damage to the farming interest in the future may be incalculable.—WILAMETTE FARMER.

FAMILIARITY WITH EVIL.

We present some extracts from a valuable essay by Henry Ward Beecher, in the January Herald of Health, treating on the danger of allowing oneself to become *indifferent* to what is wrong, because *familiar* with it:

"In the long run those things are the most influential upon us which act imperceptibly, but act all the time. In judging of the things that produce the disposition, or rather that *train* it, we are not to judge of those things alone which are apparent. Influences that work in us little by little are the formative influences of life * * * *"

The presence of evil produces familiarity, allays suspicion, and takes off fear and repulsion. When evil exists in men, it is always a mixed quality. No man is wholly bad, and no man is wholly good. Men are strangely compounded; and when evil is joined with a good, the evil is so checkered with the good, that we cannot but feel a sort of amiable sorrow, which is the next thing to approbation. The good that is associated with evil traits in men with whom we are acquainted, goes far to

take away from the mind a sense of the wickedness of evil. * * * *

Being familiar with evil brings you into the reach of temptation. It not only makes you a spectator of that which is dangerous, but brings you within its easy reach. Many go where evil is, thinking that they are not susceptible to it, and by and by, after being under its influence and becoming familiar with it, they are caught by it. I suppose there were never twenty wicked men of whom you might not say that fifteen were men who, in the beginning were perfectly certain that they could not be made wicked. It is the confidence that you are safe that is your great danger in the presence of evil. * * * *

It is objected that it is not always possible to get away from evil. Remember, then, that when you do not submit to evil, when you set your mind against it, and when you put yourself in an attitude to correct it, it will do you no harm though you are in the midst of it. If you refuse the laugh, if you refuse to endorse the tale, if you refuse to join in the conviviality, if you are found faithful though you are among the faithless, then, so far from being harmed, you will be benefited; so far from being brought down by evil you will be lifted out of the sphere of its influence. You will be a reformer, under such circumstances, and God will take care of you.

Bone Dust as a Food for Fowls.

If a really good bone dust, newly made from fresh bones, can be had, there is no better adjunct to the food of fowls; but if we wish to avoid risks, the best plan is to procure fresh bones and chop them up with an axe or hatchet. A chopping box can be thus made: take a piece of oak plank 12 inches square and 2½ inches thick; this formed the bottom of a box just 7 inches deep, the sides being made of 1½ inch pine. One side, however, is but 3½ inches high, so that when the edge of our hatchet lies on the plank bottom, the handle passes over the side of the box without touching it. Soft bones can be had at any butcher's stall. The hard and large bones are difficult to break. Ribs, &c., placed in this box, can be easily and quickly chopped up into pieces the size of a bean. A boy can chop up ten pounds in a very short time, and this will last two dozen fowls for a week nearly, at ten ounces per day. On a large scale a machine could be made which would readily crush the hardest bones. We find that the bones broken into pieces, which will pass in any direction through a hole ¼ of an inch in diameter, are small enough; the gizzard of the fowl soon grinds them up, and they partially serve instead of gravel. There is no more valuable adjunct to the food of fowls than cracked bones.

HORTICULTURAL SCHOOL FOR WOMEN.

Some weeks ago we alluded to the project of establishing a horticultural school for women, near Boston. The projectors seem determined to push the experiment, and an appeal for funds to start the work is soon to be issued. The Boston Advertiser gives the following as the plan of the institution:

"The working plan of the school comprises a farm, to be procured in the vicinity of Boston, containing about 20 acres, 5 acres to be used for the cultivation of small fruits, flowers and salads, and such vegetables as are suitable for cultivation by female labor, the rest

to be devoted to mowing and pasturage; a good dwelling house capable of accommodating about thirty inmates; a barn large enough for the farm stock; an experimental plant house for growing flowers and early vegetables, and the forwarding of plants for fields crops. The control of the institution is to be vested in a president, secretary, treasurer and twenty-four managers—one-half of whom shall be women—who will be aided by a competent instructor, an experienced farmer, and the other necessary assistants. The pupils will be instructed in plain sewing, the use of sewing machines and all kinds of house work, as well as in horticulture; the lecturers and teachers in kindred branches of labor and service will be employed from time to time.

It is intended to receive pupils to the number of twenty five, who are to be from the age of sixteen upwards, of good character, fair education, and able to work as may be required. The course of instruction will extend through two years. The estimated cost of procuring the farm and outbuildings and maintaining the school for three years is \$30,000.—PRAIRIE FARMER.

We have for years advocated an establishment for instruction for testing and procuring reliable seed and implements in Canada. We have devoted more time and means according to our circumstances, than any other person has done or ever will do; but up to the present moment not one cent's worth of the government patronage, which is nominally given for agricultural advancement, has fallen to our lot, although no one ever has procured such a number of recommendations to the legislature from the really political farmers of the country. There are colleges—and several of them—for men in the States, and now one is to be established for the other respected and beloved fairer sex. We, with others, do not deem it necessary to tax the country to the amount of tens of thousands a year, but the encouragement of any good, useful, beneficial plan, that has done much good and may do a thousand times as much, should not have the public money expended direct and intentionally against it, without showing publicly the reasons for so doing.—ED.

A WORD TO THE YOUNG MEN.—The winter months are coming on, when you will have a good chance for improving your minds. Devote your leisure hours to acquiring that knowledge which will be of practical benefit to you. A business education is valuable to everybody. Strive to fit yourselves for doing your own business and doing it safely and systematically. You cannot get too much of this kind of knowledge. You need it as much on the Farm as in the Bank. The day has gone by when it was thought unnecessary for Farmers to be as intelligent as any other class of business men. Spurn the idea, and show the world that intelligence is just as applicable to your occupation as to any other. We have a most excellent institution in London for imparting such knowledge as you all require. The course at our Commercial College is just what you need, and should have, if you can possibly muster the necessary funds to attend. Many of our Farmer's boys take rooms and board themselves whilst going through the course, and this saves half of the expense. This College took the First Prize in Penmanship at the last Provincial Fair. Eight Principals and Professors of other leading educational institutions, have been graduates of this college. Send to the Principal, Mr. J. W. Jones, for a circular.

