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The Farmer's Advocate.

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Two Airing Trips—Political and Agricultural.

STRATHROY AND PARIS.

It is absolutely necessary for health, to leave our office occasionally. We went to Strathroy on the 6th, taking the carriage road there, and returning by rail. Hay crop must be light; Fall Wheat will be a fair crop; Spring crops wanting rain.—Strathroy is growing finely, and will be a city some day. The great reform meeting was held that day; the leading reformers were there from 30 miles round. No seats were provided, even for the ladies. The Grit bugbear was the fishery question and the navigation. Not one word was said about the postage on agricultural information or Seeds, nor about the importation of swill fed American pork, and not much about reciprocity or free trade, subjects that are of importance to the farmers, and which they might understand something about, if explained to them. A large and attentive audience was assembled; there was no quarrelling, no drunkenness, no horse-racing, and all appeared satisfied with the information they had received.—It is beneficial to the farmers to attend meetings where addresses are given.

PARIS.

We paid a visit to Paris to examine some Wheat fields in that vicinity. This section of the country has suffered more from the drouth than west of London.—The meadows are worst. The Fall Wheat has been badly winter-killed, or rather killed by the frost after the snow had melted. Many large fields will not yield eight bushels to the acre. Hundreds of acres will not pay for cutting. Some va-

rieties are worse killed than others. The fields have been well put in, and clean and pure varieties are to be found there, but the majority will be shrunk and deficient on account of having been killed or set back; some pieces of oats do not look as if they would be worth cutting; and barley does not look better than it ought.—The fruit prospects are rather better here than in the vicinity of London.

We called at Woodstock, and found the best Horse in Canada there. He was looking well and doing well, and will increase the value of the horses in the county of Oxford. The County Council was sitting; we addressed them in regard to the potato bug, &c., and received a vote of thanks from them.

There are not as many new houses going up in Woodstock or Paris, in proportion to their size, as in Ingersoll or Stratford.

WOOL.

While in Paris we saw their apology for a market. Some wool was offered for sale and farmers appeared highly jubilant over what they considered the great competition among wool buyers, and considered they were receiving more than the real value for their wool—namely, 34 cents.—They were quite taken back when we told them we had sold ours a few days before in London, at 36½, without being culled, and were offered 38 if we allowed it to be culled. They had some doubts as to our veracity, as the Globe quoted it but 31 in Toronto—and the Globe is gospel in Paris, as well as in some other reform sections.—On returning to our office we examined the quotations, and found

LONDON AHEAD IN WOOL.

A guide to American Stock Men.—Market quotations of the Globe, June 9th:—Hamilton, 27 to 35 cents; London, 30 to 35 cts.; Chatham, 28 to 29 cts.; Guelph, 34 to 34½ cts.

Telegraph—Toronto Market, 30 to 31c. Advertiser, London, 30 to 37c. London Free Press, London, 32 to 38c.

We walked into the London market this morning, June 12th, and stepped up to the first load of wool we came to; it was just sold as we arrived at 38½ cents without being culled. We looked at the quotations of the Globe of the 12th, and found

the following remarks about the Toronto Market: "Competition in wool keen, price 32 cents." We would advise some of the Toronto farmers to come to Middlesex and procure a better class of Sheep, as we find wool very profitable here.

Electioneering Tactics.

As McKenzie and Blake are now traveling throughout the country explaining their views preparatory to the coming election, we deemed it our duty to listen to their remarks when in this county, as no one can form a correct judgment on any subject, unless they hear both sides of the argument. They are both eloquent and studied orators, and we believe would make good statesmen (in using the word *statesmen* we do not wish it to be inferred that they are Yankees). The great plank in their platform appears to be the result of the High Joint Commission. They lay very great stress on some points which it is not our duty to discuss; and whether right or wrong, you must be guided by circumstances and your own judgment. The political papers will keep you posted on these matters, each party to suit its own purpose.

However much we may respect McKenzie and Blake for some things, we think they would be the better of a little spice. We will therefore pepper them a trifle and we trust it may do them more good than any spice we may have applied to the Minister or Board of Agriculture.

The audience addressed by Blake and McKenzie at Strathroy was as intelligent a lot of farmers as will be found at the average of such gatherings. They listened attentively to all that was said in regard to the Fisheries, Coal, Petroleum, Navigation, Lumbering, &c. They must hear the other side before they can form an unbiased opinion. These subjects should all be considered, but where McKenzie and Blake failed to tell as effectively as they would otherwise have done, was in ignoring agricultural matters, which were immediately pertaining to the interests of the audience. We very much doubt if either McKenzie, or Blake, or McDonald, have ever condescended to look into the agricultural affairs of the country. The

following subjects might have been touched on, and should be explained at every meeting: Why should Canadian cattle be compelled to pay duty when going into the States, and American sloop fed hogs be admitted into Canada free of duty, and shipped from Canada to Europe, to the ruin of our reputation? Why should not the postal arrangements between Canada and the United States be adjusted? We have seen letters that cost between \$2 and \$3, that ought not to cost a tenth of the sum; and packages that ought to pass for 1 or 2 cents, for which 30 cents had to be paid. We believe that hundreds of thousands of dollars are annually lost to Canada just for the lack of a proper understanding with the Americans. We do not believe that the Americans desire such almost prohibitory postal arrangements as now exist. This matter only requires to be agitated, and it will be rectified.

Leading gentlemen who address agricultural audiences should draw the attention of farmers, and explain to them, if they can, why agricultural information should be nearly suppressed by the present postal arrangements and other causes. Are the inhabitants of Canada disloyal to the mother country, or is our government endeavoring to bring on annexation by the slow process of checking agricultural publications, thus encouraging American literature? We understand that the present oppressive taxation on Canadian agricultural papers has reduced the circulation of the Canada Farmer about half, and has doubled the circulation of American agricultural publications. Has the press power and can it be used in time of need?

The farmers of this western section of Canada pay as much towards the revenue of the country as fishermen, lumbermen and miners; and the farmers of the dominion must pay the principal part of all expenditures. Have their interests been looked after? Are the large expenditures about to be made intended chiefly for the benefit of farmers?

From experiments made at the Iowa agricultural college during the past year, it appears that the Peachblow, Peerless, and Chili No. 2, potatoes, are less subject to attacks of the Colorado potato beetle than other varieties.

Public Agricultural Affairs.

We have continually advocated the necessity of sending more agricultural men to our Legislature. The greatest difficulty is,—1st, to find sufficient gentlemen of ability devoting their attention to that business; 2nd, the expense that an election will cost, not only in money, but in the time taken from their business. The first is the greatest drawback. We farmers should waive a great many objections that will always be used against a farmer, and endeavor to return more to either of the Houses of Parliament. The public agricultural affairs of the country must be managed by some one. If suitable men are not to be found, all that the Government can do is to select such as they deem the most suitable. We do not doubt but in the selection of our present minister of agriculture various things were represented. The Hon. John Carling owns land, and has it cultivated, and it may be said he is a farmer. But he has never paid any attention to agriculture, and really knows less about seeds, plants, stock, weeds or cultivation than any farmer we ever met. His attention or faculties have never been devoted to it, and the great absorbing power of gold has engrossed his attention. Gold from the brewery, and brewery regulations and contracts; Gold from land and city improvements; Gold from railway influences; and gold from public improvements. These things have been, and who can say but they would be the first consideration with any one. We do not blame him for looking after his own interests, but we believe he has been led astray and misdirected by those persons who have fawned on and misled him in the discharge of his duties as minister of agriculture; and by that means has been led away from the real interests of agriculture, to the building up of party power.

Agriculture should in no way be troubled by religious or party lines. It should be the aim of the minister of Agriculture to enhance the products of the soil, to improve and protect our markets, to encourage the spread of agricultural information, and to guard the farmers as much as possible against losses of crops or stock. The voices of county councils, agricultural societies, and practical farmers, should have as much attention as one or two private individuals. Where Mr. Carling has failed has been in allowing himself to be directed by a body guard of office-seekers, who are never wanting in attendance on those who attain influence. Evil communications are apt to corrupt good manners. Had Mr. Carling lent an ear to agriculturists, and been directed by such counsel, he might have done, and may yet do good to the Dominion in which he holds such an exalted position. The mere compulsion of paying heavy taxes to support institutions that may not be of use to the tillers of the soil, does not constitute the sole duty of a minister.

Mr. Carling should know what has been of value to the country, and endeavor to make such still more useful. We believe the Provincial Exhibition has been of great benefit to the country, worth far more, in fact, than it cost, despite all the mismanagement complained of. It has been the main institution from which all the minor ones have sprung. Now, the question

may arise, and should be considered, how far these exhibitions that have emanated from the Provincial are doing good to the country. Men are like sheep,—they follow. We live in a time of advancement. Intellectual information should rule, and must rule. If some of the energy now displayed in imitating the useful labors of the past generation was expended in establishing really good agricultural clubs, for the discussion of agricultural subjects, agricultural management, and things generally in connection with agriculture—would it not be of more value to the country than the great flaring bills, the intense excitement on a fast horse, or a fat bull, or a varnished ditching machine. Will not the loss on the importation of slop-fed American pork do us more harm than the cost of a hundred Provincial exhibitions? Will not the Colorado potato bug do more damage than all the smaller exhibitions will do good? Are there not scores of subjects which we should discuss rather with the mind than with the eye?

We should have a minister of agriculture that would lead and not be led; one that would drive and not be driven.

To Ottawa or Not.

Is the Provincial Exhibition to go to Ottawa or not? This has been the main question to be decided at the annual meeting, and we presume it will be brought up again this year. The fact of the Provincial Exhibition being perambulatory has been of much benefit to the country. It has been worth all it cost.—It has given a stimulant to improvement, and an opportunity to learn, in every section where it has been. It has awakened London, Hamilton, York and Peel to have their exhibitions; it has caused Guelph to make extra exertion, and they will have a fair, as good as any in Canada, when they establish it.

There is a very large tract of country north of Kingston, and if the Exhibition went to Ottawa it would no doubt be of very great advantage to thousands that have never had an opportunity of seeing what Canada can produce. It would certainly be expensive for western men to attend, the majority could not afford it.—There are comparatively few farmers that go beyond a distance of 30 miles to attend the exhibition.

The farmers around Ottawa have been taxed for years to support our exhibitions, and we think they are fairly entitled to it now. We can hold exhibitions in Guelph, Hamilton, Toronto and London, and wait our turn for the Provincial Exhibition.—The only reason we would have for opposing it is, that perhaps when they got it once they might keep it. Such a catastrophe might happen. Quebec might join Ontario, and have the annual exhibition a permanent thing in Ottawa; and from the splits and contentions that have arisen about the exhibition in the western section there may be danger of such a proceeding, and some might argue that it would be a good thing to establish it there.

We believe it would be better for us in London to have it permanently established in Ottawa, in preference to Toronto (even this is talked of). Ottawa has ample buildings for the accommodation of stock and implements, and we believe they can

afford much more and better accommodation for visitors than can be obtained at Kingston—but arrangements should be made that farmers should be accommodated at no advance on usual rates. There is too great an inclination to charge enormously for everything at such times as the Provincial Exhibition goes to any city.—We have heard of 50 cents being charged for a night's rest on a bare floor, without covering. And Ottawa has already a noted name for high charges.

The Myat Wine Plant.

Much has been said in years gone by of this plant, especially when it was first introduced, and pedlars swarmed the country selling the roots. The majority of people looked on it as a humbug. Many hundreds went into the speculation who knew nothing about it; and had neither the patience, spirit, perseverance nor the means to properly carry out the wine-making process. Others were too careless in cleaning the casks, and many were too parsimonious to use sufficient sugar. A great deal of the vilest trash was sold under the name of Myat Wine, that was no better than the mixture of molasses and logwood that is to be found in the majority of hotels under the name of port or sherry.—The public mind became set against it, and the cultivation of the plant has almost ceased.

It happens that a gentleman named Webb, a few doors from our office, became impressed with the value of this plant, and went into its cultivation with a determination to succeed. He has now large cellars filled with the wine, varying from one to seven years of age. We tasted several vintages, and believe it to be of superior quality to nine-tenths of the liquid that is sold under the name of wine in Canada. Last evening (June 22,) we walked over one of his plantations with Mr. Webb, and obtained more information about the cultivation and management of the Myat Wine Plant than we ever knew before. The plants stand in rows, 3½ x 4 feet, and the ground is completely covered, some of the stalks being over three feet in length. We never knew anything about the ripening of rhubarb until Mr. Webb explained it,—as we always thought that when it was large enough to use it was as good as at any other time. Mr. Webb showed us the difference. The main crop will not be ripe until about the 1st of July. The edges of the leaves then begin to turn a reddish brown, and the stalks should be red. When the harvest season commences all good stalks will be cut, and the small ones left to make a second or fall crop.—A large quantity of the under leaves are worthless.

There is a great prejudice now existing with regard to the wine, and we are much pleased to be able to state that Mr. Webb is fast conquering this prejudice—not by advertising, or by agencies, but by making an article that when once tried by wine-drinkers is sure to give satisfaction. We were informed by Mr. Klitching, when we visited his vineyards and wine vaults, that preference was given to Myat wine over pure grape wine. It is our impression that for wine making in Canada the Myat Wine Plant will be found superior to the grape. Why should we expend in importing an article no better than we can produce.

An Awful Calamity.

A special meeting of the Western Fair Association was called on Saturday, the 24th of June, the sole purpose of which appeared to be the annihilation of the Farmer's Advocate and its editor. Law appeared to be the desire of some, but finally they succeeded in carrying a vote to discontinue taking the Farmer's Advocate, and to have said vote published in the papers. *This is a terrible stroke!* The support withdrawn by the above resolution must be ruinous to this institution; For the past six years they have not had one year's papers, and never paid one cent even for six single copies they have received. A sufficient number were found to carry the resolution, but not without opposition. Words were rather high. The editor was threatened, and some talked of hurling him down stairs. One of the directors said he would leave the meeting if the editor was allowed in the room again. His writings were condemned as false; and he was called a liar by the ex-president.

The fact is, the editor has been rather too free with his pen to suit a certain combined party that he considered was acting rather against the agricultural interests of the country, and endeavoring to enchain agriculture to politics. One of the members of the board threatened the editor with a horse-whipping if he published his name, or anything concerning him. A second member made a similar threat. Woe betide the poor editor that dare use an untrammelled pen. Oh, Canada, Canada, is darkness to reign!

This circumstance forcibly reminds us of the conclave formed by the three Tooley Street Tailors, who represented themselves as "we, the people of Great Britain;" and also of an incident in the life of the late millionaire, Mr. Hoby, of old London—who, having made to order a pair of boots for a certain ensign who we will call Snubs, was called upon by that celebrity, in consequence of the boots not suiting his fancy, and received the crushing announcement that the ensign would withdraw his patronage. Mr. Hoby, still retaining his senses under the dire calamity, called on his manager and told him to put up the shutters, as Ensign Snubs had withdrawn his patronage. The ensign did not wait to see Mr. Hoby's order carried out.

Our office is still open.

We have heard no convincing argument to show that the Western Fair has not been organized as a powerful political party engine, to enchain and enslave the farmers. As indications exhibit themselves to us, the effect must tend greatly to check the independence of farmers of the Dominion. The main question for Canadian farmers to decide is this:—Is Agriculture to be made entirely subservient to party political power, and the present Provincial Board of Agriculture made subservient to the wire-pullers of the Western Fair, or not?

—An Ohio paper publishes its social announcement under the heads of "Hatched," "Matched," "Patched," "Snatched," "Detached," and "Dispatched," as an improvement on "Born," "Betrayed," "Married," "Eloped," "Divorced," and "Died."

BARN WEEVIL.—Lime, sprinkled over the grain and on the barn floor, will cause the weevils to "emigrate to a more congenial climate."

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Agricultural Knowledge.

It is impossible to pass through some of our rural districts in time of seed sowing without being struck with the woful deficiency of elementary agricultural knowledge which prevails, and the signs of general bad management of land which meets the eye. In some parts the land is literally exhausted and effete from constant straining of its utmost strength, without proper chemical food, to meet the necessities of the hour. Crop after crop of the same cereal, vegetable or root is wrung from the bosom of the soil till it is rendered useless. If it does not then, after some random manuring (with substance which, from want of care, is little richer than itself), satisfy the exorbitant demands of its taskmaster, it is pronounced unworthy of cultivation and Canada is stigmatised as an unprolific country.

Draining, also, is much neglected. We have seen whole fields of excellent soil ruined, at least temporarily, through want of attention to this prime and obvious necessity of farming. The proper distribution of water, and proper desiccation are of immense importance, and render the agriculturist independent, to a great extent, of meteorological changes.

There is also, among the ordinary run of farmers, much ignorance as to the kind of soil suitable to the production of certain crops. A farmer working thus, without any chemical knowledge, with nothing to guide him but his own perhaps unsuccessful experience, and a burden of conflicting traditions, labors under a disadvantage only surmountable by rare instinctive appreciation of the relations of cause and effect.

The plowing is, moreover, in many cases, like beauty, only skin deep, though very far from beautiful to the scientific farmer. And where this happens, we have generally seen it in land which requires the most profound disruption.

It is impossible also, not to note occasionally, the exceeding slovenliness with which some farms are kept. Nothing is in its place. Fences are broken down. Pasture and tilled land are all one common, and cattle have a look of homeliness and discomfort pitiable to contemplate.

The mansion is in keeping with the field, and the out-houses with the mansion. There is nothing of neatness or order no ambition to make them look fresh and tidy and attractive; but, on the contrary, often much to repel. The yard is beset with accumulations of broken wagons, utensils, implements, troughs and lumber of all kinds. The pigs seem to be the lords of the soil, which, indeed, they cultivate better than their master, and to have everything their own dirty way. The manure is so distributed as to retain little of its vitalizing, renovating qualities.—The complaint of the soil, subjected to the treatment of some Canadian farmers, is the opposite to that of the ancient Israelites in Egypt. They wanted straw to make bricks; the poor soil is expected with "straw, all straw, and nothing but straw," to develop nourishment for man and beast.

We will not intrude on the privacy of the farmer and his family, although we have been often in his house, and could suggest some improvements in domestic economy. Be it remembered that we are speaking of a class only of Canadian farmers, and of some sections only of Lower Canada. Happily we have amongst us agriculturists of whom any country may be proud, whose farms are models of neatness, whose households are "joys for ever" to regard.—[Montreal Gazette.

We copy the above from the Montreal Witness, which copied it from the Montreal Gazette. We think it only right to give the proper credit. The remarks are too true, and too applicable to many farmers even in Ontario. It would perfectly

astonish any Middlesex farmer, however backward he might be, to go into Lower Canada and see the extent of really good land they have there, and compare the circumstances of the poor farmers in that part of the dominion. They hardly know what an agricultural paper is. The implements are of the most primitive description. Stock, grain and management the same. They do not appear to belong to Canada. Progress and improvement are but little known, and from our observation they appear a century behind the age; and at their present rate of agricultural progression we think they will not catch up in a thousand years. Where the fault or misfortune lays it is not our province to say, but a great change is required, or emigrants will not remain in that portion of the dominion.

The Danger of the Time.

There has grown up of late years a class of men who make politics their business for the simple purpose of making money out of it. They gain control of party machinery by dexterity, and then sell the honors and advantages which they control. Men of political ambition recognize their power and seek their support. The men elected to office through their influence must submit in their official acts to the dictation of the power that made and can unmake them. Those who in this way own legislators and governors sell their wares to whoever will buy.

The buyers form another class. The course of things in business, especially the business of transportation, has been to accumulate immense wealth in the hands of a few financiers. Their schemes are frequently in need of help from governmental authority. There is a short and easy way to obtain this under such a state of things as we have described. It is not necessary to buy up a legislature man by man. A much easier bargain can be made with the small clique in the background who largely control the legislature. They stand ready to sell the votes of their puppets by wholesale.

So the business is carried on. With its great profits comes increasing power to the few central political operators. Their influence widens, and draws under its control not only politicians and office holders, but newspapers, judges, financial concerns. They gain wider power within their party, and come to control nominations to the highest public positions. By natural affiliation they unite with knots of kindred spirits in other sections, and combine their power for joint action.

As their original and main stock in trade consists in the control of voters of the lower class, they humer these by the lowest demagoguism. They even shield notorious criminals, and extend a wide protection over the most disorderly and dangerous element in our cities. Men of personal ambition, on the other hand, whose position and character are above corruption, submit to the dictation of a power which they fear to disregard, and wink at what they would be ashamed to openly countenance. So the poison eats its way everywhere, into the highest ranks of society and the lowest; into our courts of justice which it corrupts; among the deus whose infamy it protects; along the broadest thoroughfares which it renders insecure. into business, spreading fraud; into the Church, drying up the manliness and honor which are the springs of Christian life.

