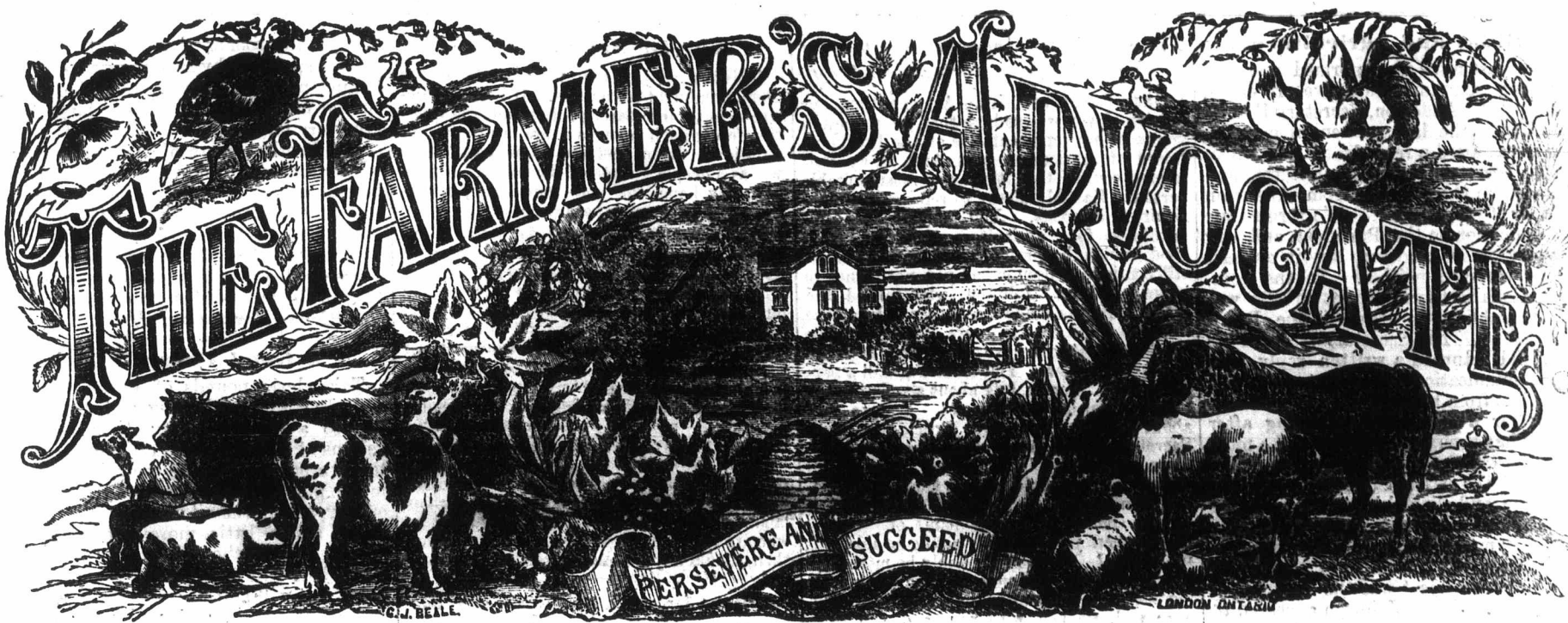


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The Season, Crops, &c.

The Spring is unusually late this year. At the time of writing, April 25, ice is still lying in front of our office window, where the sun has not shed his rays on it, and it will take another week of such weather as we have had for the past two weeks to melt it; but of course this is in the city and in the shade. The ploughs have been running for about ten days, and considerable seeding has been done. The weather has been dry and favorable, in fact, many think too dry for the water in springs and wells, which, probably, were never lower at this season of the year, as last year was so unusually dry; no rain to speak of having fell during the summer, autumn, winter or spring. Many complain of lack of water, even for stock, which is very unusual at this season of the year.
The Fall Wheat, although it exhibited very little blade last fall, many looked with fear to the results of the winter and spring, still the young plants have come through the ordeal of spring and winter frosts much better than was expected, in fact, we do not remember ever seeing such a poor blade winter so well; we have scarcely seen a dead blade this spring. The danger of killing is passed, and it now looks favorable for a bountiful crop.
In some parts of the country there has been a great scarcity of food for stock; many cattle dying, particularly in the north. There has been no loss from lack of food in this section; hay here has been procurable at \$10 to \$12 per ton, but to the north \$35 has been paid. Some who could not purchase were obliged to let their cattle die. There has been much suffering among the poor, struggling families of that section. We are too thankful for the blessings we enjoy.
Wool will be the first article brought to market, and flock owners will reap a rich harvest, as the price will be unprecedentedly high. In some sections some has been purchased on the sheep's backs. Some farmers will not sell half so readily because the price is high, but will lay by their stock for higher prices. If some were offered \$5 per lb., they would not sell, and expect to get \$6. We cannot exactly say what the price will be. We consider that the best course for farmers to pursue is not to hurry their shearing and sell before the proper time, but as soon as the market is fairly opened and the prices established among dealers. The farmers' business and the speculators' business are separate, and if farmers want to speculate they need to understand something about Wall Street. Leave the speculating to the capitalist. If they think 10 per cent. can be made in a year, or 1 per

cent. in a month, they will pay the money; sometimes they lose, but they can store and hold on to the wool at one quarter the cost that farmers can.
Wool in farmers' hands is sure to lose in weight. We have seen it badly damaged by dampness and mold, and sometimes fire and pilfering may lessen your prospects of gain. Our advice is to sell wool and every other crop as soon as the market is open and your crops ready for sale. Grain of all kinds is selling at prices that ought to satisfy our farmers. Cattle may not pay as well this season, as the immense tracts of land in the Western States out vie us in this product. They can raise corn for fuel at a lower rate than we can supply cordwood, therefore we can not but see that our lands must be devoted to other purposes than the production of beef for the spring market. Our grass may do for fall stock, but our spring and summer beef can be raised cheaper where corn is 15 cents a bushel. That is our opinion.
Our dairy productions will be a main stay to Canada; we can compete with the Americans in this line. We have for many years advocated the extension of this business, which has been found very remunerative, and will be. The dairymen will buy out the grain farmers, for they have a fast hold and will maintain it. If you have not turned your attention to it already, do so. We may be in error, but we invite any other persons to express their opinions.
Fruit has and will pay well. We can excel the Americans in raising apples that will keep; we have a mint of wealth in fruit, if rightly cultivated.
Timber has been and will be a source of wealth to us; planting will soon commence, and the sooner the better. Our old cleared lands are not worth half what they would be if we had a good growth of young timber. In fact, we believe that in many places it would now pay better than the cropping system now pursued. It should be encouraged.
TO CLEANSE FRUIT TREES FROM MOSS.—Not only the mosses and lichens which so generally affect fruit trees, but the eggs of insects, may be effectually destroyed by dressing the trees in winter, with a wash composed of a saturated solution of soft soap and common salt or brine. The trunk and large branches ought to be first scraped with a scraper made of old hoop or any other implement that may be improvised for the purpose, and when all the scales of bark are removed, apply the mixture with a painter's brush, working it well into the crevices. This is much preferable to, and not so unsightly as, washing with lime.—Gardener's Year Book.
[What is still better as a scraper to cleanse fruit trees, is a beef rib handled as you would a drawing knife, it cleans the tree effectually and it will not injure the bark.—A. S. T. Ed.]

Knitting Machines.

It behoves us to treat on machinery, as on everything else in our line. We make it our duty to let the farmer know the quality of the article he wishes to purchase.
But our readers look to us for information, and, as a consequence, we intend giving you our opinion in the very face of the law, which may be—as was previously threatened—put in force against us; for editors are liable for heavy damages for telling the truth, if the truth will be injurious to any one.
We wish to keep in the good graces of the ladies, and to accomplish this we must do our utmost to represent articles, if possible, in their proper light. No doubt we have often been in error.
We advertised and spoke well of the Hinkley Knitting Machine. On our first examination we were well pleased with its creditable looking appearance, but on trial it has not proven itself efficient. As far as our experience goes, we had three other orders for the machine, but refused to fill them.
It may yet be got to work right, and if it is, and we are satisfied about it, we will be glad to let it be known.
The Hamilton Knitter, manufactured in our own country, we regret to say has not yet worked to our satisfaction.
The Lamb Knitting machine has given entire satisfaction to every person we have supplied with it. They will knit a pair of stockings in 30 minutes, and make them well. The worst of this machine is that it costs a larger sum than the others. We know young ladies who are making money faster by knitting than their fathers, husbands or brothers on their farms. We have heard of one who purchased a farm from the evenings at her Knitting Machine.
It really is astonishing to see how nicely they work. The old knitting needles will be at a discount where a Knitter is introduced.
A very valuable number of *Health and Home* for April 20 is before us. Besides several fine engravings, and the usual good assortment of excellent reading for all departments of the household, a Supplement in this number gives an account of a four years' Libel suit brought against the Publishers for exposing Humbugs in which the important ruling of Judge Brady, of the N. Y. Supreme Court, and the testimony of leading physicians, of the advanced ground in regard to the responsibility of manufacturers and dealers in patent medicines. This will be specially interesting, not only to Lawyers, Physicians, and Druggists, but to all who buy and use medicines, and to those who have been swindled by humbugs. Get this number especially, either of your new-man, or send a dime and get a postal card copy from the Publishers, Orange Judd & Co., 245, Broadway, N. Y.

We have received an anonymous communication from Sarnia descriptive of a stump extractor. It is evidently an advertisement. If the writer wishes to have it inserted as such, our advertising columns are open to him.

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Politics and Agriculture.

In our last issue we informed you of a very long communication we received, signed—"H. Anderson, Secretary E.M.A.S." Up to the last moment of going to press we awaited a reply from the President or Secretary, to ascertain if the article was from the Board or from Anderson alone, or from neither. We wrote one communication to the President, and our Secretary wrote another, but it appears that he received neither. In the communications to the President an offer was made to publish the article if the Board requested it. The Secretary received his letter and returned a written reply, that the communication was not from the Board, but from himself.

Now for a few facts. Meeting after meeting has been held to devise the most speedy means for our destruction. We heard that one of these meetings was to take place, and slipped into the room, in our editorial capacity, just before the business commenced. Of course our presence marred the proceedings somewhat, but the above subject was the business of the meeting. James Johnson appeared to be the main-spring of the meeting, and we were threatened with a pitch down the stairs.

We have not attended any of their private meetings since, not from fear, but because our time has been too fully occupied in doing what we considered to be our duty. They have held a meeting recently, and it appears that, with their united wisdom, they have concluded to run to the Scavenger newspaper, as no respectable journal would insert their little articles, condensed into 2 1/2 columns of a common newspaper. The whole thing is a Political Rig, and the Western Fair is made to stand the brunt. Johnson is to appear as deserving of great honor, and your editor is branded as a liar, a deceiver, insane and vindictive.

City Progress.

This city is progressing at a rapid rate; buildings are springing up like mushrooms. The oil refining establishments here employ a vast amount of capital and considerable labor, and the Great Western car shops have been recently established here; the Pullman Company are also about to establish their shops here immediately. The Oil Refineries are doing a great business, and the Chemical Works are progressing well. The Starch Works are also prospering. The Superphosphate Manufacturing is doing a large remunerative business, and, indeed, on every side are the signs of enterprise and prosperity.

We have seen many Englishmen come here and commence farming, but whatever may have been the cause, they have failed in realizing their expectations. They have not in the commencement made money by farming. But if it was a great pleasure to us yesterday to visit one who is prospering—Mr. Brydges—who has leased the Carling Farm, beside the city. He has built extensive green-houses, and though he only commenced last January, his stock of plants, flowers and vegetables would do credit to those favored by years of prosperity. We have seen many Conservatories, but we have seen nothing in Canada equal to the Conservatory of Mr. Brydges, except that of Mr. Leslie. We may congratulate the people of London on having such a requisition as this Conservatory, and we must add, that the proprietor is a gentleman, and well deserving of the success which, we have no doubt, will reward his labors. Would that we had many such men, for there is plenty of room for all such industrial projects. As the city progresses there is an increasing demand for flowers, shrubs and trees, and the facility of obtaining them will tend to greater improvement and, consequently, a greater demand.

A farmer's house should always be retired enough from the main thoroughfare, to escape the noise and dust incident to travel, and this gives room for the exercise of taste in cultivating and adorning the premises.]

To Mr. Henry Anderson, Secretary of East Middlesex Agricultural Socy.

ONCE RESPECTED SIR,—At one time our opinion of you was so high that we requested you to be our representative at the Provincial Board of Agriculture and Arts, as we considered you, at that time, the most suitable person in East Middlesex to represent our agricultural interests. You labored hard and faithfully for agriculture, and did much good, which honorable position you might still continue to occupy had you not turned to make place for Johnson, who missed the mark. But a change has either taken place in your mind or in ours. Our humble opinion is that you have descended from the position of a man. You do dare to call a person a liar! You talk about slandering the most popular and useful men! You talk about honor! Your very article, signed as Secretary of an Association, is a false pretence by your own letter in our office, which states that the article was not from the Board, but from yourself. What business have you to take shelter under the name of "Secretary" when you are only acting as a private individual? What can possibly be more *subtle, deceitful and dishonorable* than the following facts:—Shortly after the agricultural lands were sold, we met with you, and you then told us they (implying the Board) were trying to use the money for Western Fair purposes.

The first time we met you after having penned your slanderous article, was on the Saturday following our receipt of it. The meeting took place in the bar-room of Balkwill's Hotel. We asked you if you would answer our question, and you consented. We then asked if you had not given us the above information. Your head at once dropped; you looked right and left for your friends, and then replied that you had.

Numbers heard this conversation. Does not this look like a trap; first, to give us this information, and then to call us a liar for publishing it?

Again, you have often told us that we were about right in our remarks concerning Johnson & Co. At one time you stated that the affairs were not managed for the interest of the farmers; that the citizens were getting the whole control, and that you had a great mind to expose the whole affair, which you could do.

Again, you are the very person that informed us of one of Johnson's remarks about us, viz., "Damn him, he is getting up a good paper!"

Again, if we remember right, we believe you were one of the persons who informed us that Johnson was the person who decried our samples of seeds when we exhibited the largest number of samples of wheat that had ever been exhibited or grown by one person in Canada.

Again, you, as an individual, make a great fuss, publish an article with the attempt and desire to injure a person who had through misinformation obtained from yourself published a mistake, but who also issued a supplement correcting the said mistake, previous to your publication.

Come, come, Anderson, no more hunker-sliding! Take off your horns and throw away your brimstone coat, and do not attempt to cloak your laudation of Johnson, all for political purposes.

Finally, we have reason to believe that you have, for some unknown cause, allowed yourself, perhaps blindly, to be led to such a course. We even doubt if you have willingly done it, and we are quite sure that the time will come, if it has not already arrived, when you will see that this very step you have taken is not for the benefit or advancement of the farmers' interests, or of those of the Western Fair, but really for political ends, to strike a blow at independence, and help to aid and vindicate your late co-operation with a set of party politicians. It has not been our desire to build up or throw down either of the great political powers, but to establish more united action among farmers, and to have their interests better looked after.

A farm, with shade and fruit trees set around the house, will sell for two hundred to one thousand dollars more than if there were none; while the girls will have more beaux, and the boys be less likely to get the mitten.

An exchange says that rusty straw is one of the most dangerous blood poisons; it induces distemper, it vitiate the blood, reduces the condition of the animal, takes away the appetite and opens the door for colic, skin diseases, swellings and fevers; it is only fit for litter.

The Destiny of Canada.

This is a subject that we farmers of the Dominion ought to consider. It is not our desire to enter into party politics, but the question forces itself upon us: are we to exist as a nation? Is our country to prosper? Are we, as a people, to be self-dependent? If so, our only hope, the only foundation, physically speaking, must be agriculture.

We leave to individuals to form for themselves opinions in regard to religion or politics; we take the side of no party; we have built on agriculture alone. We have not to our knowledge, offended either sect, yet some of both political parties have taken offence.—Our object has been the common good, yet some of those we have labored to serve have been our enemies. Our opponents are not a majority of the class we labor to serve, but a large and powerful number; men who, strange to say, are unable to stand up boldly in the light of the sun and give their reasons for their opposition, but strike in the dark. We have not spared our means or our labor to promote the welfare of agriculturists, who are the mainstay of the country. Why, then, should any oppose us and strive to injure us?

Let our farmers know the position they should hold in the country. Let there be no division among them. They have the power, and let them maintain it; no cringing or fawning to any other class. Let the interests of the farmers be looked to. Expenditure of money should all be for the promotion of agriculture but has it not rather been extracted from the farmer? The very foundation of our prosperity—the means of our agricultural improvement—has been forced to bear the most unjust and oppressive taxation. We have paid for the railroads, paid the high salaries of officials, paid for the beautiful and costly post offices in the cities, and, after all, this double tax is imposed on agricultural papers.

We would ask, what has ever been done to aid the testing and dissemination of seeds? Have not attempts been made to check private enterprise and enchain the whole agricultural community in submission to political purposes. For what other purpose has this Mimico expenditure been incurred? The work had been undertaken by individual enterprise, without expense to the country. Why, then, this expenditure? did ever a farmer ask for it? did any agricultural society or body of farmers commend it? It must be looked on as a clog and a check to improvement; as a wrong to private enterprise; as an unnecessary squandering of public money; as another place prepared for the reward, not of honest industry or deserving merit, but of partizan intrigue and favoritism.

Gleanings from our Exchanges.

PROSPECTS OF THE SEASON.—Bobcaygeon, April 13.—The snow is off in this section, and the fall wheat never looked better than now.—A greater breadth was sown last fall than in other years. The lakes can hardly be open for navigation in less than three weeks. Great fears are entertained that there will not be water enough to carry down timber and logs from the north. Hay is selling at \$29 per ton.—Toronto Mail.

SUGAR BEETS.—The culture of sugar beets is rapidly spreading in the United States. Not only is a permanent market for them about to be established in the beet-sugar factories now springing into existence, but they are found to be excellently adapted as food for stock.—Milk cows, fattening oxen, sheep and hogs all devour them readily and thrive on them satisfactorily. The climate is adapted for them, and in their culture no method or implements other than those needed for the ordinary culture of turnips, are required.—Hearth and Home.

The Bresec's Potato.

From my experience, I arrive at the following conclusions, viz:—

The King of the Earlies is the earliest and best in quality as an early potato, but to make a good crop, it must be planted early, close, and on very rich ground. The Early Rose requires little seed, two to four bushels being sufficient for an acre.—It produces more small ones than some other varieties; as it tends to grow out of the ground, it should be well hilled up; it is not good for table use till ripe. It is better as a late potato than any early variety I know. The Prolific cooks about

five minutes sooner than any of the other varieties, and is by some preferred as a baking potato. Pearles and No. 7 are similar in yield, quality and habits; both give very large and uniform tubers (have seen a Peerless weigh 5 1/2 lbs.) and both as winter and late table varieties, are of the best quality. They do well on most soils, and may be planted quite late with success. A year ago we turned over the soil and planted Peerless the last day of June. They yielded over 250 bushels to the acre, though the ground was not in very good condition.—Hearth and Home.

A Good Cheap Paint.

Take eleven pounds of unslacked lime and one gallon of boiling water, and stir it into a thick pudding; then add two gallons of boiled linseed oil and one quarter of a pound of white potash dissolved in one pint of boiling water. Mix thoroughly, and if the oil and potash do not unite, add a little more potash water, enough to cut the oil perfectly, but no more. It will look thicker than common paint, but will spread easily with a common paint brush, and will wear excellently well; it has all the appearance of a superior paint, while its cost is less than half as much. As a paint for barns, out-houses, fences, &c., it is unequalled.

Public Agricultural Matters

ACROSS THE LINES.

A large meeting has been held in regard to the State Agricultural Colleges, the desire being to obtain more aid, more land, and more power. There are some deprecating the undertaking. We clip the following from *Moore's Rural*, which should have consideration at the present time, when so much public money is being expended, or about to be:

"Buying and distributing home-grown seed free, on the part of the Department of Agriculture, ought to cease. There is neither excuse for it nor sense in it. If through Government agents abroad, the Department can secure new seeds or plants, not heretofore introduced in this country, and which have, or are supposed to have, a distinctive or special economic value here, their introduction and dissemination is excusable. But there is no excuse for the policy which buys new seed corn, wheat, or potatoes of domestic growers, and distributes it free to the few who may be favored by the Department."

Inquiries.

How is Hungarian Grass to be treated? how much seed is sown to an acre? would plaster be of service to it? what is the time for sowing, and when may the crop be fit to cut for hay?

J. CARLON.

ANSWER.—We would not recommend you to sow Hungarian Grass. It must not be sown till June, when there is no danger of the spring frost. The consequence is that it is late in the season before it can be cut, and then it is saved in a dirty state. We recommend Western Corn in preference, as we have tried both. The corn can be better saved, it is better feed, and produces more abundantly.

ISAAC COLBURN, Corresponding Secretary of the Loami Farmers' Club, Sangamon County, Illinois, will accept our thanks for his kind letter, informing us of our election as an honorary member of the Club. We forward our paper as instructed.

THE WAY TO SUCCEED.

Fortune, success, fame, position are never gained, but by piously, determined, & bravely sticking, living to a thing till it is fairly accomplished. In short, you must carry a thing through if you want to be anybody or anything. No matter if it does cost you the pleasure, the society, the thousand pearly gratifications of life. No matter for these. Stick to the thing and carry it through. Believe you were made for the matter, and that no one else can do it. Put forth your whole energies. Be awake, electrify yourself; go forth to the task. Only once learn to carry a thing through in all its completeness and proportion, and you will become a hero. You will think better of yourself; others will think better of you. The world is its very heart admires the stern, determined doer. It sees in him its best sight, its brightest object, its richest treasure. Drive right along, then, in whatever you undertake. Consider yourself amply sufficient for the deed. You'll be successful.

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Farmers' Clubs.

We give the following a welcome space in our columns. It has been kindly forwarded to us by the Secretary of the Society. We think it but right to inform our readers that this Hamilton Club does not belong to the city of Hamilton, but to a township in the County of Northumberland, over a hundred miles from the city. We think some of our cities, or farmers near the cities, might be taught a lesson by their distant friends. These Clubs are the very foundation of agricultural prosperity. It is our impression that some leading men in Canada will be impressed with this idea, and Farmers' Clubs will be established in each township. We are well aware there are great difficulties in the way: it requires time, patience and money to get one established; and oh! how tardy and penurious are some of our wealthy farmers! No appeal will affect them. Money has been heaped upon them more from luck than from management; but many would never expend one cent for any public purpose unless compelled to do so by the strict arm of the law. Those willing, laborious gentlemen who devote their time and abilities to aid the establishment or maintaining a Farmers' Club should be substantially encouraged. Their work increases the value of the poor-spirited miser's property, and he should be compelled to dole out an unwilling dollar to aid such. Township Councils might most profitably encourage such. There is not at this present time one farmer in one thousand that knows the name, or nature, or adaptability of one quarter of the commonest cereals or roots that are even raised in Canada, no, not either of wheat, peas, barley, oats, or potatoes.

These Societies teach us; they cause us to seek for knowledge; it is only the best who will venture to impart knowledge; many a stinging old cadger will even have the barefaced audacity to desire to ridicule the attempt of some poor, younger, more enterprising man than himself for doing his best to give information. We hope this will hit some; but they do not belong to the subscribers of the ADVOCATE, as that class do not take agricultural papers. Some of you may profit by these remarks; those are the persons for whom we write—namely, the Public. The class we speak of have never had spirit or enterprise enough to take an agricultural paper of any kind; they know more than the united knowledge of the country.

The Secretary will accept our thanks for his kindness. There are two other Societies in Canada—probably more—perhaps they will keep us posted. We wish you every success, and shall be pleased to hear of your progress and see accounts of your discussions.

TOWNSHIP OF HAMILTON FARMERS' CLUB.

A meeting of the above Club was held at Mrs. Wood's Hotel, on the 15th ult.—Mr. Edward Bellerby in the chair. Present—Messrs. McDonald, Bourn, Bellerby, Aitchison, Pratt, Young, Sibley, Burnham, McCallis and others.