The Greatest Profits from Draining

The profits of underdraining are now admitted by all intelligent farmers, and by some who are not intelligent. But the question is often asked, "How many years are required to repay the cost of draining by the increase of the crops?" The time will vary with circumstances, from one to five years, and if the after management of the land is bad, a longer time will be necessary. In our own experience in putting in many files of tile drain in good upland soil, the increased crops have repaid the expense in an average of about three years. The land was of such a character, that superficial observers would say that no draining was necessary. But the old test of digging trial holes two or three feet deep, showed by the water which was retained in these holes for many days during the wet season, that the subsoil contained a large surplus of water; and further proof was given by the long continued discharge of water from the drains which were afterwards cut. The digging was mostly performed by loosening the subsoil and hard-pan by the use of the ditching plow, and throwing the loosened earth out by hand. This method lessened the expense of digging to one-half, and the entire cost of the drains when completed, to two-thirds. The drains being cut about two rods apart, the whole cost was about thirty five dollars per acre. Consequently an increase in profit of twelve dollars per acre, would repay the expense in three years, the average time as above stated. Where the soil was very rich and decidedly too moist, only two years were required, as but little could be raised before, and a great deal afterwards. If the soil is poor and the farming bad, the advantages will be of course much less. There is one very important consideration, however, which we have not yet taken into account. This lengthening of the season. Farms in the latitude of forty-three degrees, may be virtually carried two or three degrees further south, without the disadvantages of a hotter sun. A well drained field may be plowed without inconvenience almost on the day that the frost disappears from the earth. If the field be not drained, the farmer may very likely have to wait a fortnight, and in wet seasons a month before he can obtain a finely pulverized soil from his farrows. Cases are not uncommon where half the amount of a barley or oat crop has been lost by such delay, and this loss proved to be fully equal to the entire expense of cultivation. Thus the delay occasioned by water, reduced what would have been a hundred per cent of profits, to nothing. At the same time the inability to cultivate his fields early, has driven the work of the farmer into a narrow compass, reducing his operations and increasing his expenses. The machinery of the farm has become deranged, and if we had some mode of reducing the vexation which the owner suffers, to an estimate of dollars and cents, it would undoubtedly be found that the profits of draining are considerably greater than our figures already given.

Our remarks thus far are intended to apply exclusively to regular underdraining, or where parallel channels about two rods asunder, extend over the whole surface. There is another kind of draining still more profitable. Or rather a small expenditure results in a greater comparative advantage.

We refer to its performance on that character of ground made up of knolls and swales, or where upland is traversed irregularly by low and wet portions. It sometimes happens that a few wet streaks across a field, in other respects tolerably dry, have prevented spring plowing for a whole month. Three-fourths of a field perhaps was quite dry enough, but the mud and water in the remaining portion placed every thing to a stand-still. Now the question occurs—what is the best mode of draining such a field?

The first thing is to cut underdrains through the centre of every swale or low and wet portion of the ground. No difficulty will be found in locating these drains, or in determining the proper places for descent and giving a free flow for the water, if the owner will take the pains to observe where the surface water flows off from melting snows or heavy storms. These ditches should be laid with large tile, say three inches in diameter, which, on account of the greater velocity of the water, will carry off more than three times as much water as a two-inch tile. These large channels will serve as main drains in future years, when the owner is able to ditch the whole surface. When these mains are completed, the fields should be measured and the position of the drains (which of course will be crooked and irregular,) laid down on a map or sketch as nearly as may be. This will assist in finding the channels when side or branch drains are made on a future occasion.

Many farmers will be quite satisfied when they have drained the low places only. No one can fail to be highly gratified with this result, if the work has been well done, for it will make all parts of the land capable of plowing and other tillage at the same period of time, and he will not have to wait several weeks after the majority of the field has become fit for plowing, before he can drive his horses over the wet spots. Another important advantage will be gained by thus bringing the richest parts of land, which before were useless, into profitable cultivation for all kinds of crops. We have known instances where wheat or corn was so much improved on such land, as to repay the entire expense in one year. But if after this preliminary work of draining the swales has been completed, it should be found by digging the trial holes already mentioned, that the subsoil of the upland needs underdraining, the full extent of the benefit cannot be reached until the whole work is thoroughly accomplished.—COUNTRY GENT.

Communications.

MR. EDITOR—Sir:—I see an account in your paper on draining, commending the use of draining with tiles, at a cost that few of us farmers can undertake. For the benefit of your readers I will give my experience. At the head of each field I commence making a ditch, by gathering the headland towards the field for three ploughings. This makes the land a little lower at the edge nearest the fence; then I take a scraper and take the earth to the low places in the field, and I now have a better, more efficient drain and at less cost than any one using drain tiles that I know of. In fact I know of some having used them that the drains are of no use. Try my plan and save money. I make a long, gradual slope, so that I lose 1.0 of an inch of land from cultivation. Some of my drains are three feet deep.

JAMES EVANS.

Harrietsville, Oct. 26th, 1869.

To the Editor of the Farmer's Advocate.

POTATOES.

Dear Sir:—I believe you are doing much more good than the farmers generally are aware of. Perhaps the most important crop that the farmer grows is that of the potato. It has generally been the custom to procure seed potatoes from uncertain sources; too frequently, those obtained have been of indifferent kinds, not yielding well, and what is of more importance, not being of good quality. It is otherwise with the potatoes, (Harrisons) which I bought of you. I planted them side by side with several others of what I, at the time, thought were the best varieties to be obtained. I am so struck with the difference of yield, that I cannot but call your attention to it. They were all planted at the same time in rows of equal length, and in every way received the same cultivation. The result is as follows:

Meltos, not quite a pailful.
Pink-eyes, a little over a pailful.
Peachblows, 3 pailful.
Goodrich, 4 pailful.
Harrison, a little over 5 pailful.

R. NICHOL.

To the Editor of the Farmer's Advocate.

NORWAY OAT.