The state of things which we have sketched is but too familiar to those whose business it is to watch the broad aspect of national life. But it is not enough real-

ized among the mass of conscientious men in private life, on whose intelligence and fidelity the salvation of the nation always rests. These cannot too soon be aroused to the evil and danger of the situation.—There is a grave present mischief, and a worse danger impending. For, as we have said, it is the nature of this bad power to grow stronger and make constantly wider conquests. Already there are ominous signs that the national government itself may fall under its control. Suppose such a clique as we have described already in control of a great state: suppose that by corrupt legislation millions of money lie in its hand, available for a political campaign; let there be other millions within easy reach, in the treasury of railroad corporations, whose controlling chiefs have immense interests at stake on the favor of the national government. At the same time let there exist a great political party, the mass of its members honestly attached to certain principles, but well under the control of their leaders, those leaders bent on success; the enormous financial and political resources of the clique at hand as a powerful instrument in a doubtful contest. Under such circumstances is it improbable that this knot of men should dictate a Presidential nomination? With the country pretty evenly divided on purely political grounds, and gigantic bribery thrown into the scale in two or three great doubtful states, is the success of such a candidate an absurd supposition?

The picture is not an imaginary one.—Would that it were! And be it noted, such a catastrophe would be worse than any mere political change that ever befel or can befall. The triumph of no political principle, however unsound, would approach the misfortune of having the administration under the control of a set of thieves. The disgrace abroad would be less than the injury at home. Squandered revenues would be the least of the evils inflicted. No public interest, no private rights would be safe. And worse than all the harm to material interests would be the moral debasement wrought through the community were the central government with its myriad arms and its conspicuous action, controlled directly by shameless greed. Before now there have been frauds and dishonesty in connection with the general government, but never has there been anything like the direct and absolute control of it by the inviolable corruption that is now threatened.—[Beecher on Christian Union.

We give the above to our readers. They may select or discard as much as their different opinions may judge to be applicable to Canadian affairs.

The Potato Bug.

The Potato Bug is surely and firmly established in Canada, marching and flying eastward. Some of you at the east may think we are alarmists, but we cannot caution you too much to be on the watch and kill the advance guard. Hand-picking is practicable on their first appearance, but as soon as the second or third crop appears, Paris Green is the most reliable destroyer yet known. From two to four pounds per acre is sufficient, mixed in the proportion of one pound of Paris Green to about ten pounds of Plaster of Paris.

You may see the spotted slug in the engraving. We took the very gentleman from which our engraving was made, and placed him in a bottle, corked it, and gave him neither food nor water; this was nearly three weeks ago, and he is yet alive. We have heard of their having been corked up for two months and being still alive.

We noticed in one of our exchange papers an account of the bad effects of a bit of worm one of them. There is no necessity

for letting them bite; and perhaps it was a hoax. They may be handled and destroyed with the naked hand, but there should be no wound or raw flesh. We think the danger of being poisoned by them is a myth, and may be made an excuse for those indolent and ignorant farmers who allow them to breed on their farms to the loss of the whole community. We are waging a deadly conflict with them, and thus far we are the conqueror. Watch, kill and destroy them by every means, is our advice to you.

Mr. Couse, of St. Thomas, gives his boys a penny for every potato bug they find on his two acres of potatoes; and the same price for every leaf having eggs on it.—The children run up the rows every day, and have as yet only earned about fifty cents, but his potatoes are kept quite free from the second crop. We say, give the boys and girls a chance to make a little money for themselves, and a larger sum for you. What would be the value of your potato crop? Would it be dear if you saved it at half its cost?

We would further suggest as a check to the spread of them, that in sections where they have not yet been seen, that each farmer would give his boys or girls 50 cents or \$1 for the first bug; 10 cents per dozen for the first dozen; 20 cents for the first fifty; 50 cents per hundred for the first five hundred; \$1 per thousand for the first thousand. When more than that are found use Paris green.

Paris Green will not poison the crop of potatoes, as some suppose, and is the only sure destroyer of them when they are too numerous to pick by hand. Many think the small potato bug, or miller bug, is the Colorado bug, and consequently they look upon the warnings as unnecessary. They will find the genuine Colorado bug too soon. Look at the engraving in this paper—and you will know them when they arrive on your farm.

Mr. Moore's Rural New Yorker, of the 17th June, makes an extract from this journal, but says they do not understand the allusion. We will explain:—The government or conservative party in this city have been guilty of such acts that exposure ought to cause shame in any living man.—The existing government has acted with these persons, and have attempted to interfere and curtail the power of the Provincial board of agricultural managers who are elected by the people. Public agricultural affairs will be better looked after in future, and the time is approaching when farmers will have more to say and less to pay in comparison with others than they now have.

TO DESTROY THE CURRANT WORM.—Procure carbolate of lime and dust the bushes; it is cheaper and more effectual than hellebore. It is certain death to the worm, and does not injure the fruit.

A music teacher once said that the art of playing the violin requires the most perception and the most delicate sense of any art in the world. We say the art, of publishing an agricultural paper to please every body beats fiddles higher than a kite.

We republish the most important matter that was in our last Supplement—as we fear many of them would not be delivered at some of the Post Offices.

To the Warden and Councilmen of the County of

GENTLEMEN,—Believing that many influential gentlemen among you are not fully aware of the advantages of the Canadian Agricultural Emporium, established by me; nor of the advantages of the FARMER'S ADVOCATE, I purpose making a few remarks in reference to them.

Eight years ago we first undertook the task of establishing the Agricultural Emporium, seeing that such an institution would be of much benefit to the country, as we had no place where seed-grain was imported and tested, and no regular established depot where a person could procure or know where to procure thoroughbred stock, or the latest-improved implements. We devoted our time and means to carry out the plans, and found it necessary to establish a paper. We gave it the name of the FARMER'S ADVOCATE, and took as our motto, "Persevere and Succeed." We believe no one who has been a constant reader of our journal but is perfectly satisfied that it has been conducted true to its name, and has fought for the interest of the farmer entirely independent of party politics. The ADVOCATE has fearlessly attacked any plans, men, or things that have tended against the interest of the farmer in general, irrespective of party, position or locality. We exposed the old Board of Agriculture, and condemned it when they were strong. We have endeavored to strengthen the new Board of Agriculture when they have been weak. We have expended a large amount of money to improve the stock and seed of the country, and the published reports from various parts show that the wheat, oats, peas, potatoes and corn sent out from the Emporium has been of much advantage to the parts of the country where they have been sent.

We have not done as much good as we might have done, as our means were small in comparison with the greatness of the undertaking. We have in no way been aided by the public funds; but our support has been entirely from what we would make from the business and our private means. The undertaking was commenced expecting the controllers of the public agricultural affairs would countenance, and at least throw no obstruction in the way of independent progress. But we much regret to inform you that the Minister of Agriculture and his cliques—most particularly in this city as well as at the Legislature halls—have done their utmost to trample out the undertaking, so as to take up our plans, and fill offices with already select favorites, and to enchain and trample down independent agricultural enterprise, and that until fair promises were being made to aid the undertaking.

The vilest plots were being planned to overthrow the FARMER'S ADVOCATE and establish an experimental and test farm themselves.

Do you believe the government would have dreamed of establishing such an institution had we not commenced it? Why have they put this quadruple tax on agricultural papers, to the effect that any agricultural journal published in Ontario must be prepaid by the publisher at the rate of one percent; while a political paper may be paid by the receiver at the rate of half a cent? Why did the government start the

Ontario Farm except to trample us out of existence? Why would they not allow seed to pass through the post office without being compelled to be prepaid at four times the rate that papers may be sent, for no other reason than to curtail the influence and freedom of us farmers.

Our dependence is on our subscription list, our advertising list, and on sales we can make. Our importing and testing seeds has been an expensive undertaking. The paper will be found of use, pleasure and profit. Each gentleman who cultivates or owns land might be benefited by it. It will be found both amusing and instructive to the young.

Perhaps you might order a few numbers for your Agricultural Societies, or a few for each school section, and might use your influence to introduce our paper and make known our plans in your vicinity.

We subjoin the following commendations, to which perhaps you might add another to our list of approbatory references. Remaining yours, respectfully,

W. WELD.

Facts about the Honey Bee.

There are three classes of bees in a hive—the Worker, Queen and Drone.

Queens are raised by peculiar food and treatment, from eggs that would otherwise produce workers.

The worker is an undeveloped female.—Workers in the absence of the queen sometimes lay eggs. These invariably produce drones.

The queen lives from two to five years. The worker from two to three months in the working season, and from six to eight during the season of rest.

The queen is perfected in fifteen or sixteen days from the egg, the worker in twenty to twenty-one, and the drone in twenty-four.

The queen usually commences laying from seven to twelve days after leaving the cell, and is capable of laying from two to three thousand eggs in a day.

The impregnation of the queen always takes place outside the hive, and on the wing, and generally the fourth or fifth day after leaving the cell. Excepting in rare cases, one impregnation answers for life. The drone she has mated with dies immediately.

The eggs of an unimpregnated queen produce nothing but drones; and it is generally conceded that impregnation does not affect the drone progeny, consequently the male progeny of a pure Italian queen is pure without regard to the drone she has mated with.

The queen and worker are provided with stings; but while the latter will use it upon any provocation, the former will only use it on her own rank. The drones have no sting.

One queen, as a rule, is all that is tolerated in a hive; but previous to throwing off "after swarms," two or more queens are permitted in the same hive for a short time; but the extra ones are soon disposed of. In case of superseding a queen, the old one is preserved until the new one is fitted to take her place. Queens have a deadly hatred of each other, and will destroy if permitted all queen larvae or cells in the hive, and will fight each other until there is but one living one left.

Bees gather three kinds of products.—Propolis, from the gum of trees and shrubs, for fastening the joints and cracks of their hives; Pollen, or bee bread, from flowers,

for feeding their young and themselves; and Honey, which constitutes the main food of the hive. Water is also carried into the hive during the breeding season, for mixing with the food for their young; salt is also made use of for the same purpose.

Wax, like fat, is an animal product, and is secreted by the bees in thin scales from the underside of the body. While doing this they consume large quantities of honey—from fifteen to twenty pounds for every pound of wax secreted.

A frightened bee, or one filled with honey is not disposed to sting.

A good swarm contains about twenty thousand bees.

A strong or medium hive, with a good living queen, is never seriously troubled with the moth worm; but a hive without a queen, or the means of raising one, is sure to be taken by them.

Bees recognize each other by their scent. The first one or two weeks of the young bee's life is spent inside the hive as a nurse or wax worker.

The range of a bee's flight for food is generally within two or three miles; much greater range is of but little benefit to them.—Selected.

Orchard Grass.

From an essay by L. F. Allen, Esq., of Black Rock, New York, in the Tribune, we make the following extract:

We have grown this grass constantly—not in large quantities to be sure—for the past 30 years, and know its value for the various purposes we have mentioned; but for soiling stock in the summer season we consider its qualities the most eminent.—A few will be stated:

First: It starts early in the spring, with a broad oat-like leaf, growing rapidly, and arriving at its highest condition of excellence when in early bloom, which is about the time of the blossoming of the common red clover, and, if made into hay, fit to cut at the same time. Yet, for soiling purposes, it may be cut some days or even some weeks earlier. It is better, however, for the full amount of nutriment it will afford, to wait until the flower is fairly developed. Its qualities are sweet, nutritious, abundant in production, tall as ordinary oats in growth, and a heavy burden to the area on which it is produced. If suffered to stand long enough to mature its seed, the stalk fiber becomes hardy, harsh and unpalatable to stock; therefore it must be cut before it arrives at its seed-ripening condition, as is the case with most other grasses for dry forage purposes. No grass which we have seen grown has yielded so heavy a swath as this, nor one from which so much cattle food to the acre can be grown, apart from Lucerne or Trefoil, which our American climates will not consecutively, year after year produce. No grass, not even red clover, springs up so rapidly after cutting, as this. We have known it in showery weather start fully three inches within a week after cutting, and so continue for repeated cuttings throughout the season, retaining its verdure into the latest frosts, and then affording a pasturage sweet and nutritious, inviting to all kinds of farm stock inclined to grazing.

Second: As hay, its quality is good, when cut in its early flower, but inferior when gone to seed, attaining then a woody fiber, as before remarked, yet, when cut and steamed, equal in nutritious quality to other late-cut grasses. The steaming or cooking process reduces its fibrous stalk to a compressive pulp, rendering it palatable to the state of animals, and congenial to the action of the stomach for nutritious uses. As hay, it cures readily; its long growth renders it easy to rake and handle; it stores compactly in either stack or mow; cuts easily with the hay knife in the mow when fed dry in winter, and is every way as convenient a long

fodder as any other. Such are its qualities for hay.

Third: As soiling stock through the summer months is now coming rapidly into practice, we can do no better service to the farmer—more particularly to the dairyman—than to recommend the Orchard grass for that purpose; and for the following reasons: It is early. It grows continuously throughout the summer and fall seasons. It is permanent in its occupation of the soil, having a strong fibrous root; maintains its hold in clumps, or tussocks, against any and all other grasses, even the blue grass—which crowds out almost every other—making no inroads on its possession when once fairly rooted. We have a field of it, on a strong clayey loam, which has stood for more than 30 years. It has been cut for soiling; it has been cut for hay; it has been pastured; it was first sown with red clover and timothy, which it long ago run out, and, although the white clover and blue grass venture their presence to a limited extent among it, the orchard grass retains its supremacy, and, breast-high at maturity, lords it over its diminutive trespassers in a bounteous crop, while its humbler attendants, good in their place, modestly fill up a great, nutritious undergrowth at the bottom.

It has been objected to the orchard grass that it grows too much in stools or tussocks. If it has a fault, that is one of them, but full seeding will measurably remedy that. It does not stool or spread so universally as the blue grass, or perhaps some others, but it forms a strong, compact root, and that root it holds firmly, enduringly, and, if given a moderate amount of fertilizing matter, its roots fill the surface, and there they stay, yielding to nothing but the utmost abuse by treading out in spring by heavy cattle—which should never be allowed on any grasses—or the plow itself.

Orchard grass yields seed bountifully, and when ripe, which is known by its assuming a yellowish color, it may be cut and bound in sheaves like oats, or mowed, cured, and thrashed out, like timothy. The entire process of its cultivation is as simple as any of our ordinary farm grasses.

If any of our subscribers can save us some seed, we should like to procure some next season, as we had a greater demand for it last year than we were able to supply. We think there is not yet sufficient knowledge about this grass in Canada. Some of our readers might do good to others by sending us their experience with it for publication.

Charcoal for Wheat.

"There are many instances on record, going most conclusively to demonstrate the very high value of charcoal as a manure for wheat. As a stimulant it is rendered apparent by the most convincing and undeniable facts. A late writer in the *Leedsburg Chronicle*, in some remarks upon this subject, says:—"A few days since, in company with Mr. Jacob Dorr, of East Buffalo, I visited a spot on the land of his brother, John Dorr, on which the excellent effects of charcoal were plainly visible. Before reaching the spot, I noticed the beautiful bright green of the wheat in the lower part of the field, even at this season—the dead of winter—and remarked to Mr. Dorr, that that must be the spot. He stated that he had not visited it for a number of years, but was under the impression that it was higher up the field. When we arrived at the spot of beautiful bright green wheat, we found, indeed, that it was the locality of the charcoal. In some places the soil was black with the coal, and the wheat plants were very large and healthy. Their appearance is very fine, and they can be seen from all parts of the field, so superior are they to those surrounding them." It appears from the communication, that some fifty or sixty years ago, a blacksmith

shop occupant was a coal presence of continued surprising rich by

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shop occupied this spot and near it there was a coal pit. This accounts for the presence of the coal, but not for the continued and undiminished fertility and surprising productiveness of the soil enriched by it.

"But it is well known to many of your readers, no doubt, that charcoal is, in its nature, nearly indestructible. It remains in the soil for generations without scarcely any perceptible change or alteration, and when applied in large quantities as a stimulant of vegetable life, acts from year to year, and even from generation to generation, without any obviously apparent diminution of energy or effect."

We quote the above and hope that some of our subscribers may be benefited by the hint and report to this journal of their success with trials of it, even after your editor has ceased to exist. We have not time or means to test every thing as well as we could wish, but we are quite convinced that too little is known about the value of charcoal and many other useful fertilizers. Send us reports of your success with them. Successful experiments are valuable. We feel sure some one of our readers will try it on a small scale. We have tried its effect on flowers and found it most beneficial in brightening colors and giving a rich verdant green appearance to the foliage.

Test of Carter's Ditching Machine

The Americans will have the best implements. Facts and figures must tell:

I hereby certify that Carter's Patent Ditching Machine has been in operation on the grounds of the Buffalo Central Park, for the past week and its capacity for performing the work for which it is intended thoroughly tested. On a soil composed of extremely tough clay, mixed with cobble stones, it cut twelve hundred (1200) yards of ditch, 2 1/2 feet deep, ready for bottoming and leveling in two working days, the same amount of ditch left in the same shape requiring forty and one half (40 1/2) days labor for one man.

I estimate the relative difference between the cost of ditching by hand labor and machine as follows:

Cutting 1200 yards ditch by hand, one man, 40 1/2 day labor at \$2	\$81 00
Cutting 1200 yds. ditch by machine,	
Wages of operator 2 days \$2 50	\$5
Wages 2 teams and drivers \$5	20 25 00

Saving by machine on 1200 yds. ditch

This test was made upon what I consider the most difficult part of the grounds, and I can add that the operation of the machine was a complete success and therefore its best recommendation.

GEORGE TROOP,
Overseer of Work done on Central Park Buffalo, May 29, 1871.

Oiled Floors.

The Manufacturer and Builder says: Oiling improves a floor in several ways. Grease spots, of course, will not affect the wood thus treated; and much less scrubbing than is necessary for plain floor will suffice to keep it clean. Moreover, the appearance is improved by the oil. Many of our native woods, prepared in this manner, become positively handsome. Finally, it gives the surface a harder texture, which makes it wear longer and more uniformly.

Paint costs more, takes longer to dry, and wears off more easily, since it simply forms a crust or coating upon the wood. Hence an oiled floor looks better than a painted one, especially if a little color, such as Van Dyke brown, umber, or burned cienna is added to the oil.

To prepare a floor in this manner, take raw linseed oil, or some cheap oil not of-

fensive in odor, and capable of drying; mix it, if desired, with some such transparent color as those mentioned above; and apply it with a common paint brush. Lay it on smoothly, so that it will strike in uniformly over the whole surface and not stand in spots. This may be done at night, after the day's work; and the place will be ready for use again the next morning. As far as the oiled surface is concerned, it might be stepped upon at once without injury; but there would be danger in case of tracking the grease to other parts of the house. A new coat of oil, applied in this way once or twice a year is sufficient to keep a floor in order.

This treatment is to be heartily recommended for the floors of kitchens, pantries, verandas, closets, bathrooms, and laborer's bedrooms. It is also a good plan in children's apartments, particularly in training them to do their own house-work, to leave without carpet or matting that part of the floor where the beds stand, with a few feet around it, and to oil the wood. The floor under the bed can then be easily kept free from dust, and the sweepings can be readily removed; while washstands, etc., can be so disposed as to give the youngsters free scope for their ablutions, without injury to carpets.

In country-houses, the plan might be carried still further. We recently had all the floors in a newly-built house oiled; and we think it wise economy. Many well-to-do families in Europe have no carpets at all; and, though there are some disadvantages in such a course, there are certainly some points gained. We think it gives cleaner houses, with less house-cleaning. Putting down, taking up, and beating carpets is the most vexatious and laborious part of our domestic economy, as their cost and destruction constitute one of its great items of expense. Still, we do not attack carpets—though, speaking of attacks, what a tax the ticks are!—we only say, where you don't need a carpet, by all means oil your floor.

Receipts for Coloring.

As this is the season when housewives do a good deal of coloring and cleansing, I forward two receipts I know to be good:

TO DYE SCARLET.—To one pound of cloth take 1 ounce of cochineal, 2 ounces muriate of tin, 2 ounces red cinners, 2 ounces cream of tartar; pulverize this compound in a bottle in one quart of soft water, then add two gallons of soft water to the above compound, and simmer the cloth four hours in a copper or brass kettle.

BLUE FOR COTTON.—Take 1 ounce Prussian blue, 3 ounce oxalic acid, put in two quarts soft water; stir till well mixed, then bottle. Put over a kettle of soft water, when warm add of the mixture and dip till dark enough. Set with alum or not, as you please.—*Cor. Me. Farmer.*

Wash for Roofs and Buildings.