Mr. Sibley introduced the subject for discussion, viz., "Barley, and its Cultivation," with the following remarks:—Gentlemen, I feel sorry that you have chosen me to bring before you the subject selected for discussion to-day, "Barley, and its Cultivation," knowing that there are some more competent, by longer experience, and better qualified to treat this subject than I am. But, considering the benefit that may be derived from the proper discussion of any subject pertaining to farming (and for which this Club was organized), I will endeavor to do what little I can to contribute to our mutual prosperity. In looking at this subject, I see it is divided into two parts, "Barley, and its Cultivation." About the first account or mention we have of barley dates as far back as the time of the Exodus, when we read of the barley being smitten in Egypt, and we read of Ruth that she came to Bethlehem at the "beginning of barley harvest," and no doubt it is indigenous to that eastern country. How it found its way to Britain I cannot say, but it has long been cultivated there to a great extent. And for the last ten or twelve years, the extent of ground over which barley has been sown in

Canada (especially in the Province of Ontario) has so increased that it has become one of our staple crops; the six-rowed being the principal variety cultivated in this country. In regard to the different varieties of barley, Professor Law divides the cultivated barley into two distinctions—the two-rowed and six-rowed. Lawson describes twenty varieties while the museum of the Highland Agricultural Society contains specimens of thirty or more. The classification of barley by the ear is of three kinds—the four-rowed, termed in Britain Bere or Bigg, the six-rowed, and two-rowed. Of these, the Bere or Bigg was that which was mostly cultivated about a century ago, but more recently the two-rowed has almost entirely supplanted it, and is now the most commonly cultivated barley in Britain, the six-rowed being rather an object of curiosity than culture. In classifying barley by the grain, there are only two kinds, Bere or Bigg, and barley. In the Bere, the medium line of the bosom is so traced as to give the grain a twisted form, one of its sides appearing larger than the other. In the barley the line passes straight, and divides the grain into two equal sides, whose shortness and plumpness give it a character of superiority. The Bigg has long been recognised in Scotland, and a two-rowed variety under the name of common or Scotch barley was for a long time cultivated; but several of the English varieties have been naturalized, and show a brighter and fairer color, plumper and shorter grain, mat's much quicker, but is less hardy and prolific than the common barley. The great bulk of barley is used for malting purposes, and is excellent food (when chopped) for fattening cattle and pigs, and also for horses when boiled, and more economical (considering the present prices of peas or oats.) Its fattening properties are ten per cent. more than that of peas, equal weight, while its nutritive properties are the same. In speaking of the cultivation of barley, I would say, in the first place, that a loam soil is the most suitable for its production. Although barley is not so hard on the soil as some of the cereals yet it requires a clean, rich soil, and land that has been made fit for a turnip or other hoe crop will give a greater yield than when sown after any other cereal. It does not require a deep seed bed, but it must be thoroughly pulverised, or you need not expect a large return. In preparing the soil for barley (if sown after a hoe crop), the ground should be ploughed once in the fall, so as to have the benefit of the winter's frost; it should be ploughed in ridges the proper width for sowing; if sown on wheat or oat stubble, plough as soon after harvest as possible, and harrow after to kill all weeds. If not rich enough, put on a good coat of manure just previous to ploughing again, before frost sets in. In spring, when the land is in a fit state for working, and just before sowing, the ground should be gone over with the cultivator, crossing the furrows, and single time with the harrows after, in order to give a loose and even seed bed. If clay soil the gang plough would be better than the cultivator. As to the proper time for sowing, much will depend on the season; if spring opens early, and continues fine, without frost, it might be sown in the last week of April, but generally I would not sow until the 5th or 10th of May, or even later, as the young brard is very tender, and when early sown is very apt to get nipped with frost, and be the cause of reducing the increase of the crop. There is much difference of opinion as to the quantity to be sown per acre. If sown early, less seed will be required than when sown late, two bushels per acre being sufficient at any time, but I would rather sow 14 than 2. A judicious selection of seed is an essential point to insure a good crop. We cannot be too particular on this point. If we would clean grain intended for seed, as we do that for exhibitions, we would not only have a better quality, but an increased yield. If the seed bed has been prepared as I have stated, a single time of the harrows each way will be all that is required to cover the seed before rolling. If grass seeds are to be sown, the ground should be rolled immediately after sowing, but if clay soil, the seeds should be harrowed in with light harrows, and the rolling left till the brard is well through the ground. I might say that I have found, from three to four years' experience, that from 100 lbs. to 150 lbs. of salt sown to the acre will have the effect of stiffening the straw, and is of great benefit where barley is sown on rich clay soil. Gentlemen, having given you my knowledge about barley, and my small experience in regard to its cultivation, it is now open for your discussion.

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Mr. A. McDonald said that he thought he could not add much to Mr. Sibley's address,

as that gentleman had touched on most of the subjects connected with barley that he could think of. He thought the six-rowed variety was most suitable for us, chiefly on account of our market—the Americans liked it best. He thought the two-rowed barley yielded best, especially on clay soils, but that the six-rowed ripened earlier, and was not so easily discolored if we happened to have showery weather during harvest; that a dry, heavy soil was best for barley, as it was easily hurt with wet; that he thought it did best either after a summer fallow or a root crop that had been well manured, with the ground well ridged up in the fall, in ridges say from 15 to 18 feet wide, then in the spring cultivating across the ridges, two or three days before sowing. He would not sow too early, as barley was a tender plant, and was apt to be hurt with frost if sown early. He had found a great advantage in dressing the ground for barley, by drawing out short well-rotted manure even during winter or early spring, and spreading it over the ground, the cultivator mixing it with the top soil; he had found it beneficial to apply plaster to barley it came up (especially if the season was dry) at the rate of 100 lbs. to 150 lbs. to the acre. He thought salt would be an advantage; he had not tried it as yet, but intended to try four or five hundred weight of salt to the acre on his barley this year. Barley was sown too early on a clay soil; if the ground was lumpy it was apt never to come up through the ground at all. One year he sowed his barley, the next day a heavy rain came on, and one-half of the barley never got through the ground, it was baked so hard. He thought the ground ought to be well prepared before sowing barley, made mellow on the top, not too deep, as barley drew its nourishment from near the surface; he thought that to apply about 150 lbs. of superphosphate of lime along with the barley, harrowing all in together would be a great advantage. He had seen bone dust applied at the rate of six bushels per acre on part of a field of barley. That part yielded ten bushels an acre more than the rest of the field where no dust was applied.

Mr. Bourn said he had no experience with barley; he had only grown one crop, and found it did not answer on his light soil; he thought it did best either after fallow or else after a root crop; he would prefer it after a root crop on a fertile soil; he thought the land required to be made very fine for barley, more so than for wheat; he thought spring wheat would do well on ground that was too rough for barley; he saw that barley did not do well on light, sandy land; it would dry up and come to nothing.

Mr. Francis Aitchison said that of all the cultivated grains there is, perhaps, none which comes to perfection in such a variety of climates as barley. It is found in most parts of the habitable globe, and maintained itself in spite alike of tropical heat and drought, and the cold of regions bordering on the frigid zone. Linnaeus found it growing in Lulea, Lapland, in latitude 67°; in genial climates, such as Egypt, Barbary and the south of Spain, two crops of barley may be reaped the same year, one in spring from seed sown the previous autumn, and one in autumn from a spring sowing. This explains a passage in the Bible (Exod. ix. 31), where the effect of the hail which desolated Egypt in consequence of Pharaoh's refusal to let the children of Israel depart is thus described:—"The flax and the barley were smitten, for the barley was in the ear and the flax was balled, but the wheat and the rye were not smitten, for they were not grown up." It is agreed among commentators that the event thus narrated took place in the month of March; the first crop of barley was therefore nearly ripe and the flax ready to pull, but the wheat and rye sown in spring were not yet sufficiently advanced in growth to be hurt by the hail. Barley grows best on light, fertile soil, well cultivated and free from weeds, which are more injurious to it than to any other grain; it should, therefore, follow a hoe crop, if possible. Root crops require a well-pulverized soil, and so does barley. In Scotland, it is almost always sown after turnips, which have been either fed off by sheep or drawn to winter quarters for cattle food. This grain does well on heavy soils, provided they are worked and stirred until a proper tilth is secured; but this, of course, increases labour just at the busiest season of the year. But it should always be borne in mind that it is very poor policy to sow barley on land not properly pulverized. Barley grows and ripens with astonishing rapidity; nevertheless, it should be got in as early as the state of the ground will admit, and should be harvested before it is quite ripe, as it quickly injures if allowed to stand

too long. When harvested early, the grain is of superior quality and less liable to shell out and be wasted. The grain of barley very much resembles that of wheat in its composition, but it contains less gluten and more starch and sugar, as the result of which it is less nutritious, though equally wholesome. Barley is quite as exhaustive a crop as wheat, if not, indeed, more so; it is, therefore, a mistake to suppose that soil need not be in as good a condition for it as for wheat. Barley will do well in a shallower soil than wheat, because it sends its root very much along the surface and not to a great depth.

Mr. Pratt said he thought he could add but little to what had been already said, as those who had spoken had pretty well exhausted the subject. He would prefer the two-rowed to the six-rowed barley, if it were not for our market: the Americans were our chief buyers, and they preferred the six-rowed barley, and we must grow what suited them, though in the front of our township we could grow five or six bushels an acre more of the two-rowed than of the six-rowed; but it was sometimes difficult to dispose of it. With him, if barley was sown after roots, it grew too strong and lodged badly, and was not a good sample. He always manured his root ground very highly, and had sometimes sown an acre or so of his ground thus with the hopes of having a good crop and a fine sample, but was disappointed; it always grew too strong. He generally sowed his root land with wheat then ploughed his wheat stubble in the fall and cultivated, and sowed with barley in the spring. In this way he had good crops of barley, and a good sample. If he was going to manure land for barley, he would do it in the fall before ploughing; it would then get well mixed with the soil when it had the necessary ploughings, harrowing, and cultivating. When sowing two-rowed barley he used from a bushel and a peck to 14 bushels of seed to the acre; of six-rowed he used about two bushels of seed to the acre. He had never tried salt on his barley, but thought he would this year, as he heard that salt helped to stiffen the straw of barley.

Mr. Young said in his experience with barley, he greatly preferred the two-rowed variety, as it did for the best with him, and he had found no difficulty in selling it and getting the highest price going for barley. On one occasion in the same field, he sowed both the kinds of barley, and he got from 8 to 10 bushels an acre more from the two-rowed than from the other kind. Though the two-rowed did best on clay soil. With him if sown after roots, it lay down and lodged badly. He thought that about the 24th of April was the best time to sow barley. If he manured land for barley he would either manure it in the fall before ploughing or else on the top altogether. He ploughed his land for barley in the fall, and then cultivated it in the spring.

Mr. Bellerby said so much had been already said that as far as he was concerned he would be brief in stating his experience in the cultivation of barley. His idea was to plough his land well in the fall, and give it a good coating of manure if he had it and the land required it. He then gave it a light ploughing say three inches deep or so, the spring ploughing into broad lands across the fall ploughing; he then cultivated it, especially if there had been rain after the cross ploughing, this making the land fine and level. No matter how fine the weather might be, he never calculated to sow barley before the 8th of May, and when the weather was not favorable he was sometimes as late as the 15th to the 20th of May. He had never been troubled with spring frosts; if barley gets any check it is very detrimental to the crop. It very seldom recovered a severe check, though sometimes it did.

A vote of thanks was given to Mr. Sibley, for the very able practical manner in which he had introduced the subject.

The next meeting of the Club was appointed to be held at Mr. Bevan's Hotel, Cobourg on Saturday, the 13th of April, at 2 o'clock p. m.,—the subject for discussion to be the cultivation of Turnips, Carrots, and Mangold Wurtzels.

Mr. John Pratt to introduce the subject.

ITALIAN BEES IN UTAH.—A Utah correspondent writes that there were a number of Italian bees imported into that Territory last spring, and that they have thus far proved a decided success in many instances, one hive producing four to six swarms, and 100 pounds of honey and upward. There is also a lively interest noted in relation to the importation of improved breeds of horses, cattle, sheep and swine.

Corn Fodder.

Mr. G. Buttery, President of the West Middlesex Agricultural Society, called in our office to procure some seeds, and in a conversation which ensued, Corn Fodder was spoken of. We both agreed that not one-tenth of the farmers of Ontario know the value of corn for soiling, nor its proper mode of cultivation and curing. He appears to understand the subject better than we do.

All who have tried corn-raising and know anything about it, know that it will spoil if placed in a mow or stack, unless in very small quantities. Mr. Buttery intends this season to put it in his barn, and lay an alternate layer of straw and corn stalks. We believe he will succeed in keeping it in that manner. The best way we have as yet found is to set it in large, round, or long stooks, in the field or near the barn yard. All that have raised it also know the difficulty of making the first armful stand, when commencing to make the stook in the field. Mr. Buttery uses a pole with two legs, one end projecting and the other lying on the ground; through the projecting end, probably about two feet from the end, he places a cross bar through the hole, so that it can be easily inserted or withdrawn. This enables the gatherer to set up the corn stalks in each corner of the fork, where it will stand firmly. The cross-bar is then withdrawn, and the pole is easily picked up and carried to the place where the next stook is to be made.

Mr. Buttery is no patent-right-man; all can use it that raise corn for fodder. We presume we may class those stock-men who do not use corn as the parties that take no agricultural paper, and who deserve to have their farms bought by their neighbors, because they think they know all about farming.

Mark these words: those farmers who have commenced using the Western Corn for fodder, are the persons who will have the control, and who will buy out the less-informed class. It may not be in one or ten years, but most assuredly, "knowledge is power," whether in farming or in any other business. Farmers who take no paper devoted to their business, are running blindly, or are led by political influences. They are not independent yeomen. Papers may be and often are in error. Thousands of things are printed that are of no use, and are sometimes worse than useless, but such are apt to be corrected. No paper can stand on falsehood and deception for seven years.

Every farmer should take one agricultural paper or more.



From Mr. Buttery's description we give our illustration in the above cut, the utility of which any one will see who has ever raised corn.

A POSER.

In the above information there is much of value to the farmer and wealth to the nation. Let us ask a question or two:—Is there a president, director, secretary or member of the East Middlesex Agricultural Society who has ever voluntarily given such useful information to the country? We have watched the *Canada Farmer* and the *Ontario Farmer* for such, but in vain. We should be happy to be informed if either East Middlesex (which means the city of London), Hamilton, Toronto, Kingston, Montreal, Quebec, or St. John's have given us such valuable information as the above cut represents, or even as much as is given in this issue of our journal, from ruralists, such as "The Farmers' Steam Horse," "Best Root Rotter," and "Corn Fodder."

These things are below the dignity of this and other cities. City power must control matters in and around the cities,

and political power has been, is, and will be the ruler of the cities. Therefore, we say that we, as agriculturists of the Dominion, should build up our position and rights on agricultural grounds at once.—We well know that in this city politics rule the agricultural affairs, to their great injury. Look at the Toronto Agricultural Exhibition—a failure, and that at Montreal, the best in Canada for the arts, sciences and floriculture, but the seed and implement department is far worse than that in the smallest township show that ever we visited in Western Canada. Draw your inferences: are the cities to rule the farmers, or are farmers to be independent? Decide!

Western Fair or Political Matters.

Being desirous to ascertain how much the Board of the E. M. A. S. are responsible for the allegations against us in Mr. Anderson's letter, we have addressed the following letters to the Vice-President, but as yet have not been favored with a reply to either:—

London, March 21st, 1872.

G. NIXON, President.—
DEAR SIR,—I have received a manuscript from the Secretary of the East Middlesex Agricultural Society, intended for publication. I shall be pleased to insert the document if it is with the wish, desire and consent of your Board. If you or the Board are not aware of it, I would most sincerely advise you, for the interest of the Society and the position of its Directors, to at once assemble a meeting of the Directors at which the members of the Society may be admitted, and have the document fairly discussed. Yours respectfully,
W. WELD.

London, April 13th, 1872.

To the President of the E. M. A. S.—
DEAR SIR,—I have been impressed that some of the controllers of the Western Fair, which your Association is connected, have acted in a most injurious manner towards the interests of the agriculturists of this Dominion and more particularly the interests of this county, and that the Western Fair, as it has been conducted, will result in more injury than benefit to this country. I should be happy to give you explanations at a public meeting, or to your Association, if the public might be admitted at any time. It is not my desire to check any progress in agriculture, but to aid it in every proper manner. Yours, &c.,
W. WELD.

Having had, as above stated, no reply, we again address the President in the following, through this paper:—

To Mr. G. NIXON, President of the E. M. A. S.—

SIR,—Should your Board desire the publication of Mr. Anderson's article, and send us word to that effect, we will publish it in our first issue succeeding.

Supplement to Farmers' Advocate for April.

[CORRECTION.]

In the first article on the 35th page of this volume:

The voice of the meeting was not taken by a vote or resolution, but from the remarks of the members and President we were led to make those statements. We had sold was \$5000; we also received information from the Secretary of the Association to the effect, that some wished to use the money for the Western Fair.

From a communication since received we understand the Western Fair was not originated for the purposes to which it may have since been applied. We have seen an explanatory document which shows that power had been granted to the Board to dispose of the land.

We return our sincere thanks to two gentlemen, Mr. W. Saunders, now President of the Western Fair, and Mr. R. Walker, who very kindly called at our office, and in a most gentlemanly manner explained some of our mistakes. There are some other little inaccuracies in the article alluded to, but from press of business we may have allowed proof sheets to go without seeing that a correction they deserved, or perhaps some things might have appeared differently.

Mr. Saunders has already convinced us that his desire is to conduct the Western Fair for the best interests of the country. We wish him

success, and are willing to aid him to the best of our abilities.

The above was sent with last month's issue to most of the members of the East Middlesex Agricultural Society, who get the paper in this city. Mr. Saunders called at the office at the time the papers were being printed.

Some are attempting to make a great handle of this also. We are always ready to correct an error, however trivial it may be.—We do not acknowledge that this opposing power is right, or that we have been in error in our opinion. We gave our information from what we believed reliable sources, and only such as we believed to be correct at the time of publication.

Seeds, Seeds, Seeds!

We hasten the publication of this issue to prevent our subscribers sending us any more orders for some kinds of seeds this season. Our stock in many varieties is already exhausted: in No. 1 McCauley Wheat, 24 bushels more than we can supply are ordered from one section alone.—There is a similar variety offered us under another name, but we refuse it, as we are not sure about it, although it could be procured for one quarter the cost of the genuine article. The King of Earlyies and some other varieties of potatoes are exhausted; Early Providence Pea also.

Orders for more than our original stock are lying unfulfilled: orders far in advance of our stock. The Italian rye grass is run out, and the King of Swedes is doubly exhausted.

We have several varieties of potato, field and garden seeds, and a choice selection of flower seeds—we think sufficient to supply all the demands we shall have in this line.

To the Ladies.

Hot-houses, conservatories and even hot beds on the farm are like angels' visits—few and far between; and we know full well that even if they were there, farmers' wives and daughters have other work to do than attending to the horticultural department. Still many of our lady friends are extremely fond of flowers, and bestow a good deal of time and trouble on their flower garden, and frequently meet with great disappointment in having all their choice plants killed by frost. We ourselves have suffered many times from the June frost, and consider that the safest and best time for sowing seed of all choice or delicate plants is about the Queen's Birthday for out-of-door culture.

We have now received our imported stock of seeds and bulbs from Germany, and to give you an opportunity of trying them yourselves, we have determined on the receipt of 5c. to pay postage, to present to the wife or daughter of every paid up subscriber of \$1, who has not previously received a prize, three packages of choice flower seed, you to select one variety of seed or one bulb from the following list, or from the flower list in our April number.

- Choicest imported German Flower Seeds.
- Asters, 18 varieties, 1 seed costs . . . 15 ct.
 - Stocks, 15 " " 2 " . . . 15
 - Zenis, 12 " " 2 " . . . 15
 - Coxcombs, 12 " " 2 " . . . 15
 - B'sams, 10 " " 2 " . . . 15
 - Pansies, 12 " " 2 " . . . 15
 - Everlastings, 10 varieties . . . 15
 - 1 Dahlia root . . . 15
 - 1 Gladiolus bulb . . . 15
 - 1 Grape Vine . . . 15
 - Vick's Floral Guide . . . 15

If your orders include bulb, roots, or the Floral Guide, send five cents additional for postage.

In the above parcels we have placed from one to three seeds of the different varieties. Thus you will be able to select such as you prefer.

CURE FOR SHEEP AFFECTED WITH WORMS IN THE HEAD.—From Mr. T. A. Selby, Parkhill, we are in receipt of a communication in which he states he saw sheep having this disease effectually cured by pouring down the nostrils of the animals affected a very small quantity of the spirits of turpentine.

Sun Flowers.

These flowers are probably the most useful kind you can plant at this season; disease is marching onward. There is no absorbent of the dangerous, sickening gasses equal to the sun flower. We would recommend all of you to plant some in localities where noxious gasses arise—about sewers, or where any decaying vegetable or animal matter is to be found. If you regard your health and have impure air about your dwellings, from whatever source arising, we would strongly recommend you to plant sun flowers.

Designing and deceitful persons have been speaking of us as if we had been opposing the Western Fair. We assert that such an accusation is without any foundation. We have not opposed the Fair, but we have opposed and will continue to oppose any person prostituting an agricultural institution for the service of persons or parties who are not favorable to the agricultural interest. Our opinion is that our agricultural affairs should be conducted for the benefit of agricultural purposes and not for party purposes.

SOW CARROTS.

Farmers, sow carrots plentifully for feeding your stock. They are a cheap and an excellent food. They are said by practical farmers to be more conducive to the good health and thriving condition of farm stock than any other food. The Belgian carrot is, above others, a very large cropper.

HINTS TO ORCHARDISTS.—Be very careful to keep your trees clean and free from worms, moths and rough bark, if you ever expect to make anything from your orchard, and no branch of farming is of more profit or benefit than the fruit production, if well managed. Wash every spring or fall with strong soapuds scraping off the rough bark with an old scythe or other instrument.

HORSES WANTED.—A subscriber writes to enquire if we can procure for him or put him in the way of securing a pair of horses or mares well-matched bay or brown, sound and kind, travelling about 34 minutes—not less, good style, about 15 or 15½ hands, and to weigh not less than one thousand pounds. Or he would buy a single horse of the same style and description as the pair wanted. He must be smoothly built and an easy rider. Any of our readers having a pair or a single horse answering the above descriptions will be good enough to communicate with us.—ADV.

AN APRIL SNOW-STORM.

To-day, the 15th, the month of April ends the first half of her course, and we have a glorious, old-fashioned snow storm. "What a horrid climate!" Grumbler exclaimed, as he crouched in a door-way for shelter. "What a glorious day!" was our only reply, as the thick covering of snow gathered fast on our cap and coat, and we looked forward to the abundant crops of wheat and fruit that are in store for us.—The snow is not only a thing of beauty and joy to the hearty boys and girls of our healthy and happy country; it is also a source of wealth; it is a sure protection to all vegetable life; it preserves our winter wheat; it adds largely to the productiveness of our soil; it is a mantle kindly thrown over the earth in this northern climate to keep within it somewhat the heat it imbibes in summer and fall. Covered by it, the roots of our grasses and other plants in the ground are uninjured, and are ready to start into luxuriant growth as soon as the earliest rays of the spring sunshine and the first gentle drops of rain tell that the winter has departed. The snow is a manure for the soil; it brings with it from the atmosphere elements that enrich the ground. Every old-country farmer knows with what certainty the winter of hard frost and heavy snow is followed by a very heavy harvest, blessing the husbandman with an abundant increase. The same rule holds good here. We have no wish for a warmer climate. Our cold, hard, bracing weather fills the farmers' purses and the merchants' grain stores. It makes our trees bow down to the ground, loaded with rich fruit. It gives strength and power of re-

durance to north, and ness to our hope that followed b

"WOOD Farmers' advice on are so apt becomes in spare some as well as easy way farms, and We do not acres of b that are y when clea you, in ad in various will be of and belts be to be price, and sale, it wi self and fa shading y storm, or, from the than the occupy. the fact increasing striped c ments it i and this s increase v As an ins forests an following paper:— rapidly m the consu numerous has been raved out season w boards. 000,000 Williams years, we 3,000,000 sumption for many tains in t of every

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durance to our brave, hardy sons of the north, and richer bloom and greater freshness to our daughters. We have every hope that this hard, cold winter will be followed by an abundant harvest.

"WOODMAN, SPARE THAT TREE!"

Farmers! we would give you a word of advice on the subject of trees. Similar advice has been given you before, but we are so apt to forget advices that repetition becomes necessary. Always in the bush spare some trees for shade and ornament, as well as for future use. It is a very easy way of enhancing the value of your farms, and that, too, without expense.

We do not mean merely allowing some acres of bush to stand for use in the year that are yet to come. This all farmers do when clearing their farms; but we advise you, in addition to this, to let trees stand in various parts of the farm where they will be of most service for shelter—clumps and belts of trees. If ever your farm be to be sold, it will bring the highest price, and if it be not ever offered for sale, it will be the more valuable for yourself and family. A belt or clump of trees, shading your cattle from the heat or the storm, or, it may be, sheltering your crop from the north wind, will pay you better than the culture of the little place they occupy. We must also take into account the fact that timber will be continually increasing in value, as the country becomes stripped of its forests. In the older settlements it is now getting scarcer and dearer, and this scarcity and increased value must increase with the increasing population.