I was one of the fortunate few who was afflicted last spring with the "oat fever," and my attack was of the Norway type. My neighbors debated in their minds whether I was insane or everburdened with cash. I had read the accounts, and my faith was sufficiently strong to send \$50 to D. Ramsdale of Vermont, for which I procured five bushels of the Norway oats. I sowed these on 4 acres of land, and gave them the usual attention, except that I went over them five times and plucked up all noxious weeds, in order to insure the strict purity of my yield. My return would have been many fold greater than it is, if it was not for the ravages of the wire worm. These oats stooled more than any other variety I ever saw, and gave uniformly good well filled heads. They are longer in the straw and head than the common kinds, and bear more leaves. The great objection is that, they are disposed to bend with the weight of grain, this weakness showing itself at the puncture of the head with the stalk. Especially is this true, if they are permitted to stand until over-ripe, yet they do not shell. They are almost as hard to thresh as wheat. Having more than I wish to sow, as my yield was 80 & 90 bushels per acre, I extend to you the first chance of obtaining my surplus for dissemination. I, in common with others, have recognized your untiring efforts to provide the farmers of Ontario with tried varieties, and will send a stock of this valued oat to the Emporium, resting assured that your patrons will thank me for ever, in this feeble way of endeavoring to further the farming interests.

JACOB HERRINGTON.

MR. WELD—Dear Sir:—Enclosed find part payment for the "Sell's Cider Mill." I have made cider for many years and never have seen a machine that I like so well, and I have used many kinds.

W. BROWN.

London, Oct. 7th, 1869.

One farmer we know made \$90 per month for several months by procuring a mill and purchasing apples from other farmers. Lots of apples are now frozen and will spoil. Send for a mill and make money.

To the Editor of the Farmer's Advocate.

Dear Sir:—I wish to make a few remarks of a very brief nature upon the farrowing of the Sow.

A few days before a sow farrows, she should be placed in a breeding house or shed, and be fed upon very soft food; she should also have an allowance of short, soft, litter, of which she will collect into a heap as the time of parturition or the time of birth approaches, and lay upon it, thereby supporting her hinder parts. Soon after farrowing, she should have a little milk and maple syrup given to her.

The sow will frequently show an inclination to destroy her progeny; if this is the case, the young should be smeared with Linseed Oil and powdered Barbadoes Aloes, the nauseating effect of those ingredients will prevent the sow from attacking her young. Constipation occasionally sets in after farrowing, occasioning great irritation and pressure upon the neck of the bladder, which may kill the animal or animals by producing Cystitis or inflammation of the bladder. Again, Costiveness may be produced by Contemptis, or inflammation of the bowels. When this is the case, the treatment must consist in bleeding, and administering 10 m or 10 drop doses of Chloroform and 1 drachm of Sulphuric Ether, in half a tumblerful of cold water.

Parturient Apoplexy is also liable to supervene after farrowing. Sometimes this disease will run through a piggery like an epidemic. When a pig is attacked with this disease, he should at once be separated from the rest.

The treatment must be of an active nature. Bleed largely and give Epsom Salts, two to three ounces. Give also Tartar Emetic, 10 to 20 grains; water, five ounces; white hellebore, 8 to 12 grains; from one to two tablespoonfuls for a pig, and the medium may be repeated in half doses. And last but not least, send for the nearest properly qualified Veterinary Surgeon that can be found, who is taught, while at College, the Anatomy and Pathology of all our domesticated animals.

Trusting that I have not taken up too much space in your paper,

I am, very truly,
JOHN L. POETT, V. S.

To the Editor of the Farmer's Advocate.

SEEDS.

DEAR SIR:—As you request accounts of the result of seeds furnished by you, I now send you a brief account of mine, as it may be well for your readers to know the results in this eastern part of the Dominion.

The English Fall Wheats were too late; they rusted and shrank badly. I do not think them worth continuing.

The Rio Grande and the Quebec wheat did well. They yielded at the rate of thirty bushels per acre, but I think they are the same class of wheat.

The Chilian wheat I put on low ground; it was injured by the frost.

The Emporium Oats yielded very well, considering the chance they had; the land was low, and this season's rains were injurious, but I think them a very superior oat

and quite equal to the Surprise. In fact I can discover no difference.

The Norway oats are ten days later than the Surprise; they are weak in the straw and lodge badly.

The Westwell oats are late in ripening.

The Crown Peas yielded well; in fact they and the Dan O'Rourke were the only peas that ripened at all evenly in this vicinity. From the two bushels of Crown Peas twenty-five were harvested, and that on foul land. Had the land been in order as you recommend, a much larger yield would have been obtained. From fourteen ounces of the Dan O'Rourke, twenty-one pounds were produced.

The Excelsior Pea, fourteen pounds from twelve ounces. The straw grew too long; I think them well adapted for light land. I have found ten peas in a pod; that is more than I have seen in any other variety.

From fifteen ounces of Early Rose, I dug 114 pounds, three potatoes weighing 1½ lbs. each. The four ounces of Worcester yielded nineteen pounds.

The three sets of Dykeman yielded 9¼ lbs. but half of them have become rotten since digging.

The Australian yielded 6½ pounds from four ounces.

This part of the country is not the best for wheat; our greatest drawback is frost. The spring crops do well with us.

FRANCIS PECK,

Reeve of Snowden and Glamorgan.

Oct. 18th 1869.

[Mr. Peck will please accept our thanks for his useful communication; also for the example he sets in his signature. Such facts must be of utility to the thoughtful, and we respectfully solicit reports from other Reeves, presidents, or M.P.'s, that have any interest in agriculture. We hope the publication of the accounts from Windsor and Prince Edward county, may induce others to report from other counties. This journal is for farmers to express their different experiences in, and we hope you may use it for that purpose.—Ed.]

To the Editor of the Farmer's Advocate.

DEAR SIR:—The forty pounds of imported Chevelier Barley I procured last year, I sowed on turnip land. My soil is clay loam. It yielded 38 bushels. I sowed it on ¾ of an acre. It stools out more than any other grain I have ever seen. It is longer in the straw than common barley. The wet season caused it to lodge in spots, or I should have had a larger yield. I sowed the common barley in land adjoining, on equally as good land, and it only yielded 40 bush. per acre. I think it should be more generally cultivated. I exhibited it at Listowel and at Wallace, and it took the first prize in both places, and I believe I could have taken the first prize at the Provincial Exhibition had I taken it there. This barley was sown on the fifth of May.

W. AYERST.

Wyandott, Oct. 20th, 1869.

To the Editor of the Farmer's Advocate.

The Crown Peas I procured from you have done well here, and there is a great demand for them. The Barley you sent produced the largest heads of grain I ever saw; I counted 64 grains in a head.
G. T. ROGERS.
Ballinacrad, Sept. 25, 1869.