The following is recommended by a practical man.—Slake lime in a close box to prevent the escape of steam, and when slacked, pass it through a sieve. To every six quarts of this lime, add one quart of rock salt and one gallon of water. After this boil and skim clean. To every five gallons of this, add, by slow degrees, three quarters of a pound of potash and four quarts of fine sand. Color matter may be added if desired. Apply with a paint or whitewash brush.

Bees should not be set nearer each other than five feet, unless you are very much crowded for room. If you will cut your bench into separate bottom boards, they will be better, as well as a saving of lumber. Bees should be set within four inches of the ground to avoid loss of numbers in the spring. Take two or three scantling, and nail on the under side of the bottom board, and you have a stand just right to set on the ground.

Farmers as Legislators.

An Agricultural club in Mississippi has started the question whether farmers should not be sent to represent the agricultural interest in the halls of legislation. It is a patent fact, which no observing person can have failed to notice that the interests of agriculture are too much neglected by our legislative bodies. This is due mainly to the indifference of farmers themselves to some of the most important questions which directly affect them. If the agriculturists of each State were represented by well organized societies, those organizations could bring a sufficient influence to bear on the Legislature to accomplish the passage of any law demanded by the agricultural interest.

In all legislative bodies the majority of the leading members are aspiring politicians, more engrossed with schemes for rising to greater eminence, than with the practical duties which attach to their position. The interests of the constituents are often sacrificed to secure the good will of certain parties deemed necessary for the accomplishment of some project of ambition. Hence it is a notorious fact that the most gifted, the most learned and eloquent are not always the most useful members of our legislative bodies. The industrious, incorruptible men of moderate abilities, devoted to the interests of their constituents, and not lured on into courses of doubtful propriety by the *ignes fatui* of high positions are really the most useful class of our legislators. Among the farmers of almost every county in this and other States, a sufficient number of intelligent men can be found, who with a little training obtained in the legislature will be found capable of representing ably the interests of their constituents. Ambitious politicians have been the bane of the whole country. As a class they may be relied on to represent their own interests, but not that of their constituents. Wherever an intelligent farmer can be substituted for one of this latter class, the farmers should unite to accomplish the substitution.—*Carolina Farmer.*

We are pleased to see other editors are taking notice of the farmers. It is long since we commenced adgitating the question. We have said and still maintain that the agricultural interest should be represented by agriculturists. Farmers ask yourselves if it is, or is it managed rightly? If not, why? and in whose hands is the remedy?

My Experience with Cisterns.

The first cistern that I remember was the once common "dug out," fashioned from a large whitewood log—say forty feet long and capable of holding fifteen or twenty barrels. It was a very good cistern, too, but passed away with the era of log houses, stick chimneys, and others evidences of pioneer life.

Next, a pit some seven feet deep was dug in the earth and water cement plastered on the earth. This was covered with plank, a pump put in and it was filled from the cave-troughs. It stood badly, leaks appeared in the cement, and the soft water ran out, and then, later, the hard water flowed in. It was a failure and was soon abandoned.

The same principle was then tried in a more substantial manner. The pit was sunk to about the same depth, and the walls laid up in stone and water lime cement in the form of an egg. A stone cap with a manhole in it covered the top. This cistern was likewise a failure, simply because that at certain seasons, when the ground was full of water, it would force its way through the wall. There were leaks in the bottom through which the hard water came into the cistern, and water lime and plaster of Paris failed to stop them. In a well drained soil, this form of cistern ought to stand well; when there is much pressure on the outside of it,

or under the bottom, it seldom gives satisfaction.

We went to the cellar next and built a huge wooden tub of inch and a-half pine plank, seven feet high, and holding eighty barrels. It made an excellent cistern for ten years. The water was always sweet and soft. It rotted through at the end of that period, and was taken down. There was no objection to this kind of cistern, but that of non-durability.

The cellar was found to be a good place for the cistern, and I resolved to build the next one so it would endure as long as the house. So I laid a wall in water-lime cement, one foot in width, next to the cellar wall on three sides, and across the cellar on the fourth side. The wall across the cellar was sixteen inches wide. The mortar was made of one part sand and three parts lime. The height of the wall was only four feet. In the bottom of the enclosure small stones were packed to the depth of six or eight inches. They rested on hard ground. A thin mortar was poured on these until the spaces were filled. When dry, three coats of plaster, made of one part sand and two parts water-lime, were put on the bottom and walls. After a couple of weeks the water was let in, and it stands well, and probable will stand as long as the house above it. Yours again,
AN OLD FARMER.—*American Rural Home.*

Hints for Housekeepers.

"Water may be kept cool for drinking in warm weather by the following method:—Get fresh water, let it be kept in an unglazed earthenware pitcher wrapped around with two or three folds of coarse cotton cloth kept constantly wet. The theory of cooling water in this manner is the absorption of heat from it, by the evaporation of the moisture in the cotton cloth—expansion produces cold, compression heat.

"A French chemist asserts that if tea be ground like coffee before hot water is poured upon it, it will yield nearly double the amount of its exhilarating qualities. Another writer says if you put a piece of lump sugar, the size of a walnut, into a tea-pot, you will make the tea infuse in half the time.

"Borax is said to be superior to everything else for exterminating the cockroach. The smell, or touch of borax, it is said, is certain death to them.

"To color a floor—to a strong lye of wood ashes, add enough copperas for the required oak shade. Put this on with a mop, and varnish afterwards.

"The French have discovered that the white of an egg, given in sweetened water is a sure cure for the croup. The remedy is to be repeated till a cure is effected.

"Grease can be removed as follows: Put on powder of French chalk, and place a piece of blotting paper over it; then pass a hot iron over the blotting paper: The heat liquefies the grease, the chalk absorbs it, and excess of grease is absorbed by the blotting-paper.

"Corn starch makes the best paste for scrap-books. Dissolve a small quantity in cold water, then cook it thoroughly. Be careful and not get it too thick. When cold it should be thin enough to apply with a brush. It will not mould nor stain the paper. It is the kind used by daguerreotypists on "gem" pictures."

Working Bulls.

Why should not bulls be worked? asks the *Germantown Telegraph*. We see no reason and know that they are often broken to work and prove as gentle and efficient as oxen. If it was more generally done, there would be less complaint of their roaming over the country and knocking down fences.—*Planter and Farmer.*

We have had a bull at work regularly all this spring. He is perfectly gentle, and is worked by a boy twelve years old. He draws a cart, hauling out manure, and bringing in firewood, litter for stables and stockyard, &c., thus relieving the team from a good deal of work. We find him quite as good as an ox.

Be careful. A farmer lost a valuable calf last week, by feeding it from a pail in which he had previously scalded potato bugs.

List of Agricultural Societies, Officers and Addresses in connection with the Bureau of Agriculture of Ontario, for 1871.

The names of Electoral Divisions are in Small Capitals; the Townships in Italic.

First the President; second the Treasurer; third the Secretary. When there are only two names, the second is both Treasurer and Secretary combined.

ADDINGTON.—Thomas Price, Newburgh; J. B. Aylsworth, Newburgh. *Camden*.—J. F. Hawley, Centerville; J. B. Aylsworth, Newburgh. *Loughborough*.—W. Horner, Loughborough; W. Boyce, Loughborough. *Portland*.—J. Charlton, Jr., Harrowsmith; J. Cook, Harrowsmith. *Sheffield*.—D. Gilmore, Tamworth; J. Aylsworth, Tamworth.

ALGOMA.—C. J. Brampton, Sault Ste. Marie. Secretary and Treasurer.

BRANT, NORTH.—A. Telfer, Paris; D. R. Dickson, Paris. *Brantford*.—James Tennant, Cainsville; D. Whiting, Cainsville; W. F. Crome, Cainsville. *Onondaga*.—W. Barrill, Sr., Onondaga; W. Barrill, Jr., Onondaga. *Paris Horticultural Society*.—C. Whitlaw, Paris; Henry Hart, Paris.

BRANT, SOUTH.—A. McEwan, Mohawk; W. Sanderson, Brantford. *Brantford Horticultural Society*.—J. Wallace, Brantford; E. C. Passmore, Brantford; B. F. Fitch, Brantford.

BOTHWELL.—A. McDiarmid, Morpeth; G. A. Tye, M.D., Thamesville; Wm. Latimer, Selton. *Euphemia and Dawn*.—Thomas Carey, Florence; Isaac Unsworth, Florence. *Howard*.—Edward Tyhurst, Ridgetown; C. Grant, Ridgetown. *Zone*.—D. McCraney, Bothwell; John Taylor, Bothwell.

BROCKVILLE.—Richard Arnold, Addison; W. H. Constock, Brockville; Bethel Loverin, Greenbush.

BRUCE, NORTH.—Wm. Scott, Duablan; James Saunders, Paisley. *Arvon*.—J. Briggs, Arkwright; J. Douglas, Tara; J. N. Gardner, Invermay. *Bruce*.—A. Burwash, Underwood; H. Murray, Underwood. *Elderatic*.—James H. Paisley, J. C. Gibson, Paisley. *Saugoe*.—John Wallace, Duablan; James Muir, Normanton.

BRUCE, SOUTH.—Richard Rivers, Walkerton; James Waterson, Walkerton; A. S. L. Mackintosh, Walkerton. *Brant*.—John Bruce, Walkerton; J. Waterson, Walkerton; A. S. L. Mackintosh, Walkerton. *Carriack*.—Wm. Dickinson, Midway; Charles Schiel, Midway; Dr. J. Murphy, Midway. *Culross*.—A. Little, Teeswater; V. Fraser, Teeswater. *Greenock*.—J. Collier, Sr., Greenock; J. Cunningham, Greenock. *Luron*.—D. Henderson, Kincardine. *T. Wilson, Kincardine*.—Kincardine. *R. Maden, Bervie*.—A. H. Boyd, Bervie; J. Bradley, M. D., Bervie. *Kintore*.—W. Anderson, Lucknow; W. Geddes, Lucknow; R. L. Hunter, Lucknow.

CARDWELL.—Wm. Hanna, Sandhill; G. McManis, Mono Mills; John Allen, Mono Mills. *Albion*.—John Kelly, Athlone; J. C. Hart, Keenansville. *Albion*.—Wm. Dick, Albion; L. R. Bolton, Albion. *Colston*.—Alex. McLoughlan, Rockside; H. McLean, Caledon; D. Kirkwood, Rockside. *Mono*.—J. Mitchell, Mono Mills; W. Parsons, Orangeville; J. Lindsay, Orangeville.

CHARLETON.—G. W. Eaton, Ottawa; A. S. Woodburn, Ottawa.

CORNWALL.—D. Tait, Mille Roches; J. S. McDougall, Cornwall.

DUNDAS.—Alex. Farlinger, Morrisburgh; A. G. Macdonell, Morrisburgh. *Atitola*.—John Heukive; Thos. McNulty, Iroquois. *Mountain*.—W. Thompson, North Mountain; Alva Carleton, Inkerman. *Williamsburgh*.—J. Dickey, North Williamsburgh; Whittaker, North Williamsburgh. *Winchester*.—G. W. Bogart, East Winchester; James Gallispe, East Winchester.

ERRHAM, EAST.—N. Choate, Port Hope; Wm. Sisson, Port Hope; John Foot, Port Hope. *Caren*.—James Sisson, Ida; J. W. Greenock, Millbrook. *Hope*.—S. Caldwell, Port Hope; R. Dickson, Port Hope. *Monwess*.—Wm. Ward, Bethany; A. Ryley, Bethany. *Port Hope Horticultural Society*.—J. G. Williams, Port Hope; H. M. Rose, Port Hope; J. E. Gandrie, Port Hope.

ERRHAM, WEST.—Geo. Mitchell, Enfield; M. Porter, Bowmanville; R. Windatt, Bowmanville. *Cartwright*.—R. B. Spinks, Cartwright; D. Deacon, Casarea; James Par, Cartwright. *Clarke*.—Richard Ruddock, Orono; Henry Middleton, Newcastle; G. S. Lovekin, Newcastle. *Darlington*.—Wm. Windatt, Bowmanville; R. Windatt, Bowmanville. *Bowmanville Horticultural Society*.—W. R. Clinnie, Bowmanville.

ELGIN, EAST.—Daniel Black, St. Thomas; John King, St. Thomas. H. F. Ellis, St. Thomas. *Bayham*.—S. Griffin, Vienna; R. L. McCally, Vienna. *Dorchester*.—South. John Thomas, Sprigfield; M. Fullerton, Lyons. *Chamas*.—Charles Ross, Gravesand; W. M. Cleveland, Aylmer. *Farmouth*.—Stephen Wade, St. Thomas; L. S. Leonard, St. Thomas.

ELGIN, WEST.—Wm. Bobier, Wallace town; Samuel Williams, Iona; A. Barclay, Wallace town. *Aldboro*.—Robert Mowbray, Eagle; Richard Coates, Rodney. *Southhold and Dunwich*.—J. A. Philpot, Iona.

ESSEX.—T. Armitage, Harrow; Alex. Bartlett, Windsor; Henry Botsford, Amherstburgh. *Colchester*.—Thomas Clark, Harrow; Jacob Fox, Harrow; Walter Grubb, Oxley. *Goshfield and Mersea*.—Geo. Russell, Leamington; J. C. Fox, Olinda; C. Palmer, Leamington. *Malden and Anderson*.—W. Brugh, Amherstburgh; D. Campbell, Amherstburgh; H. Botsford, Amherstburgh. *Maidstone*.—Patrick McNally, Maidstone; Thomas Moran, Maidstone; T. F. Kane, Maidstone. *Rochester*.—Alex. Taylor, Woodlee; James Henry, Woodlee; J. A. Hogan, Woodlee. *Tilbury, West*.—George Tool, Camber; J. F. Dodd, Trudell.

FRONTENAC.—Allen Bond, Inverary; Isaac Simpson, Kingston. *Pittsburgh*.—J. Ryan, Kingston; R. J. Milton, Kingston. *Storrington*.—L. Lyon, Inverary; Thos. Conklin, Inverary. *Wolf Island*.—M. Spoor, Wolf Island; H. O. Hitchcock, Wolf Island.

GLENGARY.—A. D. McNab, Vankleek Hill; Thos. McDonnell, Williamstown; Daniel Campbell, Williamstown. *Charlottenburgh and Levee*.—A. J. Grant, Williamstown; T. McClellan, Williamstown. *Lochiel and Kenyon*.—Malcolm McGillivray, Kirk Hill; Alex. McDonnell, Lochiel.

GREENVILLE, SOUTH.—Charles Kow, Prescott; Patrick McCrea, Prescott; T. J. Tracy, Prescott. *Edwardsburgh*.—James Millar, Spencerville; G. Fairbairn, Spencerville; James Robertson, Spencerville. GREY, NORTH.—G. Harkness, Speedie; Alex. Crichton, Owen Sound; Thomas Gordon, Owen Sound.

GREY, SOUTH.—Geo. Jackson, M. P. Durham; S. E. Legate, Durham. *Artemesia*.—Thos. Kells, Flesherton; Henry Meldrin, Eugenia; Robert Terille, Flesherton. *Egremond*.—Wm. Reid, Holstein; D. Allan, Holstein. *Malancthon*.—John Mills, Melancthon; H. Jarvis, Horning's Mills. *Narnaugh*.—J. Robertson, Mount Forest; W. H. Ryan, Mount Forest. *Osprey*.—T. Ganey, Maxwell; J. Ganey, Maxwell. *Pyron*.—J. McArthur, Ronalds; John McKenzie, Cedarville; J. G. Peer, Ronalds.

HALDIMAND.—J. R. Martin, Cayuga; Jacob Young, York G. R. *Den and South Cayuga*.—A. Arnold, Byang; T. Q. Hamilton, Port Maitland. *Rainham*.—R. A. Havill, Rainham. *John Law, Rainham Centre*.—Secca, Onida and North Cayuga. A. Turnbull, York; F. A. Nellis, York. *Walpole*.—J. P. Biggar, Erie; W. R. Hewitt, Cheapside.

HALTOUN.—D. Alton, Applebee; W. C. Beatty, Omagh. *Equising*.—R. Knight, Milton; John Murray, Equising. *Nassagaweya*.—John Kean, Nassagaweya; S. R. Lister, Nassagaweya. *Neison*.—John Fothergill, Appleby; Robert Miller, Neison. *Trafalgar*.—Joseph Turk, Trafalgar; H. M. Switzer, Palermo.

HAMILTON.—George Roach, Hamilton; F. C. Bruce, Hamilton. HASTINGS, NORTH.—James Foster, Moira; E. Ketcheson, Moira; Jas. J. Ryan, W. Huntington. *Danganonno, Furdy, &c.*—D. Havanagh, Umfraville; John Wilson, L'Amable. *Huntingdon*.—Richard Newton, Huntingdon; John Murray, Huntingdon; James Hagarty, John Murray, Madoc; J. H. Dunn, Madoc; E. Holmes, Madoc; Charles Gream, Madoc. *Rawdon*.—Peter Chard, Stirling; H. G. Thurler, Stirling; G. E. Bull, Stirling.

HASTINGS, EAST.—G. Phillips, Thurlow; Wm. Hudson, Ruslin; P. R. Palmer, Thurlow. *Thurlow*.—A. A. Farley, Canifon; James Hall, Plainfield; G. R. Palmer, Thurlow. *Tyndinaga*.—Wm. Beatty, Melrose; Thomas Earls, Shannonville; Charles Anderson, Melrose.

HASTINGS, WEST.—Alex. Thompson, Belleville; W. H. Graham, Belleville; D. R. Ketcheson, Wallbridge. HURON, NORTH.—S. Malcomson, Huron. *Ashfield and Wawanosh*.—D. McClinton, Nile; R. Clendening, Dunganon; J. Hwarin, Nile; R. Clendening, Dunganon; M. Roberts, Dunganon. *Grey*.—S. Slemmon, Grey; J. Lackie, Dingle; D. Stewart, Dingle. *Hocick*.—A. Thompson, Wroxeter; W. Lawrie, Wroxeter. *Hullitt*.—J. B. Racey, Clinton; E. Holmes, Clinton. *Tanbury*.—R. Currie, Wingham; A. Fisher, Wingham; R. A. Graham, Wingham. *Wawanosh, East*.—William Carr, Westfield; J. H. Taylor, Westfield.

HURON, SOUTH.—Geo. Anderson, Varna; G. E. Cresswell, Eremonville; Hugh Love, Sr., Hill's Green. *Hay*.—James Swinerton, Redgerville; R. Brown, Zurich. *Stanley*.—Geo. Anderson, Varna; James Armstrong, Varna; Anderson, Varna. *Stephen and John Walker, Jr.*, Varna. *Stephen and Ushorne*.—A. Bishop, Hay; James Pickard, Exeter; John Gounlock, Seaford; Julius Duncan, Seaford; Wm. McConnell, Egmundville. *Seaford Horticultural Society*.—Robert Gibbons, Goderich; Peter Adamson, Goderich.

KENT.—Wm. Clark, Rond Eau; James Hart, Chatham. *Chatham*.—A. McDougall, Wallaceburgh; John Lilla, Rond Eau; W. H. White, Wallaceburgh. *Chatham*.—Wm. Clark, Rond Eau; W. H. White, Chatham; W. R. Fellows, Rond Eau. *Raleigh*.—B. S. Scaman, Charing Cross; S. White, Charing Cross; A. H. White, Charing Cross.

Tilbury, East.—H Forbes, Tilbury, East; J. Coutts, Valetta; J. Fletcher, Tilbury, East. KINGSTON.—Thos. Briggs, Kingston; E. H. Smyth, Kingston.

LAMBTON.—Peter McGregor, Sarnia; A. Young, Sr., Sarnia; Wm. Mowbray, Logterait. *Bosanquet*.—B. Cornell, Arkona; M. Watton, Widder Station. *Brooke*.—John Sinclair, Aughrin; E. Bowly, Napier. *Enniskillen*.—R. Brock, Ossian; John Hendra, Ossian. *Moore*.—J. Payne, Corunna; H. J. Miller, Corunna. *Plympton*.—H. H. Hunt, Wyom- ing; John Simpson, Aberarder. *Warwick*.—Richard Evans, Warwick; Geo. Smith, Warwick.

LANARK, NORTH.—Wm. Mostyne, M.D., Almonte; Wm. Templeman, Almonte. *Almonte*.—D. McDougall, McDonald's Cor.; James Donald, McDonald's Cor. *Langark*.—E. Anderson, Hopetown; Jas. Stewart, Middleville. *Pakenham*.—Young Scott, Pakenham; A. Fowler, Pakenham. *Ramsay*.—L. Nasmith, Bennie's Corners; Gilbert Forgie, Almonte.