As an instance of the rapidity with which forests are disappearing, we give you the following extract from a Pennsylvania paper:—"The forests of Pennsylvania are rapidly melting away. For ten years past the consumption of timber to supply the numerous sawmills of Williamsport alone has been immense. The amount of log rafted out of the boom for the present season will cut over 215,000,000 feet of boards. It is safe to assume that 300,000,000 are annually manufactured at Williamsport. If we go back for ten years, we have the enormous aggregate of 3,000,000,000 feet. That this fearful consumption of the raw material can continue for many years is impossible. Our mountains in ten or fifteen years will be denuded of every pine tree."

HEALING GIRDLED TREES.

Take strips of good thrifty grown wood of the last year's growth, cut in suitable lengths, and fit them nice and snug into suitable places cut into the live bark, something like grafting, only my slips are cut square, and are set so snug that the ends crowd a very little at the top and bottom of the notches cut to receive them in the girdled tree. I then take strip of old cotton cloth well spread with good graining wax, and bind it around the tree where the grafts are set in, and the work is done. The cloth may reach above and below the girdled. I believe I have not lost any trees thus treated. Before I learned of this method I lost more or less every winter.

As a preventative I keep a good rat dog to kill the mice, and it does me good to see him pry off the little vermin. If the tree be large it will take five or six slips, or more if it is thought necessary.

I examined some of my trees the other day, and I found the slips grown to the size of two inches in two years, and consequently the trees were almost healed over.

EARLY PEAS AND SPINACH.

The seeds of peas and spinach germinate in the earth at quite a low temperature, and the plants will endure considerable frost without injury—hence they are among the first garden crops sown in the open air.

As but little skill is required to grow peas, our city markets are liable to become overstocked with them, and the prices to decline below paying rates. But the markets generally open very high, and they who have a warm situation in a dry or gravelly soil—and a warm situation—descending towards the south, so that the rays of the mid-day sun fall almost vertically upon it, can make the growing of early peas profitable.

But to raise early peas, we must not only sow them very early, on a warm soil, but we must sow the earliest varieties. There is a difference in time of maturing between our earliest and latest varieties of three or four weeks.

Tom Thumb is the most easily grown of all the early peas, but I think about three days later than Carter's. As the stem grows only 3 or 10 inches high, it can be sown in drills 12 to 15 inches apart, and the yield is immense.

McLean's little Gem is more excellent than either of the others, and is especially to be recommended for family use. It is dwarf, green in color, wrinkled and fairly productive.

These three sorts make a very good list of early peas for family use; for market, I would omit McLean's.—Country Gentleman.

THE SWEET PEAS.

A skillful cultivator of this flowering plant says that if properly grown, it will continue in bloom for months; that failure arises from poor soil, sowing too thickly, and not allowing a well developed and luxuriant growth. The soil should be as rich as for celeriac, a trench dug, well manured, and the peas sown in small bunches a foot apart, or in a continuous row. To keep up the bloom, the same course must be adopted as with many other plants, namely, the prompt removal of the seed pods as fast as they form, as the growth and ripening of the seed would exhaust the plants. Pinching in occasionally is useful. Some of the English gardeners, by a process similar to the preceding, keep up flowers from May to November.

RAISING POULTRY.

See that the roost is clean, and have no openings excepting where the hens go in and out and a glass window or two for light; keep the door locked, and save the entrance for the fowls only. Put large enough for the heaviest to creep in. Let the peas for them to roost and the mess for them to lay in, be numerous enough for at least four lines. The number you save, which will give room for them to rest at night unmolested by the many quarrelsome dances to be found in a score or more hens, and it will prevent so many hens wanting to use the same nest, so lay and hatch out young in. If there are more than thirty hens in one roost, have another one made, above 100 yards away, and leave two or three roosters only with those left, as one fine healthy male bird is sufficient for ten or fifteen hens. And do not have more than this number at one place if you have to contrive ever so many new roosting-places; then feed well, never heeding what some miserable old stinky muck says to the contrary, giving them just as much in ring and evening as they will eat up clean. Feed early in the morning, when you let them out of the roost, as they will then all eat together, by scattering the corn or grain all around, for it is a lazy and foolish way to throw what you give them on such a small space as to have the master fowls fighting the underlings. Feed just before sundown, at a regular time as possible, and never between meals, unless in frost and snow, when they can get nothing on their ranges; then give them baked vegetable food, such as potatoes or turnips, mashed well, mixed with oatmeal or any meal ground from a different kind of grain from that which is fed either at morning or night. Put eggs under the first hens which want to sit, and mark them all with ink, so that if any more should be laid to them after, they can be taken away, and this should be seen to daily—13 to 15 eggs, according to size of hens, will be sufficient for any hen to cover and keep warm.

When the hens hatch their young brood, put them in warm little movable coops, so that the hen cannot drag them about in the mud and wet. Place these coops on some nice sunny bank, far enough apart to prevent the broods mixing, and attend to them every two or three hours, as in cool weather and so early in the season they require feeding often, and when storms come on or it is very cold, the coops require closing up so that it will be dark inside, and the hen will nurse them all the while. When the chickens are a month old, the hens can be allowed their liberty during the day, and when they commence to lay again, can go back to their former roosting place, the little ones using the coop till they are sold or taken to a roosting-place, which should not be within the old fowls, as they would get a deal of punishment from their roosting together—beans which, as the weather becomes warmer, it is unhealthy to be at all crowded, and disease, lice and death follow in succession. The art of raising poultry is in giving them spacious roosts and extensive ranges, and keeping the families small; then there are no limits to the numbers any one wishes to have, but any poultry fancier had much better expend \$500 in the construction of fifty roosts placed at a distance from each other, to prevent intermixture, than to lay out \$1,000 in a fine paternal edifice to accommodate the same number under one roof; and, say what any one will to the contrary, any one of the fifty little ten-dollar roosts would pay more profit than the great one thousand dollar structure.

Turkey and Guinea birds should never be permitted to enter the roosting or laying departments of the common fowls, for they are quite as cruel in worrying and disturbing generally as Pea Fowls, which also should be excluded. Ducks require a separate place for their own good, as they get dirty by lying under hens at roost, and if they have a comfortable and convenient shed with snug laying places on the ground, they will hatch out and raise their young better than by bothering hens, pool things, to sit extra time and dance attendance along ditches or around ponds.

Any youth who has premises of his father to commence raising poultry on and around should look to the eggs as a source of profit equal to the chickens raised, and if he has several separate roosts it would be good policy to have the perpetual laying varieties of hens at all but one, keeping one lot to use for sitting and raising, and the others for laying.—Country Gentleman.

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TO CAUSE THE HAIR OF THE MANE AND TAIL TO GROW.

In reply to S. C. Lake, in the Rural New Yorker, of Dec. 9th, I beg to give the following recipe, which I have personally proved to be efficient in restoring a healthy growth of hair on the tails and manes of horses: Corrosive sublimate (hyd. bichloride,) oxymercurate of mercury, each four grains in one ounce of distilled water. Wash the parts where the hair is thin with warm water and soap, then rub dry with a linen cloth and immediately after rub in some of the above ointment. If the hair has been rubbed off by the animal's own endeavours to allay cutaneous irritation, then dress with the following ointment: One ounce of fine flour sulphur, one ounce of pulverized saltpetre, made into a soft ointment with fresh butter or fresh rendered hog's lard; rub in at night and wash out in the morning with warm water and soap; repeat three or four times. If the hair is scant from natural debility of the capillary organs, then simply use cold water applied with a soft sponge; avoid all combing or brushing, and clean the mane and tail, as the Arabs do with a coarse flannel rubber.

Never Prove False to a Friend.

- Never prove false to a friend, In love and in friendship be true; Never prove false to a friend So long as he's faithful to you. He may be dishonest; a knave In other's opinions; but then To you he is generous and kind, And one of the noblest of men. Is any man free from each fault, All righteous and good in his ways? Lives there a woman so perfect on earth That she can be named but in praise? Never speak ill of a friend, To gossipers keep closed your ear An excellent rule on the main, Is to credit the tenth that you hear. Stand by a friend in distress, When you know he is really in need; Heed not if he fails; none the less, There is honor for you in the deed. That one may deceive you tis so— Then his, not yours the disgrace; Because we find one man untrue, Shall we wrong or distrust a whole race? Censure a man for his faults, Give him honor, where honor is due; But never prove false to a friend, As long as he's faithful to you.

CULTIVATING WHEAT FIELDS IN THE SPRING.

Many farmers have harrowed their winter wheat in the spring, when the soil was in proper condition for working, and the reports of such culture have been, in the main, favorable. In England a machine is in use adapted to the working of the soil between the drill rows and sweeping the same breadth as the grain drill. Horse-hoeing is the name applied to this kind of culture, and it is, of course, more perfect than the work of a common harrow. It destroys weeds directly beneath the crop. It helps that following, inasmuch as it cleans the soil. Drilled wheat in much better shape to be benefited by the use of a common harrow than that sown broadcast; its roots are firmer and deeper in the soil, so that fewer are torn out and more dirt is worked up loose between the rows. The roller is deemed a better implement by many of our farmers, and is more frequently used on their wheat fields in the spring than the harrow. It is certainly a safe tool to use on the wheat field; it breaks the crust, presses the soil firm around the plants, and smooths the surface of the field. The soil must, however, be quite dry when it is used.

In this connection we give the experience of some of the farmers belonging to the Elmira Club, in cultivating wheat in the spring and in sowing spring wheat where winter wheat had been badly killed.

J. R. Conklin had a field of winter wheat much injured by heaving. In the worst spots when

the plants were apparently dead he dragged the ground up mellow and sowed spring wheat, and after harrowing in the seed, rolled all the field. All this was early in spring. The result was a good crop of spring wheat, and nearly as early as the winter wheat, and where dragging had lapped on the latter it was evidently benefited. Have since dragged and rolled separate parts of the winter wheat fields, applying drag to the worst spots. Improvement to the crop has always followed.

Mr. Conklin.—Why drag and roll too? Mr. Conklin.—Dragging loosens the ground, and the roller presses into that soft ground the loosened roots.

Mr. Samuel Chapman.—Last spring I resolved to make a test in my wheat by dragging part and leaving part. I took out a thirty-two teeth sharp drag, and started it myself to note results. The first two rounds I kept watch of the teeth as they tore through the roots. It looked as though all were torn out. At the end of those rounds I raised the drag to see how much the teeth had gathered. It was surprising to see how little. I don't believe one plant in a hundred was torn up. So I concluded to trust my man for the rest of the job, but I instructed him to leave certain strips which were staked out, in order to make a comparative test. Now for the results. Those parts which were harrowed took on a darker green and gave evidence otherwise of increased vigor. They retained all their advantage over the undragged parts until harvest. I could not separate the harvest, and cannot therefore tell how much I was benefited by the work, but the advantage was very plainly in favor of the harrowed portions. The field the previous year had borne barley, the year before corn, and before that was a timothy sod. Some fear to undrudge an operation which looks so hazardous to the crop, but I can assure you that if you will put your harrow on the wheat and drive it a while, and then examine the extent of the mischief, you will be surprised there is so little. I would recommend dragging as a sort of spring cultivation of winter wheat, on all pieces not troubled with many flat stones. On such the injury might outweigh the advantages.

Our own experience in harrowing wheat for two or three seasons has satisfied us of its utility. Our practice has been to harrow soon after the ground was well settled and dry after the wheat had commenced growing. Indeed we have harrowed, as an experiment, the second time after the wheat was six or eight inches in height. It makes the soil in fine tilth, seems to give a clean appearance to the field and a thrifty look to the wheat. Of course this cannot be done where the ground has been seeded with clover without damaging that. We prefer sowing our clover seed just before the harrowing. It is then nicely covered in a good seed bed and escapes danger from late frosts which damage so much early sown clover.

FECUNDITY OF DUCKS AND HENS.

Some interesting experiments have been made upon the comparative fecundity of ducks and hens, so as to determine from which of the two the larger number of eggs can be obtained in the same time. For this purpose three hens and three ducks were selected, all hatched in February, and nourished with suitable food. In the following autumn the ducks had laid two hundred and twenty-five eggs, while the hens in the case laid none. In the following February the laying season began again with the ducks, and continued uninterruptedly till August. They showed no inclination to sit and became very thin, but subsequently fattening up somewhat. In the meantime the hens had not been idle. The total number of eggs laid by the hens amounted to two hundred and fifty-seven, or eighty-six eggs each; and the ducks produced three hundred and ninety-two, or one hundred and thirty-one each. Although the eggs of the ducks were rather smaller than those of the hens, yet they proved to be decidedly superior in nutritive material, so the superiority in productiveness appears to be altogether on the side of the ducks.

GAME HENS AND DUCKS.

A writer in the Canadian Poultry Chronicle gives the following as his experience with the laying qualities of game hens and ducks:—"There are few fowls more prolific than game, and where there is a good wide range of any kind, no fowls will prove more profitable, the black-breasted red variety being the best. They eat little in proportion to larger fowls, and are very good layers; but they cannot be kept in close confinement on account of their fighting propensities. No fancier that can find a suitable place in his poultry yard but should have a few ducks. Their appetite is such that a most any kind of food will supply them; they pick up the waste food left by other fowls and grow fat on it. In the barn yard, in gardens, and in pasture land they are alike useful and beneficial. There are three kinds which now stand high among breeders, namely:—The Aylesbury, which is pure white; the Rouen, which in color resembles the wild Mallard; and the Cayuga, which are pure black, except occasional white spots on the

COOLING MILK FOR BUTTER MAKING.

During summer the milk as soon as it is drawn from the cows should be cooled down to a temperature of 60° to 62°, and this temperature maintained while the cream is rising. To accomplish this there should be a spring of pure cold running water at hand, and tanks should be made to hold the milk while cooling; and in most cases at the time till it is to be skimmed, unless it can otherwise be kept at a temperature not exceeding 64°. In Orange County, New York State, which is famous for butter, the plan adopted is to have tanks 6 feet wide, by 10 to 12 feet long and 20 inches deep. These tanks are constantly supplied with cold running water, which can be conducted by pipes so as to run through several tanks, each elevated enough above the other in gradation to give a very gentle flow from the highest one down to the lowest. The milk as soon as drawn from the cows is placed in long tin pans, which are at once placed in the tanks and remain there till the cream rises, which usually takes from 12 to 24 hours, the length of time depending somewhat upon the state of the weather and richness of the milk given by the cows.

The butter makers of that portion of Pennsylvania where the celebrated Philadelphia butter is made, construct spring-houses with cement floors, over which water is flowed, and the milk pans are set on the floor. Narrow elevated plank walks are arranged so that the attendants can pass among the pans to handle and remove them for skimming or setting. The plan adopted there is to take off the first cream that rises within twelve hours, and set that aside for the manufacture of the very choicest butter. The cream that rises afterwards is not equal in quality to the first, and is kept separate, to be made into butter of a second grade of quality. The butter made from the first cream brings \$1 per lb.; the other a less price.

If cream is left too long on the milk, or becomes in any way tainted or soured, a first-class article of butter cannot be made, as decomposition has then already set in. Really first-class, well-made butter should retain its sweetness and flavor for months, while, as ordinarily made, it loses flavor and begins to turn rancid in a very short time during warm weather. The cream is churned at the same temperature it is kept at—60° to 62°—and it should not in any case exceed 64°. In churning, the butter should not come in less than half an hour after commencing to churn, and the motion of the churning must be kept steady and uniform. If it comes too quickly there is a less quantity, and generally inferior in quality. The best Orange County butter-makers have found from long experience that the process of churning should occupy 40 to 45 minutes to ensure the best quality and largest yield of butter, and that it is better to take an hour in the process than to have it come in half an hour. They are very particular to use only cold, pure spring-water in washing the butter, and not to allow their hands to come in contact with it during the process of making up.

BEARING CHICKENS.

The following rules to ensure success in raising choice fowls are given by a successful breeder. 1st. After they are hatched keep the hen and chicks in a clean, warm, dry coop. 2nd. Do not let the chicks get out of the coop in the mornings until the sun has dried the dew from the grass. 3rd. Do not let them out at all in wet weather. 4th. Give them clean food and pure fresh water, which must be renewed at least twice a day. 5th. Do not let them have access to slops, garbage, or dirty water. 6th. Let them remain quiet and undisturbed as much as possible, and make the coop so that they will be rat proof at night.

CRIB-BITING AMONG HORSES.

This ugly habit is most common among horses that are kept constantly stabled. At first it is merely a habit provoked by idleness, and hence is most frequently found in horses that are not accustomed to regular work or exercise. In turn it becomes eventually a disease that is almost incurable, and very provokingly destructive to all the surroundings of the horse affected. It is also very apt to become catching from one horse to another where they are stalled together, or if a horse is in close enough proximity to a crib-biter to hear him tearing away with his teeth at every thing within his reach. It may be cured if taken in its early stages. Being usually a concomitant of indigestion caused by high feeding and want of sufficient exercise, any substance which acts as a stimulant to the horse's stomach will be beneficial. A lump of hard rock salt kept within reach of the horse at all times while in the stable is very efficacious in stopping the practice of cribbing if it has not become habitual.

If this does not suffice, add a large piece of chalk, and wet the hay and oats fed to the horse. Give such medicine as will keep the digestion in order; good ventilation in the stable and regular daily exercise.—*Free Press*.

From the Prairie Farmer.

Patrons of Husbandry.

RE-ORGANIZATION OF THE ILLINOIS STATE GRANGE.

According to notice the Masters of the subordinate Granges of Illinois, to the number of twenty, assembled at Dixon on the 5th inst., for the purpose of re-organizing the State Grange.

In the evening an informal meeting was held, at which a general interchange of views was had, and the members posted themselves in the workings of the order, as explained by the Secretary of the National Grange.

At the opening of the morning session, the committee on by-laws being ready to report, presented a code of by-laws, which were first read entire, and then discussed and voted upon by section. As finally adopted by the Grange the by-laws are as follows:

TITLE.

ARTICLE I. This Grange shall be known and distinguished as the Illinois State Grange, and in all its acts shall be subject to the Constitution of the National Grange.

MEMBERS.

ART. II. The members of the State Grange shall be the Masters and Past Masters of the subordinate Granges of the State.

MEETINGS.

ART. III. This Grange shall hold regular annual meetings on the Second Tuesday in December, at such place as the Grange may by vote decide at last annual meeting. Special meetings may be called by the Master and Secretary, by giving written notice to each Subordinate Grange thirty days preceding, or by vote of the Grange at a regular meeting.

QUORUM.

ART. IV. Twenty members shall constitute a quorum for the transaction of business.

DUTIES OF OFFICERS.

ART. V.—Sec. 1. It shall be the duty of the Master to open and preside at all meetings of the Grange, and, in conjunction with the Secretary, to call special meetings.

Sec. 2. The duties of the Lecturer shall be such as usually devolve upon that officer in a Subordinate Grange.

Sec. 3. It shall be the duty of the Overseer to assist the Master in preserving order, and he shall preside over the Grange in the absence of the Master. In case of a vacancy in office of the Master, he shall fill the same until the next annual meeting.

Sec. 4. It shall be the duty of the Steward to have charge of the inner gate, and to preside over the Grange in absence of the Master and Overseer.

Sec. 5. The Assistant Steward shall assist the Steward in the performance of his duties.

Sec. 6. The Secretary shall keep an accurate record of all the proceedings of the Grange; make out all necessary returns to the National Grange; keep the accounts of the Subordinate Granges with the State Grange; receive and pay over to the Treasurer all moneys, and take a receipt for the same.

Sec. 7. It shall be the duty of the Treasurer to receive all moneys from the hands of the

Secretary, giving his receipt for the same; to keep an accurate account thereof and pay them out on the order of the Master, first getting the consent of the Executive Committee; he shall render a full account of his office at each annual meeting, and deliver to his successor in office all moneys, books and papers pertaining to his office, and he shall give bonds in a sufficient amount to secure the money that may be placed in his hands, which amount shall be payable to the Master.

Sec. 8. It shall be the duty of the Gate keeper to see that the gates are properly guarded.

ELECTIONS.

ART. VI. All elections shall be separately, by ballot, and a majority of the votes cast shall be necessary to a choice.

VACANCIES.

ART. VII. In case of vacancies caused by death, removal or resignation of any officer elected, the Master may fill such office by appointment, for the unexpired term.

COMMITTEES.

ART. VIII.—Sec. 1. All Committees, unless otherwise ordered, shall consist of three members, and shall be appointed as follows: two members by the Master and one by the Overseer.

Sec. 2. At the regular annual meeting a Committee on Finance shall be appointed, whose duty it shall be to audit all accounts previous to their being paid. To them shall be referred the reports of the Secretary and Treasurer for examination.

Sec. 3. At the first annual meeting an Executive Committee of six members shall be elected by ballot, (of which the Master elect shall be an "ex-officio" member), three of whom shall hold their office for two years and three for one year, their several terms of service being determined by lot; and at each annual session thereafter there shall be chosen three members of said committee, who shall take the place of the retiring members. The duties of this committee shall be confined to business, and during the recess of the Grange they may suggest or adopt such regulations as may seem necessary and expedient for the welfare of the Order.

The Master and Secretary shall call a meeting of the State Grange, as provided in Article III. of these By-Laws, upon written request signed by four of this Committee.

ANNUAL YEAR.

ART. IX. The Annual Year of this and Subordinate Granges shall commence on the first day of January, and end on the last day of December in each year.

QUARTERLY DUES.

ART. X. The Secretary shall see that the quarterly dues of Subordinate Granges are promptly paid; and in case the dues remain delinquent two quarters, the delinquent Grange shall be reported to the Master of the State Grange. On receiving such notice it shall be the duty of the Master to warn the delinquent Grange, and if the dues are not forwarded in thirty days, it shall be the duty of the Master to revoke the charter of such delinquent Grange.

APPEALS.

ART. XI. Any Grange whose charter has thus been revoked may appeal to the State Grange at any regular meeting, asking for reinstatement, and the State Grange shall have power to reinstate such Granges subject to such penalty as may seem just.

WITHDRAWAL AND TRANSFER OF MEMBERS.

ART. XII. Any member of this Order may affiliate with a Subordinate Grange by presenting a demit, showing that he is a member in good standing, upon a vote of the Grange receiving such petition.

DEPUTIES.

ART. XIII. There shall be appointed by the Master of the State Grange a sufficient number of Deputies, whose duty it shall be to organize new Granges, on application having been made to them by those desiring such an organization; to install officers of Granges when the same have been elected, and they shall be vigilant that no disorder shall obtain in the Granges under their jurisdiction, and shall report promptly any such disorder to the Master. Deputies shall receive, for organizing new Granges, their travelling expenses and five dollars additional for each day's service actually necessary for the work. No other Granges shall hereafter be recognized except those organized by Deputies appointed as herein specified, and by Masters.

AMENDMENTS.

ART. XIV. These By-Laws may be amended or revised at any regular meeting of the Grange by a vote of two-thirds of the members present. The consideration of these by-laws occupied the attention of the Grange during the entire morning session.

The afternoon of the second day was employed in general discussion of the aims of the order, and in perfecting members in working the ritual, and other secret workings of the order.

On motion it was Resolved—That we desire the National Grange, at its next meeting, to change the Constitution of the National Grange

so that officers of the State Grange shall be elected annually; and that until such change is made, we, as a State Grange, request a dispensation allowing us so to act.

It was also Resolved—That each and every member of the State Grange be hereby instructed to-a-certain, at the next meeting of their respective subordinate Granges, how many and what kinds of agricultural implements are wanted soon by their members, the manner in which they can pay for them, and that they report the same to the Master of the State Grange, that he may order them if they so desire, cash or approved notes to accompany each order.

In explanation of this resolution, it may be said that masters of some of the subordinate Granges had been offered for their members' implements at a good discount as manufacturers allow to their regular agents. It is a movement to favor members of the order who desire to do away, as much as possible, with middle-men, and to reap the benefits of direct dealing with manufacturers.

The meeting was one of harmony and general good feeling, and much enthusiasm was exhibited in furthering the spread of the order, and in securing the objects for which it was established. As will be noticed, the Granges as yet are confined to a most exclusively to a few counties of the State, (several Granges at a distance were not represented), but interest in the matter is very rapidly spreading, and there seems no doubt but, with a continuance of the present zeal on the part of those connected with the order, and wise counsel in its management both here and in the other States, that the work of uniting the producing classes will progress with a rapidity commensurate with the importance of the movement.

In this connection we publish the following

Plea for Organization Among Farmers.

One of the distinguishing features of the present, as compared with former times, is the tendency in every department of labor or business to a socialized effort.

Organization is the watchword of every enterprise. Organized effort builds railroads, establishes steamship lines, controls Legislatures, moves Congress, makes and un-makes "powers that be"—does everything, indeed, short of an actual usurpation of Supreme power. The merchant, the politician, the speculator, and indeed every class of men with whom intelligence is the moving force, have not been slow to avail themselves of a power which, collected even from feeble sources, is, when agitated, well nigh irresistible.