To the Editor of the Farmer's Advocate.

A QUESTION FOR FLORISTS.

MR. EDITOR:—We have been so much interested this summer in watching the eccentricities of one of our plants, that I send you the following account, as it may perhaps interest you also.

I obtained last spring—from a celebrated florist in this country—six Dahlia roots, all in fine condition and healthy. These, after being well started in a cold frame, were planted out in the open ground where they came on vigorously.—One, named "Madame de St. Laurent," had three shoots, and was the first to bloom.—After it had been in flower some time, I remarked that all the blooms had been on one main stem, and were of a pale bluish purple, and very fine in form and quality. On examination I found to my astonishment that on another stalk of the same plant, were buds just opening, of a totally different color; and some days afterwards the centre stem showed blooms again different.—Thus I have had at the same time, and on the same plant, three distinct varieties of bloom—those on the first stem being as above a pale bluish purple; on another rich, dark crimson, and on the one between these two, dark crimson down in the quills or petals, fading to nearly white at the tops.

I know, for I was myself the planter, that there was only one piece of tuber, so of these three curiosities pray which is "Madame de St. Laurent?" and can you give me a reason for what appears to be so comical a freak of nature.—I am not learned in the culture of Dahlias, but this seems to me to be a singular instance and may be of interest to some of your numerous readers.
P. S.

[Will any of our Horticultural friends explain this seeming mystery.]—Ed.

Miscellaneous.

TRUISMS.

True success crowns stern endeavors;
Life we know is but a span:
One day less each evening measures,
Wisely use Time while we can.

Every station has its troubles,
Mourning o'er them will not mend;
Meeting Misery makes it double,
Longest lives must have an end.

Sunbeams after showers are brightest,
Seeking sorrow is a sin;
Loving hearts are ever lightest,
Peace (that jewel) dwells within.

Fretful fears in gloom repining,
Shade the heart with dark despair—
See!—there's light around thee shining!
And for shadows—never care.

Longest joys won't last for ever,
Make the most of every day;
Youth and beauty, Time will sever—
But Content hath no decay.—

P. A. S.

La Patrie, a French paper, publishes the following simple method of destroying the grub which does so much damage to apple

trees: Place a piece of aloe about the size of a walnut, in a quart of water; shake the bottle from time to time during three or four days, and apply the liquid with a small brush to the affected parts of the tree. If the weather be dry, a single application will suffice.

PRESERVING APPLES, PEARS, ETC.—The following is a *precis*, recently published by the Royal Horticultural Society, in relation to the preservation of fruits:

1. As the flavor of fruit is so easily affected by heterogenous odors, it is highly desirable that the apple and pear rooms should be distinct.
2. The walls and the floor should be annually washed with a solution of quicklime, to which common salt is sometimes added. [Salt is objectionable.]
3. The room should be perfectly dry, kept at as uniform a temperature as practicable, and be well ventilated; but there should not be a thorough draught.
4. The utmost care should be taken in gathering the fruit, which should be handled as little as possible.
5. For present use, the fruit should be well ripened; but if for long keeping, it is better, especially with pears, that it should not arrive at complete maturity. This point, however, requires considerable judgment.
6. No imperfect fruit should be stored with that which is sound, and every more or less decayed specimen should be immediately removed.
7. If placed on shelves, the fruit should not lie more than two deep, and no straw should be used.
8. Where especially clear and beautiful specimens are wanted, they may be packed carefully in *dry* bran, or in layers of *perfectly dry* cotton-wool, either in closed boxes or in large garden-pots. Scentless sawdust will answer the same purpose, but pine sawdust is apt to communicate an unpleasant taste.
9. With care, early apples may be kept till Christmas, while many kinds may be preserved in perfection to a second year.

An exchange gives the following sensible directions for driving young horses:

"In teaching a young horse to drive well, do not hurry to see how fast he can trot. Keep each pace clear and distinct from the other—that is, in walking, make him walk and do not allow him to trot. While trotting, be equally careful that he keeps steady at his pace, and do not allow him to slack into a walk. The reins, while driving, should be kept snug; and when pushed to the top of his speed, keep him well in hand; that he may learn to bear well upon the bit, so that when going at a high rate of speed, he can be held at his pace, but do not allow him to pull too hard, for it is not only unpleasant, but makes it often difficult to manage him."

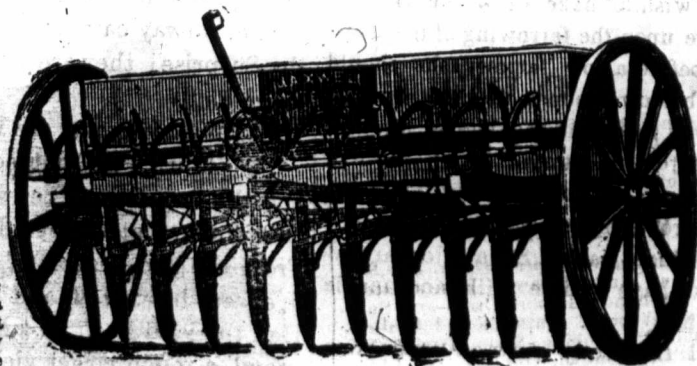
LONDON MARKETS, LONDON, Oct. 26th, 1869

Fall Wheat, per bushel.....	\$ 80 to 83
Spring Wheat do	85 to 85
Barley do	50 to 70
Oats do	28 to 30
Peas do	50 to 60
Corn do	70 to 75
Cherries, per quart	4 to 5
Currants, red do	3 to 4
Currants, black do	10 to 12
Hay, per ton.....	8.00 to 10.00
Butter, prime, per lb.....	20 to 25
Eggs, per dozen	10 to 14
Potatoes, per bushel.....	30 to 40
Flour, per 100 lbs.....	2.00 to 2.25
Mutton, per lb., by quarter.....	6 to 8
Beef, per pound	6 to 7
Cows do	25.00 to 35.00
Sheep	3.00 to 4.00
Lambs	2.00 to 3.00
Wool, per lb.....	35 to 37 1/2
Hides.....	5 1/2 to 6
Hops.....	3 to 6

THE BEST SEED DRILLS PROCURABLE,
ARE MANUFACTURED BY

Messrs. Maxwell and Whitlaw.