LANARK, SOUTH.—Alex. Dadds, Glen Tay; Arch. Campbell, Perth. *Beckwith*.—Robert Bell, Carleton Place; A. McArthur, Carleton Place. *Bathurst*.—Duncan McDonald, Perth; Peter Cameron, Perth. *Drummond*.—James Shaw, Perth; Timothy Doyle, Perth. *Montague*.—Peter Clark, Montague; C. Carnduff, Smith's Falls; E. Chalmers, Smith's Falls. LEEDS AND NORTH GRENVILLE.—David H. Eaton, Farmersville; Charles Richards, Frankville; Samuel Connor, Frankville.

LEEDS, SOUTH.—Geo. Richardson, Ganna- noque; Wm. Brough, Gannaquoque. *Crosby, North*.—W. H. Freudenberg, Westport; R. D. Reubens, Newboro'. *Lansdown*.—W. Beatty, Lansdown; W. Thomson, Lansdown. *Young and Escott*.—A. Baker, Farmersville; J. C. Alguire, Farmersville.

LENNOX.—John Sharp, Bath; Charles James, Napanee. *Amherst Island*.—J. H. Richards, Emerald; J. B. Howard, Emerald. *Capt. G. Skene, Emerald*. *Fredericksburgh, North*.—E. Fretts, Napanee; W. N. Dollar, Napanee.

LINCOLN.—James Douglass, St. Catharines; Charles A. F. Ball, St. Catharines; James Lawrie, St. Catharines. *Clinton*.—J. H. McCombs, Beamsville; John Arkers, Beamsville. *Greenham*.—John Robertson, St. Catharines; Wm. P. Parnell, St. Catharines; Wm. H. Emmett, St. Catharines. *Grimshy*.—H. F. Bridgeman, Smithville; J. T. Middleton, Smithville. *Louth*.—H. Wismer, Jordan; J. Gregory, St. Catharines; J. Pauling, Port Dalhousie. *London*.—Wm. Tooley, London; C. W. Andrus, London; Wm. McBride, London.

MIDDLESEX, N.—L. E. Shipley, Duncreiff; W. K. Atkinson, Ailsa Craig. *Ade aide, Bid- Wm. Brent, Adelaide*; Granton; Alex. Grant, do; C. M. Webb, do. *Loth*.—J. D. McKeith, do; J. Irvine, do. *McGillivray*.—J. Robinson, Ailsa Craig; Wm. Elliott, Parkhill; J. Dawson, Wm. Williams, E. A. Marshall, Smithville, Falkirk; T. G. Shipley, do.

MIDDLESEX, E.—K. Tooley, Gladstone; J. B. Lane, Dorchester Station; H. Anderson, London. *Dorchester*.—Charles Edwards, London; Wesley J. B. Lane, Dorchester, St. London. *Hyde Park*.—Thos. Elliot, Arva; R. Orr, do. *Westminster*.—Elliot Grieve, London; Robert Riddle, do; Thos. Fleming, do.

MIDDLESEX, W.—Godfrey McGougan, Strathroy; James Keefer, do. *Ekhrid*.—Philip Cornell, Appin; A. Douglas, Longwood. *Metoufe*.—D. Brown, Mount Hope; H. Thompson, Napier. *Mosa*.—B. Watterworth, Warisville; A. Thomson, do.

MONCK.—J. W. Overhott, Marshville; A. McKeague, Wellandport. *Castor*.—Wm. Hoover, Caistorville; Samuel Atter, Abington. *Gainsboro*.—M. J. Dalton, Smithville; J. Upper, St. Ann's. *Pelham*.—H. R. Hancy, M. D., Fenwick; Samuel Beckett, Rigeville. *Wainfleet*.—J. H. Bradshaw, Marshville; J. Priestman, do; Western Branch. *Dunnville, Canboro and Shebrooke*.—Charles Stevens, Dunnville; Wm. Braund, Stromness.

NIAGARA.—Robert N. Ball, Niagara; S. H. Pollett, do; Alex. Servos, do.

NORTHUMBERLAND, E.—Wm. Humphries, Warkworth; A. F. Wright, Brighton; E. P. Hurlbut, Warkworth. *Brighton*.—Robt. Macklaim, Brighton; A. A. Becker, Hilton. *Canabie*.—C. Newson, Castleton; W. Easton, Colborne. *Marrara*.—Hugh McQuoid, Trenton; Gilbert Jones, do; H. Fieldhouse, Rosa. *Percy*.—John Skenkiah, Warkworth; John Douglas, do; R. P. Hurlbut, do. *Seymour*.—Robt. Dinwoodie, Campbellford; John Clark, Burnbrae.

To be continued in next month

himself; and the curious grins he sometimes makes are quite natural to him, he don't need to assume anything. He is a particularly humble animal, never asserting his rights or complaining about his wrongs. Another thing, the toad is very fond of music, and is easily tamed. There was a toad lived near our cellar door about a month ago, and he got so tame that when we called toadie, toadie, he would hop right up to us; and one very hot day he even took a drink of water out of a cup which we held down on its side to him. About two years ago there was a little toad that would hop up to us every evening when we began to play an old concertina, and whenever we would stop he would hop away again. There was one key spoiled and when we played on it, it gave some hideous howls which made poor toadie cruch down and move about in a curious way. This proved to us that he had a good ear for music. One thing troubled us very much, we never could get Mr. Toadie to eat anything. We broke off our biggest cabbage leaves and some of the sweetest flowers, still he would never touch them; but before long we found out our mistake. We happened to see the cunning little fellow picking down as though they were good. So now we never try to feed toads on cabbage as we see that they have no taste for greens; and whenever we hear any person say that the toads eat their onions and cabbage plants, we only laugh at them, and assure them that the toad is the "Gardner's best friend," for instead of destroying the plants, he destroys the grubs and flies that would eat every vegetable in the garden, were it not for Mr. Toad's indefatigable labors. I. F. I.

We feel much obliged for I. F. I.'s occasional correspondence, and hope it will stimulate other Canadians to use their pen.

Potatoes.

Sir,—Last year I purchased six bushels of Harrison, and one bushel of Goodrich potatoes for seed. From the six bushels of Harrison's I obtained 250 bushels of marketable potatoes, which I sold chiefly to my neighbors at 60 cents per bushel, for seed. From the one bushel of Goodrich I got 70 bushels of large potatoes, which I also sold at the same price. Any of your readers can count the profit.

I hear many people complain that their farms do not pay. I cannot say so, for my general crop of grain, hay, &c., paid me in something the same proportion as the above. I always endeavor to obtain the best seeds, and the best information as to different methods of testing the soil, seeds, stock, &c., and by adopting what to my experience seems most likely to be profitable, have never failed in making a reasonable profit out of my farm, yearly. I gather much useful information by conversation with others, from my own observation, and especially from reading the correspondence and other articles in the Farmer's Advocate.

Yours truly, W. WILLIAMS. McGillivray, June 20, 1871.

SOCIAL HONORS.—Everybody should cultivate a nice sense of honor. In a hundred different ways, this most fitting adjunct of the true lady or gentleman is often tried. For instance, one is the guest of a family, where, perhaps, the domestic machinery does not run smoothly. There is sorrow in the house, unsuspected by the outer world. Sometimes, it is a dissipated son, whose conduct is a shame and a grief to the parents; sometimes a relative, whose eccentricities and peculiarities are a cloud on the home. Or, worst of all, husband and wife may not be in accord, and there may be often bitter words spoken, and harsh recriminations. In any of these cases the guest is, in honor, bound to be blind and deaf, as far as people without are concerned. If a gentle word within can do any good, it may well be said; but to go forth and reveal the shadow of an unhappy secret to any one, even to your nearest friend, is an act of indecency and meanness almost unparalleled. Once in the sacred precincts of any home, admitted to its privacy, sharing its life, all that you see and hear is a sacred trust. It is as you really contem- ptable to gossip of such things as it would be to steal the silver, or borrow the books and forget to return them.

For the Farmer's Advocate. ESSAY ON TOADS.

The nasty toad, such a subject to write about; such a horrid, ugly, clumsy creature. Never mind my little friends, if the toad is ugly he is not such a bad fellow after all. In truth, he has a great number of good qualities; and the only faults that can be laid to his charge are his ugly looks; but we must remember that he cannot help his looks as he did not make

SPECIAL NOTICE.

We beg to tender our best thanks to those of our subscribers who have responded so readily to our call for payment, in our circular to those in arrears last month, and who have in most cases done so with many good wishes for our success. Believing that the oversight is occasioned more by want of thought than any other cause, we trust that those who have not yet remitted will do so, and save us from the disagreeable necessity of pushing our claims upon them further.

Crop Prospects.

London, June 26, 1871.—Hay will be a light crop, far below the average. Fall Wheat to the West and South will be above the average; to the east it has been in many cases badly injured by spring frosts, and will not reach the average.—Barley will be very light, few fields will give even half a crop. Peas will be fair. Spring wheat very poor,—we have not seen even one middling piece. Our own sowing of McCauley wheat,—the only kind of spring wheat we would sow this year,—is the worst looking crop on the farm. Cause—dry weather just as it came through the ground, which continued till last week. Let us hear how it answers in other sections. Oats will be but a medium crop; we have seen some pieces near Paris that, from present appearances, will scarce pay for harvesting. Report says that Spring Wheat is being plowed down near St. Catharines and other places. Root Crops bid fair to be over an average.—Potatoes never looked better, where people have kept them clear of bugs. Some farmers that do not take an agricultural paper neglected to notice the bugs in time, and now only have bare stalks; they will have potatoes to purchase instead of to sell—and have raised such a crop of bugs as will cause thousands of dollars loss to good farmers.

To Young Canadian Farmers.

We have reason to believe that your parents have expended very large sums for educational purposes. We would ask some of you if writing was taught in the school in which you were educated? As yet there are very few sections from which we have had correspondence, in comparison to the number of places where the young folks think they know as much about everything as any body else. The greatest good of education is to be able to impart knowledge to others. Some of you might with advantage to yourselves and to the country, make an attempt.

Disease Among Horses.

We learn from our exchanges that a new disease has broken out among horses in New York, from which many have already died. We know nothing of this disease yet, and trust there may be no necessity on our part for investigation. One good thing is, we Canadians do not need to import horses from the States.

To prevent the introduction of the disease into Canada, it would be well that no horses should be admitted from the States until there is no further danger. We could lose nothing by being cautious.—Even one race horse might spread the disease here.

Editor Farmer's Advocate.

CANADIAN PROGRESS.

Dear Sir,—Allow me to make a few remarks on the progress of the County of Wellington. The County Council during the year has granted \$45,000 for various public improvements, \$3000 for the Central Fair, \$300 for the Band, \$200 for the sufferers by the Bradford fire.—They also have passed resolutions to abolish all tolls on the County Roads, as soon as the present leases expire. They have, I believe, more miles of gravel road than any other county in Ontario, which are all owned by the county. Let me ask what the County Council of Middlesex has done towards public improvements.

W. A. AYERST.

Talbotville.

Many of the residents of Middlesex know but little of what other counties are doing. It would do most of our farmers good to take a trip through the County of Wellington. They are able to pay their taxes, they raise more roots on an average, have better stock, and appear in a most prosperous condition—even more so than with us,—despite grants of \$45,000 per annum for public improvements.

Editor Farmer's Advocate.

Letter from Paris.

Dear Sir,—Our spring seeding time opened out with favorable weather, which gave the farmers in this section ample opportunity to sow a liberal breadth of spring crops—which was very generally improved—in oats, corn and barley. Spring wheat is only sown to a limited extent; the soil here does not prove to be as favorable to the growth of this cereal as soils composed principally of clay and clay loam, such as prevail in your section, and northern and western counties. Fall wheat has proved to be seriously winter-killed in this county—and on a visit to Guelph, Beverly, Brantford, Burford, Galt, Ayr, &c., the indications are that the wheat will be a very short one. Reports come from Simcoe and Berlin that the injury to the winter wheat from the early exposure to severe frosts in March, has been unusually severe, indicating that the extent of country is large which shares in the misfortune of a light wheat crop. Spring crops have been retarded in their growth by the very severe drought which has prevailed. Barley will be a light crop, and early sown Oats will give a light return. The copious shower last night (June 23) will do immense good to our parched crops, it being the first rain which has thoroughly wet the ground since spring seeding.

Your June No. comes to us impregnated with a fair share of energy and spirit, which commends its pages to the great interest of the country; and the soas of toil, the farmers, who are the motive power to the agricultural interest, the basis of our country's prosperity. What farmers essentially require is to feel the importance of their position, and to have a knowledge of the power they possess in controlling the material interests of the country—Canadian Agriculture.

A paper advocating the farmer's prosperity may be "independent of political strife," but it cannot exist, or harmonize its influence in favor of such prosperity, without advocating a principle. Commerce is based on the products of a country; legislation essays to control commerce in the interest of party, and not in that of commerce. I commend your judgement in refusing to accept these entangling party alliances, but a principle you can advocate without fear or favour—suppose even that political action requisite to the furtherance and carrying out that principle. Theories are worthless to us unless they admit of solution by practical

application to our wants and necessities. "Free trade with the United States" is a motto you can add to your paper with the full assurance that it will prevail. There need be no hesitancy on your part; down here in the county of Brant we are very near unanimous. We want a thorough demolition of Custom houses on our frontier lines from Vancouver's Island to Nova Scotia,—unrestricted commercial intercourse with our neighbours. You appreciate, Sir, that the salt wells, oil wells, farm products, manufactures and the whole commercial interest would receive a grand impetus by such a move. Towns and cities would soon feel the invigorating influence, and make an era in the prosperity of our Dominion, which the people in after years will refer to with pride, as the beginning of a new life to enterprise and prosperity.

M. N. BROWN.

Paris, Ontario, June 24, 1871.

Union Among Farmers.

Advantages of united effort has been long appreciated and approved among those who pursue the trades and professions. Those especially, the seat of whose business is in large towns or densely populated districts, have made most progress in this department of improvement. Farmers being apart and associating less with each other, or with the world perhaps than most other classes of society, have been slower than other bodies of men of equal intelligence to see the advantages of union for their common good, or to improve to the full the advantages they already see. Yet something has been done. The Agricultural Fairs, which have become so popular within the last few years, have diffused a vast amount of information, which had otherwise been confined to a few. They have inspired a self respect, awakened an emulation and enthusiasm for improvement, whose effect on the agricultural interests has, along with other favorable causes, been as life from the dead.

Whatever processes can lessen the number of middle men between the producer and the customer both ways, are blessings to the community. The merchant, we admit, performs a great and valuable service wherever he is needed. But still all devices—honest ones we mean—that may lessen or remove the necessity for his aid are blessings. They relieve labor of one of its heaviest burdens, the support of a large crowd of non-producers, who must be paid at a high rate for what they do, and whose number from the operation of obvious causes, is becoming greater every year. But our object at present is not so much comment on the progress already made by farmers in union of effect, as to point out other things in which union is especially needed, and in which its results would be without doubt of the most beneficial character.

First among the matters which we would commend to the notice of our friends, is union in the purchase of our costly stock, books, implements, seeds, shrubs, trees and other things of a similar kind. It is so easy to see the way in which union may operate most advantageously in securing improvement in farming implements, seeds, shrubs and trees, that we may not dwell longer on them at this point.

The farmers of a certain neighborhood are fully convinced that a certain breed of horses, cattle, sheep or swine is the best they could have. But only one of them is able to make the purchase of a first rate male and female that can be relied on as thoroughbred. But by uniting their means they make the expense very light, which would secure a speedy introduction among them of the very best of all kinds of stock, which the American and British stockgrowers can furnish.

In the destruction of vermin, union is absolutely essential to success. A gardener attempts to save his fruit trees from the ravages of the borer, or the fruit from the apple worm. He uses every preventive and remedy that a single man can use. He accomplishes a little, and but a little; for his neighbors on all sides neglect these matters, and live on from year to year unaffected by his suggestions or example. Their orchards and gardens are prolific sources of every species of vermin and insects, that flourish under the reign of carelessness and laziness; every year he is overrun with a new swarm. He becomes discouraged and at last gives up the struggle. Union is essential to success in all these matters. Let a whole neighborhood be animated by a common spirit and pursue the same effective system of prevention and cure, and the pest may be conquered.—Ohio Farmer

The Farmer's Advocate.

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TERMS OF ADVERTISEMENTS.—10 cents per line, Agate space. Specials, 20 cents per line. Editorials 50 cents per line.

The provincial trial of implements will take place at Paris. The day is not yet fixed; the Secretary informs us it will be about the 15th or 20th of July, depending on the maturity of the wheat crop.

OBSERVATIONS ON SHOERING.—No person should ever allow his horse to be shod by a farrier who employs or keeps in his shop the knife used for cutting away the hoof, shaped like a small shovel, and usually braced against the shoulder when used in shovelling away the horn. The Almighty designed the frog as an elastic, insensible cushion, on which the horse should walk, as do the fowls and some animals: yet blacksmiths delight in cutting away the most useful part, and thereby expose that which is sensitive to contact with the hard road. No greater folly can be imagined, and to a reasonable man it only requires to be noticed to make the error self-apparent. The blacksmith will argue that he must cut away the rags, and sometimes they are so ignorant as to declare they cut away the frog to prevent the very object of its creation. The frog should never be cut, or any portion; if allowed to take its natural course it becomes a perfect safety-stand and protection to the foot. In colts the frog may be seen in its full vigor and usefulness; but at the first shoeing the knife goes to work—and so it continues while there is frog to cut.

WHITEWASHING.—Good whitewash, well applied to fences, rough siding and the walls and ceilings of buildings, has a highly sanitary influence, as well as being in the highest degree preservative in its effect. To be durable, whitewash should be prepared in the following manner:—Take the very best stone lime and slack it in a close tub, covered with a cloth to preserve the steam. Salt, as much as can be dissolved in the water for slacking and reducing the lime, should be applied, and the whole mass carefully strained and thickened with a small quantity of sand, the purer and finer the better. A few pounds of wheat flour mixed as paste may be added, and will give greater durability to the mass, especially when applied to the exterior surface of buildings. With pure lime properly slacked and mixed with twice its weight of fine sand, and sifted wood ashes, in equal proportions, almost any color, may be made by the addition of pigment. Granite, slate, freestone and other shades may be imitated, and without any detriment to the durability of the wash. This covering is very often applied, and with good effect, to underpinning, stone fences, roofs and the roofs of barns and other outbuildings.

NEVER MIND THE WOULD SHED.—"My dear Amelia," said a dandy, "I have long wished for this opportunity, but hardly dare speak for fear you will reject me. But I love you; say you will be mine! Your smiles would shed"—and then he came to a pause; "your smiles would shed"—and then he paused again. "Never mind the wood shed," said Amelia; "go on with the pretty talk."

PICKLE AND PRESERVE JARS.—Whenever pickle or preserve jars are empty, wash them well in cold water, dry them thoroughly, and put them in a dry place. If you wash pickle or preserve jars in hot water, it will crack their glazed surface, and make them porous, which spoils them for use, as pickles and preserves require have the air kept from them.

The Colorado Potato Bug.

An Ounce of Prevention is worth a Pound of Cure.

FOREWARNED FOREARMED.



This illustration is made from a leaf we took to our artist yesterday. The spotted figure represents the bug before entering into the ground to become complete, as in the spotted form it has no wings. The striped bug is the gentleman fully equipped with wings, and ready to reproduce its species. The spots on the leaf are intended to represent the eggs. The bugs are very round on the back, rounder even than they appear in the engraving. We hope fuller descriptions will appear, but at this early stage of the pests ravages among us little is as yet known about them, or at least far less than we ought to know.

Farmers, we have now in our country an invading army of destroyers, a thousand times worse than the Fenians, worse even than a war between Canada and any other country, it may be more expensive and more destructive. The destruction caused by a war is confined comparatively to a locality—though other sections of the country may be called on to find men and money. But this invading destroyer will sweep our country, and the most injurious effects will follow. One-fifth of our food will be taken from us, and that fifth is the kind that the poor farmer, the poor mechanic, and the poor settler most depend on. The loss will not affect the rich, but tend to increase their wealth, but the poor farmer, with his large family of children, who depends on the potato as a main support, will be sadly tried. The poor widow and orphan will be oppressed, many young couples will postpone matrimony, and thousands of poor inhabitants will be deprived of the necessities and comforts of home. The devastating insect is so firmly lodged in our midst that no terrestrial power known can stay its progress. But we may, by close watching and industry, destroy the advancing enemy and keep them in check for a time, and save some of our crops that would otherwise be totally destroyed. The loss in some sections will be considerable this year; it may be greatly reduced by timely attention, and our labors be lessened for another year, by destroying the few advancing bugs as soon as found, to prevent their rapid increase.