The agricultural interests alone, perhaps, furnish an exception. The landowners alone have not manifested the disposition, if they have possessed the power, to organize. They have been the beggars who have received the crumbs that have fallen from the tables of others. The source of all wealth—the only producing power in the whole category of intelligent forces, they have with surprising humility and unparallelled meekness, accepted the favors which the condescension and graciousness of those whom their industry has supported, have deigned to bestow. Like the dairyman's cows, their diet has been scant or generous, according as the interest or necessities of the master require. The chief eye has been to the product, and it has not answered quite to the golden egg. What wonder, then, that the cases and responsibilities of the farmer have been accounted service rather than emolument? What wonder that the intelligent and enterprising youth has fled from them as from a bondage? The refinement and respectability of the class have been brought to it, at least to a great extent, by those who have come from other callings, and who have adopted agriculture, not so much as a means of profit and a resource, as a mode of spending an elegant leisure and enjoying the wealth acquired from other sources.

The superior intelligence which any of the class who have been bred to it, and been brought up in it, have shown, has been developed in spite of its disadvantages, rather than under its stimulating influences. However much the agricultural classes may be made the subjects of complimentary phrases and flattering designations, this is too palpably true to be gaudied by any intelligent and observing farmer. The farmer has little to do but to grub and to plow. He seldom leaves his work except to go to market or to mill. His grain is received at the elevator, his cattle, and hogs, and sheep, and wool are picked up by the enterprising speculator. His supplies are passed over to him for cash or on credit, with the invariable per cent. of profit which the merchant's hieroglyphics do not reveal. His implements of husbandry

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are branded with the Dutchman's one per cent. on every shaft and crossbar. He toils on disassociated—alone.

The combinations of others are against him. The manufacturer dares not recognize him, except through his agents. The railroad companies overburden him with taxes oppressive rates and exactions. The legislature ignores him while voting subsidies, tariffs and corporation privileges. These are specimen chiefs, whose lieutenants, the middle men, the implement dealers, the railroad agents, the small politicians, command and lead him as they will. He is treated as so much gross material whose capabilities are calculated as men calculate the strength of a beam, the power and endurance of a horse, or the profit and productiveness of a cow or a sheep. He is neither made their social equal, nor regarded as in fact the source of the wealth of the world.

The chief seats in the synagogue are not for him. The possibilities, indeed, of rising to positions of eminent usefulness and wide influence in the pursuit of agriculture are so remote and uncertain that practically, the ambition to do this involves the necessity of choosing some other business in professional life. The thorough disintegration of the class and the difficulty of bringing any enlightening and benefitting influences to bear upon them, were aptly illustrated at the recent convention of representatives of agricultural schools at Chicago, where it was seriously discussed how it was possible to bring the results of the work of these institutions, especially in the experimental field, to the knowledge of the agricultural masses, whom they were designed to benefit. And this is a real difficulty, and at present is not possible, except to a very imperfect degree. We ask, where is the remedy? The obvious answer, and the only answer, is in Organization; an Organization which shall embrace and touch the masses; an Organization on a plan so complete and comprehensive that its ramifications shall extend to remote neighborhoods, and include in its membership the honest and moral husbandmen, of every degree of intelligence.

The order of "Patrons of Husbandry" is an organization whose plans and purposes are of this kind. These plans and purposes are not covert, but are open, to be read and known of all men. They can be easily examined and understood. What of good there is in them is laid open to inspection, and what of evil is not concealed.

Are the requisite elements for such an organization to be found in the agricultural class? Many farmers of the best intelligence hopefully affirm they are. Others, most positively, but chiefly in their own interest, deny. This movement undoubtedly partakes of the nature of an experiment, and what other great enterprise has not? Yet even as an experiment, it offers possibilities so large and inviting that we may well take counsel of our hopes rather than our fears. It is only just to add that those who have examined the workings of the order most thoroughly, and have had the best opportunities of noting its reception among the agricultural class, are most hopeful of its success and expectant of its benefits. These are of its power for good lies in the single word organization: whether its efforts are to be directed to the collection of facts, diffusion of information, mental improvement, resisting combinations, cheapening of farm supplies, introduction into neighborhoods of improved stock, or to whatever object, organization is the antecedent of success.

HOW THE SOUTH AMERICANS MAKE FRUIT TREES.

Darwin, in his "Naturalist's Voyage", (1871), says:—"In Chiloe, the inhabitants possess a marvellously short method of making an orchard. At the lower part of almost every branch, small, conical, brown, wrinkled points project:—these are always ready to change into roots as may sometimes be seen, where any mud has been accidentally splashed against a tree. A branch as thick as a man's thigh is chosen in the early spring, and is cut off just beneath a group of these points; all the smaller branches are lopped off, and it is then placed about two feet deep in the ground. During the ensuing summer the stump throws out long shoots, and sometimes even bears fruit. I was shown one which had produced as many as twenty-three apples, but this was thought very unusual. In the third season the stump is chafed (as I have myself seen) into a well-wooded tree, loaded with fruit."

Learn that happiness is not outside, but inside. A good heart and a clear conscience bring happiness, which no riches and no circumstances alone ever do.

Correspondence.

FARMER'S POSITION.

SIR,—In my letter on "Farmers' Clubs," printed in this month's paper, you make me say that the general quantity of seeds sowed to the acre was two bushels. It ought to have been two bushels of mixed seeds per ten acres. I have been quizzed about the quantity I sowed already, and expect to get a good deal more of it. I also did not wish my name to appear, and I think I signed myself "A Farmer." I do not care much whether my name appears or not; but as I am a young man, and a still younger farmer, I may be thought to be putting myself too forward among my neighbours. I wish you would remedy the mistake about the seeds.

In reference to the paragraph taken from the *Wisconsin Republican*. It says that "farmers have less amusements and fewer opportunities of social enjoyment than any other class." Now, if the gentleman who wrote this lived in our neighborhood I think he would soon change his opinion. I think farmers, as a class, have more social enjoyment than a great many other classes, especially those people who live in large cities. A person may live for years next door to another and never see them or visit them. I know this from experience; I lived once next door to a family in a large city for over seven months, and never knew one of the inmates by sight even. This I would not call much social intercourse. What would we say of a farmer who lived on an adjoining lot to another or seven months and never saw him or his family? Why, we would call him a very unneighborly fellow at least, if not something harder; but this case is not the exception, but the rule in large places. Again, if a farmer or any of his family are sick, he gets more attention paid to him than any other class of men either in city or country. Again, in the fall and winter months there are a great many pleasant parties, &c., &c., which you will rarely find equalled in towns. I also make exception to the *causes* he alleges for what he brings forward. What difference would it make to a farmer with a good team and a good road before him, whether the place he was going to was one mile or five distant? In fact, there are many winter evenings a person would rather drive the latter distance than the former, if for nothing else but to exercise his horses, which generally stand too much in the stable during the winter. Again, he says:—"While they work harder than any other class, they enjoy less of the comforts and pleasures of life." Now, I quite disagree with him about the farmers working harder than any other class. I know we have to work hard during the busy season of the year, and make long hours in haying and harvesting; but, with the exception of about two months, I hardly think the farmers work on an average ten hours a day through the whole year; and if a farmer is pretty well off, he need do but little manual labor, if he looks after his business and uses his head a little. If this gentleman, who writes about the hard work of farmers, saw some of the work in mines and other places, he would be apt to change his opinion. I saw the work in a large ironworks once, and could hardly think it possible that men could stand the heat and labor I saw there. Indeed, if you take all, or nearly all, of the classes who make their living by manual labor, you will hardly find another class that take it as easy through the whole year as the farmers. Again, he says "we don't enjoy the comforts and pleasures of life." I have said something about the pleasures above, so I will not refer to them again. Now, what does comfort consist in? I should think in having plenty to eat, drink and wear, and having a good house to live in, warm in winter and cool in summer, and not being troubled about the changes and fluctuations of trade. I think most people will agree with me that the farmers, as a class, enjoy more of the above comforts than any other people in Canada. A tradesman is not sure of work from one day to another, and when out of work his means of living cease; if he gets sick, his wages are stopped, and everything is going out and nothing coming in. How different with a farmer! If he is unwell a day or two, or wishes to take a holiday, his wheat does not stop growing, or his cattle stand still, just because he is away from the farm.

Now, Mr. Editor, I think some one better qualified than myself had better take this question up, and give their ideas upon it. I hope to see a good article on this in your next number.—I remain, yours truly,
Brantford, April 1st, 1872. A FARMER.

We have examined the communication you refer to; you have written two bushels to ten acres: the mistake was made by the printer. We have been so overwhelmed with labour in regard to seeds and other things, that we did not read the proof-sheet. We are highly pleased that you should have taken the subject up and handled the question so ably. It is our impression the publication of your articles under your own signature would be rather advantageous to you than otherwise.

MACHINE ON THE BRAIN.

SIR,—All must admit that we live in an age of progress, and that the last half century stands marked in the world's history as the great progressive age. It is but natural to ask the cause of this progress. I think, sir, you will agree with me that it is the application of steam as a motive power which is the principal cause. For proof of this, we need but look at the carrying trade all over the world, by land and sea, and the various manufacturing establishments producing articles of utility and comfort at a rapid and cheap rate, and the printing press, the great civilizer of the world—all these derive their great impetus from steam. It is quite natural for us here to inquire if the application of steam power cannot be applied more directly to aid the agriculturist? If it is used as an economical power for the purposes before named, why not for agricultural purposes generally, teaming on our wagon roads, ploughing and cultivating our lands, mowing, reaping, thrashing, &c.?

Now, sir, my opinion is, some simple application is needed, and we will do our farm labour much cheaper with steam than with animal force. If the various agricultural societies of our country would offer premiums sufficient to induce genius and talent in that direction, I have no doubt in a short time it would be accomplished. Our Provincial Agricultural Society for some years past offered \$100 premium for the best steam plough on exhibition. As yet none have been produced, and no great wonder, for talent and genius could not be expected to produce such an article as would be adapted to this country without expending ten times that amount in experimenting. It must be remembered also that men of genius are not generally rich, and cannot afford to spend money and time in experimenting without some prospect of an early remuneration.

I would suggest that the various Agricultural Societies combine in some way to offer, through the Provincial Society, inducements sufficient to engage inventors to try if possible and produce some simple and cheap locomotive to be propelled by steam, to be used for ploughing, teaming on wagon roads, reaping, mowing, thrashing, &c., &c. If it is produced, agriculturists will be the gainers, though they should offer a heavy premium; if not, they have nothing to pay towards it.—Yours for progress,
OLD SUBSCRIBER.

"Old Subscriber" may have some good object in view (and perhaps may have machine on the brain) that he would like to see perfected. Having heard more than is contained in his communication, we will tell you his hobby. He wishes to get up a steam engine to propel itself when necessary, to plough, drive the reaper, and do all that labor now does with a span of horses; and also to be used as a stationary engine when required. His plans are as yet in his cranium. The engine is to turn round on the ground it stands on, if required; it is to ascend any hill that horses can, and descend as steadily. The economy of its workings are estimated, and a farmer is to go to church on Sunday with his own steam engine, and do all kinds of work cheaper than is now done by horses; horses are to be displaced by it. There will probably be plenty of our readers who will scout this idea, as invariably every new invention or improvement is sure to be derided by the mass; and some one poor solitary individual has to labour and toil, often despised, ridiculed, and called crazy, a fool, an idiot, &c., while the results of his work are taken up and used by the very parties who have derided them! If a good premium was offered to aid such, we think the public money might be expended for less useful purposes.

SMUT IN WHEAT.

SIR,—In the January number of your paper a Scotch agriculturist describes the cause of ball smut in wheat, but he says nothing about the way of preventing it. Having had experience in this matter for several years, I send you my recipe:—Make a strong brine, and put it in a small pot on the fire; then put in blue vitriol; let it simmer till the vitriol is dissolved; then put the prepared brine on the wheat, and let it stand some time, not less than 24 hours. It will not injure the sound wheat; the damaged grains only will turn blue. Just cover the wheat with the brine. One pound of vitriol is enough for five bushels of wheat. I see but little smut in this country, compared to what we had in Ireland.—There we never sowed our wheat unless prepared as above, and I never saw one head of smut in wheat, the seed of which had been treated with this preparation. N. HUGHES.
Treadwell, April 10, 1872.

SMUT IN WHEAT.

SIR,—I send you the result of a trial I made to test a preventative of smut in wheat: I took some good, clean wheat and rubbed it well with smut; I then divided it into three portions. No. 1, I sowed dry; No. 2, I wet with water and dried with lime; No. 3, I soaked in vitriol (sulphate of copper). I sowed the three parcels, and the result was as follows:—No. 1, the half of the product was smut; No. 2, nearly one-third was smut; No. 3, there were only very few grains affected with smut. I also sowed in the same field dry, clean wheat, which produced no smut.
J. W. HALL.
S. Monaghan, April 12, 1872.

TESTING OF SEEDS.

SIR,—Please send me the McCulling wheat that you offer to present to your subscribers. I am a director of the Agricultural Society of this township. I enclose the necessary amount, and will carefully test the wheat and send you the report in the fall.

I am much pleased with your paper, more particularly with the prominence given in it to the testing and dissemination of seeds, a work calculated to benefit the country very largely. I believe if Agricultural Societies would devote a large portion of their funds to the purchase and distribution of seeds among the members, it would be infinitely of more advantage to them individually and to the country at large, than the present mode of frittering away the money on Exhibitions.—You have devised and you are carrying out the very best method of benefiting the agriculturist and the country generally. I hope you will carry out fully your great design of having farmers throughout the whole country supplied with genuine tested seeds. I got a small quantity of Crown Peas from you, which have done well with me. They required better cultivation and cleaner ground than the common peas.

My filly from "Anglo Saxon" is acknowledged by competent judges to be the best in the township. She is rising two years old.
SEYMOUR, April 11, 1872. F. MACBURN.

AGRICULTURAL FAIR.

SIR,—The first fair held in this village, for the sale of agricultural stock, grain, &c., was held to-day. The weather was not favorable, and consequently, there was not much business done. There were a good many cattle offered for sale, but, owing to the scarcity of feed this season, they were not in the best condition. However, several cattle changed hands at fair prices, and also some sheep and horses. There were several thorough-bred and grade bulls on the ground. There was not the same competition and business done that there would be at fairs longer established; but every undertaking has its first day, and success follows perseverance. We hope the Fair of Warkworth will yet stand A No. 1 in the county of Northumberland.
JAS. CARLON.
Warkworth, April 10, 1872.

RATHER ROUGH.

SIR,—Last summer here was so dry that the crops were next to a failure, and most of the farmers contracted debts. Hay could not be bought under \$35 per ton, and most farmers will not have seed enough to put in their spring crop. This season, I trust, will not be as bad as the last.
THOS. CUDDELL.
North Kepple, April 5, 1872.

Rouen Ducks.

If a variety of ducks, easily reared, large, compact, with fine flavored flesh, and at the same time exquisitely handsome in color and form, is wanted, then the Rouen will exactly fill the bill. The race is "thorough-bred" as truly perhaps as any other, though unquestionably nothing but a common puddle-duck improved and bred to a great size. The distinctive qualities of the Rouens are transmitted with a good degree of certainty.

This variety of ducks is bred by fanciers to the utmost nicety as regards feathering. To meet the requirements of the standard of excellence, the beak should be long, and the line, in a profile view, nearly straight from base to tip, on top. Color of upper mandibles pale greenish yellow, excepting a broad black spot at the tip. The lining upon the drake's neck should be pure white, and sharply defined, extending fully around with the exception of a half one-half an inch at the back, where it is veiled by dark feathers. The rich chestnut or claret of the breast should be unbroken, although exactly at its edges there are sometimes a few intruding feathers of another hue, but the fewer the better.

We will not enumerate the various other points of the drake required by the standard, having merely mentioned the above because they are the essential ones, and therefore necessary to be kept in mind by breeders, especially when purchasing. The points on which the duck is most apt to fail are the neck, which should be free from the vestige of the wing of her mate, the breast, under part of the body and tail, which should be rich brown—each feather marked distinctly with a rich, chestnut pencilling. The feet exhibit very markedly the various colors of plumage.

We choose the Rouens as the best ducks in the world, both for their looks and for their useful qualities; and we admit that there are other fine varieties. A Rouen duck in full plumage exhibits some of the finest feathers ever worn by any bird—particularly attractive because so varied—delicately marked in some parts of the body, bold and clear in others, displaying so many changeable hues, and upon the wing marks some very brilliant colors. And when we speak of utility, as flesh is the principal object, no other breed of ducks can excel them.

We can procure from a first-class stock some eggs from these fine birds, to supply those who get up clubs for this paper.

FARMERS TO PARLIAMENT.

SIR,—I am pleased to see that you advocate the principle of sending more farmers to Parliament. This is a step in the right direction. I know from my experience in business that there is a vast difference in the expenses of a country where the Parliament is composed mostly of lawyers, and a State Legislature, where the great majority are farmers. It has taken me my lot to deal in real estate. I have made and executed, and have received about 375 Deeds of Conveyance, ranging in value from ten to ten thousand dollars. The cheapest rate for a Deed—copy and recording—has been \$4; many \$5 and \$6, and some as high as \$10. If we take \$5 as the average price, it will amount to \$1,875.

Once on a time, I was in one of the New England States, and having sold a parcel of land I held there, the purchaser stepped into the Registry Office, the next building to the hotel where I was, and had a deed made out, which I signed and acknowledged before a Magistrate to be my Act and Deed; it was then recorded. All this was done in less than an hour, and cost me only 57½ cts.—Deed, 25 cts., Magistrate's Fees, 12½ cts., and recording, 20 cts. At this rate my conveyancing would amount to only \$215.63, leaving a balance in my favor of \$1659.37.

I asked about their State Legislature. They gave me a pamphlet in which I read as follows:—Farmers, 142; attorneys, 23; merchants, physicians, and mechanics of various trades, 86, making in all 251 members in the House. What a difference in the two Parliaments! I go strongly for more farmers in the House.

P. S.—I have tried to make a statement of the difference between lawyers and farmers making laws for us, but my health is so poor that I cannot state anything clearly. I have passed through 76 hard winters, and am now quite feeble. If you can pick anything out of what I have written worth publishing, do so, or consign it to the scrap basket. I am

well pleased with your paper and wish to continue it. I do think a Deed may be made for \$1 or less, and recorded for 75 cts. The 2nd Deed is as useless as two hairs to wear to church.

HIRAM CAPRON.
Paris, April 22nd, 1872.

FARMERS' POLITICS.

SIR,—I am glad to see that you draw attention at this time to the above most important subject, reminding farmers of the near approach of election time, and urging the necessity of sending more agriculturists to Parliament. This is the best motto farmers can adopt. I am afraid it is too true that although all other interests in the country are cared for and protected, the farming interest—the most important—is almost entirely unrepresented in our Legislature, and yet a great proportion of our members are returned by farmers.—This is a most absurd state of things, but farmers have the remedy in their own hands if they think proper to act. It is for them to decide whether Canada is ever to become a thriving agricultural country, or merely a highway for the commerce of the Western States.

Surely there must be among the farmers of Ontario a sufficient number of intelligent men to represent our interests in Parliament, and who are willing to devote their time and energies to the cause. How is it that farmers, in

their wisdom, prefer to return men whose interests lie in an entirely different direction? Most of our members, whatever their merits in other respects, are totally ignorant of matters pertaining to the land, and are therefore unable, if willing, to forward in any way the farming interest.

We do not ask for exclusive or class legislation, to benefit us at the expense of the commercial or any other part of the community, but if the public money has been advanced for the benefit and improvement of the towns and cities, for the promotion of mechanics' institutes, &c., then I think that farmers' demands for assistance should not be overlooked. The drainage of the land is a matter which I think should receive the attention of Government, and every country member ought to pledge himself to give it all the support in his power. I trust and believe, Mr. Editor, that you will not allow your readers' interests in these matters to flag, but will keep them well posted to the day of election. Wm. KING.
Port Robinson, April 16, 1872.

ALSIKE CLOVER.

This plant has long been extensively cultivated in Europe, where its great value for forage has been appreciated by farmers.

red clover. It is also excellent for the honey-bee, equal to, if not surpassing, the white clover. The first cutting produces the seed, and afterwards excellent pasturage, but, if preferred for hay and no seed, it produces two crops. With the knowledge I have of it, I would not recommend it for light, yellow, sandy soil.

[We are not able, on our authority, to speak of this as of other crops that we recommend. But the work from which we take the extract is of standard authority. We would advise some of our practical farmers who have tried it to give us their experience. Give it fair play—clean ground and careful culture.—Ass't Ed.]

LARGE OR SMALL HOGS.

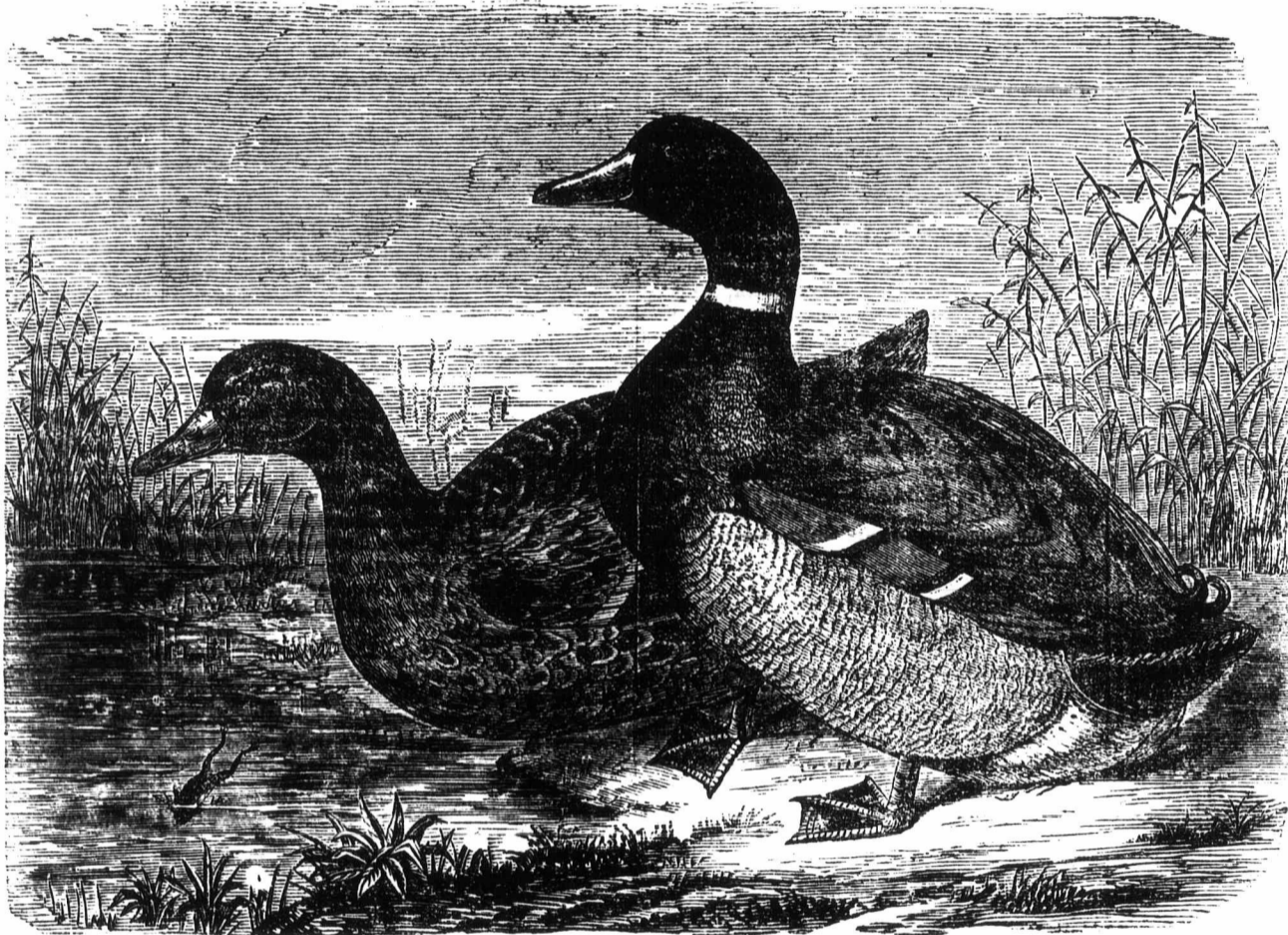
Under this heading we find a long article in one of our exchanges, the *Rural Home*. It is a subject well deserving the careful consideration of our farmers. We make some extracts, condensing the article and making it more suitable for our columns. The writer says:—

"One of the last things we would consider in discussing the comparative merit of the breeds of hogs, would be the mere size. The interest of the farmer is, not the great size to which the hog may be fed, but what pays the greatest profit on investment and labor. This is a plain common-sense view of the matter.—We should not send to markets hogs weighing less than 200 or 250 pounds. Hogs of less weight are not in so good demand for packing, and not so saleable. Hogs of 200 or 250 pounds always command a ready market. We should, in selecting hogs for the farm, keep these weights in mind.