THEIR Paras Drill has taken six 1st Prizes and six Diplomas at the Provincial Exhibition. Their Empire Drill took the first prize at the last Provincial Exhibition, and their Paris Drill took the second. They cannot choke, sow evenly and give entire satisfaction; they are cheap, well made, and warranted to do their work efficiently. Terms of payment are easy. If you want a drill, purchase the best. All orders promptly attended to at the Emporium, and all implements sold at the



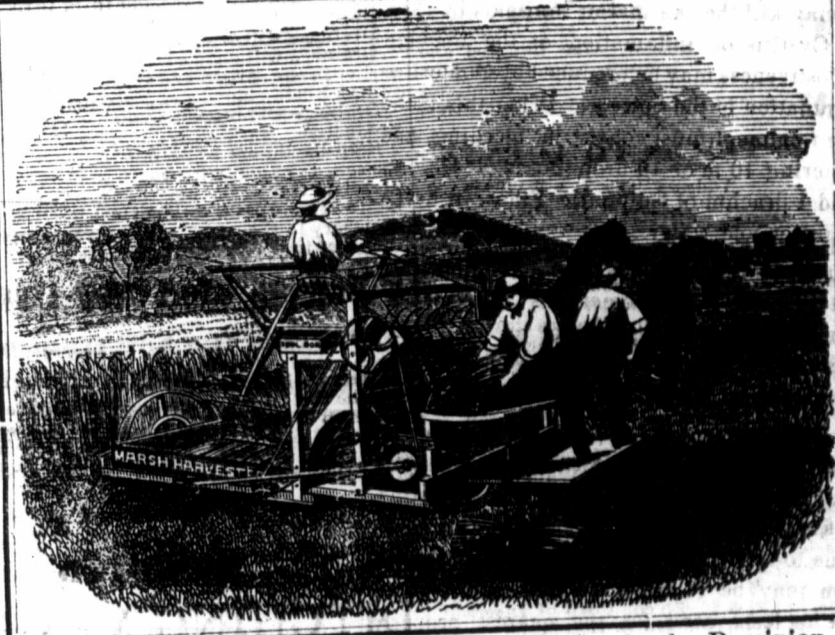
manufacturers prices. The Empire Drill has a Land Measurer and Grass Sowing Attachment. May be seen at the Emporium. Price \$65, with Seed Attachment \$70, and with Land Measurer \$75. Orders taken at the Emporium.

Address
WM. WELD,
London, Ont.

ECONOMICAL, SUCCESSFUL, AND UNRIVALED.
THE CELEBRATED REAPER

The Marsh Harvester

THE MARSH HARVESTER



THE MARSH HARVESTER

Acknowledged to be the best Harvesting Machine in the Dominion.

Leffel's American DOUBLE TURBINE WATER--WHEEL
MADE TO ORDER.

For further particulars send for pamphlet, Address to

PAXTON, TATE, & Co.
Berry St., Port Berry, Ont.

SENT FREE! SENT FREE!
M. O'KEEFE, SON & Co.'s CATALOGUE OF SEEDS,
AND GUIDE TO THE
FLOWER AND VEGETABLES GARDEN,
For 1869.

M. O'KEEFE, SON, & Co., Seed Importers and Growers, Ellwanger and Barry Block, Rochester, New York.

E. A. TAYLOR & Co.
Booksellers and Stationers,
Richmond Street, London, Ont.
SCHOOL BOOKS, MAGAZINES,
Office Stationery, etc., always on hand.

FARMERS SHOULD USE MILLER'S Tick Destroyer!
FOR SHEEP



IT Destroys the Ticks, promotes the growth of the Wool, and improves the condition of the animal. Every day brings additional testimony of its thorough effectiveness. No flock-master should be without it. Sold everywhere in boxes at 35c, 70c, and \$1. A 35c box will clean 20 sheep, or 35 lambs.
HUGH MILLER & Co., Chemists,
Toronto, Ontario.

J. BEATTIE & Co.,
IS THE CHEAPEST DRY GOODS, MILLINERY AND MANTLE STORE IN THE CITY OF LONDON.

MOCKING BIRDS.

Guaranteed (males) tame hand-fed Birds in FULL SONG AND FEATHER at \$12 EACH. The birds are of first quality, and their safe delivery guaranteed.

FANCY PIGEONS.

Twenty varieties at \$5 and \$3 per pair, all mated breeding birds.

GAME FOWLS.

Fourteen kinds at \$5 and \$4 per pair. The above birds were bred by C. H. Betts of the city of Baltimore, who has won a name in this branch. Orders received for any of the above at this office.

A. WESTMAN.

SAW-MAKER and Repairer, is prepared to File, Set, Re-cut and Gum all kinds of Saws. Rose's Patent Queen Saw always on hand. Patent Cross-cut Saw Handles, Wholesale and retail. Parasols and Umbrellas covered and repaired. Jobbing Shop, Dundas St., two doors east of Talbot, London, Ont. I-in p.

WANTED AGENTS FOR HOW TO MAKE THE FARM PAY

The Farmer's Book

IN BOTH ENGLISH AND GERMAN

Showing how to double the value of land; make three times as much out of stock; raise three times as much Grain, Hay, Roots, and all farm crops and more than double all the profits of the farm. Every Farmer, Stock-Raiser, Gardener and Fruit Cultivator wants it. One hundred and forty illustrations. Agents are having wonderful success. Send for circular, the recommendations, price, and

TERMS TO AGENTS

Address, Rev C.S. EASTMAN General Agent for Ontario.

LANDS FOR SALE.