ORIGIN.

These insects was first seen in the Rocky Mountains, and gradually spread themselves eastward, over all the states between Canada and the Rocky Mountains. They appear to increase in numbers and destructiveness as they advance eastward. They do not appear to travel to the west. Even

in this city there is a remarkable instance. West. East. Thus, No. 1 garden to the west has not had a bug on it; No. 2 had a few bugs; No. 3 a vacant lot; No. 4 a potato patch. They were first seen on No. 2. No. 2 has neglected his patch and allowed them to breed; No. 4 has watched his closely, and picked off every bug as soon as seen, and they continually reappear, no doubt from No. 2; No. 1 has closely watched his potatoes, and never found a bug, although only separated by the fence from No. 2.

The larva is deposited on the under side of the leaf, and is of a yellow color; they remain there about a week; as they mature they begin to draw from the plant and crawl along the leaf, emerge from their covering and become a dirty brown. They appear to change their coat again and turn to a dirty yellow; in this form they have two rows of black spots on their sides, increase in brightness until they gain nearly full growth; in this state they have no wings, but descend into the earth for another change, and come out again clothed with wings, having ten black stripes, alternated with as many of a yellowish cast.

There appears to be no end to their voracious appetite. They eat night and day, and in all stages; neither sun or frost seems to trouble them, as they can lay embedded in the ground, and emerge on suitable occasions.

We have not been able to devote as much attention to them as we would wish, but have experimented on numerous modes of destruction, and find nothing equal to the finger and thumb for destroying the larva. It is quite soft, and a slight pressure destroys it, and saves the leaves of the plant. We think it better than gathering the leaves. Some believe the bugs to be poisonous, but we are alive still, and our hand is in no way swollen, and we have killed the bugs and larva with our hand by the thousand. But we think they might be injurious if the flesh on the hand was scratched or sore.

PARIS GREEN

is a rank poison, composed principally of arsenic. We applied it first in an unadulterated state, but found that it destroyed the vines. Care must be taken in using it. No animal or child should be allowed near it, and you should avoid inhaling the fumes or dust. The best way to apply it is to get a tin box made like a flour box used for cooking. Have a socket handle soldered on it at an angle of 45 degrees, then put in a wooden handle so that you can keep the dust away from the operator. We applied it in the morning when the dew was on, and at night any quantity of dead bugs could be picked up.

Do you want to save your potatoes? If so you must attend to them immediately. The second crop of bugs will be nearly a thousand to one; the third crop you may estimate by the car load—you cannot count them. The early potatoes may be saved, and the late ones may be destroyed, even as far east as this, unless a great deal of care and labor is expended.

To our readers east and north we say, look out for the enemy and attack the first one. We expect you will have the advance guard of them in Montreal this year

—and most probably they will reach Europe in a year or two more. They fly, and attach themselves to anything. Their standard is—to the East! to the East! and they appear not to be satisfied with a share, they claim the whole potato crop, and will have it too unless they are vigorously attacked. Some say that ducks will destroy them, but we have not tried the remedy.

Last year we spoke of the approaching pest, and raised a warning voice. We had a suggestion to offer, to attempt to repel them, but they will be worse than we then anticipated. We have not gone into the elaborate display of latin terms, species, habits, &c., as Entomologists will do, nor are we as well informed as we should be, having so many things to attend to that we can scarce find time to pen this article, and even after it is penned the printing and postage must be paid from our own pocket. We hope that among the thousands that now take our paper some will be benefited sufficient to induce them to aid our circulation, and enable us to continue our researches, and to improve and test sends to a greater extent.

The following article relative to the potato bug is copied from the Ohio State Journal:—

The proper name of the bug is *Doryphora deeneo-lineata*, or ten lined spearman. This beetle is about three-eighths of an inch long, oval-shaped, of a pale yellow color, and has five black stripes on each wing cover. It comes out of its winter quarters, in the ground, in May, or as soon as the potatoes have started, and soon commences to deposit its eggs, which are light yellow, in clusters of twenty or thirty on the under side of the leaves of the potato, to the amount of about seven hundred. These are hatched out into larvæ in six days, which immediately commence feeding upon the plant and attain their full growth in about two weeks; they then descend into the ground, where they pass into the pupa state, and come out again in the shape of perfect beetles in from ten to fifteen days. It will be thus seen that it only takes about fifty days from egg to egg, and the increase would be enormous during a season, if the eggs were not destroyed in some manner.

The Colorado potato bug started out on its devastating march from its native home in the canons of the Rocky Mountains in 1859, invaded Iowa and Northern Missouri in 1861, crossed the Mississippi in 1864, spread over Illinois and Wisconsin, and appeared about the center of Indiana in 1868. It thus appears that its progress towards the east has been about 60 miles a year. It is here now, probably in every potato field in the county—and it is a matter of serious consideration how to guard against it.

Lime, plaster, brine, coal tar, and every known insect destroyer, has been tried, with but little if any success. Neither ducks, turkeys, geese nor chickens will touch the beetle or its larvæ. The only applications which have proved at all destructive have been Paris green and powdered hellebore, but these are dangerous remedies.

Probably the only practical way of guarding against, or lessening the danger of a total destruction of the crop, is to commence a war of extermination against the insect and its eggs on their very first appearance. When first their presence is discovered on the plants set men immediately to work to examine every plant, and pick off every bug and leaf having a cluster of eggs upon it, which should be thrown into tin buckets and afterwards destroyed. Where they have not got too much of a start, this labor is not so great as it would seem—one man being able to go over nearly an acre in a day. Whoever fails to take this or some other method of immediately destroying these pests before each insect has multiplied himself by seven hundred, will seriously regret his mistake before many weeks. Wherever a pair of the beetles is discovered, every leaf within a radius of several feet should be carefully examined for eggs.

After all, however, the only effectual check to the extraordinary increase attainable by the ten-lined spearman will be found in its natural cannibal and parasitic insect enemies.

One of the best informed agriculturists of Illinois has estimated the damages arising to the citizens of that State from the ravages of this bug, since its first appearance, at forty millions of dollars.

POISONED BY A POTATO BUG.

The Walworth County Independent, published at Elkhorn, Wis., gives an account of a farmer's daughter, living near that place, who while killing potato bugs was suddenly seized with a violent pain in her finger which soon extended to the arm, and her arm became swollen very rapidly. She went to the house and a physician was sent for. When he arrived, some two hours after, the arm was the color of mahogany, and was swollen to a fearful extent, the swelling extending to the shoulder. Prompt remedies were applied to relieve the poison, and the girl is now recovering. She had a slight sore on her finger and the poison was probably conveyed to the arm through it. It was a very dangerous type of poisoning, and people should be exceedingly careful how they come in contact with the potato bugs.

WILL IT PAY TO RAISE POTATOES.

This very important question should be discussed now, if ever, when the potato bug is against every man, and every man against the potato bug. Let us begin if you please by telling each his experience in the matter, and in the end we may hit upon the right solution of the query. This is the third year that I have abstained from planting a potato,—and, although the bugs are rapidly disappearing, they are still to be seen crawling about my garden in hated numbers.

All the anti-bug remedies in use were used, including picking, and that without effect.—The potatoes grown were the newest varieties introduced from year to year, my object in growing being to test them. The deduction I make from my own experience is—that in order to get rid of the bug by abstaining from planting the potato, not one year, but probably several years of such abstention may be necessary. That this can be done by our farmers with economy, is equally clear to me, since, if I am correctly informed, there is a large area of land in this state where the bugs are unknown, or their depredations but light, and from which the affected parts of the state could be supplied. This is just what took place last fall, and seems to indicate the future. Is it better to buy and eat potatoes from our neighbor, or to continue to plant them—to give them time, labor and money, and have none to eat?

With regard to the present remedy—Paris Green—those who use it should know that it is loaded with arsenic. I speak knowingly of the article sold under this name. This says Prof. Daniells, "ought never to be put upon the soil."

The Professor's views upon the effects of arsenic upon the soil and upon the potato would be of great interest to the farming community. Will he please favor us?

Another question: Does any one know whether the potato bug has ever vacated the land he has once invaded? From all I can learn he marches not only to occupy but to hold.

JOSEPH HOBBS.

—An article by Prof. Daniells, in this issue, gives his reasons for objecting to the use of Paris Green. We think Dr. Hobbs must be misinformed as to one point. We do not know of any considerable area in Wisconsin—where potatoes are grown—in which the Colorado beetle has not made its appearance. In some places it appears in greater numbers than in others. We are not sure that the advice given is not wise.—Certainly it is better not to plant potatoes, than to plant them, give them considerable care, and then abandon them to the beetles. We would strongly impress upon any one who proposes abandoning his potatoes to the bugs, the duty of plowing them up, covering the vines—and so of tomato and egg plants. No plant should be allowed to stand, serving no other purpose than to supply food for and increase the number of this great pest.—*Western Farmer.*

THE USE OF PARIS GREEN.

Paris Green is Scheele's Green (arsenite of copper) adulterated with barytes, gypsum, or carbonate of lime. Scheele's Green contains 29 per cent. of copper and 71 per cent. of arsenious acid—the white vitriol substance sold by druggists as arsenic. Paris Green then is a dangerous poison. It is insoluble in water, hence when put upon the land becomes as permanent an ingredient of the soil as if it were so much sand.

There is no evidence to show that plants ever take this substance into their circulation, and the laws of vegetable physiology would lead us to believe that if they do so at all it must be in the smallest quantities. Notwith-

standing this fact of the amount use upon an beetle for one that he is will active poison soil, upon his use of it him. It is not mere What is to be the future? but no one can upon the subj. There are t Often objected those who use same, do not not past when upon the plan At least it ca cially brought Paris Green a deadly poi one of its those slow stantly at w gredients of University

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POTATO Scotlan potato is of the toe is g planting die out; are the health a ion, and in view theory An im Patters new va steadily and the ous new the fail

standing this fact, let a man make a calculation of the amount of this substance he will use upon an acre in destroying the potato beetle for one year, and then satisfy himself that he is willing to sow that amount of an active poison which must become a part of the soil, upon his land, before he continues the use of it himself, or advocates its general use. It is not merely a question of the present.—What is to become of this mineral poison in the future? It may never be a source of evil, but no one can avoid feeling a little distrust upon the subject.

There are the main reasons why I have so often objected to its use, and I still feel that those who use it, and advise others to do the same, do not fully realize that the danger is not past when the substance has been sifted upon the plants and no one has been poisoned. At least it cannot be too often or too emphatically brought before the public that in using Paris Green they are sowing upon their land a deadly poison which will remain there as one of its constituents, unless removed by those slow natural solvents which are constantly at work decomposing the mineral ingredients of the soil. W. W. DANIELLS, University of Wisconsin, June, 1871.

PARIS GREEN AND ITS EFFECTS.

It is well that the subject of Paris Green as an insect destroyer promises to be well ventilated, as it is now being used so extensively. But what we want are the facts as regards its effects on vegetation, and if there is danger to life or health in the use of it let it be shown up. Three or four years' use of it in a community would seem to develop the danger, if any, but as yet I have seen nor heard of none in these parts.

I see that Prof. Daniells asserts that the quality of the potato is injured by its use; it may be, but how? Is it absorbed by the vines and carried to the tuber? I heard this so stated three years ago, but the person so believing then uses the article now, and has no fear of injury either to the potato or those eating them.

Others as well as myself have raised as good a quality of potatoes where the poison has been used as could be wished; but the past season the quality of them of all sorts was inferior, which may be safely attributed to the hot season rather than to the effects of the poison.

As regards the degree of strength necessary in using to kill the beetle, I can say that I know from experience, both the present season and the last, that if reduced thirty times it will kill the beetles, but it requires time enough for them to eat the leaves to which it is applied before it takes effect, for their coat of mail is impervious to poisons. Yesterday I put some of them into diluted carbolic acid, and twenty-four hours afterwards many of them were alive and kicking. But when the Paris Green mixture is applied to the younger bugs or grubs it takes effect immediately, and adheres to them and is absorbed. A friend of mine, who is reliable, says he has reduced it forty times, and it had the effect on the young, but not as quickly, yet I doubt if it would be sufficiently strong to kill the old.

I hope there are some who, with a well-developed crop of curculios on their trees, will try the effect of the Paris Green mixture on them. If they find it effectual in destroying the "Little Turk," and saving some of their fruit, they will not be obliged to eat it if they think there is danger of being poisoned, but they will have the satisfaction of having used up the enemy, and no seed sown for a crop of them another year. Berlin, Wis. G. N. SMITH.

DETERIORATION OF VARIETIES OF POTATOES.—Mr. W. Patterson of Dundee, Scotland, after experimenting with the potato for many years, and in many ways, is of the opinion that any variety of potato is gradually weakened by repeated planting, and that each would ultimately die out; new kinds produced from the seed are the only hope of preservation of full health and vigor. This is not a new opinion, and it certainly is reasonable, not only in view of observed facts, but because the theory is based on good sound reasoning. An important suggestion made by Mr. Patterson is that this work of producing new varieties from the seed should go on steadily, not waiting until varieties fail and then attempt the production of vigorous new varieties from seed produced by the failing variety.

How to Have Good Mutton.

The sheep is a delicate feeder, and makes one of the most delicious and digestible of all the butchers' meats. Like most animals, it improves in flavor by age, and attains its perfection, in most breeds, at the age of three years, when it makes, in Daniel Webster's language, red-mutton—so called because the gravy, though well done, is red and of high flavor. In feeding sheep for the luxurious table, there should be but few together, which allows them greater variety of food and more repose. In large flocks the strong sheep monopolize the best herbs and grasses, and the weakest ones are poor and mean meat; besides, there are always restless sheep where many feed together, and the others are ill at ease while any are on foot. Sheep well-grazed are better than the stall fed, and have that "gamey" and juicy flesh so liked by epicures. The best table sheep in the British-isles are the small Welsh breed, which have the wide range of those mountains.

But the best sheep in the world are often spoiled by bad butchering, and I propose to show how this should be done. Many persons become disgusted with, and never eat, mutton, because of what they term the "wool-taste." Now, a sheep well dressed, may be wrapped in the skin and wool, as well as in the purest linen, and never have a "wool flavor." The intestines of the sheep are, like those of all the ruminating animals, very long and powerful in capillary absorption; and, if allowed to remain in the body after death, infuse the odor and flavor of their contents into the meat, and thus give that ill taste. Everything, then, depends upon rapid dressing. While yet alive, the sheep should be suspended by the hind legs, well apart, to two pegs or hooks, to a cross-timber, so that the body may be easily reached on all sides without turning it. The butcher should be prepared, with a sharp knife, ax, meat saw, thread and water; also, with a block, or low stool, to stand upon, if need be; for the sheep, when suspended, is too long generally to be reached in all parts. The throat should then be cut, severing both arteries, and the blood entirely let out. (If Professor Bergh is about, the animal may be knocked on the back of the head with the pole of the ax before using the knife.) The skin should then be rapidly taken off, at least from the parts to be cut in taking out the intestines, and pinned back, so as freely to allow that operation. This finished, the blood should be well washed out by casting on the body clean water freely. Should the intestines at any time be broken, let them be tied up at once, and the soiled parts well cleaned.

The body should then hang until it is well dry, when it is ready for use. Mutton (and all meats) never ought to be salted, if possible, until it is ready for the cook. Salt absorbs the juices, dries and preserves the meat, but spoils the flavor. Meat should be hung in a cool, dry place, so that all parts may be aired. Do not allow it to become frozen, but if frozen, it should be used at once, if possible. In some parts of Mexico, beef will hang in the air for weeks in the warmest weather, because of the dryness of the climate. The Indians and hunters dry their meats with slow fires.—Am. Agriculturist.

BOUGHTON WHEAT.—The Boughton is not a new variety. We have known it in Western New York for a dozen or fifteen years. It was introduced there from Maryland. It ripened early, and could be grown in sections where the Soules was seriously injured by the midge. It never became, however, a favorite variety. On good, rich land it produced a fair crop of handsome wheat, but in unfavorable seasons, or on poor, undrained land, it was apt to winter-kill. The Diehl has all the good qualities of the Boughton, and is early enough to escape the midge, and is not so liable to winter-kill, or be smothered by heavy snows. We believe the Tappahanoeck, Boughton, and Early May are one and the same variety.

Conjugal Attentions.

The duties of husbands are thus laid down in a discourse by the Rev. Dr. William Aikman:—"The first duty of husbands is to sympathize with their wives in all their cares and labors. Men are apt to forget, in the perplexities and annoyances of business, that home cares are also annoying, and try the patience and strength of their wives. They come home expecting sympathy and attention, but are too apt to have none to give. A single kindly word or look that tells his thought of her and her troubles, would lift the weight of care from her heart. Secondly—Husbands should make confidants of their wives, consulting them on their plans and prospects, and especially on their troubles and embarrassments. A woman's intuition is often better than all his wisdom and shrewdness, and all her ready sympathy and interest is a powerful aid to his efforts for their mutual welfare.—Thirdly—Men should show their love for their wives in constant attention, in their manner of treating them, and in the trifling offices of affection which may be hardly noticeable, but which make all the difference between a life of sad and undefined longing, and cheery, happy existence. Above all, men should beware of treating their wives with rudeness and incivility, as if they were the only person not entitled to their consideration and respect.—They should think of their sensitive feelings and their need of sympathy, and never let the fire of love go out, or cease to show that the flame is burning with unabated fervor."

Keeping Poultry in Orchards.

A writer in an exchange says the public has yet to learn the full advantages of keeping poultry. Few seem to appreciate what they may do among trees in an orchard of a quarter of an acre, where they may be kept by a picket fence four or five feet high, putting in say 125 fowls, and observe the result. He will avoid the annoyance in the garden of which so many complain, while they will work among the trees, doing just what is needed; keeping the ground well cultivated, and destroying everything that can injure the fruit, in the shape of bugs, worms, or other insects; lay a large number of eggs, which are a cash article, to say nothing of the chickens which will pay for raising at the present time. I have about 100 fowls, which have worked admirably among my trees, keeping the ground in good condition, keeping off the insects, and promoting the growth of the orchard. I am satisfied that we have yet to learn the full benefit which may be derived from the proper management of fowls, and it is quite possible that the method that I have suggested may offer the best way of getting your apple orchard into bearing condition again.

Swamps—Drainage.

A proper degree of draining tends to protect crops from injuries which are the result of excess of moisture, and contributes materially to ensure their success. This operation alone, has often been sufficient to render extensive sterile plains exceedingly fertile.

There are probably very few farms of any extent, on which drains are not more or less necessary. Swamps and bogs exist in most sections, and those can never be profitably worked, or rendered of any essential benefit to their possessors till they have been thoroughly ameliorated by opening channels for the passage of all the superabundant water they contain. Draining, in this case, must necessarily precede all other improvements, and if it be not thoroughly and systematically accomplished, the operator will find all his subsequent efforts of no avail.

As an instance of successful and economical draining, we may mention the case of the Rev. D. Huntington, from whose communication to the committee of the Hampshire and Hampden Agricultural Society, we gather the following facts:

"A few years since," says Mr. H., "this land was a swamp covered with bogs and brakes and bushes—the haunt of snakes and frogs and mud-turtles—an entire waste." It was not only useless, but being located in the immediate vicinity of his homestead, was a constant eyesore, and probably unhealthy. In reclaiming it, he first cut the bushes, and then opened a ditch three feet wide, and two and a half feet deep, extending through its whole length. The bog-heads were then cut, taking off the entire surface where it was thought to be necessary, and removed to an adjacent lot, the soil of which was sandy. Here they were made to act as manure, and being intimately mixed with it, they soon so far improved its capacities, as fully to recompense him for the cost and trouble involved in their removal.

The greater part of this soil has had crops upon it, and some parts repeatedly, and the whole, at the time the report was presented to the committee, was fit for the plow. What the expense was, Mr. H. expresses himself unable to state, but was confident it bore no proportion to the improved value of the land. The cutting the bushes, opening the ditch and removing the "bog-heads," could not involve a very heavy outlay, as the work was performed at "odd jobs," and when, probably, the men had nothing else to do. The Northampton Courier, in speaking of this subject says:

"As to intrinsic value, lands thus redeemed are to be ranked with the very best. For some crops, broom-corn and beans for instance, other soils are preferable. But for the standard, substantial crops of Indian corn, potatoes, oats and different kinds of grasses raised in our valley, experience will show abundantly, that we have no better lands than those thus reclaimed. Having nothing in view but to subdue and improve them as well as possible, he has never been particular to ascertain precisely the quantity of crops raised. Compared with those raised on the alluvial lands adjoining, however, they will in the proper season of crops, speak for themselves and the soil that produces them. In some respects the soil of reclaimed lands has manifestly the advantage. It is naturally richer. Having for its basis clay or hard pan, it retains the manure put upon it much longer. It is easily cultivated, and excepting those portions of the alluvial which are benefited by freshets, it is, to say the least, as easily kept in good heart."