If we find a breed of hogs that will reach these rates with a consumption of less food than other breeds, this is the breed we would prefer, though other breeds might grow larger and heavier. This is a simple question:—not what will grow the largest, but what will pay the best. In other words, we would not regard as the great thing to be desired, the

number of pounds a hog would weigh, but on the contrary, would select as most profitable the hog that represented in every pound of pork the least cost in food.

Early maturity and quick fattening properties are the first things to be considered in our selection. Our aim should be to put our spring pigs in the market late in the fall, and early in the winter, and our late pigs in the winter, or early in the spring. We should then consider which breed of hogs would give the largest return of pork for each bushel of feed consumed; and should select the breed which we believed we could put into market at the least cost per pound. We do not believe it will be found profitable to feed for the greatest weights in any instance.—Every farmer knows that when good shoals are first put into the pen, in the fall, they make a rapid increase in weight for the food they consume. Feed them liberally and one can almost see them grow.—After a while, however, on the same liberal food, their increase is less marked.—We have heard farmers contend that at first their shoals made a gain of eighteen or twenty pounds for every bushel of feed they consumed; and yet we do not believe the average of the hogs marketed any



ROUEN DUCKS.

Its culture in America is of recent date; but as its good qualities have become more known, its culture has largely increased. A "Western Agriculturist," in the *Western Rural*, writes:—"About a year ago last spring I hesitatingly purchased enough of the Alsike clover seed to sow twenty-five acres, at the rate of four and one-third pounds to the acre, at \$1 per lb. I sowed in the month of April, on ground prepared for wheat, and with it. I harrowed this ground, and afterwards plastered it. Notwithstanding the dry season, I cut from that ground about forty tons of hay in July. I drew into my barn five tons for feeding; the balance I stacked, and in September threshed it, and got 85 bushels of seed. Before cutting, I brought in some stalks which measured four feet in length. The field on which it was sown is high rolling land; soil dark, sandy loam. I am feeding this winter my entire stock, horses and cattle, on the hay that was threshed. They never thrived better on any feed than they do at the present time. It is free from fuzz and dust, and the stalk, unlike the other clover, remains green after the seed has ripened, and the cattle seize it with an avidity that would plainly vindicate its superiority over the common

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season is better than from 5 to 8 pounds to a bushel of feed consumed, because many are fed too long in the anxiety of farmers to secure heavy weights. The feeding operations should cease the moment the animal is in good condition for the market.—Then this farmer may expect a fair remuneration.

Flowers.

OUR first importation from Holland direct arrived since the last paper was published. It is not a large stock, and is intended only for our lady friends. It consists of Gladioluses and Lilies of fine varieties.—We will send a choice, finely-colored Gladiolus bulb as a present to those of our lady subscribers who have paid their \$1 and have not received any present, by their sending 5 cents to pay for package and postage. The gentlemen had the opportunity offered of getting presents of grain last month, and many availed themselves of it. To every new lady subscriber who sends us \$1 for a year's subscription to the ADVOCATE during the present month, we will send one choice Lily Bulb, or two Dahlia Bulbs, or two Gladiolus Bulbs, or "Vick's Floral Guide" and a package of choice flower seeds, or a grape vine; also, to the lady who obtains ten new subscribers at \$1 each, in addition to the ADVOCATE and the presents to each as above stated, we will send (postpaid) one of Vick's beautiful and handsome Chromos, which cannot fail to please, as they are exceedingly beautiful. You may add gentlemen's names if you choose, and receive the flower seeds and bulbs, or the gentlemen may have field seeds, vegetables or potatoes sent to them.

LADIES!

read the above. Can you employ a little time more beneficially than in introducing into your neighbourhood the choicest and most valuable seeds for the farm?—such pleasing, cheering and refining ornaments as flowers, which always make home attractive, and render it more peaceful and more heaven-like!—and by the introduction into your homes of a paper that will not taint your morals, does not interfere with your different religious feelings, tries to avoid political strife, and is furnishing the most valuable information concerning seeds, implements and stock, as well as giving amusement to the young and information to the old? After the first year you would have seeds and plants of each kind for every subscriber, by exchanging. We feel satisfied that some gray-headed old lady or gentleman will say to one of the children or grandchildren—"Yes, my dear, go and try what you can do;" the result will be—"Mr. Weld, I have succeeded in getting up a club; please send me one of the Chromos, and such and such seeds, for so-and-so." Just go and try. If you do not gain a pair of the Chromos, or even one, if you only send three or four new names, we will present you with a few flower seeds that will please you.

Now is just the time to get your flowers. Go to work at once. Send your orders in by the 20th of this month, then you can plant them out by the 3rd of June; you will probably have a better flower garden in the fall than those who planted earlier. In our list will be found a collection of choice hardy Annuals most suitable for the farmers' garden—such as do not require a hot house, but will thrive with common care.

RURAL LIFE.

Statistics teach us that farmers live longer lives than any other class who perform labor of a mechanical kind, and that they are excelled in longevity only by those who work with the brain occasionally, as preachers, orators and public speakers. And the probability is that considering the healthfulness of their employment and the general freedom from annoying cares and anxieties which they enjoy, their lives might be considerably more enduring, did they exercise care in choosing their diet and in preserving themselves from sudden chills during the most trying season of their labor, that of harvest. It is then that most farmers contract diseases which are sooner or later fatal to them.

SUMMER FLOWERING BULBS.

(From Vick's Floral Guide.)

THE Summer Bulbs are a most useful and brilliant class of flowers, and becoming every year more popular, both among florists and amateurs everywhere. The Gladiolus now takes rank at the very head of the list, and the Dahlia still retains a good share of its old popularity. The Summer Bulbs are tender, and therefore

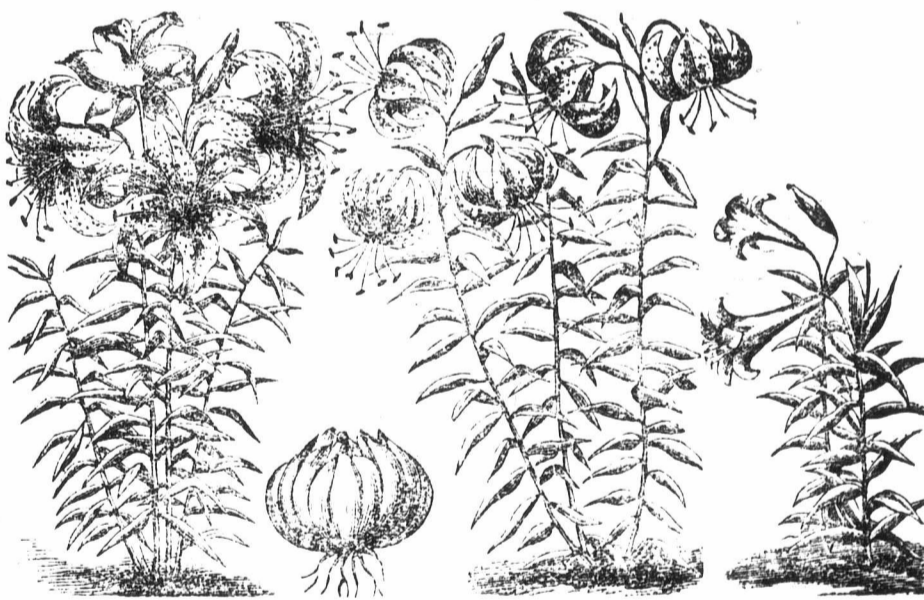
destroyed by freezing, and must not be planted until frost is over in the spring. In the autumn they must be taken up before very hard frosts, and kept in the cellar or some other safe place until spring. They are easily preserved in good condition, and will richly repay for the little care required in their treatment.



GLADIOLUS.

The Gladiolus is the most beautiful of our Summer Bulbs, with tall spikes of flowers, some two feet or more in height, and of an several from the same bulb.—The flowers are of almost every desirable color—brilliant scarlet, crimson, creamy white, striped, blotched and spotted in the most curious and interesting manner. The culture is very simple. Set the bulbs from six to nine inches apart, and cover about three inches. If set in rows they may be set six inches apart in the rows,

and the rows one foot apart. The planting may be done at different times, from the middle of April to the middle of June to secure a long succession of bloom.—Keep the earth mellow, and place a neat stake to support the spikes in storms. I have never known a case where the Gladiolus failed to give the most perfect satisfaction, opening a new field of beauty to those unacquainted with its merits. For in-door decoration, such as ornamenting the dining-table, schools, churches, &c.,



LILIAM AURATUM.

LILIAM LANCIFOLIUM.

LILIAM LONGIFLORUM.

SPINACH.

it is unsurpassed, making a magnificent display with little trouble. In the fall, take up the bulbs, let them dry in the air for a few days, then cut off the tops and store the bulbs out of the way of frost, for next season's planting. Look at them occasionally. If kept in a place too moist, they will show signs of mildew. If this appears, remove them to a dryer position. If the bulbs shrivel, it shows they are getting too dry; but they do not usually suffer from a dry atmosphere. In all foreign and American Catalogues several varieties are described as *white*. I have made descriptions as found true in my own grounds, but to prevent disappointment, will say I know of no reliable pure white Gladiolus.

Long before green peas are ready for use, farmers' wives wander about the fields or marshes, or fence corners, or the road side, searching for dandelion, or mustard, or cowslip, or some still viler weed for greens.

Now, by a little care and labor in the early part of September and as soon as the ground can be worked in the spring, every gardener can have the best of greens upon his table from the middle of April until the time of green peas. Three or four square rods of rich soil sown at the times above mentioned to spinach, will afford an abundant supply for a average-sized family. The ground should be very rich, should be spaded deep and firm, and the seed covered about an inch in drills one foot apart.

Round leaved or Samner is the best variety for spring sowing, and if sowed as early as possible, will be large enough to commence cutting the latter part of May.—Country Farmer.

HIGH PRICE OF FOWLS.

The great scarcity of fowls in our market and the high price paid for them is the cause of much complaint among our house keepers. Raising and fattening fowl pays well; on every farm there is the facility for feeding them, and yet they are scarce in the market. Will not our farmers' wives and daughters procure a greater supply for the demand? The State of Iowa cannot boast of a climate or soil equal to that of Canada, and there they make quite a good thing by poultry. We give one instance:—Mrs. Gage, in Story County, raised six hundred Braham chickens that weighed from six to fifteen pounds. She fed them on corn meal, wheat screenings, and the coarser grains of the farm, with sour milk. She says she can raise a pound of poultry with as little trouble and expense as a pound of pork, and she can sell it for twice as much. What she has done there can be done as well here. Often a neglected spot, a waste corner in the farm, can be turned to good account by growing something to help in feeding the fowl. In such places let sun-flower seed be sown; the abundant seed they produce will be a choice addition to the food of the poultry yard. And besides, the bad air that arises from some damp places will be deprived of much of its injurious influence to the health by the abundant growth of the sun-flowers.

OUT WEST.

Sir.—I am sorry I have not more time on my hands which would afford me the opportunity of sketching you a general outline of our progress and prospects up west.

I have intended to correspond, in a very amiable way, with the London press. I look upon it as a debt to the press to give a correct account of any promising features that the face of our country affords through the beneficent intelligence pouring through the columns of the many useful periodicals with which our province is favored, in its practical application we all derive a benefit.

The western portion is evidently destined to eventually become a large dairy district. The benefit of this to the community, when it is fairly in operation, can hardly now be estimated. In my humble opinion the day is just dawning when ten of thousands of wealth will find its way into our section of country for our exports of dairy products, where now little or nothing is afforded.

We have now in operation in one section, an area of not more than 4 miles, 4 cheese factories, named respectively, Butler's, Shaw's, Wilson's and Webb's in the Township of Howland, also one in Orford, Barr's factory. People are waking up to their own interests in these matters, and so far as the operation under my supervision is concerned I can speak positively, having secured nearly 200 cows as patronage to begin with, and having seen one of the best operations that I am acquainted with in Canada, viz., the London North Branch Cheese Factory steam appliance for manipulating and carving cheese, have taken what I term the model factory as my pattern, which is now in operation. To appreciate the arrangement, it must be seen. I found Mr. E. S. Harris, the cheese maker whom the company have been fortunate enough to employ, a very obliging and accommodating gentleman. His cheese made in this factory last season is reported from England by the English purchasers as very handsome, and equal to the best Canadian they had ever seen. This, Mr. Editor, I think will justify my statement. We have made cheese out west which stands No. 1 in the English market, and we intend to keep up our reputation and not be behind London or any other section in Ontario.

This is one of the great advantages of such papers. When once a man acquires knowledge he is always anxious to acquire more, and to put it into practice. He is no longer content to move on in the old track, he will go on improving, and is at all times willing to help forward the good work of improvement. You are entitled to the gratitude of the farmers for the many useful lessons you have given them in the ADVOCATE and for bringing them out to help themselves and one another.

With thanks for the interest you have taken in the welfare of Agriculture, I am,

Ridgeway, April.

Yours,
W. H.

SEED TEST.

SIR.—In renewing my subscription for the ADVOCATE, I would inform you how your seeds succeeded with me. The McCulling Wheat did not do as well as I expected but the fault was not in the wheat for the ground was not suitable. I intend to give it a fair trial this year. The Potatoes are first-rate. The Bresse's Prolific produced a very large field and most productive early potatoes I ever raised. The Caico is an excellent potato, a good cropper, and first class for table use.—Bresse's Prolific is an abundant cropper. The Cam-x is also an excellent potato. In fact all the potatoes you sent me I can recommend highly. GEO. MONGER. Fergus, April 10, 1872.

SEED TEST.

SIR.—The following is the result of my experiments in your seeds:—McCulling Wheat, sowed 7 lb. of seed on the 10th of April, and harvested on the 8th of August; yield, 2 bush. and 10 lbs. of clean seed. Bresse's Peerless potatoes, 15 lbs. of which produced 14 bushels of excellent quality and very large, 4 of them weighing 8 lbs. King of the Earlies 15 lbs. of which yielded 10 bush. and 22 lb. They were 10 days earlier than the Early Rose variety, and were equal in quality. 7 1/2 lbs. Prolific yielded 8 bush. and 10 lbs. 1 1/2 lbs. Climax yielded 1 bush. and 30 lbs. 1 1/2 lbs. Excelsior yielded 65 lbs. of very good quality. G. G. Tuamessford, March 5, 1872.

A SURE CURE FOR CANADIAN THISTLES.

SIR.—You say anyone that can use a pen can write for the paper, but I think you are a little wrong for I can use a pen in a middling sort of a way but writing for the paper is another thing altogether. However if you will promise to correct all my mistakes, I will give you a recipe for killing Canadian thistles.—Pough early in the fall, and manure where the thistles are; cultivate deep to make the land clean; seed down with barley and half a pound of clover per acre, and mind early seedling to get a good crop the following year; then cut for seed about the 20th of June. Mix some timothy and cut for hay; pasture two years. Sow a good quantity of salt where the thistles are mulching, which makes the thistles grow hollow. By this method I killed half an acre of them.

A WARNING TO FARMERS.

Having purchased 6 bushels of the Milwaukee Club Wheat in London, at 15 shillings a bushel. I sowed it on the 4th of April on 4 1/2 acres of my best land. I expected a great yield, but I three-fold only 7 bushels per acre of long weak straw, though good wheat. I sowed 2 1/2 bushels of Fife Wheat, which gave 50 bushels, with no weevil, and was shorter straw. I recommend the Fife Wheat.

AN OLD SUBSCRIBER. Westminster, April 8th, 1872.

BEST ROOT SUGAR.

With the greatest pleasure we give insertion to a communication from one who deserves well of the country. He has, at a great outlay of money and labor, succeeded in an enterprise that will, if properly supported, be a source of great wealth to the farmers and to the whole Dominion. No men are more deserving of encouragement than those who, in spite of every discouragement, commence and persevere in such undertakings. We have had experience of what it costs to start and carry on enterprises unaided by any one in authority. Mr. Kraft should receive a good bonus from the Government, and if they sincerely desire the success of agriculture and agriculturists they will give him all needful support.

SIR.—I send you some of the first beet sugar that we have succeeded in making after two years of hard labor and much money spent; but at last we have had the honor of having manufactured the first beet sugar that was ever made in Canada. It was the most difficult task I ever undertook, and had I not had Mr. Melius in with me to assist me, it would have been impossible for me to have made one pound of sugar; but the doctor is a good chemist as well as a good machinist, and we succeeded in making 50 lbs.

We now know from experience that over \$10,000, as I stated in my last letter would not only be insufficient to start the first factory for the purpose, but it would not pay the losses. I am convinced that if once started there would not be a better paying business in Canada; nor is there in the world a better

country for the business. There is no better country for the growth of roots, and during our hard cold winters all the beets could be worked up, without their becoming too dry, as is the case in milder climates. The great difficulty is in our foundries and the working bands. The workmen in the foundry when asked to make the machinery for a sugar factory, ask what you want and say they think they can make it, but cannot tell you the cost as they never made any before; and then when it is made, you have to pay for various patterns they had to make; and, also, you have to pay a little more than the regular price for the masonry. It required more than ordinary time, being the first of the sort, and, on the whole, there is a good deal of loss before things are in the way of working. I do not blame the workmen, for how can they do otherwise? What they have never seen they cannot expect to do.

Our Government should give some encouragement to the first factory; the second would be easy. The State of California gave for the first factory a bonus of \$30,000. For the first one I would not ask that amount from our Government; I would be satisfied with a bonus of \$20,000, or even \$15,000, a sum barely sufficient to pay for the losses in the first successful attempt. The next would be the benefit of our labor. M. KRAFT. Bridgeport, April 12, 1872.

DISCOURAGING LETTER FROM RENFREW.

SIR.—Enclosed find the price of the McCulling wheat I ordered. This section of country is anything but an agricultural one; being a pine region, there is not much agriculture carried on, and labor is so high that farm help cannot be employed on terms that will keep farmers safe. Laborers must have a dollar a day. In short, this is not a farming country. J. HALIDAY, SR. Bayat Pt., Renfrew, April 16, 1872.

THE 'ADVOCATE' THE FARMERS' PAPER.

SIR.—Enclosed is the amount of my subscription for the Advocate for this year. I like it better than ever, and think that no farmer should be without it. It is the paper for farmers. GEO. DIX. Tavistock, April 7, 1872.

NEW SEEDS IN THE NORTH.

SIR.—In ordering a fresh supply of seeds from the Emporium I give you the results generally. California White Oats, excellent; Scotch Potato Oats did exceedingly well; Black Tartary, a great crop, but I am sorry they sell so well as some others; Chevalier Barley, a good crop and good grain; Early Rose Potatoes and Bresse's Prolific are really splendid, dry, and mealy; Hanson potatoes also turned out well; California Peas—every farmer should have them—great croppers and rich.

Let me have the fresh seeds named in the accompanying list of 27 new varieties. I would add—I advise every farmer to take the Advocate and profit by its advice. A. H. R. Avonmore, March 22, 1872.

APIARY.

The past winter has been the most disastrous one on record to the bee-keeper; never has the loss been so great. It has been widespread, both far and near, in many cases whole apiaries perishing, both large and small, leaving not a single stock to begin with. The loss has been enormous, some losing 40 or 50 stocks—the accumulation of many years. No doubt the loss has been ninety per cent. of the bees kept in these counties. But, strange to say, some have wintered their bees perfectly safe and in good condition in the open air, without any care whatever; certain positions have been favorable, and where stocks were sheltered from the east winds, they appear to have escaped the damp that was so fatal. It is said that a "winter's fog will freeze a dog," and we find that immediately after the misty weather in February, our bees became charged with damp, and the cold weather continuing, with no sun to relieve them, they were completely exhausted, with plenty of honey at hand. Now, what do we learn by this sad experience? We find our bees perishing, and how to dry them is the question.—Bring them to the fire in a warm room, and the first and best means and falls to the bottom; the bees become revive, and go to the curer comb to feed. The accumulated heat dries the inner walls of the hive, and they are in a position again to stand the cold. Some may prefer putting them beyond the reach of

frost, but then they will be damp, and the long confinement is ruinous. Many who stowed them in pits and cellars have lost all the present winter.

The season appears particularly unfavorable to the bee-keeper. The past has been a lesson which we should all profit by, and if our hives are not the best, now is the time to procure the best double-walled hive the country produces. Obtain an Italian stock to begin with; go into bee-keeping intelligently, and, as in any other business, you may expect to succeed. B. LOREN. Cobourg, April 15th, 1872.

SEEDS.

HORSE BEANS.

SIR.—I have grown horse beans the last 10 years, and would not be without them; they pay me better than wheat. I differ a little from Mr. Hollings in my mode of setting.—I plant in drills from 17 to 20 inches apart, 2 bushels to the acre, cover with the plough the same as potatoes and before the beans come through I harrow the drills lengthways thoroughly, so as not to disturb the beans; after they are 5 or 6 inches above the ground, I run the plough through them, throwing a little ground up to the rows, which I consider adds one-third to my crop. T. BUNN. New Lancaster, April 2nd, 1872.

WHEAT AND OATS.

SIR.—As I am a subscriber to your paper and one that has received some good from its pages, I wish you every success with it and the Emporium, and think they will do a great amount of good to the country. Four of us got one barrel of seeds, potatoes, &c. from you last spring, and as you wish information and I see a good account of the McCulling Wheat, I will give you mine.—I sowed 7 1/2 lbs. in my orchard the last 9th of May, from which I threshed and cleaned 5 bushels and 3 lbs. of good wheat. I should have had more, but the mice and hens destroyed some. It was sown very thin in drills about 16 inches apart; it grew about 3 1/2 feet high, was stiff in straw, and stood out very much. I am not much in favour with bearded wheat, but if we get the wheat we must not mind beards. Also, from 7 1/2 lbs. of Baltic Wheat I threshed three bushels and 20 lbs. of excellent wheat. It was sown along side of my Glasgow Wheat; it had not as good ground as the McCulling Wheat or I think it would have done better.—Of the two wheats I prefer the Baltic, my McCulling Wheat being a large, coarse sample, while the Baltic is beautiful. I have not seen any account in your paper of the flouring qualities of the McCulling variety.—However, I am going to give both kinds a fair trial this spring, and then I shall be better able to decide which is the best.

From one peck of Black Tartar Oats I had just about 10 bushels of good, plump oats, but these are not a main oat as I always thought they were.

The Potatoes I got from you were all cut so with the summer frost that I barely had seed again, but some of the other parties who got them had good yields from them.

Will you please inform me what difference in appearance there is between the Baltic and Glasgow wheats; when they were growing last summer I could see none, only that the Baltic I got from you was a purer sample. We have had three feet of snow on the level here, and we have had no thaw to raise the springs, so a great many wells are dry; we are also very scarce of feed, yet we hope we shall soon have a thaw. Please receive this letter from a plain farmer, who likes good stock and seeds and grain, but like a good many more that are clearing away the forest, cannot afford what I would wish. JAS. BEMCROFT. Artemesia, April 5th, 1872.

We hope our readers will come to our aid and answer the question in regard to the wheat.—[Ed.]

SEEDS.

SIR.—I have shipped to you half a bushel of bed chaff or Farrow Wheat, and half a bushel of Famin Oats which were imported from Famin, a port in Germany. They are a white oat, very smooth and have no long tails to them like the Norway Oats and some others. They are big croppers averaging from 75 to 80 bushels per acre. The wheat is not my own growing; I bought it in the township of Marlborough. It was grown on heavy soil, its average yield being 30 to 40 bushels per acre. In the same field and on the same quality of ground it yielded from 10

to 15 bushels per acre more than the Glasgow Wheat. One thing I can certify to is that the farmers in the adjoining townships that have heard of it are so keen to get it that they would give most any price for it; but they cannot get it now for love or money. I must conclude my letter by saying that feed is very scarce here just now. A FARMER IN MINTO Clifford, April 6, 1872.

Miscellaneous.

PARASITIC PLANTS DELETERIOUS TO WHEAT.

How often do we hear farmers remark, we will have no smut this year, we have so many black heads, and even with these remarks, should we examine the black heads we will find some smut kernel or arrested spore balls. Many of the ergots in different cereals are of this family, and confuse the student when their growth is checked by those multiple changes which seem to follow natural laws as secondaries to primary forms, as in minerals. They are different from all flowering plants in their chemical influence upon the air. They absorb oxygen and exhale carbonic acid, performing the same office in this respect as animals. The odor they emit in decaying is more of an animal than vegetable matter, and in fact the spores of some of the fungi are propagated and derive nourishment from the interior tissues of plants, as the group of animals termed the Entozoa, such as the trichina spiralis, derive their nourishment from the muscular system of the hog. Therefore, we can come up to this conclusion that parasitic plants in the vegetable kingdom prey upon and absorb the juices of plants, both in the interior and exterior, as the animal parasites, such as trichina, tape worm, and lice derive their nourishment from either the interior or exterior of the animal they prey upon.