- No 1 100 acres, North 1/2 lot 10, 3rd con Bayham.
- No 2 90 acres, lot 11, con. B. Dorchester.
- No 4 100 acres, Village of Bayham. 70 acres cleared.
- No 18 70 acres, west 1/2 lot 22, 10 con. Euphemia.
- No 19 100 acres, Village of Bayham. 70 acres cleared.
- No 20 127 acres, part lots 26 & 27, 1st con. Augusta.
- No 21 89 acres, Village of Delaware.
- No 22 Saw Mill at Cashmere, 3 miles from Bothwell.
- No 23 100 acres, West 1/2 lot 2, 1st or front con Oxford.
- No 25 80 acres, lot 6, 1st con. County Huron.
- No 26 100 acres, west 1/2 lot 13, 2nd con. Walpole Hald.
- No 27 60 acres, lot 12, Township of Bayham.
- No 29 300 acres, South 1/2 lots 11, 12 and 13 Caradoc.
- No 30 120 acres, North 1/2 lot 18, 3rd range, Caradoc.
- No 32 100 acres, lot D, 1st con. 4th range, Caradoc.
- No 33 100 acres, lot 12, 20th con West Williams.
- No 34 100 acres, west 1/2 lot 18, 10th con Euphemia.
- No 108 196 acres, lots 21 & 22, 6th con town of Ingersoll.
- No 109 50 acres, lot 14, 1st con North Dorchester.
- No 110 198 acres, lot 5, 8th con Yarmouth, Co Elgin.
- No 111 50 acres, East 1/2 lot 24, 14th con. Aldboro.
- No 112 100 acres, South 1/2 lot 26, 1st con Mosa.
- No 113 30 acres lot 37, con C, 3 miles from London.
- No 114 100 acres, South 1/2 lot 45, 1st con Westminster.
- No 114 A saw mill near Otterville, South Norwich.
- No 115 100 acres lot 22, 4th con London. Improved.
- No 116 36 acres, lot 92, east Talbot Road.
- No 113 100 acres, north Cornwall Farm, Talbot Road.
- No 119 60 acres, S 1/2 lot 25, 7 con Beverly township.
- No 120 90 acres, S 1/2 lot 23, 5th con Beverly township.

WILD LANDS

- 100 acres, Co. Lambton, Dawn township, west 1/2 lot 23, 10th con. Good soil and timber.
- 100 acres, Co. Lambton, Dawn township, 1/2 lot 28, 4th con. Good soil and timber.
- 100 acres, Co. Lambton, township of Sombra, North 1/2 lot 26, 7 con. Good soil and timber.
- 100 acres, Co. Lambton, township of Sombra, North 1/2 lot 21, 13th con. Good soil and timber.
- 200 acres, Co. Lambton, township of Enniskillen, Lot 27, 14th con.
- 150 acres, E 1/2 and S. W. 1/2 of lot 24, 6th con Enniskillen.
- 200 acres, lot 28, 8th con. Enniskillen.
- 200 acres, lot 29, 7th con. Enniskillen.
- 200 acres, lot 12, 5th con. Moore.
- 175 acres, lots 29 and 30, 1st con. Euphemia.

NOTICE.—Lands sold will be charged one per cent. commission. No charge for registering particulars. Applicants must send a stamp directed envelope for reply. No charge made unless sales are effected, or parties wish a special advertisement. The public having lands or houses for sale, are invited to send in particulars for the registry, this being an excellent medium for bringing their wants under the notice of the public. Apply to the "Farmer's Advocate" office, London, Ont. N. B.—Parties writing for particulars will please give the registry No. of the lot they apply for. We have upwards of 20,000 acres of wild lands for sale in all parts of Canada.

DRAINING



FACTS FOR FARMERS.

The best authorities on Agriculture say that thorough drainage will add at least one third to the product of the soil.

Drainage will often save a crop. Drainage will enable a farmer to work his land much earlier in the spring, and thereby his crops escape risks to which late planting exposes them.

Drainage will often convert useless land into the most productive.

Rain should not be permitted to run off the surface of the soil, nor should it remain in it to sour, but should precolate through it, and then be removed, thus imparting to vegetation the valuable properties it contains, so necessary to the sustenance of vegetable life. Hence the great importance of underdraining.

A THOROUGH SYSTEM OF UNDERDRAINING

Prevents the Soil from baking.

Preserves it always in a moist and porous state, so that the roots can extend to great distances in the soil in search of nourishment, and thus causes a vigorous growth of the crop. The undersigned has therefore great pleasure in introducing to the enterprising farmers of Ontario,

CARTER'S IMPROVED

DITCHING MACHINE

An Invention which will supply a great want, and greatly help the agriculturist in causing "two blades of grass to grow where but one grew before," and at a price greatly under the cost of ditching and draining in the usual manner—by spade and mattock.—This machine was tried last summer on Mr. Leslie's farm, near Toronto, and earned the approbation of all the practical men present, and received flattering notices from the representatives of the press sent to report upon its merits.

The following additional testimonial is now submitted and as it is subscribed by prominent and well known farmers in the County of Elgin, the undersigned rests confident that the merits of the machine will remain unquestioned, and that the more it is introduced the more useful and popular it will become.

Testimonial of Eye-Witnesses.

We, the undersigned, having been present at a trial of Carter's Improved Ditching Machine, held on the farm of Mr. Andrew Murray, Malahide, Ont., 28th July, 1868, hereby certify that the said Machine in our judgment

Agricultural Emporium Price List for September.

Carter's Patent Ditching Machine \$130. The Champion Wood Sawing Machine, \$100. The Empire Seed Drill, the First-prize Machine, giving entire satisfaction; without grass Sower \$65; with grass sowing attachment, \$70. The Celebrated Little Giant Thresher and Separator, highly approved of; price in cash, \$100; On credit with 7 per cent. interest, \$105; With Horse Power, tumbling Rod, Band Wheel, and 60 feet of Belting, \$180; on credit at 7 per cent. interest, \$185; Sell's Patent Cider Press, First Prize, \$30; Sell's Patent Cider Press, Double Geared, \$35; Abell's Patent Grain Crusher, \$30, \$35 & \$40; Gardener's Patent

is perfectly adapted for the purposes of Land Draining, supplying a machine exceedingly simple in construction easily handled, and admirably adapted for agricultural purposes, and for which we feel assured a good return will be realized by any person requiring it, being satisfied that under ordinary circumstances the machine is capable of making drains from 2 1/2 to 3 feet deep and 8 inches wide at a cost of from two to four cents per rod, according to the nature of the soil operated on; and we therefore recommend the said machine to the favorable notice of the farming community.