Covered ditches are used to a considerable extent, and answer all the purposes of draining admirably, while they may be plowed over and cultivated as are other parts of the land, so that there is no loss of surface and no disfigurement of the fair face of the field.

These drains are constructed of various materials. They will last for many years made of brush laid lengthwise in the ditch; but if a gullet is made at the bottom six inches square by setting, and the ditch filled with small stones to within twelve inches of the top of the ground it will make a ditch that will last a lifetime.

Brush drains may answer the desired purpose, where stones cannot be obtained; yet, we question whether it would be best to lay down such works where permanent drains are required. A field drained with good and permanent covered drains, presents a neat appearance; there are no ridges or gutters, but the entire surface is level and unbroken. A cheap and convenient article may now be had in *draining tile*, which possesses a permanent efficiency and value. It is made of various sizes, with and without bottoms, and some of it perforated on the sides so as to receive the water at whatever point it may flow in upon them.

We have covered drains across a twelve acre lot, diagonally, made of stones, with a six inch gullet, which has supplied us with twenty hundred gallons of pure water every twelve four hours through all the late drought. On the ground thus drained we have just cut, by the estimation of good judges, a crop of hard grass, red top and clover, equal to three tons to the acre, where two years ago only one ton of meadow grass, skunk cabbage, hardhack and hassock grass grew.

Where stones are plentiful on the farm, they are the material we ought to use in under-draining. If stones cannot be had, draining tile, which can now be obtained at most of our Agricultural warehouses, are far more preferable than wood, and will be found more efficient, as well as more profitable, in the end.—N. E. Far.

A gentleman relates that many years ago he was on a visit to the Isle of Man, and during his walks he strolled into the quiet churchyard, where reposed the bodies of many a faithful and humble Christian. Near a grave in the corner of the churchyard he noticed a lady with a little girl (the latter about twelve years of age) to whom she was relating the story of the Dairyman's Daughter, whose remains lay beneath their feet. As the lady proceeded with the narrative, he observed the little girl lift up her eyes filled with tears, and heard her say that she would try and be as good as the Dairyman's Daughter had been. After planting a beautiful lily on the grave, they walked slowly away. The gentleman, upon making inquiry, found that the lady was the Duchess of Kent, and the little girl her daughter. The latter is now the Queen of England.

CURIOUS CASE AT LAW.—At a recent sitting of the Division Court at Catawaqui one farmer sued another for damages, laid at \$10, done to his horses' tails. The plaintiff had three horses in pasture, and in this pasture his neighbor's calf was allowed to feed. The calf eat off the tails of the three horses. The owner of the calf knew its propensity, for it had previously eaten the tail off his own horse. The Judge at once allowed the amount claimed, and thought the amount low.

Barren Apple Trees—How to Make Them Bear.

"Through the kindness of the Hon. John Whittlesey, the *Herald* is able to lay the following important fact before our readers:

"First, the Northern Spy, Red Astrachan, and a number of other choice varieties of apples, have failed through this region to bear apples, although ten or fifteen years old. Two years ago, Dr. Hull, of Alton, delivered a lecture at Benton Harbor, in which he recommended root-pruning. Mr. O. A. Winchester, of St. Joseph, of Archer & Co.'s Nursery, had ten Northern Spy apple trees, thirteen or more years old, which had never blossomed, or born a crop. After the lecture, though late in the season, he directed his man to root-prune one tree, and half root-prune another. Last year, no favorable results appeared, probably from the lateness of the root-pruning. This year, the tree which was root-pruned all around, is full of blossoms, while that side of the tree half root-pruned alone is full of blossoms, the un-root-pruned side having none at all. Every other Northern Spy apple tree, as usual, contains no blossoms.

"This single fact should lead our orchardists to try the experiment this season. Now is the time to begin, and the work of root-pruning should be finished by the first of June."

Management of Fruit Trees that Bear Every Alternate Year.

It is common for many fruit trees to yield a crop of fruit only once in two years. Some pomologists have assumed that the fruitful year always occurs on a season designated in the calendar by an uneven number; and the observations of others have been confined to trees that have yielded fruit during the season represented by an even number in the computation of centuries. Thus far in the progress of scientific pomology, no plausible reason has been adduced to show why the fruitful season may not occur during a year designated by an even or an uneven number. The fact that fruit trees, which have been accustomed to yield a crop what we denominate to be an "odd year," have been so managed as to produce the accustomed supply on an "even year," assures pomologists that the fruitfulness, or want of productiveness, is not influenced either way, by the season represented by an odd or an even number.

The presentation of a few pomological facts touching this subject, will assure us beyond all doubt, that the fruitfulness of a tree—aside from certain causes beyond the control of mortals—is subject to familiar pomological laws, which every intelligent pomologist understands. It is understood that the fruit buds of an apple tree, from which the crop of apples must be produced during the season of 1871, were formed in the growing season of 1870. If there had been any occurrences to prevent the formation of fruit buds in 1870, the tree could not produce fruit during the season of 1871. It is well understood, also, that when a tree is growing rapidly, it cannot yield a bountiful supply of fruit; and when every branch and twig bends with a heavy crop, the spray and the buds cannot be expected to make more than a small and feeble growth. Hence, so large a proportion of the vital energies of the fruit tree bearing a heavy burden of fruit, is employed in the development of the crop, that the buds for the crop of the succeeding season cannot be properly unfolded. Therefore the season following the year of an abundant crop is appropriated solely to the development of fruit buds; and as there is no fruit requiring the energies of the tree, the whole vital force is concentrated in producing wood and fruit buds. The next season, whether the year be odd or even, nature having made preparation in buds, there will be a bountiful crop of fruit; and if none of the buds or young fruit are broken off, all the vital powers of the tree will centre towards the full development of the fruit, to the serious neglect of the crop of buds.

An intelligent friend has a valuable apple tree, which yielded a bountiful crop of apples once in two years. He expressed a desire that pomologists could have sufficient skill to make that tree bear a moderate crop of fruit every season, rather than a heavy crop one year and nothing the next, as the variety was so excellent, they greatly desired a small supply, at least, every season. He was assured that if he would whp off all the blossoms on one half the tree-top, the portion defoliated would yield a supply the next season. As he knew that if the tree produced fruit on only one half the top, there would be more than his family could make use of, he

reluctantly tried the experiment, in the success of which he cherished no confidence, and whipped off every blossom to be seen within the area of about half of the top. The result was just as it always will be under similar circumstances; there was a supply of fruit, the following season, on that part of the tree from which the blossoms had been removed, while the other portion of the branches yielded no fruit.

The same result could have been attained by whipping off one half or more of the blossoms over the entire tree. By removing the blossoms the specimens of fruit would have been greatly lessened. Hence the energies of the tree would have been adequate to the perfect development of the limited crop, and also to the preparation of the fruit buds for the crop of the succeeding season.—S. Edwards Todd, in *Tilton's Journal of Horticulture*.

LOSS OF HAIR IN HORSES.—The following is very useful in cases where there is falling out of the hair of the mane and tail, viz:—Glycerine two ozs., sulphur, one oz., acetate of lead two drachms, water eight ounces. To be well mixed, and applied by means of a sponge.

Swindling Honest Farmers.

We copy the following from the *Williamsport Daily Gazette*, and it suggests three points for caution to all farmers, namely, to be careful never to do no business with other than truly honest and honorable men, no matter how good a bargain is promised; secondly, keep out of the way of entire strangers; and thirdly, be careful about signing your names to any papers, unless dealing with old neighbors, or those whose integrity is established.

Among the many swindling operations of the day, the patent right dodge is largely practiced on farmers, and we have heard of several cases in this county within a year. The following note is a copy of one now in use by these sharpers. It will appear at first sight to be very simple, and no person wishing to take an agency for any of the many patents, would hesitate to sign it:

SMITHVILLE, PA., April 15th 1871.

One year after date, I promise to pay A. Sharp or order, Two Hundred and seventy five dollars for value received, at ten per cent. per annum, payable at Smithville, Pa.

Witness: JOHN DOE.

Now, having read the above carefully, and supposing it to be all right for ten dollars, just cut it in two between the words "or" and "bearer" in the first line, and you find that the left-hand piece is a perfect note for \$275. Having induced a farmer to accept an agency, as specified in the original note, and having obtained his signature, the sharper departs. He then cuts off the right hand portion, proceeds to the nearest broker or banker, to whom he offers to sell the note at a discount on the plea of needing the money. The signer is generally a responsible person, well known to business men of the village, and the note is purchased. When the note falls due it is presented for collection, and as the signatures are indisputable, the honest farmer is compelled to pay \$275, when he only supposed that he owed ten dollars.

This is one of the most infamous of all tricks of deception, and is largely practiced throughout the country. Farmers should cut this out and preserve it carefully, in order to guard against being imposed upon by unscrupulous scoundrels.

Crops for Soiling.

The articles in *THE RURAL HOME* urging farmers to grow some crops which yield more food for stock than those in general cultivation will call the attention of thoughtless farmers to a very important branch of their business. Cabbage is mentioned as one crop that might be grown with profit, and for late fall and early winter feed, I have no doubt it would prove highly remunerative. I have often fed cabbage to cattle, in a small way, and know that it is very superior food for such cows. It is also excellent for store hogs, and if one was cooking food for fattening hogs, I think cabbage might be put into good advantage.

But what I wish now to urge particularly on farmers, is the profit of having various crops which may be used for soiling, or helping out if the pastures get short, during the summer and fall. One does not wish to devote more land to pasture than is necessary on a medium-sized farm, where grain growing is the main business, and it is unfortunate too, if the pasture comes short of supplying the demand made on it. We can guard against both these contingencies by having a reserve of food which may be cut and fed to cattle either on their pasture or in the yards or stables. This supply of food should be such that it may be

saved for winter use in case it is not needed before.

Clover is the most convenient, and the earliest forage plant for use in the first half of summer. A small piece should be on hand near the barn, to cut for the teams and cows, if June pasture is not sufficient, and in any case it will be found extremely handy for the teams if they are hard worked. A piece can easily be cut over twice, and if there is a surplus, it is where it can be readily made into hay and stored under cover. One acre of good clover feed in this way is equal to four or five acres in pasture.

Next, a patch of corn, sown in drills, should be prepared for later use. One acre of this for late summer and early fall use, is equal to seven or eight acres of pasture at that time of year. One acre to a dozen head of cattle will help out largely if the season should turn dry; and if, otherwise, and the pastures are sufficient, it will make a large quantity of winter food. In either case there can be nothing lost, but much may be gained.

For the Farmer's Advocate.

Home.

By I. F. INCH.

Poets have written and choristers sung
Of the beauties and pleasures of home,
Still 'tis a theme that never grows old,
Whatever the changes that come.

The house on the hill, O how dear is the name,
Then the old-fashioned orchard and farm;
The bridge o'er the brook, the spring by the
stone,
And old Ponto who watched us from harm.

Our fancy returns to the garden and lane,
Where we played in our infantine days;
To the Hawthorn that stood on the top of the
hill,
Where the birds sang their beautiful lays.

The trysting-tree, too, we must never forget—
It stands at the foot of the lane;
On its soft smooth bark our names we carved,
And promised to meet there again.

How to Produce Sexes at Will.

Although stock breeding has long been elevated to a science, and many valuable theories deduced as to the means of improving stock, yet but little has been accomplished in the way of regulating the production of the sexes, which oftentimes would be of incalculable value to the stock raiser. That such is not impracticable has been already demonstrated with considerable success. One of the first writers on the subject is M. Thury, Professor in the Academy of Geneva, who observed that the queen bee lays female eggs at first and male eggs afterwards; that with hens the first laid eggs give females, the last male products; that young bulls who meet the female at the first signs of heat generate heifers more frequently than old bulls, who are exhausted and do service later; that mares shown the stallion late in their period drop horse colts rather than fillies. Upon these observations he formulated the following law for stock raisers: "If you wish to produce females, give the male at the first sign of heat; if you wish to produce males, give him at the end of the heat." A celebrated Swiss stock raiser, son of the President of the Swiss Agricultural Society, Canton de Vaud, in publishing his experience in 1867, says, in speaking of the accuracy of this law: "In the first place on twenty-two successive occasions, I desired to have heifers. My cows were of Schwitz breed, and my bull a Jane Durham. I succeeded in these cases. Having bought a pure Durham cow, it was very important for me to have a new bull to supersede the one I had bought at great expense, without leaving to chance the production of a male. So I followed the direction of Professor Thury, and the success has proved once more the success of the law. I have obtained from my Durham bull, six more bulls (Schwitz Durham cows,) for field work, and, having chosen

cows of the same color and height, I have obtained perfect matches of oxen. My herd amounted to forty cows of every age—in short, I have made in all twenty-nine experiments of the new method, and in every one I succeeded in the production of what I was looking for—male or female. I had not one single failure. All the experiments have been made by myself, without any persons intervention; consequently, I do declare that I consider as real, and certainly perfect, the method of Professor Thury."

It is sufficient to say that experiments on the same law have been tried by other eminent Agriculturalists with equal success.

Hundreds of our readers will doubt and even ridicule the idea as thousands before them have doubted other good discoveries. To show again how prejudiced mankind is against any novelties, we quote the following as illustration:—

POTATOES IN FRANCE.

It is reported that one day, in the laboratory of Mayer, a potato was put into Parmentier's hand for a chemical purpose. He examined it with attention, and enquired of the Professor whether it was employable as food. "For Pigs," said the Professor. "Ah," said Parmentier, "pigs are no bad judges—they discovered truffles; why not follow their example in this respect also, and eat potatoes?" The Professor assured him that the root was quite unfit for human food. But Parmentier was not to be dissuaded from making the investigation. Inviting two or three friends to assist in the investigation, he boiled a pot of potatoes, and enjoyed them much. Louis XVI and his Queen had a dish of potatoes served at table, and found them, as Parmentier had declared, an excellent vegetable. But their introduction brought upon him some angry criticisms from the "friends of the people," who declared that the common people were—thanks to Parmentier—to be fed on food for swine. Happily, this prejudiced view of Parmentier's intention subsided, and the potato became an "institution" of the dinner-table in France as well as England.

How to destroy Insects in your Orchards.

The address of J. W. Robson before the Jo Daviess County (Illinois) Horticultural Society, has some excellent points relating to orchard culture, and especially the depredations of insects, and he recommends every orchardist to observe these few details every season.

1st. Encourage the black-cap titmouse and the hairy woodpecker, which destroy the insects in the pupa state.

2nd. Light small bonfires in the orchard, on dark nights, after the sun has set. This will destroy the moth.

3rd. Pick up wormy fruit as soon as it falls, run it through the cider mill, or throw it to the hogs to be eaten.

4th. Strips of wooden cloth tied around the trunks when the trees are in bloom, and examined twice a week, will destroy those that have escaped and crawled there for shelter. They will be found generally in a transformation state, between worm and pupa.

5th. Place a bunch of weeds or soft hay in the crotch of the trees at the same time, and examine frequently. You have only to look at these dishes of beautiful fruit, to see how this insect destroys the appearance and lessens the market value of the apple.

Brother Horticulturalists, up and be doing, bearing in mind that eternal vigilance is the price of handsome perfect fruit."

HE who does his best, however little it may be, is always to be distinguished from him who does nothing.

Youth's Department.

Answers.

TO PUZZLES IN JUNE NUMBER.

Correct answers returned; No. 1. J. A. Ayerst, Talbotville; Maggie G. Brown, Bryanston; James A. Potter Berlin. 2. Bella, Maggie G. Brown, J. A. Potter, J. A. Ayerst. 3. Maggie G. Brown, Bella. 4 and 5. Bella and J. A. Ayerst.

1, Pumpkin. 2, Parsnip. 3, Carrot. 4, Monosyllable. 5, Mistake.

TO ENIGMA.

Bella, J. A. Ayerst, James A. Potter, Maggie G. Brown. Nest.

ILLUSTRATED REBUS.



Something Pleasant.

WORD PUZZLE.

2 My first's in the past, not so in the future, Second connecting all nations, but not found in nature, Third, seen in the tempest but never in calm, Fourth, ne'er found in field, but exists in the lawn, Fifth, seen in the lightning and heard in the thunder, Sixth, not in either, but awakens in wonder, One third of the sea my seventh does make, In forming all worlds my eighth does partake, My whole's furnished with eyes, yet never did see, Only reared in the dark, what then can they be?

PUZZLE.

My first most eagerly is sought; Given free by some, by others bought; Oft gladdens and oft grieves; And sore the sufferer's heart it wrings, Yet often pleasure with it brings, The would it makes relieve.

My second is of various makes, And various are the hues it takes Is a chameleon true; For when by some tis seen as green, By others tis as plainly seen Red, white, and even blue.

My whole, a medium for my first, By its own kind is often curst, With spite and bitter spleen The Governor is by their asseveration The most virtuous men in all creation - But that's not so, I ween. CONSTANT READER.

ENIGMA.

I am composed of six letters; My 2, 3, 5 is a conjunction; My 5, 4, 3 is a boy's name; My 6, 5, 4 is a girl's name; My 1, 2, 3 is a vessel; My whole is the name of a country.

BELLA.

The Whole Art of Kissing.

People will kiss, yet not one in a hundred know how to extract bliss from lovely lips, no more than they know how to make diamonds from charcoal. And yet it is easy—at least for us! This little item is not alone for young beginners, but for the many that go at it like hunting coons or shelling corn. First know you are to kiss. Don't make a mistake, although mistakes may be good. Don't jump up like a trout for a fly, and smack a woman on the neck, on the ear, on the corner of the forehead, on the end of her nose, or slop over on her waterfall or bonnet-ribbon, in haste to get through.

The gentleman should be a little the tallest He should have a clean face, a kind eye, and a mouthfull of expression instead of tobacco. Don't kiss everything, including little dogs, male or female. Don't sit down to it. Stand up! Need not be anxious to get in a crowd. Two persons are plenty to corner and catch a kiss. More persons spoil the sport. Stand firm. It won't hurt any after you are used to it. Take the left hand of the lady in your right hand. Let your hat go to any place out of the way! Throw the left hand gently over the shoulder of the lady, and let the hand fall down upon the right toward the belt. Don't be in a hurry. Draw her gently toward your loving heart.

Her head will fall lightly upon your shoulder and a handsome shoulder-strap it makes! Don't be in a hurry; send a little life down your left arm, and let it know its business. Her left hand is in your right hand. Let there be expression to that—not like the grip of a vice, put a gentle clasp, full of electricity, thought and respect. Don't be in a hurry; her head lies carelessly on your shoulder! You are nearly heart to heart! Look down into her half-closed eyes! Gently but manfully press her to your bosom. Stand firm, and Providence will give you strength for the ordeal. Be brave, but do not be in a hurry.

Her lips almost open! Lean lightly forward with the head, not the body. Take good aim! The lips meet—the eyes close—the heart opens—the soul rideth the storm, trouble and sorrow of life (don't be in a hurry!)—heaven opens before, the world shoots from under your feet as a meteor flashes across the evening sky (don't be afraid!)—the nerves dance before the just created altar of love as zephyrs dance with the dew-trimmed flowers—the heart forgets its bitterness—and the art of kissing is learned!

No noise, no fuss, no fluttering and squirming, like a hook-impaled worm. Kissing don't hurt; and it don't require a brass to make it legal. Don't jab down on a beautiful mouth as if spearing frogs! Do not muss her hair, scratch down her collar, bite her cheek, squizzle her ribbons and leave her mused, ruffled and flummoxed! Don't grab and yank the lady as if she was a struggling colt!



Husband:—What do these certificates amount to?

Wife: They prove that Perry Davis' PAIN-KILLER is safe to use under any circumstances—that it is not only a Liniment to rub on Bruises, Cuts, Scalds, Burns and external complaints with unfailing relief, but that it has done miracles in curing Colic, Cramps, Spasms, Heartburn, Diarrhoea, Dysentery, Sour Stomach, Dizziness, Sick Headache; and also, it was the PAIN-KILLER that cured John Sparkler of the Fever and Ague; you know he had it over a year.

Husband:—Did it cure any Rheumatism about here? I am more interested in that than I am in fever and ague.