There is another phenomena which all practical farmers and horticulturists understand, which is that the more feeble the animal or plant is, either by starvation or physical decay, the more it is subject to the attack of parasites. The strong and healthy colt or calf is never troubled with lice except when exposed by mingling with weak stock. The abundant corn crop of 1871 is not troubled with the fungi growth of smut as in years when corn is weakly, caused from long coming up at planting time. We hear no complaints of cattle dying when turned into corn stalks this last season, which shows that smut has something to with the deaths of former years.

Let us as practical farmers take into consideration the cause of smut being in our wheat crops and we find that seed sown and mucked into wet and slushy ground, is more apt to be smutty in harvest than when the seed is sown in a dry bed; also that spring wheat, when sowed early or out of season, and the seed just ready to sprout or swell, and if checked by a hard frost so as to enfeeble embryo life, will have the same effect in developing smut as when wheat is mucked into the ground.

Farmers from long experience know the effect of sowing wheat when the ground is in a bad condition and also know a remedy in steeping the seed in lime and ashes with seed which the effect of mixing alkalies with seed wheat in preventing smut—now let us examine the cause, so as to come to a scientific conclusion on the subject, and why quicklime, ashes, salt, urine, &c., should kill the fungi growth in cereals. All cultivated cereals have fungi spores in the shape of smut connected with their ripened grain; for instance, in examining with a microscope a kernel of wheat, we find in the smallest ends of the two lobes which form the seed, a fine silky fur, growing from the silicious bran—this fur, or velvet fuzz, is often filled with smut spores which has charged the kernel either in the field or in the threshing. Winnowing the wheat when dry often has the effect of blowing away the smut spores, but should they be left in the seed when sown, and the season and ground favorable to their development, we are pretty sure to have smutty wheat from this cause. Wheat when sown, and lies long in the ground before sprouting, from cold and wet, or frost, gives the embryo plant a sickly nature, and also gives the smut spores a chance of being absorbed in its juices, which by a process of fungi reproduction impregnates the whole system, as trichina affects the hog.

Now, how shall we get rid of the scourge?—I answer, in the same manner that we get rid of parasite lice in calves and colts; feed the plant as we do the colt, also give it a dry bed when sprouting, and we have little trouble with smut. But should we stunt our young

wheat, corn or bad far great nat sorb the j Iowa Ho

THE APP

The ex to the cor wheat cro proper an In our plan of plants plowed in upon the of the bar sowed with subjected barn-yard worms, l cause of pure and of plants and thrive to be plo yard ma corn is c ground c row the and roll where yo to being is renew by deep barn-y preparat Expe my farm a satisfi no such worm.

SIR.—plained found in duces th quality wheat, these a some l used in cannot Scottie Barley food in equinn therefore be acc benefit overle same g wholes A fil quant ers, b was propri the re both consu In told, bread many How benefi thus I h mille the n find

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wheat, corn, or oats, either by over cropping or bad farming, all the fungi parasites in the great natural struggle for life will try to absorb the juices of the plants they prey upon.—Iowa Homestead.

THE APPLICATION OF MANURE FOR WHEAT. By F. Watts.

The experience of many years has led me to the conclusion that the deterioration of the wheat crop is mainly attributable to the improper and untimely use of barn-yard manure. In our practice, the clover sod is turned down and planted with corn. The ground is again plowed in the spring, and sowed with oats, and upon the stubble of this crop all the manure of the barnyard is put; then plowed again and sowed with wheat. This delicate plant is thus subjected to the rawness and grossness of barn-yard food, with all its germs of flies, worms, lice and bugs—seemingly a sufficient cause of the unsuccessful growth of a grain so pure and delicate as wheat. Corn is the hog of plants, and will devour food of any quality and thrive upon it. Here, then, upon the sod, to be plowed for corn, is the place for barn-yard manure. Bury it deep, and when the corn is cut off, break the stubble even with the ground during the winter. In the spring harrow the ground well, sow your oats upon it, and roll it. You will thus keep your manure where you put it, and not subject the oat crop to being thrown down by it. When this crop is removed, bring your manure to the surface by deep plowing and thorough tillage. The barn-yard manure having thus received proper preparation, is a fit food for the wheat plant. Experience has taught me this lesson. On my farm in Pennsylvania I never fail to raise a satisfactory crop of wheat, and I have known no such thing as midge, Hessian fly, or army worm.

BARLEY MEAL.

Sir,—It is a singular fact, not easily explained, that barley meal is an article not found in the markets of a country which produces that grain in abundance and of fine quality. We have the meal produced from wheat, oats, rye, corn, and buck-wheat, and these are everywhere used for bread or food of some kind, while barley meal, so commonly used in Scotland and many parts of England, cannot be had anywhere in the Province.—Scottish song has honored the "Bannecks of Barley Meal" as a common and wholesome food in the Fatherland, and the meal is also as common there for porridge as oatmeal, and is equally recommended and wholesome. How, therefore, can its absence from all our markets be accounted for? Are we reaping so much benefit from breweries and distilleries that we overlook the profit to be derived from the same grain thus wasted, if turned into cheap, wholesome food?

A flour dealer, in Toronto, wanted to get a quantity of barley meal to sell to his customers, but could not obtain it; and so anxious was he to be supplied, that he offered the proprietor of an oat-mill to put up all the requisite machinery in his mill to produce both pearl barley and barley meal, if he would consent to it on fair terms.

In the south and west of England, I am told, barley flour is extensively used for loaf bread, and its sweetness and lightness lead many to prefer it to the fine wheat loaf. How much would the suffering poor also be benefitted by the cheap bread which could thus be supplied.

I have no doubt that were our oat-mill millers to connect with their establishments the manufacture of barley meal, they would find it a lucrative branch of their business.

A FRIEND OF CHEAP BREAD.

WHO IS OLD?

A wise man will never rust out. As long as he can move or breathe he will be doing for himself, for his neighbor, or for posterity. Almost to the last hour of his life, Washington was at work. So were Franklin and Young, and Howard and Newton. The vigor of their lives never decayed. No rust marred their spirits. It is a foolish idea to suppose that we must lie down and die because we are old. Who is old? Not the man of energy, not the day laborer in science, art or benevolence; but he only who suffers his energies to waste away and the springs of life to become motionless; on whose hands the hours drag heavily, and to whom all things wear the garb of gloom. Is he old? Should not be put; but is he active?—can he breathe freely and move with agility? There are scores of gray-headed men we should prefer in any important enterprise to those young men who fear and tremble at approaching shadows, and turn pale at a lion in their path, at a harsh word or a frown.

Don't Think to Please All.

Don't think, as you pass on the journey of life, That you'll always be clear of the "waters of strife," That fortune will always befriend you; Don't fondly imagine you'll never receive A stab in the dark or a thorn in your sleeve, That friendship will always defend you. Don't think you shall always get praise from your neighbors, Don't think to please all with your well-meaning labors, But guard against inward vexation; Don't think disappointment will never rebuff you, That envy, or hatred, or pride will ne'er cuff you, That blessed will e'er be your vocation.

If you should but a little conspicuous stand, Ill will and ill nature place out the hand To bother, annoy and distress you; Great noes will be picked in your decentish coat, And slander will send the false rumors afloat, If fortune should slightly caress you.

The world is composed of a termagant crew, The knowing ones many, the ignorant few, All biting and spitting each other; They are scorning and flouting, lamproosing and louting, Distorting, detracting, and sulking, and putting, And raising a dust and a bother.

There are some who are always inimical, cynical, Satirical, comical, mimical, finical, Who set themselves up as your judges; There are some hypercritical, some hyperbolic, Some hypothetical—hypochondriacal Hypocrites, owing you grudges.

There are always some acting as factious objectors, Conceited advisers and stupid directors, All telling you what you should do; There are ignorant complainers, all scolding and squalling, With ready fault-finders, all pulling and hauling.

Knowing all things far better than you. Don't think to please all, for that rule isn't practical, But don't think to wander through life misanthropical, But rather forgive and forget; A fig for man's judgment—that mind may be sounder

Which is always excited and ready to flounder In the bog of a stew or a fret. Don't think to please all, but then never turn crusty, And so fish, and snappish, and nasty, and musty, Don't shut yourself up in your shell; If you can't please your neighbor, why please your own conscience,

The world's fine opinions are clamor and nonsense, Never fear if you always do well.

SUNDRY LETTERS.

I am writing to you from the exact latitude of Philadelphia, and just one mile from the Pacific coast, at the head of navigation on the Sacramento River. Our year has but two seasons—Wet and Dry. The season closes May 1st, or thereabouts; the dry season lasts from May till December—all the time without either rain or dew, the sun shining every day from 6:30 to 10:30 in the shade. The earth baked like a brick, and all the luxuriant annual vegetation dried like hay, while the trees and a few hardy perennial plants alone remain green. During this time herds of cattle—sleek fellows—feed and fatten on the nutritious seeds of the dry herbage of the plains, lolling beneath the shade of our oaks "on a thousand hills," or stroll along our bright, clear creeks that everywhere cross the plains, running from the snow-capped mountains on either side of the valley to the river. And the farmer sits on his mower, reaper or header and cuts his fields of hay or grain, leaving it loose in the field—no bad weather here—to be gathered up at any time within the next five months. And then such day's work as we do! No moisture in our straw or grain; a mado! No moisture in our straw or grain; a mado! Mississippi Valley can easily thresh 2,000 here in the same time! And then such grain, too! plump, bright, large, clean. Well, nobody ever saw so much of good grain who has not been in California.

Grain is raised here with one-fourth the labor that it is on the Mississippi or its tributaries; and it costs absolutely nothing to raise stock. I can see hundreds of head from the window by which I am writing that have never been touched, or cared for, except to mark or brand them. We never feed stock other than work animals or milk cows. We have no snow here, and no cold weather, save a few frosty nights in winter.

But here is one drawback: We can raise no vegetables, and but little fruit, without irrigating, and not one-thousandth part of our arable land is so situated as to be easily irrigated from the mountain streams, which cross the valley. But when we can irrigate, everything can be raised in the greatest perfection;—the common fruits of our northern homes and the most delicate of the tropics may be seen growing side by side.

Everything that anybody would ever think of weighing sells here by the hundred pound. Land is worth from \$5 to \$50 per acre, with some Government open to settlers, which can be bought at \$2.50 per acre, Government having raised the land in this Valley to that price. In conclusion, I would say that I have no land to sell or any kind of an axe to grind. I am engaged in raising hogs. I have hundreds that have never been fed anything. They will fatten in the fall on the abundance of acorns, are killed, "baconed," and sold to John Chinaman for twenty cents per pound, without ever having cost anybody a cent.—M. L. H.

Youths' Department.

UNCLE TOM'S COLUMN.

DEAR UNCLE TOM.—What a jolly old uncle you must be! I wish I could see you, for I know you are just one of those kind of fellows that always have lots of candy in their pockets. And now I want to puzzle you. I saw this in a paper the other day:

A C O O A R 80.

Can you make that out? I puzzled all the boys in the school with it, but the master said I had better be puzzling over my sums. Oh, what a bother sums are! I like geography best, because that is where you find out about the animals, and the trees, and the people all over the world. Bill is head of the class in arithmetic, and he says there's nothing shows smartness so much as arithmetic. I said: "Look at that hog tearing up the pasture; he may not always be posted in arithmetic, but when you come to square root, he is there, the hog is." Oh, how the boys did laugh. But I guess I have written enough, so good bye for this time. BOB JOHNSON.

DEAR UNCLE TOM,—I like you because mamma says she thinks you must be a real nice old man. I wish you would write some nice little rhymes for us. There's Willie and Baby, and Julia (that's me), and we know mother gives songs that are real splendid, and we want some more. Willie is four years old. The other day mamma gave Baby a piece of cake, but when she went out of the room Willie took the cake from Baby and ate it. I said: "O, Willie, you ought not to take your little sister's cake." He said: "didn't ma tell me I was always to take her part?" I want to tell you about an examination at school. One of the visitors asked: "What is the chief use of bread?" Willie shouted out: "To put butter and molasses on, of course!" I will write to you again some other time. I am your loving niece, JULIA MORSEHOVE.

UNCLE TOM'S REMARKS.

Bob need not feel so tremendously smart over his puzzle, for I have found it out already; however, let all the rest of you find the answer too. But Bob, you ought to be fond of your arithmetic just as well as of the geography, because without arithmetic you will have a hard time to get along in the world. I like you, Julia; you are an unselfish girl I am sure, and you are very fond of your father and mother, and brother and sister, but you must not encourage Willie's sharpness, as he is evidently a little selfish. Next month you shall have some of the rhymes you ask for. The answer to the charade last month is "Snow-ball."

Well, youngsters, how do you feel this month? I have not heard from as many of you as I should have liked, but by-and-bye, when we are better acquainted several letters from the old folks, telling about my nephews and nieces. One affectionate mamma says:—"I believe I've got the tenderest-hearted boys in the world; I can't tell one of them to fetch a pail of water, but he'll burst out a-crying." I can only say that if I was near them they'd bet under somewhat real ease besides in the heart. I like boys and girls who do all they can to help their parents. Not, however, as one boy I know did. His mother having made a bottle of nice preserves, labelled them: "Put up by Mrs. D." Freddy having discovered them soon eat up the contents and wrote on the bottom of the label: "Put down by Freddy D." This may have been a good joke for Freddy, but it was hard on the preserves.

One farmer tells me about a neighbor's son, who, hearing some one speak of the number of engagements an old soldier had been in, said:—"O, that's nothing, my sister Mary's been engaged eleven times." If this youngster would only write an account of the engagements, do doubt they would be interesting, but he need not mention to his sister that he is going to do so.

I have received a very interesting composition from another nephew. Here it is: "The Throat.—A throat is convenient to have, especially to roosters and ministers—the former eats corn and crows with it; the latter preaches with his'n, and ties it up.—Johnny H." But he has forgotten that the throat is of especial convenience to him for swallowing candy. You see what a smart lot of nephews and nieces I have, but smartness is not always appreciated. One of them after noicing for some time the glittering gold filling in her aunt's front teeth, exclaimed: "Aunt Emma, I wish I had copper-toed teeth like yours!" But I think I have said enough for this time. Study out the puzzles and send me the answers. UNCLE TOM.

AUNT KATE'S HOUSE-KEEPING.

Well, you know, I ain't been married very long, and keepin' house is kind of new to me, so I tries most everything as comes along to see if it be good, and I makes many and many a blunder. I says to myself, says I: "woul'n't it be grand if somebody who had made all these blunders afore should have said so somewhere, and then they'd been a warnin' till us." So when Ben kem home (Ben's my husband, he is), "Ben," says I; "we'l, Kate," says he; "Ben," says I; "I'm going to write for the 'FARMER'S ADVOCATE,' and tell my experience there, and that'll be a saving to many a farmer and his wife." "But," says Ben, "they all gets their almanacs and receipt books as teaches how to cook, and so on." "Yes, but," says I, "it's just like the writings of them scientific farmers, there's good in them no doubt, but their ideas want to be experimented on first, and then if they turn out well, why, all right."

That's just what I mean to do; if any one says that such and such is good, I'll try it, and if it is good, I'll say so in the 'Advocate,' and if not, why maybe I'll say that too. So Ben he 'greed, and that's why I write.

The lengthening days remind us that warm weather is at hand. Every bright morning all the rooms should be well aired. Don't be afraid to let the sun come into your houses. About this time spring cleaning ought to be commenced; don't neglect that, for who can be comfortable in a house that is dull and dingy from the smoke of the winter fires. When summer comes let it find us bright and clean, ready for it.

I've got a capital fruit pudding which Ben is awful fond of:—One cup of molasses, half a cup of brown sugar, half a cup of butter, one cup of milk, three and a half cups of flour, one-half teaspoonful each of cinnamon, salt-ice, and cloves, half a cup of chopped raisins or currants, a large cupful of chopped apples or dried apples, which have been well soaked; one teaspoonful of soda stirred in the molasses. Boil two hours in a floured cloth or tin pail. There, now, I guess that'll do for this time.

HIDDEN ANIMALS.

- 1. Phonography enables me to live.
2. AMASA pestors me terribly.
3. Have you heard of the wild Catawba grapes?
4. See that enormous elephant!
5. The pine cone yields an excellent salve.
6. Can ghosts enter common keyholes?
7. An Arab is a very good scholar.
8. He can be a rebel.
9. I am a rebel.
10. I have not determined yet.
Answer next month.

ACROSTIC.

As soon as melts the ice and snow,
Prepare the plow, and spade, and hoe;
Repair your fences; make them good;
Improve your time; no farmer should
Lose in the spring a single day.
Much will depend upon the way
A farmer spends the month of May.
Ye men! don't trifle it away.
J. LAWSON.
Battersea, April 4, 1872.

TELL THE TRUTH.

Boy, at all times tell the truth;
Let no lie defile thy youth.
If thou'rt wrong, be thine the shame;
Speak the truth and bear the blame.
Truth is honest, truth is sure;
Truth is strong and must endure;
Falsehood lasts a single day,
Then it vanishes away.
Boy, at all times tell the truth;
Let no lie defile thy youth.
Truth is steadfast, sure and fast,
Certain to prevail at last.

(ADVERTISEMENT)

Fingal and Clinton Agricultural Works

MACPHERSON, GLASGOW & CO., PROPRIETORS.

MANUFACTURERS OF THE "CLIMAX DOUBLE CYLINDER" THRESHING MACHINE,

THE STANDARD MACHINE OF THE DAY, WELL AND FAVOURABLY KNOWN THROUGHOUT THE ENTIRE PROVINCE.

THEY TAKE THE LEAD WHEREVER INTRODUCED, and are WARRANTED to give the MOST COMPLETE SATISFACTION. THRESHERS and FARMERS alike accord to them the highest praise.

ADDRESS—

MACPHERSON, GLASGOW & CO., FINGAL, CO. ELGIN, ONT.; or GLASGOW, MACPHERSON & CO., CLINTON, CO. HURON, ONT.

April 26, 1872.

(5-1f)

Emporium Price List for April.

Table listing various agricultural products like potatoes (BREESE'S PERLESS, BREESE'S EARLY ROSE, etc.), wheat, and other crops with their respective prices per bushel or bush.

MANGEL WURZEL.

Table listing different varieties of mangel wurzel such as LONG RED MANGEL, YELLOW GLOBE, and RED GLOBE with their prices.

WESTERN CORN.

This is one of the most profitable crops to raise where feed for stock is required; every one who has tried it speaks highly of it; it will yield 20 tons per acre of very superior feed.

FIELD SEEDS.

Table listing various field seeds like Purple Top Abe deen Turnip, Skirving's King of Swedes, etc., with prices per bushel.

SEEDS FOR TESTING.

Table listing seeds for testing such as Cook's Foot Grass, Italian Rye Grass, etc., with prices per bushel.

FLOWERS.

Table listing various flowers like Aster Truffants, New Victoria, etc., with prices per packet.

Table listing various plants and seeds like Dianthus Lucinatus, Hedewigii, etc., with prices.

Table listing plants like Mignonette, Obeliscaria Pulcherrima, etc., with prices.

Table listing plants like Amaranth, purple gl be, 12 varieties, etc., with prices.

IMPLEMENTS.

Table listing agricultural implements like Carter's Patent Ditching Machine, Stump Extractor, etc., with prices.

HOME ENTERPRISE.—While in Toronto recently we had occasion to call at the pianoforte establishment of Messrs. Heintzman & Co., on King-street; and we were much gratified to see the evidence of a large business done.

VERILY IT HATH NO EQUAL. CONSUMPTIVES, READ!

Would you cure that distressing Cough and bring back that healthy vigor lately parted in your cheek? If you would do not delay for ere you are aware it will be too late!

Allen's Lung Balsam is your hope; it has been tried by thousands such as you, who have been cured; many, in their gratitude, have lent their names to us that suffering humanity can read their evidence and believe.

PERRY DAVIS & SON, GENERAL AGENTS, Providence & Montreal.

Burlington. Leaving the East and arriving at Chicago or Indianapolis, how shall we reach the west? The best line is acknowledged the C. B. & Q., joined together with the B. & M. Railroad by the Irish Bridge at Burlington, and called the Burlington Route.

The main line of the Route running to Omaha, connects with the great Pacific roads, and forms to-day the leading route to California. The middle branch, entering Nebraska at Plattsmouth, passes through Lincoln, the state Capital, and will this year be finished to Fort Kearney, forming the shortest route across the Continent by over 100 miles.

Another branch of the B. M. diverging at Red Oak falls into a line running down the Missouri through St. Joe and Kansas City, and all Kansas. Passengers by this route to Kansas see Illinois, Southern Iowa, and Missouri, and by a slight divergence, can see Nebraska also.

Lovers of fine views should remember the Burlington Route, for its towns "high gleaming from afar" its tree-fringed streams—its rough bluffs and quarries its tree-fringed oceans stretching over the prairies further than eye can reach.

Land-buyers will be sure to remember it, for they have friends among the two thousand who have already bought farms, from Geo. S. Harris, the Land Commissioner of the B. & M. R. R. at Burlington, Iowa, or among the four thousand homesteaders and pre-emptors who last year file claims in the Lincoln land office, where "Uncle Sam is rich enough to give us all a farm."

London Markets.

Receipts small as usual on this day of the week. Flour stuffs still firm. White Flour about \$3.33. Red Winter \$2.28. Spring \$1.32. Barley: 100s. Peas unstaged and peas command 4 5/8 to 3 3/4 per bushel. The above are a few lots of Hay comprised bulk of Produce in.

Table listing grain prices like White-fall Wheat, Red-fall Wheat, etc., with prices per bushel.

Table listing various produce items like Hay, Clover seed, Flax seed, etc., with prices.

Table listing various provisions like Eggs, Roll Butter, Cheese, etc., with prices.

Table listing various hides like Sheep Skins, Lamb Skins, etc., with prices.

Table listing various meats like Beef, Mutton, Chickens, etc., with prices.

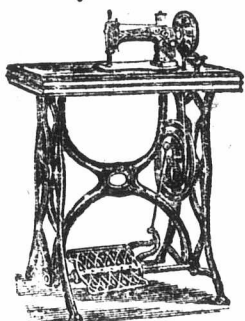
Liverpool Markets.

Table listing Liverpool market prices for various goods like Flour, Wheat, etc., with prices.

Montreal Markets.

Table listing Montreal market prices for various goods like Flour, etc., with prices.

THE GARDNER PATENT Sewing Machine



MANUFACTURED BY
GARDNER SEWING MACHINE COMPANY
Nos. 61, 63, 65, 67, 69, 71 and 73, James St.,
HAMILTON, ONT.

F. A. GARDNER, Mechanical Supt. F. M. WILSON, Sec.-Treas. GEO. LEE, Business Supt.

THE GARDNER PATENT SEWING MACHINE

READ THE FOLLOWING DESCRIPTION.

In design, the machine resembles the Family Singer; but the principle of the working parts is entirely different, having no gear, and being as nearly noiseless as it is possible to make a Sewing Machine.

The UPPER TENSION is on the face-plate. The discs between which the thread passes are attached by a stud to the tension spring, which is flat and placed on the inside of the face-plate. Its upper end secured to the arm, and is regulated by a thumbscrew in the face-plate.

The SHUTTLE MOVEMENT is obtained from the shuttle-cam on the shaft, which is designated as a "ball cam," working between the prongs of a fork which is pivoted to the shaft of the shuttle-arm. This shaft is also made of steel, and securely fastened to the shuttle arm, which in a basket at the end carries the shuttle along the face of the shuttle-race, describing a radial movement which is concealed by all to be the best movement to prevent skipping stitches. The centrifugal force always keeping the shuttle firm to the face of the race.

The FEED derives its motion from the "feed cam" placed on the same shaft, the motion being transmitted through the eccentric rod and feed lever under the machine to the feed, which is made of steel, having a bearing its whole length, thereby preventing any twisting movement. To the end of the feed lever is attached a screw, which serves to give any required lift to the feed that may be necessary for light or heavy goods. The feed spring is also attached to the bed; it is flat, made of steel, and very durable.

The DURABILITY OF THE MACHINE cannot be questioned; the movements being all hardened and not likely to get out of repair. The whole of the works are enclosed in the arm, which is finely secured to the bed-plate, and set upon a walnut top or enclosed in half or full cabinet case, as may be ordered.

It will be observed that there is no gear of any kind, and that all the motions are derived from the same shaft,—all the usual complicated shuttle and feed movements being avoided.

The TREADLE is adjustable, working upon "centres" in brackets which are fastened to the treadle-bar, giving a light easy motion without any noise or looseness, and can be adjusted to give any required "dip" to either toe or heel of the treadle, besides taking up the wear or loosening.