- T. M. Nairn, Warden, Co. of Elgin.
- James Brown, J. P., Farmer.
- Peter Clayton, J. P., Farmer.
- A. J. Davis, Farmer.
- William Adams, Farmer.
- Ezra Foot, M. D.
- John Vanpatter, Farmer.
- Richard Hill, Farmer.
- James McCausland, Farmer.
- Abram Bemer, Farmer.
- A. Hill, Farmer and Mill Owner.
- Jesse Learn, Farmer.
- Andrew Murray, Merchant.
- Jesse Kinsay, Farmer.
- G. J. Walker, Merchant.
- Simon Miller, Farmer.
- W. J. Kerr, Merchant.
- Calvin Adams, Farmer.
- Rev. Joseph Clutton.
- Thos. Locker, J. P., Farmer.
- Joel W. Davis, Farmer.
- Elias J. Adams, Farmer.
- Ira Doolittle, Farmer.
- Richard Locker, Farmer.
- Benjamin Schooley, Farmer.
- W. R. Farthings, Merchant.
- Alexander Treadwell, Farmer.
- W. E. Murray, Conveyancer.
- Edwin Price, M. D.
- Seth Lewis, Farmer.
- Thomas Little, Farmer.
- John W. Gillett, J. P., Farmer.
- George F. Clark, M. D.
- Ganes Fritchard, Farmer.
- Harvey Vanpatter, Farmer.

The Gross weight of the Machine for shipment is 1370 lbs.

Price at the Factory, \$130.

Applications to manufacture on Royalty, or for Machines, to be addressed to

DANIEL STEWART, General Agent for Dominion.

Aylmer, Co. Elgin, O., Aug 6, 1869.

Root Cutter, \$28; Straw Cutters with reversed Feed, 12 inches, \$50; Straw Cutters without reversed Feed, \$45; Straw Cutters, without reversed Feed, 10 1/2 inches \$40; Straw Cutters without reversed Feed, 9 1/2 inches \$36; Straw Cutters, for hand use, 9 inches \$30; Improved Berkshire Pigs, from six Weeks to three months old, \$10 to \$30. Norway Oats, 25cts. per pound, \$1.50 per peck, \$2.50 per half bush., \$4 per bush. Early Rose Potatoes, \$1 per peck, \$1.87 1/2 per half bush., \$3 per bush. Harrison, 37 1/2 cts. per peck, 62 1/2 cts. per half bush, \$1 per bush. All implements sold at Manufacturers' prices. Send orders to

W. WELD, London, Ont. Office Richmond Street.

G. J. BAKER

HAS invented a Machine that makes washing day a pleasant pastime, instead of—THUMP, THUMP, SCOLD SCOLD, all the day as of old. It is pronounced the HOUSEKEEPER'S FRIEND AND UNIVERSAL FAVORITE, by all who have seen and used it. It is universally acknowledged that a good

Washing Machine

WITH A WRINGER COMBINED,



Will save two-thirds of the labor, and make the clothes last more than twice as long as those done in the old style. The reason why G. J. Baker's Patent Washing Machine is

SUPERIOR TO ALL OTHERS

Is, because it washes quicker and cleaner, and makes the clothing whiter with less muss about the house than any other Machine in existence; thereby saving more than half the labor, half the fuel, and half the soap generally used—as a child twelve or fourteen years old can do more in two hours than a woman could do in half a day in the old way. See it and try it before you buy any other kind, as it is a machine that is easily worked, and less liable to get out of order than any other machine now in use.

COUNTY RIGHTS FOR SALE,

Apply to **G. J. BAKER.**

Oakville, Ont.

C. MOOREHEAD,

Manufacturer of Furniture, (Wholesale and Retail)

UPHOLSTERER, &c

May, 14. King-St., London.

DRAIN TILES.

THE Subscriber begs respectfully to inform the public that they can be supplied with various sizes of tiles, at his factory, one mile east of Lambeth, Westminster. C. GERRARD, London. 1 in p June.

SLADE'S PATENT HAND LOOM

Neat, Complete, Strong and Cheap.

THEY are superior to the looms now in use, are more easily worked, and throw their own shuttle. A child can use them. Every family that makes home-made cloth will find it to their advantage to use one of these looms. The Price of Loom for plain weaving is \$40; for twilling, \$50. Samples may be seen and orders taken at the Agricultural Emporium Ware-room, London, or address to

G. S. ORR, Chatham.

PATENT RIGHTS FOR SALE.

Apply to

FIRST PRIZE EMPORIUM SEED WHEAT.

PARTIES desirous of procuring reliable TREDWELL SEED WHEAT, grown from seed which gained Mr. Weld's EMPORIUM PRIZE of TWENTY-FIVE DOLLARS, can be supplied by—
C. A. O'MALLEY,

THE BEST SHEEP MARK YET INVENTED.—It is made of flat tinned wire, stamped with name of owner and number. It is cheap; it looks well; it does not wear out. Prepaid by mail to any address on receipt of 34 cts. each. Liberal terms to agents. Sample sent free. ARCHIBALD YOUNG, Jr. Sarnia Ont.

BURKE'S PHOTOGRAPH GALLERY.

First Door South of McBRIDE'S Stove and Tin Shop Richmond Street, LONDON.

Worthen's Patent SELF-ACTING HAND LOOM.

THIS Loom will weave a greater variety of Goods with less Power, greater ease, and with more rapidly than any other loom now in use, and is every way adapted to weaving all kinds of hand spun woolen yarns, also cotton and wool, with great speed. Any person can weave on this loom when the warp is drawn through the harness.

It lets off the warp, winds up the cloth, throws the shuttle, and treads the treadles by simply turning an easy crank. When the warp is drawn through the reed and harness, on the same warp, Jeans, Satinets, Tweed Linsey, Blanket Twill, Double, Plain, Sencing Twills, and various kinds Ribbed Goods and Balmoral Skirtings can be woven. To make the changes from one kind of Cloth or Twill to another, requires but two minutes, and they are so easy and simple that a child can make them after one time showing. This loom has taken

FIRST PRIZE

in nearly every state of the United States, and has been greatly improved, and received the first prize at Kingston, 1867, also first prize and silver medal at Montreal, Sept. 16, 1868, and first prize at Hamilton, Sept. 24, 1868, and at London, Sept. 24, 1869.

For Lower Province, Worthen Loom Co., Coaticook, Province Quebec, or S. Worthen, Toronto. J. H. BECK, Medina P. O.