Wife:—You had better go over to Judge Jones and see the certificates for yourself; there is no question but what they are convincing, and I don't think he has returned them to Providence, R.I., where Perry Davis & Son's head office is.

Husband:—I am really getting interested in the PAIN-KILLER, my dear, and I will call on the Judge to-day, for my Rheumatism is quite unbearable.

(To be continued.)

The PAIN-KILLER is an internal and external remedy for pain. For internal pain, Cramps, Spasms, Sudden Colds and Bowel difficulties, a few drops in water will give immediate relief. As a liniment, it is without an equal; it stops pain almost instantly. Be sure and get the genuine made by Perry Davis and Son, and sold by all Druggists and Grocers.

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Anglo-American Hotel, KINGSTON, CANADA, E. MILSAP & CO., Proprietors.

THE Proprietors take pleasure in informing their friends, and travellers either for pleasure or on business, that they have newly furnished this elegant Hotel, where they will find every comfort and accommodation. Guests will find this the most pleasant and desirable stopping place in the City, 71-4

To Nebraska, California, Kansas, and the B. & M. R. R. Lands.

The starting points of this route are at Chicago and Peoria. The central point is BURLINGTON, on the Mississippi. It traverses Illinois and the whole breath of Southern Iowa. Near the Missouri, its trunk forks into three branches, for it has three western termini.

Its northern terminus is Council Bluffs, where, crossing to Omaha, it connects with the Union Pacific for all places on the inter-continental and Pacific slopes. Over-land travel and traffic choose this reliable route more and more.

Its next terminus is Lincoln, the Capital of Nebraska, fifty-five miles west of the Missouri at Plattsmouth. This is the only direct avenue to the South Platte country, where the sales of railroad land last season, rose to half a million.

Its third terminus is at Hamburg, it makes close connections, twice a day, for St. Joseph, Leavenworth, Kansas City, and the whole South-west.

In journeying then, from the East to Kansas, via Burlington, you enjoy advantages you can secure on no other line. You both pass over a road second to no other in speed, safety, or any Pullman luxury of modern travel; and while on your way, survey the garden of Illinois and Missouri, as well as 400,000 acres of prairie in South-western Iowa, now in market at low prices and long credit. 71-6-6 f.

Great Western Railway.

GOING WEST.—Steamboat Express, 2.45 a.m.; Special Express, 5.00 a.m.; Mixed (Local), 7.10 a.m.; Morning Express, 12.50 p.m.; Pacific Express, 2.35 p.m. GOING EAST.—Accommodation, 6.00 a.m.; Atlantic Express, 8.40 a.m.; Day Express, 12.35 p.m.; Detroit Express, 4.00 p.m.; Night Express, 11.25 p.m.;

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, 3.10 p.m.

London Markets.

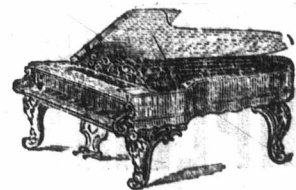
LONDON, May 30, 1871.

Table with columns for Grain (White Wheat, Red Fall Wheat, Spring Wheat, Barley, Peas, Oats, Corn, Buckwheat, Rye) and Produce (Hay, Potatoes, Carrots, White Beans, Apples, Dried Apples, Hops, Clover Seed, Flax Seed, Cordwood, Fleece Wool) with prices listed.

HO FOR MANITOBA!

FOR SALE IMMEDIATELY, 100 Acres of Land, six miles from London, on a gravel road, 70 acres cleared, 30 acres woods, Brick House, running stream through the farm. Price \$3,500 cash down. Also, 300 Acres of Land, 40 miles from this city, nearly 200 acres cleared, 100 acres woods, good frame Barn, Orchard, &c. \$6,500. For particulars of the above apply at the Agricultural Emporium, London. Many thousands of Acres, consisting of Farms and Wild Lands for sale. If you wish to purchase or sell, this is the medium for doing so. Charge only one per cent. No sale no pay.

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HEINTZMAN & CO.

Have taken all the Prizes and Diplomas for Pianos at Provincial Exhibitions of 1870, 1868, 1867, and every where when they have competed.

We invite comparison with the imported Pianos; AND BUYERS SAVE THE DUTY.

Sole Agents for Taylor & Farley's celebrated ORGANS, which have gained prizes over those of leading manufacturers in Boston, New York and Buffalo.

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Note the address— HEINTZMAN & CO., 115 & 117 King St. West, TORONTO.

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

Cutters & Sleighs in all Varieties.

Great Sale of Cutters & Sleighs on and after

FIRST OF DECEMBER, 1870

Warranted first class materials and workmanship. HODGINS & MORAN, Richmond St., near Crystal Palace. London, Nov. 19, 1870. 12-6m

Emporium Price List for July.

- IMPLEMENTS. Carter's Patent Ditching Machine, improved, \$130. Drain Tile Machine, \$200. Increased in power and generally improved. Collard's Harrow, \$12. Howard's Improved Harrow, \$22 to \$24. Lawn Mowing Machine, \$25 and upwards. Send for Circular. Seed Drills, \$5 to \$70. Taylor's Burglar and Fire Proof Safes, from \$35 to \$675. Jones' Amalgam Bells, for Churches, Factories, School Houses and Farms. From 16 to 36 inches diameter, \$10 to \$130, with yoke and crank, or yoke and wheel. American Amalgam Bells. Stump Extractor, \$50, \$75 and \$100. Reaping Machine, combined, \$140, single, \$80. Fraser's Hay and Grain Car, \$9. Paragon Grain Crusher, \$30, \$35 and \$40. Lamb's Knitting Machine, \$30 to \$75. Hinkley's Knitting Machine, \$30 to \$50. Tumbling Churn, \$4, \$5 and \$7. The celebrated Blanshard Churn. Sewing Machines—any stitch and all prices. Grant's Hay Fork, with Pulleys, \$12. Dana's Patent Sheep Marks, with name and number, \$1 per 100. Punches, \$1.25. Bound Registers, 50 cents. Sheet Registers, 8 cents. Clark's Cultivator. It is of light draft, very durably constructed, and does the work completely. Price \$34. Plowman's Patent Hardened Metal Plows, \$14 to \$16. Good Horse Powers, \$50. Do- with Wood Sowing Machine, complete, \$95. Best made. Thain's Drill Plough, \$16. Walsley's Potato Digger, with mould board; for drilling, earthing up and digging. \$16, \$20. Best Sulkey Horse Rake, \$40. One Horse Drill Plough, and One Horse Plough, \$5 to \$7.50. Beehives, - Louie's, Thomas' and Mitchell's,

SMITH'S IMPROVED AGRICULTURAL IMPLEMENTS

One, Two and Three Horse Thrashing Machines

With recent important improvements, which now makes this the most complete Thrasher in use.

HARPOON

Horse Hay Fork

The above is one of the greatest Labor Saving Machines yet invented in harvesting Hay or Grain, and, although but recently invented, are fast coming into general use.

CULTIVATORS

They are admitted by all who have used them to be the best and most complete Machine of the kind known.

The Wheels are so arranged as to rise and lower independent of each other, and can be set to any depth from one to six inches, and they can be removed from place to place on their wheels. The Teeth are plated with steel, and are so constructed as to be easily kept in repair.

EAGLE MOWING & REAPING MACHINE.

The celebrated Eagle Mowing and Reaping Machines, which are admitted by all Practical Farmers to be the highest of draught and best Working Machine yet introduced.

IMPROVED WOOD SAWING MACHINE

The subscriber begs to inform Agriculturists and Farmers, that he has now on hand an assortment of the above celebrated Machines, which he offers for sale at the

Lowest Possible Prices, and on the most

FAVORABLE TERMS OF PAYMENT.

These Machines have the latest improvements, and are so constructed as to give GREATER EASE IN DRAUGHT, AND DO MORE WORK than hitherto accomplished by any other Machine. They are of the BEST MATERIAL and Workmanship, are simple in management, and

Extremely Light and Durable They are recommended to parties in want of Machines with full confidence of their giving every satisfaction.

FARMERS

before buying elsewhere, are

Invited to Examine these Machines

Orders sent by Mail promptly attended to.

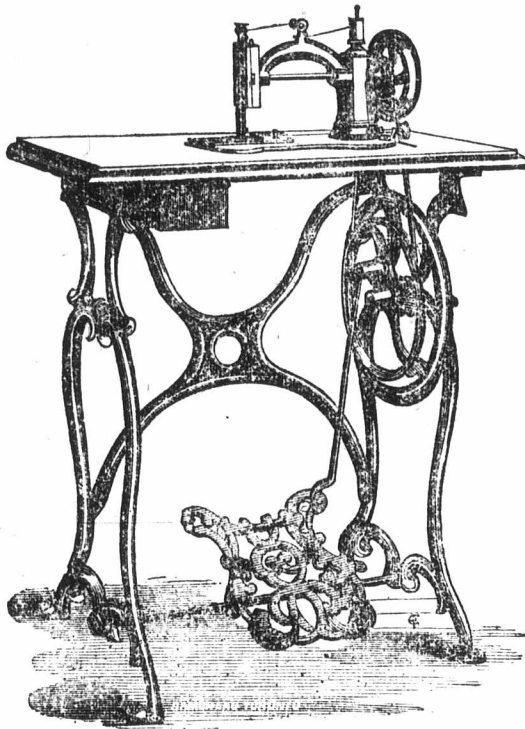
JOHN SMITH,

St. Gabriel Locks, MONTREAL.

June, 1871.

GATES' LOCK STITCH Shuttle SEWING MACHINE

For Family Use and Manufacturing Purposes.



Gates' Family (Singer) Machine, \$35.

Gates' Hand Shuttle Machine, \$25.

Gates' Hand Elliptic Machine, \$15.

Send for Circulars. Agents Wanted.

Salesroom No. 14, King Street East Toronto.

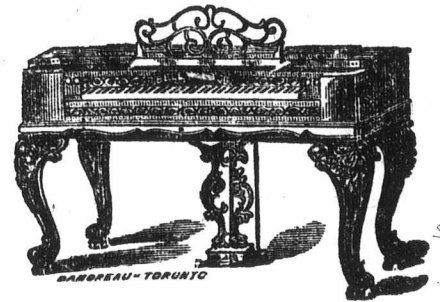
These Machines Sew with two Threads, and make the Lock or Shuttle Stitch, which is regarded by Manufacturers, Tailors, and the masses generally, as the best suited to all kinds of work. Our Family Machines are especially adapted to all Household Sewing; also for Dress, Shirt Bosom, Cloak, Corset, Cap, Vest and Pantalon Making; and will Hem, Fell, Tuck, Bind, Cord, Quilt & Gather in the most superior manner.

Awarded the First Prize at the Provincial Fair at London, Sept. 23rd, 1869. Upwards of 20,000 sold, the demand still increasing.

- 1. Economy of Thread. 2. Beauty and Excellence of Stitch, alike on both sides. 3. Strength, Firmness and Durability of Seam. 4. Wide Range of Applications to Purposes and Materials. 5. Excellence of Workmanship. 6. Simplicity and Thoroughness of Construction. 7. Noiseless Movement. 8. Speed, Ease of Operation and Management. 9. It will work as well after five years constant use as on the day when purchased. 10. Has been awarded the highest Premium wherever exhibited.

G. W. GATES & CO.,

Manufacturers, Toronto, Ont



A Diploma and Two First Prizes

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MELODEONS AND ORGANS GUELPH, ONT.,

At the late Provincial Exhibition in Toronto, viz.,

FIRST PRIZE on MELODEONS

And Diploma and First Prize on Harmoniums or Large Cabinet Organs.

Also, all the PRIZES at the QUEBEC PROVINCIAL FAIR, held in Montreal, September, 1870.

All instruments warranted for Five Years.

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GUELPH.

CHARLES THAIN,

MANUFACTURER of Ploughs, Harrows, Cultivators, Thain's Double Mould Plough & Turnip Sowers, Horse Rakes, Turnip Cutters, Churns, &c. First Prize Double Mould Plough at Provincial Show, Hamilton, 1868, at the Provincial Show, London, 1869, and at Toronto Provincial Show, 1870.

First Prize Two Row Turnip, Carrot and Mangold Drill, at the Provincial Show, Toronto, 1870.

Second Prize Two Horse Cultivator at the Provincial Show, Toronto, 1870.

Third Prize One Horse Cultivator, Toronto, 1870.

All Orders promptly attended to by addressing CHAS. THAIN, Eramosa Bridge, Guelph, Ont.

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Paid-up Capital, \$1,000,000 Rest, 60,000 Contingent Fund, 13,000

THE LONDON BRANCH OF MOLSONS BANK, Dundas Street, one door west of the New Arcade,

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.

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JOSEPH JEFFERY, Manager.

London, Sept 14, 1870.

THE SUPERIOR FENCE POST-HOLE BORER

WHICH TOOK THE EXTRA PRIZE At the late Provincial Exhibition in London. County and township rights for sale. Apply to

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GEO. P. ROWELL & CO., 40 Park Row, New York, and S. M. PETTINGILL & CO., 37 Park Row, New York, are sole agents for the Farmer's Advocate in that city, and are authorized to contract for inserting advertisements for us at our lowest rates. Advertisers in that city are requested to leave their favors with either of the above houses. W. WELD, Editor

CATERPILLARS.

FRUIT OR NO FRUIT

Farmers and Gardeners, Look out for Your CURRANT BUSHES AND FRUIT TREES.

The Chinese Garden Powder

Destroys all kinds of Insects, Grubs and Caterpillars on every description of Trees and Plants.

HUGH MILLER & CO., Proprietors, TORONTO.

For Sale by Druggists and Seedsmen; at 25 cents a package. 71-6-21

COLLINS & CO.'S CAST CAST-STEEL



SMITH'S PATENT PLOWS NEVER "STICKS" in any soil. For circulars, giving full information, address COLLINS & CO., 212 Water Street, New York.

HINKLEY KNITTING MACHINE

THE SIMPLEST, CHEAPEST & BEST IN USE! HAS BUT ONE NEEDLE! A CHILD CAN RUN IT!

Designed especially for the use of families, and Ladies who desire to knit for the market. Will do every stitch of the knitting in a Stocking, widening and narrowing as readily as by hand. Are splendid for worsteds and fancy work, TAKING FIVE DIFFERENT KINDS OF STITCH! Are very easy to manage and not liable to get out of order EVERY FAMILY SHOULD HAVE ONE.

We want an Agent in every Town to introduce and sell them, to whom we offer the most liberal inducements. Send for our Circular and Sample Stocking.

Address, - HINKLEY KNITTING MACHINE CO., Bath, Me. 71-6-7

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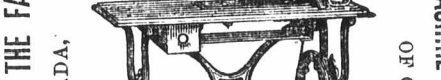
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JAS. THOMPSON, - Proprietor.

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, 71-6-7

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, has 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

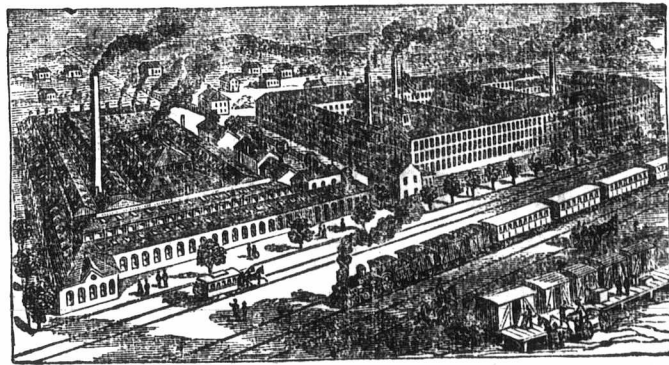
John Morrish, Chatham, General Agent for the County of Kent.

Wm. Lundie, Mount Brydges, Agent for West Middlesex. 71-2

GREAT REDUCTION.

WHEELER & WILSON'S
SILENT MOTION
SEWING MACHINES.

OVER
HALF A MILLION
SOLD IN
All Parts of the World.



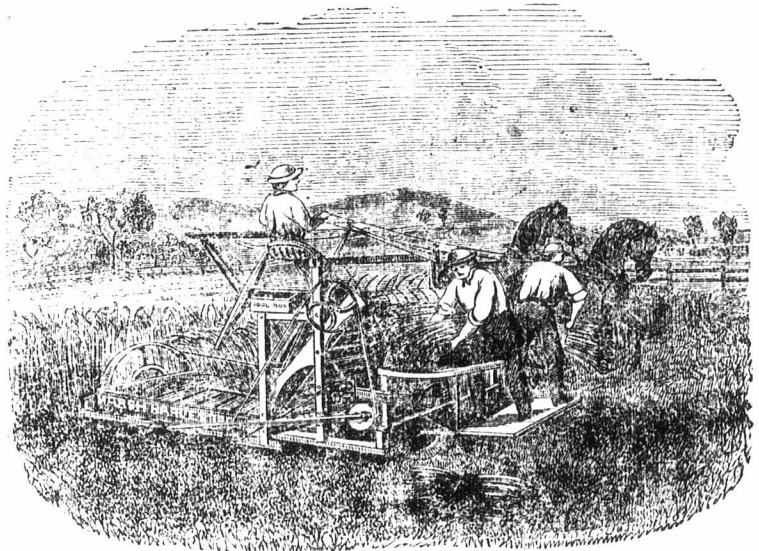
Wheeler & Wilson Sewing Machine Manufactories, Bridgeport, Conn.
Front 368 ft., Depth 307 ft. Front 527 ft., Depth 219 ft.

THESE MANUFACTORIES
Are now capable of turning out over
120,000 MACHINES!!!
PER ANNUM.

Hitherto the facilities of the Wheeler & Wilson Manufacturing Co., great as they were, have been inadequate to supply the unprecedented demand of this favorite Machine. Recent extensive additions to the Company's manufacturing resources, however, enable them now not only to supply the demand of the world, but at a much cheaper rate. The public in Canada will now reap the benefit of these changes, and it is expected the present large reduction will increase the sale still more extensively.

Remember the chief points of excellence of this Machine. ITS REMARKABLE SIMPLICITY OF CONSTRUCTION, MAKING THE LOCK STITCH WITHOUT A SHUTTLE, HAVING ABOUT HALF THE FRICTION AND MOVEMENTS OF ANY SHUTTLE MACHINE IN THE WORLD. Hence its Great Durability, Quiet Movements, Easy Running and Speed. CATALOGUE AND REDUCED PRICE LIST POST FREE TO ANY ADDRESS.

G. A. WALTON, GENERAL AGENT,
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85 King Street West, TORONTO. 71-6-61 37 Spark Street, OTTAWA.



THE MARSH HARVESTER

THE BEST REAPER EXTANT,

Weighs ONLY 790 POUNDS and is the lightest draft Reaper made, cutting Five Feet Swath.

Awarded 1st Prize and Diploma at London, 1869; 1st Prize, Field Trial, Indiana, 1870; 1st Prize, West Branch Agricultural Exhibition, 1870; 1st Prize, Field Trial, St. Louis, U. S., 1870; 1st Prize, Field Trial, in Hungary, Europe, 1870.

WARRANTY.—The Marsh Harvester is warranted to be of light draft, and to cut Grain in a workman-like manner—equal to the work done by any other Reaper.

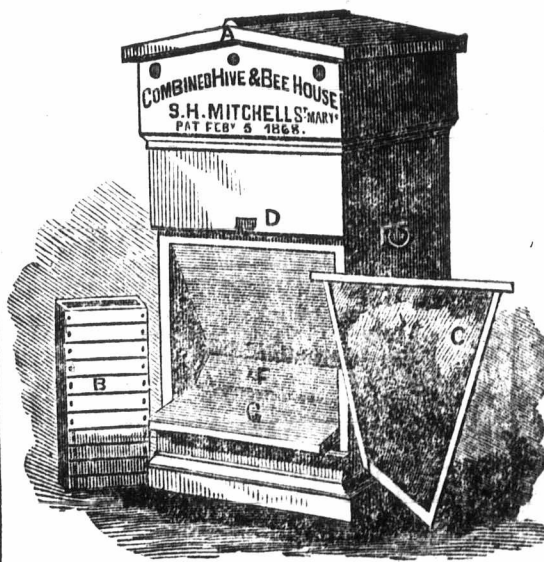
Every purchaser will be allowed to work the Machine in Grain one-half day on trial; and in case anything proves defective, due notice must be given us, or the Agent from whom it was bought, and time allowed to send a person to put it in order. If then the Machine can not be made to work from fault in itself, it may be returned, and the money will be refunded. If immediate notice is not given after trial, the Machine will be considered accepted.

For Testimonials and full particulars, address

PAXTON, TATE & CO.,
Port Perry, Ont.