The WHEEL BEARING. The wheel runs upon a tapered stud or bearing fastened to the side of the stand by a nut with the bearing end turned to a centre; the wheel is bored tapering to fit the stud; upon the front side of the wheel a steel plate is fastened by two screws, which bear against the centre of the stud; the plate is adjustable, and screws to draw the wheel upon the tapered stud, taking up the wear and yet running easy.

The GARDNER PATENT is fitted with all the latest and most improved attachments, comprising the following, which are furnished without extra charge:—

One silver-plated Sewing Gauge, with thumb-screw. One silver-plated Cor-ler. One silver-plated Tucker. One silver-plated Friller. One silver-plated Hemmer, which will hem to any width. One Quilting Gauge. One Brailor. One Sew Driver. One Oil Can. One Bottle Oil. One Spool Thread. Seven Cloth or Leather Needles. Six Bobbins. Extra Spring for leather work. Printed Directions.

Address,
GARDNER SEWING MACHINE CO.
71, 6-124 HAMILTON, ONT.

The King of Sewing Machines

THE MACHINE FOR THE FARMERS OF CANADA.



THE MACHINE FOR THE ARTIZANS OF CANADA.

THE OSBORN LOCK STITCH Sewing Machine

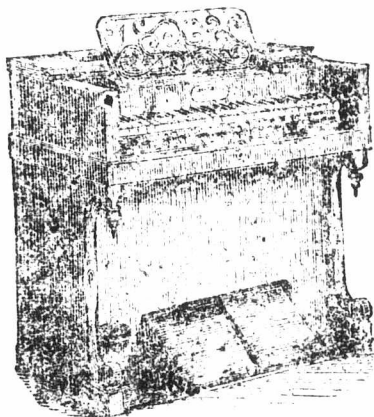
Has now been tested beyond all question, and the verdict of the public is that to-day it stands without a rival. It is the most substantially built, the fewest working parts, and is beautiful in design and finish. Has the best design of a shuttle, and by far the largest bobbins. It is capable of performing a range of work hitherto thought impossible for Sewing Machines. Is sold at about one-half the price of other Machines doing the like work, and is equally at home on leather as on fine goods. A perfect machine guaranteed or no sale. It is the best made, simplest, more durable and reliable than any other single thread Machine. Larger and works with greater ease. Will do all kinds of domestic Sewing in a perfectly satisfactory manner. Has taken first prize wherever exhibited.

Agents wanted everywhere. Splendid Inducements.

GUELPH SEWING MACHINE CO.,

Guelph, Canada

John Morrish, Chatham, General Agent for the County of Kent.
Wm. Lundie, Mount Brydges, Agent for West Middlesex.



W. BELL & CO.,
Organ & Melodeon Manufacturers,
GUELPH, ONT.

RECEIVED AT KINGSTON,

A Silver Medal and all the First Prizes.

At Western Fair, London. Diploma and First Prize for best Melodeon and Cabinet Organ of any kind.

At Great Central Fair, Hamilton. Diploma and all the First Prizes.

At Central Exhibition, Guelph. A Diploma for General Excellence, and 3 First Prizes out of 4 for Music.

NOTICE.

MR. WM. WEBB manufactures and keeps constantly on hand the Patent COMBINED PEA HARVESTER AND HAY RAKE, a complete implement. Price \$20.

Extract from Certificate:—
We, the undersigned, take great pleasure in recommending to the Farmers your Pea Harvester and Hay Rake. Having used your Machine and seen it used, would say we can pull from eight to ten acres of peas per day with it as well as it can be done with the scythe.

Yours respectfully,
James Corsort, S. A. Corsort, G. F. Ryland, John Atkinson, J. C. Sheehy, J. Campbell, P. Anderson, Wm. S. Albert, A. Decker, Jos. Mitchell, D. Y. Decker, Wm. H. Tetter, A. Dieyar, M. R. C. L., Thos. Hodson, Wm. J. Howard, R. Porter, Wm. Tears, Geo. Walker, James Howard, Fishwick Loft, James Hayes, all of the Township of London.

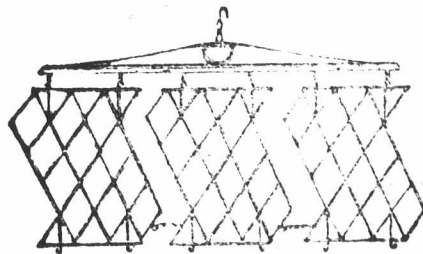
For Machines address WM. WEBB, London, or call at the Manufactory, opposite Mr. John Elliot's Foundry, Wellington Street.
London, May 1, 1872.



MARKHAM BELL FOUNDRY.

No. 1 Bell, 15 inches diameter—yoke & crank...	\$10
No. 2 " " " " " " " " " " " "	12
No. 3 " " " " " " " " " " " "	20
No. 4 " " " " " " " " " " " "	30
No. 5 " " " " " " " " " " " "	40
No. 6 " " " " " " " " " " " "	70
No. 7 " " " " " " " " " " " "	120

There are about 1800 of the above bells now in use and giving the best of satisfaction, costing only one third the amount of ordinary bells, and are all warranted one year. Encourage home manufacture and purchase a warranted article. Farmers throw aside these dinner bell ones, which cause the ladies to get swollen necks by blowing. JONES & CO., Markham P. O., Ont. W. WELD, Agent, London.



HOWARD'S IMPROVED IRON HARROW.

THIS harrow is superior to all others, because it is the most complete. It covers 14 feet of land, it leaves the ground level, works firm, and adapts itself to uneven land. It does not tend and choke to draw either end. The teeth being so set as to tear the ground up to a good depth, or to pass lightly over the surface, as the teeth are beveled on one side. It can be worked with a span of three horses, or it may be unjointed and worked with one or two horses, in one, two or three sections.

They are giving entire satisfaction.

Price of Harrow complete, with three sections, treble-tree, and two coupling-trees, \$35.

Price of two sections and one coupling tree, \$22.

Address—THOMAS HOWARD,

Adelaide Street, London, Ontario

Samples may be seen and order taken at the Agricultural Emporium.

CURRIE BOILER WORKS

Manufacture all kinds of

AGRICULTURAL, Stationary & Portable Boilers, Oil Stills, Worms, Agitators, Iron Boats, Bridge Girders, Tanks, &c.

New and Second-hand Boilers for Sale.

Works on the Esplanade, Foot of Church Street TORONTO.

NEIL CURRIE, Proprietor.

8-y

USE SIMPSON'S CATTLE SPICE

It is the finest Condition Powder in the World FOR HORSES.

It fattens Cattle, Sheep, Hogs and all animals.

It gives a relish to the coarsest Food.

It fattens Cattle in half the usual time, and at a great saving of expense.

For sale by the principal Chemists and Merchants in every town.

PRICE 25c. per lb.

Wholesale by C. GARLICK, 138 St. James Street, MONTREAL.

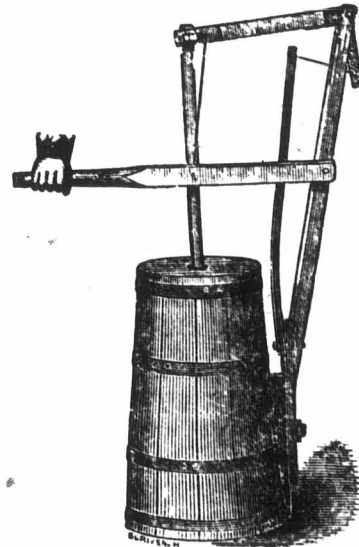
11-1871 W. WELD, Agent London.

PORT PERRY HOUSE,

PORT PERRY, ONT.

JAS. THOMPSON, - Proprietor.

THE Subscriber wishes to inform the community that his premises are now open to the public where he is prepared to furnish as good accommodation as any in the County.



"Pride of the Dairy."

PATENTED & SUPD. 15TH 1870.
BY THOMAS FORFAR, WATERLOO, ONT.

THIS CHURN carried off First Prizes at Hamilton, Guelph and Milton in 1871, competing against the Churn that took the First Prize at Kingston. It has an improved dash, and a cup on the staff to carry air into the cream, and will produce butter much sooner and easier than the common Churn. Township Rights for this and the Second Prize Churn will be sold at Ten Dollars per Township, on application or sent free to any R.R. Station in Ontario, on receipt of \$4.50 each, until territory is sold, also the Right of the EMPIRE ROOF CUTTER, at Ten Dollars per township. It cuts 1 1/2 bushels per minute.

The above Churn may be seen at the Agricultural Emporium, London.

April, 1872.

TYTLER & ROSE, Family Grocers & Seedsmen.

TIMOTHY and CLOVER SEED; all KINDS of FIELD SEED TURNIP, MANGEL, &c. &c. Insisted direct by the growers, and of the very best quality.—LARD PLASTER.

TYTLER & ROSE,

WINE MERCHANTS AND SEEDSMEN,

DUNDAS STREET.

London, April, 1872.

TIME AND LABOR SAVED

THE OSCILLATING

WASHING MACHINE

Patented on the 18th of July, 1870, by

WILLIAM MATHEWSON,

OF BROOKLIN, ONT.

THE Patentee challenges any other Washing Machine now in use to compete against his, for thoroughness, speed, and economy. The Machine has been thoroughly tested, and used by nearly all the principal hotels and leading farmers in the County, who pronounce it the best now in use. It will wash from a muslin pocket-handkerchief to a bed-quilt. A trial will satisfy any person as to its merits.

County Rights and Machines for sale.

Apply to WM. MATHEWSON,

Brooklin, Ont.

This Machine can be seen and procured at the Agricultural Emporium, Waterlo, London.

Brooklin, March, 1871.

DANA'S PATENT SHEEP MARKS.

THESE MARKS ARE THE CHEAPEST, the most lasting, the least troublesome and most complete ever invented. They are used and recommended by many of the best Breeders in the United States and Canada such as G. B. Loring, Salem, Mass., President New England Wool Growers' Society; John S. Ross, Haverhill, Ill.; Professor M. Miles, of the State Agricultural College, Ames, Iowa; Geo. B. Swan, Toronto, Ont.; John G. Nichol, Edmonton, Ont. On each Mark is stamped the owner's name and the sheep number. They will be sent free, by mail or express, for ONLY FOUR CENTS EACH, and will last for twenty years.

Cash must accompany all orders.

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Orders addressed to the "Farmer's Advocate" Office for any quantity will be filled at the above-mentioned price, as quickly as the Marks can be made.

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Exchange Broker, Insurance Agent, and Agent of the National Steamship Co. by from New York to Liverpool, calling at Queenstown.

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BRARY ST.—EPPE'S COCOA—GRATIFUL AND COMFORTING—By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition and by a careful application of the fine properties of well-selected cocoa, Mr. Eppe has provided our breakfast tables with a delicately flavored beverage which may save us many heavy doctor's bills. *Civil Service Gazette.* Made simply with boiling water or milk. Each packet is labelled—"James Eppe & Co., Homeopathic Chemists, London." Also, makers of Eppe's Milky Cocoa (Cocoa and Condensed Milk.) 72-1-y

G. MOORHEAD,
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Manufacturer of Furniture,
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DEALER in all kinds of MUSICAL INSTRUMENTS. BRASS BANDS supplied with new or second-hand instruments, at from One Hundred to Two Hundred Dollars per set of from ten to twelve pieces. Brass and Brass Side Drums. Musical Instruments of all kinds Tuned and Repaired.
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1872] SEEDS. [1872
SANDERSON'S CATALOGUE OF SEEDS
FOR THE

Farm,
Vegetable Garden, and
Flower Garden.

CONTAINS all the LATEST NOVELTIES IN VEGETABLE, FLOWER & FARM SEEDS—
French Cauliflower and Cabbage Seeds; New Egyptian Beet; New Nantes Stump-rooted Red Carrot; Laxton's Alpha Peas; Carter's First Crop and Little Gem Peas; New Potatoes, comprising Breeze's Early Rose, King of the Fairies Peerless, and Prof. H. also Excelsior, Early Mohawk, Climax, Early Prince, also Late Rose, &c. &c.; Curled Simpson Lettuce; Trophy Tomato; Early White Nibble Dick Turnip; Vilmorin's Improved Sugar Beet; Swede Turnips in all the best varieties in cultivation, including Westbury, Covent Garden Improved Purple Top, Carter's Imperial, Skirving's, East Lothian, Shepherd's Golden Globe, &c. &c.

GRASS SEEDS—Rye Grass, Crested Dogtail; Red Top; Orchard Grass; Kentucky Blue Grass; Mix'd Lawn Grass, &c. &c.
Wire Flower Stands; Wire Hanging Baskets, &c. Lawn Mowers and Seed Drills.
Catalogues free by mail on application.
25 Packets Flower Seeds free by mail for \$1.
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CHEAP FARMS! FREE HOMES!
ON THE LINE OF THE
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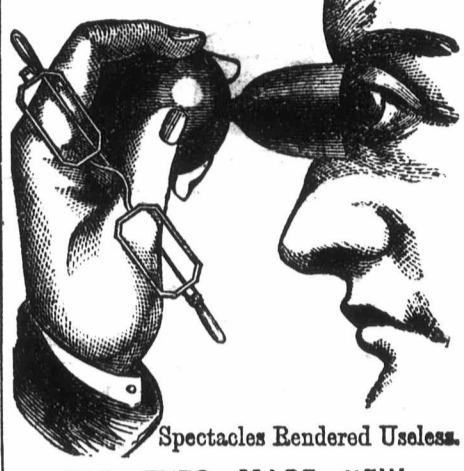
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12,000,000 ACRES
OF THE
Best Farming & Mineral Lands in America.
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IN THE
GREAT PLATTE VALLEY,
THE GARDEN OF THE WEST,
NOW FOR SALE!

These lands are in the central portion of the United States, on the 41st degree of North Latitude, the central line of the great Temperate Zone of the American Continent, and for grain growing and stock raising unsurpassed by any in the U. States.
CHEAPER IN PRICE, more favorable terms given, and more convenient to market than can be found elsewhere.
FREE Homesteads for Actual Settlers. The best locations for Colonies. Soldier's entitled to a Homestead of 160 acres. Free Passes to purchasers of land.
Send for the new descriptive pamphlet, with new maps, published in English, German, Swedish and Danish, mailed free everywhere.
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Land Commissioner U. S. R. Co.,
OMAHA, NEB., U.S.
April, 1872 4-3

THE ARTIST PHOTOGRAPHER,
FRANK COOPER,
STUDIO RICHMOND STREET,
Near the Revere House, the place where the beautiful "Rembrandt" is made.
London, May 1871. 71-51

J. H. WILSON,
VETERINARY SURGEON,
Graduate of the Toronto Veterinary College.
Office—New Arcade, between Dundas street and Market Square. Residence—Richmond street, opposite the old Nunnery.

RESTORE YOUR SIGHT.



Spectacles Rendered Useless.
OLD EYES MADE NEW.

All diseases of the Eye successfully treated by
Ball's New Patent Ivory Eye Cups.
Read for yourself and restore your sight. Spectacles and Surgical operations rendered useless. The inestimable blessing of Sight is made perpetual by the use of the new PATENT IMPROVED IVORY EYE CUPS.
Many of our most eminent physicians, oculists, students and divines have had their sight permanently restored for life, and cured of the following diseases:

1. Impaired Vision;
2. Presbyopia, or Far Sightedness, or Dimness of Vision, commonly called Blurring;
3. Asthenopia, or Weak Eyes;
4. Epiphora, Running or Watery Eyes;
5. Sore Eyes—specially treated with the Eye Cups—cure guaranteed;
6. Weakness of the Retina, or Optic Nerve;
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10. Mydriasis—moving specks or floating bodies before the eyes;
11. Amaurosis, or Obscurity of Vision;
12. Cataracts, Partial Blindness; the loss of sight.

Any one can use the Ivory Eye Cups without the aid of Doctor or Medicine, so as to receive immediate beneficial results and never wear spectacles; or, if using now, to lay them aside forever. We guarantee a cure in every case where the directions are followed, or we will refund the money.

2500 Certificates of Cure.
From honest Farmers, Mechanics, and Merchants, some of them the most eminent leading professional and business men and women of education and refinement, in our country, may be seen at our office.
Under date of March 29, Hon. Horace Greeley, of the New York Tribune, writes: "J. Ball, of our city is a conscientious and responsible man, who is capable of intentional deception or imposition."
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Truly Yours, PROF. W. MERRICK.

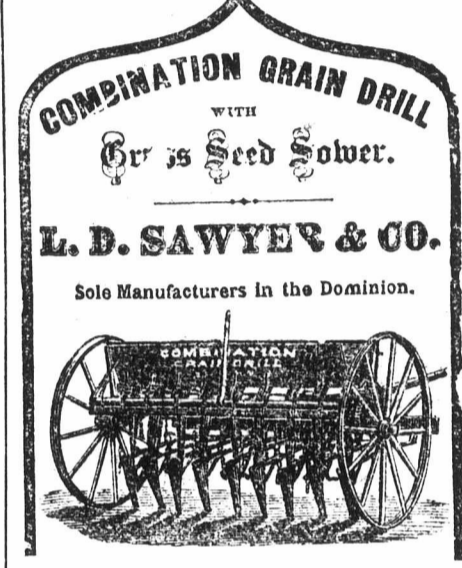
Rev. Joseph Smith, Malden, Mass., cured of partial blindness, of 18 years' standing, in one minute, by the Patent Ivory Eye Cups.
E. C. Ellis, late Mayor of Boston, Ohio, wrote us Nov. 15th, 1872: "I have tested the Patent Ivory Eye Cups, and I am satisfied they are good. I am pleased with them; they are the Greatest Invention of the age."
All persons wishing for full particulars, certificates of cures, prices, &c., will please send your address to us, and we will send our Treatise on the Eye, of 44 pages, free of charge, by return mail.
Write to
DR. J. BALL & CO., P. O. Box 957, No. 91, Liberty Street, NEW YORK.
For the worst cases of Myopia, or Near-Sightedness, use our New Patent Ivory Attachments, which applied to the Ivory Eye Cups, has proved a certain cure for this disease.
Send for pamphlets and certificates—free. Waste no more money by adjusting huge glasses on your nose and disfiguring your face.
Employment for all. Agents wanted for the new Patent Improved Ivory Eye Cups, just introduced in the market. The success is unparalleled by any other article. All persons out of employment, or those wishing to improve their circumstances, whether gentlemen or ladies, can make a respectable living at this light and easy employment. Hundreds of agents are making from 5 to \$30 A DAY. To five agents \$20 a week will be guaranteed. Information furnished free of charge. Send for pamphlet, circulars, and price list. Address
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Being a Handy Book of Forms, with observations, designed for the use of Farmers, Merchants and others. Enabling them to draw their Deeds, Mortgages, &c., without the assistance of a lawyer. Price \$1.50, sent free by mail to any address, on receipt of the amount.
71-61f **E. A. TAYLOR, & Co.,** London, Ont.

1872] SEEDS. [1872

W. & R. SIMSON & CO.
ARE NOW RECEIVING A LARGE STOCK OF A FRESH
FIELD AND GARDEN SEEDS
from the most reliable growers.
They would direct special attention to their stock of
White Belgian Carrots
Long Orange Carrots
Altringham Carrots
East Lothian Improved Purple Top Sweetfish Turnip
Long Red & Yellow Globe Mangel Wurzel
Cabbage, Onion, etc.
LAND PLASTER.

W. & R. SIMSON & CO., DUNDAS STREET.
London, April 1, 1872. 4-1f



OUR COMBINATION GRAIN DRILL

TOOK FIRST PRIZE at PROVINCIAL Exhibition, Toronto, in 1871; also, at Provincial Exhibition at Kingston, in 1871; at the Central Fair, Guelph, in 1871; and at numerous County Fairs the past two years. In fact, it has never been defeated. It is excelled by no Drill manufactured in the Dominion or the United States. Drills for Spring seeding ready for delivery March 1st.
We would call the attention of agriculturists to the following machines manufactured by us:

- The Ohio & Champion Combined Mowing & Self-Rake Reaper
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- Sprague Iron Frame Mower
- Carter's celebrated Ditcher
- Pitt's 8 & 10 Horse-Power Threshing Machine
- Taylor's Sulky Horse Rake
- Power and Hand Cutting Boxes, &c

Send for catalogue. Address
L. D. SAWYER & CO.,
4-2 HAMILTON, ONT.

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EGGS FOR HATCHING.
HAVING spared neither pains nor expense in procuring really choice Fowls from Europe and the United States, I will now dispose of a few settings of Eggs of the choicest varieties, all of which I guarantee pure.
J. PLUMMER, Junr.
London, Feb., 1872. 72-3-1f

EGGS! EGGS! EGGS!

For Hatching, now ready.
DARK BRAHMAS, Pea Comb, \$3 per doz. Light Brahmas, from birds weighing 22lbs. to 24lbs the pair, \$2 per doz. Black Spanish, "white faced," \$2 per doz. Black-breasted red game, "willow, white and yellow leg," also duckwing game, at \$2 per doz. Aylesbury Ducks, weighing 17lbs. the pair, at \$2 per doz.
The above fowls are all either imported, or bred direct from imported birds, and have taken first prizes at several Shows. The eggs will be carefully packed and sent as directed; any eggs not hatched will be replaced. Orders must be accompanied by the cash.
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GUELPH, ONT.,
MANUFACTURE all kinds of Agricultural Implements—
Canadian Sifter Fanning Mills
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Little Giant Straw Cutter
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All orders from a distance carefully attended to, and satisfaction guaranteed.
LEVI COSSITT,
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IMPORTANT TO

Farmers, Gardeners,
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Bone Super-Phosphate Manure,
Quality Guaranteed!

Analysis by the Highest Authority!
PRICE \$40 PER TON,
In good barrels, containing 700 lbs. each, and in bags containing 50 lbs. each.

No charge for Bags or Barrels.
BEST AND CHEAPEST FERTILIZER MADE.

Try it, and you will always use it.
Manufactured by "WESTERN OF CANADA" Super-Phosphate Works, London.
JOHN WALKER, Manager.

All orders addressed will secure prompt attention. Agents wanted.
London, Feb., 1872. 2-3

GEO. J. GRIFFIN, Seed Merchant,

WHOLESALE AND RETAIL DEALER IN
Field, Garden and Flower Seeds,

IMPORTER OF
ENGLISH, FRENCH & AMERICAN SEEDS;
DUTCH FLOWERING BULBS, &c.
Sole Agent for London for the
Toronto Tea Company's TEAS & COFFEES

ESTABLISHED 1855.
Office & Warehouse—City Hall Buildings,
RICHMOND STREET, LONDON, ONT.
London, Feb., 1872. 72-3-1

WILSON & HASKETT,
PRODUCE DEALERS AND COMMISSION MERCHANTS. Office—Corner of King and Oxford Streets, INGERSOLL, Ont.
JAS. M. WILSON. J. W. HASKETT. 3-1f

LAMB KNITTING MACHINE

\$50 and \$53 Each,
WORK BY HAND

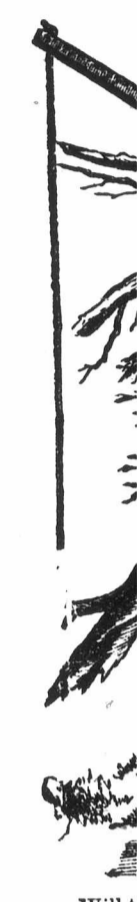
Sets up its own work, knits a pair of Stockings in 30 Minutes. Also, Fancy Vests, Clouds, Gloves, Mittens, Cuffs, Collarettes, Capes, Shawls, Hoops, Babies' Boots, Counterpanes, Anti-Macassars, Window Curtains, Double and Single Webbs, Ribbons or Plain, &c. These Machines knit the Polka Stitch and Cardigan Jackets, Wide and Narrow, the same as hand work. Also, the

SINGER & HOWE SEWING MACHINES,
For Families and Manufacturers' use, cheap for cash, wholesale and retail.

The latest out, needed by every lady in the land,
THE CRESCENT GRADUATED
Button Hole Cutter.

Send 25 cents for sample, and get your county right.
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Toronto, Ont., Feb. 27, 1872. 3-y
W. WELLD, Agent, London.