CORNISH AND MACDONALD,

BARRISTERS, ATTORNEYS-AT-LAW, Solicitors in Chancery, Conveyancers, &c., London, Ontario. F. EVANS CORNISH. (t-f) ALEXANDER J. B. MACDONALD

SCATCHERD AND MEREDITH,

BARRISTERS, &c. LONDON, ONTARIO. THOS. SCATCHERD, W. R. MEREDITH, m-c

F. S. CLARKE, Richmond St., London, Exchange Broker, Insurance Agent, and Agent of the National Steamship Coy., from New York to Liverpool, Calling at Queenstown. Prepaid Certificates issued to bring out from the above places, or Germany. m-c-y.

LONDON PUMP AND FANNING MILL FACTORY

Bathurst-st., London Ont. J. M. COUSINS, Manufacturer of Improved Force and Lift Pumps, Fanning Mills, and "Little Giant" Straw Cutters. Pumps repaired, Wells dug and Cisterns built.

THE Services of Anglo Saxon, the King of Canadian Stock, may now be engaged for the Spring season by any Agl. Society that wishes to procure the most valuable stock producer for Beauty and Utility.

GLOBE FOUNDRY.

M. & E. ANDERSON, manufacturers of Cook, Box and Parlor Stoves, Oil Well Casing, and Agricultural Furnaces of the most approved patterns; Stove Pipe, Plain and Japanned Tin Ware, Cauldron and Sugar Kettles. Sale shop, opposite E. Adams' Wholesale Store, Dundas Street, London, Ont. m-c

W. McDONOUGH'S

Is the best place in the city for Teas, Sugars, Tobaccos, Fruits, Wines, Spirits, Cordials, Cigars, &c., wholesale and Retail. Terms Cash. Obsequered Store, Richmond Street. m-c

Mount Hope Nurseries, ROCHESTER, N.Y.

THIS well-known establishment, founded 30 years ago by the present proprietors, and conducted ever since and at the present time under their personal supervision, now offers the largest and most complete stock in the country, embracing: STANDARD AND DWARF FRUIT TREES, GRAPES AND SMALL FRUITS, ORNAMENTAL TREES AND SHRUBS, NEW AND RARE FRUITS OF ALL SORTS, NEW AND RARE ORNAMENTAL TREES, The collection in both departments, useful and ornamental, is the largest in the U. S. Extensive specimen grounds are maintained at great expense, to determine qualities and insure accuracy in propagation. Orders for large or small quantities promptly and carefully filled. Packing performed in the most skillful and thorough manner.

Small Parcels Forwarded by Mail when Desired

Nursery men and dealers supplied on liberal terms. Descriptive and Illustrated priced Catalogues, sent pre-paid on receipt of stamps, as follows: No. 1—Fruits, 10c. No. 2—Ornamental Trees, 10c. No. 3—Greenhouse, 5c. No. 4—Wholesale, FREE.

Address—**ELLWANGER & BARRY,** Rochester, N.Y. 1-in-sept-up

FOR SALE.

SOUTH 1/2 of lot 25, concession 7, township of Beverly, county of Wentworth, containing 60 acres; about 45 acres cleared and fenced. On the premises there is a log house, log barn, frame stable, sheds, sheep and pig houses, a thriving orchard and a good well. Also the south 1/2 of lot 23, same concession, containing 50 acres; about 25 acres cleared and fenced. On it there is a good frame barn and also a good well.

The property lies within 18 miles of Hamilton. Price \$2200, not less than half of the price to be paid down.

The above property may be exchanged for land in the Western Section of the Province. Address, **ROBERT R. HUNTER** Kirkwall P.O. Wentworth Co.

PLUMMER & PACEY'S

WAGON and Sleigh factory, Ridout Street, London, Ont. Their machinery is more perfect and complete than ever, in consequence of which they are able to turn out work, both in quantity, quality and cheapness sufficient to surprise every one not posted up in the improvements of the age. A general improvement of Hubs, Spokes, and Bent Stuff, and any kind of wood work for Wagons, Sleighs, Horse Rakes, &c., always on hand. m-c

TO GARDENERS, FLORISTS AND OTHERS.

TWO Inch Flower Pots	\$1.00 per Hundred
3	1 50
4	2 00
5	2 50
6	3 00
7	4 00
8	5 00
9	6 00
10	7 00
11	8 00
12	9 00
13	10 50
14	12 00
15	13 00
16	14 00
17	15 00

Saucers from 12 to 25 cts. per dozen

CHARLES SIBLEY, LONDON,

Manufacturer of Draining Tiles, Flower Pots, Vases, Chimney Pots and earthenware of all kinds. Orders shipped punctually to all parts. Samples may be seen and orders taken at the Agricultural Emporium Ware-room. Address, **W. WELD, London, Ont.**

TO HORSEMEN! O HUMBBUG!

HOW to make any Horse trot fast without the use of a Track, and a rapid cure for knee-sprung horses. Price \$1 each. On receipt of price full particulars will be forwarded. Address, **PROF. JARDINE,** Aurora, Ont. Sept. to Mar.

TEALE AND WILKENS MARBLE CUTTERS DUNDAS STREET LONDON, ONT.

Joseph Hall Machine Works, Oshawa, Ontario.

Established

1851.

Joseph Hall
Manufacturing
COMPANY

Proprietors

The business carried on

TO OSHAWA,

by the late

Joseph Hall,

and more recently by his

EXECUTORS,

has been purchased in-

cluding

SHOPS,

Machinery, Patterns &c.

by the

JOSEPH HALL

MANUFACTURING Co'y.

who will continue

THE BUSINESS,

in all its

BRANCHES

with increased

ENERGY

AND

VIGOR.



OUR

FACILITIES

will be very much

INCREASED

by the addition of new

Machinery,

and a more thorough

ORGANIZATION

Through our

Connection

with the

GLEN & HALL Manufacturing Co. of Rochester. We shall continue to receive all valuable improvements introduced in the United States.

We shall offer this season our well-known Machines with many a valuable improvement, and shall, as usual, keep constantly on hand duplicate parts of all our manufactures, thus enabling us to supply the wants of our customers and save them from delay in case of accidents.

MR. F.W. GLEN

Will continue to give his time to the Management of the Business. We are determined that all that capital, skillful workmen, improved machinery, perfect organization and division of labor can do, with the best material, shall be done to put into the hands of our patrons the best machines made in Canada, at the lowest possible price.

For further particulars, address

F.W. GLEN,

President,

OSHAWA, ONT.