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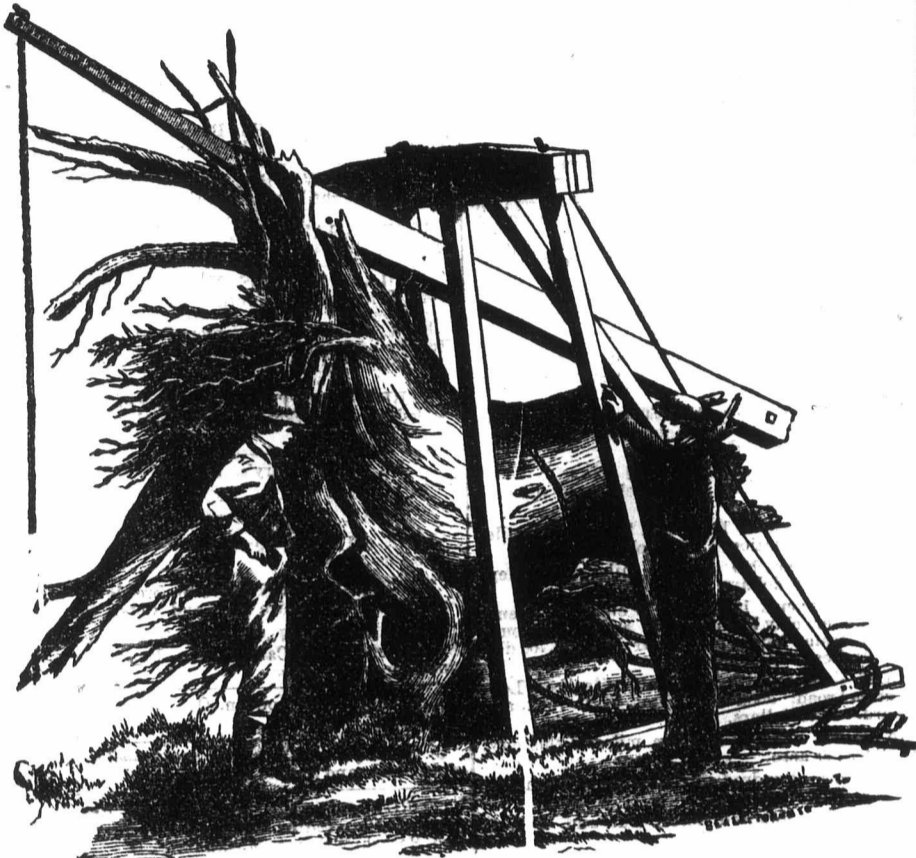
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THE DOMINION STUMP EXTRACTOR

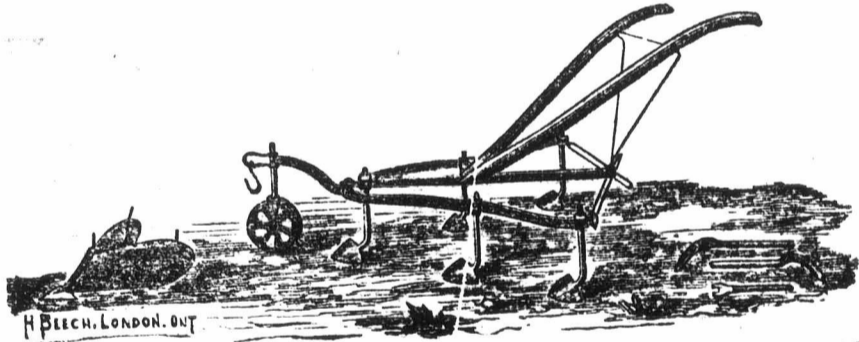
THE BEST STUMP EXTRACTOR MADE.



Will take out 20 to 50 stumps per day, depending on size. Three sizes. No. 1, capable of drawing any stump, \$120. No. 2, for stumps 2 feet 6 inches. \$90. No. 3, for 18 inch stumps, \$70. The largest sizes will take out the smallest stumps, but they are constructed much stronger and heavier. Apply to PLUMMER & PACEY, Waggon Makers, London, or to W. WELD, Agricultural Emporium. N.B.—HUBS, SPOKES and BENT STUFF always on hand.

WHITE'S CULTIVATOR,

THE BEST IRON ROOT CULTIVATOR MADE.



Short, light, strong, durable, runs easily and steadily, does its work most efficiently; it has Steel Feet and Steel Weeder for attachment; also, the teeth can all be easily removed and the Drill Plough inserted in the frame. It will pay every good farmer to have one. Price of Cultivator only \$14, complete with Mold Board; \$12 with Teeth and Weeder, without the Mold Board. Terms cash down.

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FOR SALE, 106 ACRES of GOOD LAND, three-quarters of a mile from the city. This is the most beautiful site for a gentleman's residence to be found anywhere near London, and is admirably adapted for building lots, being in one of the most elevated and picturesque localities to be found. The soil is fertile and porous; the locality is healthy. This lot, no doubt, would have been taken ere now had it been procurable. \$15 per acre. Inferior lots have commanded higher prices—Enquire at the Farmers' Advocate Office. Price \$16,000. 72-3-4f

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FOR SALE—Durham Cow, red, 7 years old, \$120. Durham Cow, black, \$120. Durham yearling Heifer, roan, \$100. Durham Bull, 2 years old, \$180. Ayrshire Bull, 4 years old, \$40. Apply to ARCHIBALD STEWART, Lobe, Or at this office. 13

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Should have a

Horse-Power Sawing Machine

And Jack combined, or separate power suitable for 2 or 3 Horses. Sawing Machines will cut 20 to 50 Cords per day. Jack suitable for driving all kinds of Machinery usually used. Price \$95.

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SADDLES, TRUNKS, HARNESS, Ladies' and Gents' Valises, COLORED WOOL MATS Whips, Currycombs, Brushes.

And everything connected with a first-class Harness business—all of the best material and workmanship, which will be sold at the lowest cash prices. All work warranted.

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GO TO DYSON'S for CHEESE VATS and the best Stoves. Cheap as any. Dundas St., London.

T. PEEL, Practical Tailor, has always on hand a large Stock of Cloths, which he will sell at a small advance on cost, by the yard, and will cut them out free of charge. T. Peel, Merchant Tailor Dundas Street, London. 12

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IS the cheapest Dry Goods, Millinery and Mantle Store in the City of London. 3-y

JAMES LENNOX, Merchant Tailor, Dundas St. West, Wilson's Block, keeps constantly on hand an assortment of English and Canadian Tweeds and Cloths. The patronage of the public is respectfully solicited. 1-12

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CARRIAGE BUILDERS Dundas Street, East of Wellington Street, LONDON, ONTARIO. 9

NEW SEEDS FOR 1872.

WE have now received our NEW IMPORTATIONS of GARDEN & FIELD SEEDS,

and shall be glad to receive a continuance of that patronage with which we have hitherto been favored. Our Seeds are all selected from the best varieties and from well-known houses in the trade. In fact, we take every possible care to obtain the very best articles. We offer among other varieties, the following:

CABBAGE—Large Drumhead, Early and Large York, Flat and Red Dutch, Savoy, Winning-street &c. CARRIOT—Early Horn, Low Orange, Altringham, Intermediate White, Belgium &c. TURNIP—Early Stone, Skiving's Purple Top, Swede, Yellow Aberdeen, White Globe, Orange Jelly, &c. CLOVER & TIMOTHY, Tares, Flax Seed, Hungarian Grass, &c.

ROWLAND & JEWELL, Corner Dundas and Richmond-sts., LONDON, ONT. 72-3-3

FOR SALE, 7 Tons of genuine BONE DUST.—Price \$35 per ton on board the cars.—Apply at this office. 3-4f

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Paid-up Capital, \$1,000,000
Reserve, 60,000
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Issues Drafts on London, England New York, U.S., St. John, N.B.,

And all the principal Cities and Towns in Ontario and Quebec.

Offers unusual facilities to those engaged in the produce business.

Deals liberally with merchants and manufacturers.

Discounts for the Farming community. Buys and Sells Sterling Exchange, New York Exchange, Greenbacks, &c., at very close rates.

Makes Advances on United States Currency and Securities on reasonable terms.

Savings Bank Department Affords opportunity for safe and remunerative investments of accumulative savings.

JOSEPH JEFFERY, Manager.

London, Sept 14, 1870. 10

THE Agricultural Mutual ASSURANCE ASSOCIATION OF CANADA.

HEAD OFFICE, LONDON, ONT. Licensed by the Dominion Government.

CAPITAL FIRST JAN., 1871, \$231,242 25.

Cash and Cash Items, \$72,289 55.

THIS COMPANY continues to grow in the public confidence. On 1st January, 1871, it had in force 34,528 POLICIES,

Having, during the year 1870, issued the immense number of 12,310 Policies.

Intending insurers will note—

1st—That this is the only Fire Mutual in Canada that has shown its ability to comply with the law of the Dominion, and deposit a portion of its surplus funds for the security of its members.—\$25,000 having been so deposited.

2nd—That being purely mutual, all the assets and profits belong solely to the members, and accumulate for their benefit, and are not paid away in the shape of dividends to shareholders as in the case of proprietary companies.

3rd—That nothing more hazardous than farm property and isolated dwelling houses are insured by this Company, and that it has no Branch for the insurance of more dangerous property, nor has it any connection with any other company whatsoever.

4th—That all honest losses are settled and paid for without any unnecessary delay.

5th—That the rates of this Company are as low as those of any well established Company, and lower than those of a great many.

6th—That nearly four hundred thousand dollars have been distributed by this Company in satisfaction of losses to the farmers of Canada during the last ten years.

7th—That the "Agricultural" has never made a second call on their members for payments on their premium notes.

8th—Farmers patronize your own Canadian Company that has done good service amongst you. Address the Secretary, London, Ont., or apply to any of the Agents m-y

FOR SALE.

DURHAM BULL, AGED TWO YEARS.—Dark red, duly bred in Canadian Herd Book. Also TWO DURHAM COWS and ONE BULL CALF. Apply to J. IRWIN, Lot 7, con 2, Dorchester; London P. O. 3-3



ONE HUNDRED PAGES—printed in Tinted Paper. Four Colored Engravings of Flowers, Plants & Vegetables, with descriptions, and Two Colored Plates—Directions and Plans for making Walks, Lawns, Gardens, &c. The handsomest and best Floral Guide in the World—ALL FOR TEN CENTS, to those who think of buying Seeds.—20,000 sold of 1871. Address, JAMES VICK, Rochester, N. Y. 3-4f

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Grand Trunk Railway. Mail Train for Toronto, &c., 7.30 a. m.; Day Express for Sarnia, Detroit and Toronto, 11.25 a. m.; Accommodation for St. Mary's, 2.45 p. m.

SEEDS THAT'S TRUE.

GEO. J. GRIFFIN. Brogs to call special attention to his stock of the following varieties of FIELD SEEDS: SWEDS TURNIP. Skirving's Purple Top King of Swedes Westbury's Purple Top Bronze Top Swede Lang's Improved

AT GRIFFIN'S SEEDSTORE, ESTABLISHED 1855 RICHMOND STREET.

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Great Saving to Consumers. PARTIES inquire how to get up CLUBS. Our answer is—You should send for Price List and a Club Form with accompanying it, with full directions making a large saving to consumers and remunerating to Club organizers.

MILLER'S GREAT TEA WAREHOUSE, 52 and 54, Front Street East, Toronto, Ontario. Local Agents Wanted.

FOR SALE, FOUR PURE-BRED AYRSHIRE BULLS. with Pedigree—One 4 year old; one 2 year old; two 1 year old. AARON CHATE, Breeder of Pure Ayrshires, Perrytown, Perrytown, April 26, 1872.

JOHN ELLIOTT, PHENIX FOUNDRY.

MANUFACTURER of Stoves, Ploughs, Reaping machines, Threshing Machines, Lap-Furrow Ploughs, Cultivators, and Guage Ploughs, &c., London, Ont.

Toronto Nurseries G. LESLIE & SON, PROPRIETORS. EXTENT, 150 ACRES

The Stock embraces Trees, Plants and Flowers, suitable to the climate, which we can pack to carry safely to any part of the world.

M. KNOWLTON, WHOLESALE AND RETAIL DEALER IN LUMBER, SHINGLES, LATH & CEDAR POSTS.

PAUL'S OLD STAND, south side of York street west of Townshend House. Orders collected. London, May, 1871.

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SELLING OUT, the whole of J. PLUMMER'S celebrated stock of POULTRY, consisting of Dark Brahmans, Light Brahmans, Cocksins (three varieties), Buff, Partridge and White Houdans; Hamburgs; three Black Hamburg hens, imported. The owner being now otherwise engaged, will dispose of his entire stock which have taken the leading prizes for years past. Many choice lots will be obtained. No reserve.

Address— J. PLUMMER, London, Ont. London, April 26, 1872.

REID'S NEW DOUBLE HOLLYHOCK SEED.

THESE noble and majestic Autumn flowers have only to be seen in flower to gain them a place in every garden. In forming, as they do, gorgeous pyramids of many colours—pure white, yellow, orange, buff, black, rose, pink, crimson, deep-maroon, carnation, striped, &c. &c.

JOHN REID, Plant Nursery, Sarnia, Ontario. Sarnia, April 26, 1872.

MANURES.

CROPS RIPENED from 10 to 15 days earlier and yield increased 100 per cent by using Lamb's Superphosphate of Lime, \$40 per ton. Fine Bone Dust 30 Half-inch Bone Dust 20

SUPERIOR SEED OATS FOR SALE.

THE SUBSCRIBER having procured the superior WHITE SCHOENEN OAT imported from Hamburg to this country through the Washington Agricultural Department has now the pleasure of offering to the Farmers of Ontario, the most excellent oat which he thinks for Productiveness and Quality, cannot be surpassed, if equalled, by any new variety now introduced. Samples may be seen at the following places:—S. M. Thomas, Beeklin; H. M. Thomas, residence 14 miles north of Beeklin; Steel & Brothers, Oshawa; R. Francis, Whitby; Brown & Christian, Manchester; George Sheehy, Borealis; H. Gordon, Post-Rice, Port Perry; and at the subscriber's residence, Lot No. 50 9th Con., Whitby.

EXCELLENT VARIETY OF POTATOES, AT MODERATE PRICES: Early Goodrich; Early Rose; Canadian Rough-coats; Breeze's Prolific and Climax, &c.

FOR DRAIN TILE MACHINES, BRICK MACHINES, COMBINED TILE AND BRICK MACHINES, AND HAND TILE MACHINES.

WANTED THREE YOUNG SUFOLK SOWS, aged 6 months; also an Essex BOAR, aged 6 months; also two dark BRAHMA FOWLS. Only first-class stock required. Any one having either of the above to dispose of, will please apply before the 10th of this month—Address Agricultural Emporium, London.

New Seed Grain.

THE "APRIL WHEAT" \$3 per bushel.—This wheat surpasses all other spring sows for rapidity of growth, large yield, and flouring qualities—Crop, 36 bushels per acre. The "GOLDEN MELLON" BARLEY, \$2 (4 lbs.), the only first-class two-rowed Barley, an excellent copper, early to harvest, and very quick in maturing; crop 33 bush. per acre. "EARLY PROVIDENCE" PEA—Grey Feed—\$2.50; great crop; frequently yield 50 to 60 bush. to the acre. "HORSE BEANS," 3 dollars; promise to become a valuable crop in this country.

J. A. HOLLINGS, Pondhead, Co. Simcoe, Ont. April, 1872.

LONDON LAND AGENCY.

LANDS FOR SALE.

- No. 1—Township of Grey, Co. of Huron, 177 acres, mostly cleared, good frame buildings, 10 miles from Seaford, 6,500 dollars. No. 2—Township of Sombra, 100 acres, 3 1-2 miles from Wilkesport, 800 dollars. No. 3—Township of Sombra, 200 acres, 14 miles from Sarnia, well timbered, 1,600 dollars. No. 4—Westminster, 100 acres, 8 miles from the city, 80 acres cleared, good fruit section, 3,300 dol. No. 5—West Zorra, 50 acres, very snug place, 6 miles from W. side of road, good land, every convenience, 2,400 dollars. No. 6—Bathurst, 121 acres, 95 cleared, 8 miles from Tilsonburg Station, excellent buildings, well watered, 3,500 dollars. No. 7—Lobo, 50 acres, 45 clear, brick house cost \$1,350, good land and every convenience—3,000 dollars. No. 8—London Township, 50 acres, 6 miles from city on gravel road, 35 acres cleared, good land and convenience, 2,200 dollars. No. 9—Township of Blandford, Co. of Oxford, 400 acres, 6 miles from Woodstock, good water—2,000 dollars per acre. No. 10—Cupheim, 100 acres, 70 clear, 3 miles from N. wharf station, 1,000 dollars. No. 11—Thames, 100 acres, 4 miles from Glenora; price, 1,000 dollars. No. 12—Nissouri, 100 acres, 70 cleared; plenty of cut timber; clay loam; creek and well; young orchard; frame house, etc.; clear deed, 3,700 dollars; 10 miles from London. No. 13—40 acres, 7 and a half miles from London on gravel road; good clay loam; well, creek, and orchard, 5,000 dollars. No. 14—600 acres within ten miles of this city, 25 dollars per acre. No. 15—two hundred acres, ten miles from this city, 30 dollars per acre. No. 16—One hundred acres, four and a half miles from London, \$5,500. No. 17—One hundred and twenty acres, four and a half miles from Glenora, \$9 per acre—all woods. The timber will more than pay for the lot. No. 18—Six hundred acres, within 11 miles of London, \$15 per acre. Must be sold within ten days. No. 19—Metairie, 220 acres, 180 clear; frame house, barn, sheds, splendid orchard; brick Cheese Factory; light clay land; hard wood, 23 miles from Strathroy, \$10,000. Easy terms. No. 20—London, 100 acres, 70 clear; hard wood; frame house and barn; orchard; spring creek; clay loam; 4 miles from city limits, near gravel road; 3000 dollars. No. 21—North Dorchester, 100 acres, 60 improved; house, barn, good orchard; on gravel road, 10 miles from London; 3,500 dollars. No. 22—London Gore, 50 acres, 55 clear, clay loam; house and barn; orchard, good spring; 7 acres well watered; 4 1/2 miles from city; 2,000 dollars. No. 23—Carleton, 96 acres, 60 clear; frame house and barn; orchard; good wheat soil; 3 miles from Komoka; 2,500 dollars. No. 24—Peel, Wellington Co.; 50 acres cleared; house and barn; well watered; 650 dollars; terms easy. No. 25—Dorchester, 100 acres, 65 clear; house, barn, orchard; well watered; lightish land; 3,000 dollars. No. 26—Dover East, 100 acres, 40 clear; 2 houses, barn, small orchard; 1 1/2 miles from starting port; 1,000 dollars; easy terms. No. 27—London Gore, 57 acres, 40 clear; house, barn, good water; loamy land; easy terms. No. 28—Osprey, 100 acres, 12 clear, hard wood, well watered; new frame house; 1000 dollars. No. 29—Houghton, 100 acres, well wooded; \$400. No. 30—London Gore, 31 acres, clear, finely cultivated; 3 miles from London, 1/2 mile from gravel road, \$1,500. No. 31—Delaware, 96 acres, 85 clear; brick house, first class farm buildings, 3 acres of orchard; a frame house, rents for \$8 per month; good spring; on gravel road, 1 1/2 miles from city; \$5,000. No. 32—West Williams, 100 acres, 70 clear; excellent timber; clay and sandy loam; good buildings, orchard; 4 miles from Arkona, 8 miles from Parkhill, \$3,500. No. 33—Westminster, 57 acres, 38 clear; fair buildings, excellent land, well drained; 5 acres wheat; orchard, vines; 5 miles from city, \$2,800. No. 34—Blanshard, 90 acres, 82 clear, capital land, house, barn, running spring, orchard; 11 acres fall wheat; 1/2 of a mile from gravel road, and 2 miles from St. Mary's, \$4,000. No. 35—Gore of London, 50 acres, mostly clear, good bush, near gravel road, close to city, excellent land, \$2,500. No. 36—Ashfield Huron Co., 158 acres, good loamy land, bush, map, hemlock; no clearance; spring creek; on stage road, 8 miles from Goderich; cheap, 1,000 dollars.

LANDS advertised and sold on commission. Terms, from 1 to 2 1/2 on sales only. Parties with farms or wild lands to dispose of will address, enclosing stamp or apply to Canadian Agricultural Emporium, or to J. NATTRASS, Land Agent; Office, Market Lane, London.

FOR SALE—A BRIGHT BAY STALLION—3 years old, by Anglo-American, dam South Rainbow, g.d. Morgan splendor. Has taken two 1st and one 2nd prize as a yearling.—Price \$150.—Apply to W. & T. FRANK, Westminster, 4-1-0

BREEDERS DIRECTORY.

- H. E. IRVING, Hamilton, Breeder of South-down Sheep and Berkshire Pigs. 72-1-y R. D. FOLEY, Bowmanville Importer & Breeder of Devon Cattle, Berkshire Pigs and Merino Sheep. 72-1-y WALTER RAIKES, Barrie, P. O., Breeder of Short Horns and Berkshire Pigs. 72-1-y JOHN CRAWFORD, Mahem P. O., Breeder of Heavy Draught Horses and Cotswold Sheep. 1-y JOSEPH GARDNER, Britannia P. O., Breeder of Short Horn Cattle. 72 RICHARD RIVELSON, Galt, Breeder of Cotswold, Leicester, and Southdown Sheep. H. M. COCHRAN, Compton P. O., Importer and Breeder of Short Horn Cattle, Cotswold Sheep and Berkshire Pigs. N. BETHELL, Thorold, Breeder of Short Horns, Berkshire and Yorkshire Pigs, Southdown and Leicester Sheep. W. LANG, St. Mary's, Breeder of Short Horns and Berkshire Pigs. A. PARK, Ingersoll, breeder of Ayrshire cattle. JOHN CURRIE, Verschoyle, breeder of Berkshire Pigs. J. FEATHERSTONE, Credit, breeder of Essex, Suffolk, and Yorkshire Pigs, and Cotswold Sheep. JOHN JACKSON, Grahamsville, importer and breeder of English Cart Horses, Berkshire swine, and Leicester sheep. J. R. TAYLOR, London, Ont., breeder of pure bred Short Horns. J. MAIN, Bayne, importer and breeder of Cotswold Sheep and Suffolk Swine. GEORGE MILLER, Importer and Breeder of Short Horn Cattle, Cotswold & Leicester Sheep, and Berkshire Swine, Markham P. O. JAMES LAWRIE, Malvern P. O., importer and breeder of Ayrshire Cattle, Clydesdale Horses, Berkshire Pigs, and Leicester Sheep. GEORGE G. MANN, Bowmanville, Importer and breeder of Thorough-bred Devon Cattle. JOHN SCOTT, Coldstream, Breeder of Leicester Sheep and Short Horn cattle. THOS IRVING, Logan's Farm, Montreal, Breeder of Ayrshire Cattle, Clydesdale Horses, Yorkshire and Berkshire Pigs, and Leicester Sheep. BRODIE, SON & CONVERSE, Belleville, Breeder of Yorkshire Pigs and Ayrshire Cattle. W. HOOD, Guelph, Breeder of Galloway Cattle. H. H. SPENCER, Breeder and Importer of Devon Cattle, Clydesdale Horses, Southdown and Hampshire-down Sheep, and Berkshire Pigs. Bro. Kim P. O., near Whitby Ontario. J. MILLER, Thistle-ha, Brougham P. O., Breeder of Short-Horns, Cotswold Sheep, improved Berkshire Pigs and Clydesdale Horses. R. LEAN, Coldsprings, Breeder of Leicester Sheep and Berkshire Pigs. G. MORTON, Morton P. O., Breeder of Ayrshire Cattle. JOHN SNELL & SONS, Edmonton, Breeders of Short-Horn Cattle, Leicester and Cotswold Sheep, and improved Berkshire Pigs. Winner of the Prince of Wales prize for the best Bull and five of his Calves at Provincial Exhibition, Kingston, 1871. F. W. STONE, Morton Lodge Guelph, Importer and Breeder of Short-Horn and Hereford Cattle, Cotswold and Southdown sheep, and Berkshire Pigs. JAMES COWAN CLOUGHMORE, Galt P. O., Breeder of Short-Horns, Leicester Sheep and Essex Pigs. R. KIRBY, Breeder of Lincoln and Leicester Sheep, and Berkshire Hogs, Pusinch, Township, Guelph Station, Arkell P. O. JNO. KENNEDY, Mont Juan, Hyde Park P. O., Breeder of Short Horn Cattle, Leicester Sheep and Berkshire Pigs. GEO. ROACH, Hamilton, Importer and Breeder of Berkshire, Suffolk and Essex Swine. J. K. HUNTER, Alma, Breeder of Short Horn Cattle. D. S. ROBERTSON, Wanstead, breeder of pure bred Berkshire pigs. EDW. JEFFE, Bond Head, Breeder of Short Horns, Leicester Sheep, Berkshire and Chester White Pigs. THOS. GUY, Sydenham Farm, Oshawa, Breeder of Ayrshire and Devon Cattle.

FOR SALE, A VERY FINE DURHAM BULL, aged 4 years, color red, with a little white. Price \$400. Also, a very promising entire Colt, got by Black Hawk from a superior dam, aged two years, color dark brown.

Also 5 superior Berkshire Pigs, sows and boars, aged four months; bred from Roach's and Stone's stock. Price \$20 each. Apply to J. BRETON, Strathburn, 72-3-2

WANTED, within five miles of Ingersoll, FIFTY ACRES of GOOD LAND; good buildings and constant supply of water.—Apply at this office. 8-1

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