71-6-3i

S. H. MITCHELL'S
PATENT
Combined Hive and Bee House.



THE MOST PERFECT, THE MOST USEFUL, THE MOST DURABLE and Ornamental Hive ever offered to the public!

DESCRIPTION OF CUT.

A, Movable Cover. B, Honey Box, standing on its end,—bottom view. C, Comb Frame drawn out. D, Button to shut up Door in Winter. E, Robber Stop. F, Bottom of Hive. G, Alighting Board in Summer, and door to shut up house in winter.

THE BEE-KEEPERS' CATECHISM,
By S. H. Mitchell.

Is a complete reference book of nearly 80 pages, giving minute directions on the culture of the Honey Bee,—both in common and movable Comb Hives, and illustrates a system of artificial swarming by which good swarms can be made two weeks in advance of natural swarming. It is written not from theory, but is the result of over twenty years extensive practical experience in Bee culture. Price 25 cents each; \$2 per dozen. Post-paid by mail, on receipt of price.

ITALIAN BEES AND QUEENS,

Having Italianized my large Apiary I can now furnish about one hundred swarm of Italians every season at the following low prices:—A good swarm in my Patent combined Hive, with two Honey Boxes, with individual right, and printed directions how to make and how to use, \$12. Italian Queens, each, \$4. Bees sent safely by express to any part of Canada during the month of June. Queens ready about the first of July.

Practical Lessons given in Artificial Swarming on the first and second Tuesdays in June, free to all who may wish to attend. Circulars free to all.

Agents Wanted in every Township. County and Township Rights for sale.

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Apiarian and Market Gardener, Elgin Street, ST. MARY'S, Ont.

71-6-2i

THE BEST PLACE
in London to get Watches Repaired
is at

MORPHY'S

On Dundas Street. He keeps a very large assortment of Fancy Goods, Watches, Clocks, Jewelry, and Musical Instruments. The greatest variety and largest number of Fiddles ever brought to London, ranging from \$1 upwards, and the best Strings in the city. Agent for McLeod's celebrated Melodeons. Concertinas and Accordions in great variety. All sold at unusually low prices, to suit the times. Wade & Butcher's Razors, which are so sharp they will shave a sleeping man without waking him. Remember the place, MORPHY'S, Dundas St., London, Ont.

M. KNOWLTON,

WHOLESALE AND RETAIL DEALER IN
LUMBER, SHINGLES, LATH & CEDAR POSTS,
Flooring and Siding Dressed.

PAUL'S OLD STAND, south side of York street,
west of Peoumsh House. Orders solicited.
London, May, 1871. 71-5y

LONDON

**SADDLE, HARNESS & TRUNK
FACTORY.**

THE Subscriber takes pleasure in calling the attention of the citizens of London and surrounding country to his large and complete assortment of

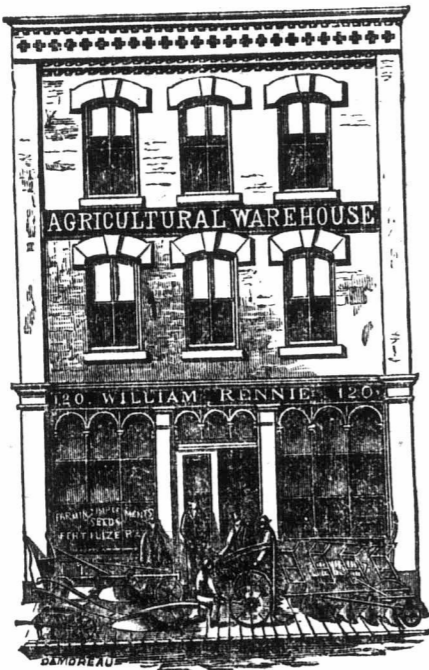
**SADDLES, TRUNKS, HARNESS,
Ladies' and Gents' Valises,
COLORED WOOL MATS**

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.

JOHN STEVENSON,

Richmond Street, opposite City Hall.
London, May, 1871. 71-5y



JUST ARRIVED

Per Steamship Ottawa, from Scotland, a large stock of JOHN GRAY & CO'S best

DOUBLE FURROW PLOWS

and Champion Single Furrows. Also—LIGHT IRON PLOWS, got up expressly for the Canada Trade, with Steel Mould Boards and Steel Shafts. Price, \$29. Light Double Mould Board Plows, with Marker—heap. The latest and most approved Steel Mould Boards kept in stock. Philadelphia Lawn Mowers, price \$14 and upwards.

WM. RENNIE,

120 Adelaide-street, East. P. O. Box 1555.
TORONTO, ONT.,

Send for Illustrated Catalogue of Farming Implements. 71-6

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 any sum they may name. 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. 3-1y

**ROYAL HOTEL,
WHITBY, ONT.**

JAMES PRINGLE, - PROPRIETOR.

An omnibus to all trains. First-class Sample Rooms attached. 3-

T. CLAXTON,

Dealer in first class Violins, English, German and Anglo-German Concertinas, Guitars, Flutes, Fifes, Bows, Strings, &c.

TUNING AND REPAIRING

Promptly attended to. Good Second-hand Brass Instruments Bought, Sold, or taken in exchange.

Note the address—
197 Yonge street, nearly opposite Odd Fellows' Hall
TORONTO. 3-1f

20 ACRES of good LAND for Sale.—House, Orchard, &c. Two miles and a half from the City. Apply at the Agricultural Emporium, London, Ont.

Benjamin Plowman,

OF WESTON, would draw the attention of Manufacturers and Machinists to his new Patent process of HARDENING CAST IRON for all purposes where such is required; and would supply the trade with Plough Boards of their Patterns, on moderate terms. To Farmers he would recommend his Root Cutters, which took the 3rd Prize at the Provincial Show this year, price \$14. His Ploughs took extra Prizes with the hardened metal—Price 14 to \$16. May be procured at the Agricultural Emporium, London: 12

F. S. CLARKE, Richmond St., London, Exchange Broker, Insurance Agent, and Agent of the National Steamship Co. from New York to Liverpool, calling at Queenstown. Prepaid certificates issued to bring out from the above places or Germany. 3-y

**JOHN ELLIOTT,
PHENIX FOUNDRY.**

MANUFACTURER of Stoves, Ploughs, Reaping machines, Threshing Machines, Lap-Furrow Ploughs, Cultivators, and Gauge Ploughs, &c., London, Ont. Also, at Strathroy. 3-1f

**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. 8-y

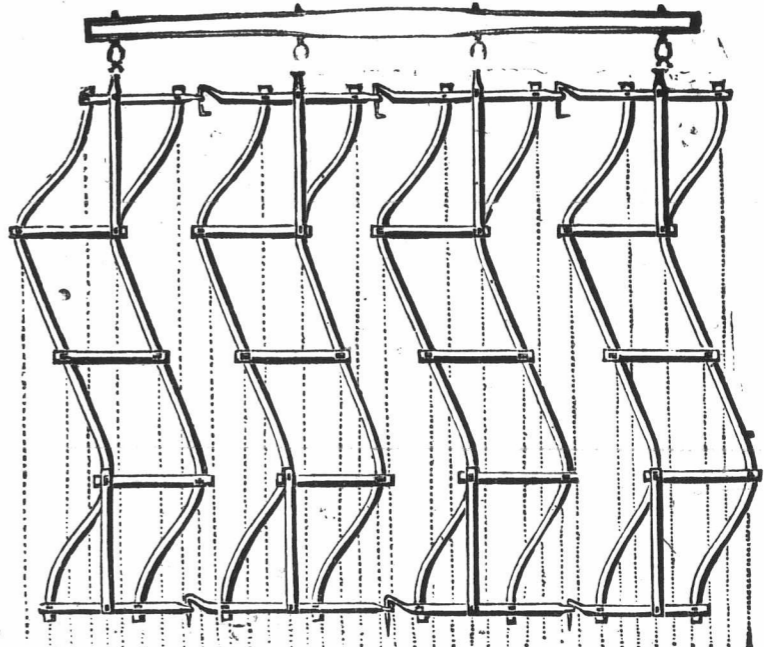
**J. H. WILSON,
VETERINARY SURGEON,**

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

References—Prof. A. Smith, V. S.; Dr. Varley V. S.; Dr. Laing, V. S.; Dr. Bovel, M. D.; Dr. Thorburn, M. D.; Dr. Rowel, M. D.; and Dr. Nichol all of Toronto. Dr. McKenzie, M. D., and J. Dulmage, of London. 4-1y

Gananoque Agricultural Implement Works

THE BEST OF MATERIALS USED IN CONSTRUCTION
Every Tooth Steeled and Hardened Every Piece warranted
against Breaking, 30 days.



EVERY HARROW WARRANTED TO WORK SATIS-
FACTORY, OR NO SALE.

COLLARD'S PATENT IRON HARROW

Has been constructed with great care, on scientific principles, and after repeated experiments. The sections being narrow renders it flexible; readily adjusts itself to the uneven surface of the ground; frees itself from roots, sods and all foreign substances; hugs the ground closely, tearing up every part of it. The hinges are so constructed that they hold the sections in line, and still allow sufficient play. It is light to handle, easy draft, and requires no repairing. Farmers are invited to try one of those Harrows far a day, and if they do not suit,—lay it aside. Address—

R. P. COLTON, Gananoque.
Gananoque, Feb 24, 1871. 3-6i

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 12,319 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 sole 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—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 such good service amongst you.

Address the Secretary, London, Ont.; or apply to any of the Agents. m-y

DOMINION TELEGRAPH COMPANY

Office, Albion Buildings

Second Door South of the Post Office, opposite the Bank of British North America,
RICHMOND ST., LONDON, ONT.
E. A. BUCK, Manager. T. J. WAUGH, Supt.
London, Nov. 22, 1870. 12

PREMIUM CHESTER WHITE PIGS,

PURE BLOOD, Short Horn (Durham), Devon, Alderney and Ayrshire Calves, Merino, South-down and Cotswold Sheep, Cashmere Goats, Imported Suffolk, Essex, Berkshire and Seton Pigs, and all Choice Breeds of Poultry and Eggs for sale. Send for Circulars and Prices. Address
N. P. BOYER & CO., Parkesburg, Chester Co., Pa

POULTRY.

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 following varieties, all of which I guarantee pure.

WHITE AND GREY DORKINS, BUFF COCHINS, LIGHT AND DARK BRAHMAS,

Golden and Silver-Spangled, Silver and Golden Pencilled and Black Hamburgs,

BLACK SPANISH, WHITE LEGHORNS Black, Red and Duckwing Game,

SILVER, SEBRIGHT & WHITE BANTAMS AYLESBURY AND ROUEN DUCKS.

J. PLUMMER, Jr.
London, Oct. 31, 1870. 11

LONDON PUMP

Fanning Mill Factory,

BATHURST STREET, LONDON, ONT.

J. M. COUSINS manufacturer of Improved Force and Lift Pumps, Fanning Mills, and "Little Giant" Straw Cutters.

Pumps repaired, Wells dug and Cisterns built. 1-1f

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FRANK COOPER,

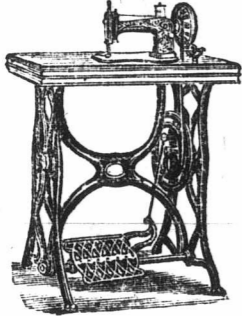
STUDIO RICHMOND STREET,

Near the Revere House, the place where the beautiful "Rembrandt" is made.
London, May 1871. 71-51 1

PURE BRED AYRSHIRE BULLS.

GEORGE MORTON, OF MORTON, COUNTY of Leeds, Ontario, offers for sale twenty-six bulls, raised by himself; one 5-years old, two 3-years old; four 2-years old; nineteen 1-year old bulls, each having full pedigree traced to imported stock. Dairying being the most profitable farming, and Ayrshires being proverbially the race of milkers, are most desirable. Price moderate: \$50 to \$125 each, Shipped G.T.R. GEORGE MORTON.

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. WILLSON, 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 irregularly 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 pinned 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 conceded 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, are 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 loose motion.

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 Corner.
- One silver-plated Tuckor.
- One silver-plated Fritler.
- One silver-plated Hemmer, which will hem to any width.
- One Quilting Gauge.
- One Framer.
- One Screw 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., HAMILTON, ONT.

D. REGAN, SUCCESSOR to John McPherson & Co., Manufacturer, Wholesale and Retail Dealer in Boots and Shoes, Farmer's Block, opposite Strong's Hotel, Dundas Street, London, Ont. April 1, 1870.

AYR AGRICULTURAL WORKS.

THE UNDERSIGNED continues to manufacture and keep on hand a Stock of those

Straw Cutters, Root Cutters, And Horse Powers,

which were awarded the First Prize at the late Provincial Exhibition, and will be happy to deal with parties requiring such. Arrangements have been completed for manufacturing

Carter & Stewart's Ditching Machine

for the coming Summer.

Reaping Machines (Self Rake and Hand Rake), Mowing Machines, Threshing Machines, Grain Drills, Turnip Sowers, Sulky Hay Rakes, Cultivators, Drag and Circular Saws, Ploughs,

and all kinds of Agricultural Implements of the best kind and quality, always on hand at fair remunerative rates. Send for Catalogue.

JOHN WATSON, Ayr, Ontario, Jan. 1871.

JAS. BIGGS, DUKE STREET,

Manufactures the above

Self-Balancing Windows

Which can be applied to old windows as well as new.

The window opens at top and bottom, thus giving perfect ventilation. Can be seen working at the shop, and other places through the city where it has been applied.

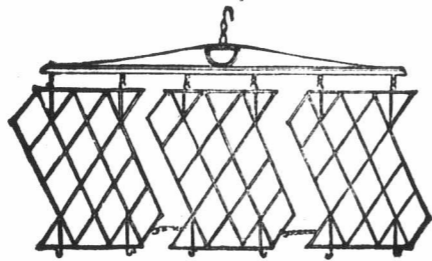
Shop—Duke Street, London, Ont. Infringers of patent will be prosecuted.

ANDREW CHISHOLM & Co.

IMPORTERS of Staple and Fancy Dry Goods, Carpets and Oil Cloths. Manufacturers of Clothing and general Outfitters. Dundas Street, London, Ont.

SIGN OF THE STRIKING CLOCK,

Opposite the Market Lane. 1-y



HOWARD'S IMPROVED IRON HARROW.

THIS Harrow is superior to all others, because it is the most complete. It covers 14 ft of land. It leaves the ground level, works free, and adapts itself to uneven land. It does not bend and choke as than any other Harrow. It is so constructed as to draw either end. The teeth being so set as to tear the ground up to a good depth, or to pass slightly over the surface, as the teeth are beveled on one side. It can be worked with a pair 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 orders taken at the Agricultural Emporium. 71.4

BREAKFAST.—EPPS'S COCOA.—GRATEFUL AND COMFORTING.—The very agreeable character of this preparation has rendered it a general favorite. The *Civil Service Gazette* remarks:—"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. Epps has provided our breakfast tables with a delicately flavored beverage which may save us many heavy doctor's bills." Made simply with boiling water or milk. Sold only in tin-lined packets, labeled—JAMES EPPS & Co., Homoeopathic Chemists, London. 12-y

40 ACRES within three miles of the City. Two Houses, two Orchards, excellent Land. Apply at the Agricultural Emporium, London, Ont.

G. MOORHEAD, WHOLESALE AND RETAIL, Manufacturer of Furniture, UPHOLSTERER, &c. 1-1f King Street, London.

LAMB KNITTING MACHINE

It is patronised by the Royal Families of Europe. Awarded a gold Medal at Paris, 1867, and highest Prizes wherever exhibited, including the Hamilton Exhibition in 1868, Toronto 1871, for the best, cheapest, simplest, and most complete Knitter in the world. More than 13,000 Sold and in Use the past Eight Months.

Lamb's Family Knitting Machine, \$50 and \$53 Each, WORK BY HAND

LAMB'S KNITTING MACHINE.—An indispensable appliance in every Family, Benevolent and Reformatory institution. It is used to great profit in manufacturing special lines of Goods for the Market.

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

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Yours respectfully, James Corson, S. A. Corson, G. F. Ryland, John Atkinson, J. C. Sheehy, J. Campbell, P. Anderson, Wm. Simbert, A. Docker, Jas. Mitchell, D. Y. Decker, Wm. H. Telfer, A. Biever, M. R. C. S. L., Thos. Holson, Wm. J. Howard, R. Porter, Wm. Tears, Geo. Walker, James Howard, Fishwick Loft, James Hynes 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, 1870. 5f7u

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EVERY FARMER 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 Cord's per day. Jack suitable for driving all kinds of Machinery usually used. Price \$35. D. DARVILL, London, Jan., 1871.

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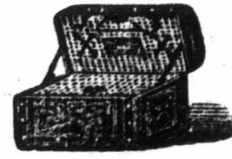
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A FULL ASSORTMENT OF trunk, Valises and Ladies' Bags Always on hand. Dundas street, Five Doors East of Clarence street. C. F. AYARS, London, Aug., 1870. 36

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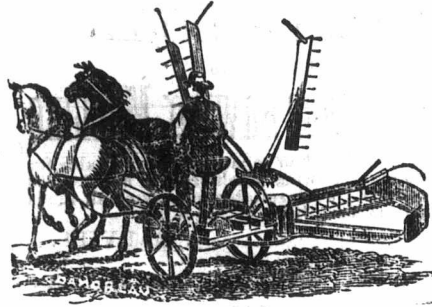
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IRE BULLS. ORTON, COUNTY for sale twenty-12 ears old, two 3-years an 1-year old bulls, 1 imported stock, suitable farming, and race of milkers, are le: \$50 to \$125 each, **MORTON.**

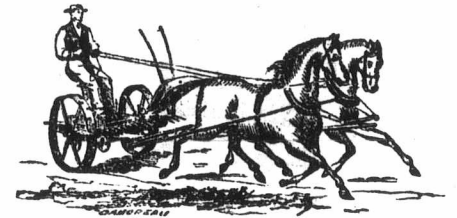
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OSHAWA, + + ONTARIO.

ESTABLISHED 1851.



The Joseph Hall Manufacturing Company
PROPRIETORS.



WE DESIRE TO CALL ATTENTION TO OUR
**Number One and Two Buckeye Combined
REAPER AND MOWER,**
WITH JOHNSON'S SELF RAKE IMPROVED FOR 1871.

We believe this Machine, as we now build it, to be the most perfect Reaper and Mower ever yet offered to the public of Canada.

Among its many advantages we call attention to the following:—

It has no Gears on the Driving Wheels,

Enabling it to pass over marshy or sandy ground without clogging up the gearing, thereby rendering it less liable to breakage. It is furnished with

Four Knives, Two for Mowing and Two for Reaping, one of which has a sickle edge for cutting ripe, clean grain, the other a smooth edge for cutting grain in which there is grass or seed clover.

It has malleable guards both on the Mower Bar and Reaper Table, with best cast steel Ledger Plates. It is also furnished with our

New Patent Tilting Table for Picking up Lodged Grain.

This is the only really valuable Tilting Table offered on any combined Reaper and Mower.—
The Table can be very easily raised or lowered by the Driver in his Seat without stopping his Team.

This is one of the most important improvements effected in any Machine during the past two years.

Any one or all of the Arms of the Reel

Can be made to act as Rakes at the option of the Driver, by a Lever readily operated by his foot. The Cutting apparatus is in front of the Machine, and therefore whether Reaping or Mowing, the entire work of the Machine is under the eye of the Driver while guiding his team. This Table is so constructed as to

Gather the Grain into a Bundle before it leaves the Table, and deposit it in a more compact form than any other Reel Rake.

The Table is attached to the Machine both in front and rear of the Driving Wheel, which enables it to pass over rough ground with much greater ease and less injury to the Table. The Grain Wheel Axis is on a line with the axle of the Drive Wheel, which enables it to turn the corners readily.

The Rakes are driven by Gearing instead of Chains, and therefore have a steady uniform motion,

Making them much less liable to breakage on uneven ground, and more regular in removing the grain. The Gearing is very simple, strong and durable. The Boxes are all lined with

BABBIT METAL.

The parts are all numbered, so that the Repairs can be ordered by telegraph or otherwise, by simply giving the number of the part wanted

There is no side Draught in either reaping or mowing, and the Machine is so perfectly balanced that there is no pressure on the horses' necks either when reaping or mowing. All our malleable castings, where they are subject to much strain, have been

Twice annealed, thereby rendering them both tough and strong.

OUR JOHNSON RAKE

Is so constructed as to raise the cam so far above the Grain Table that the Grain does not interfere with the machinery of the Rakes or Reels.

We make the above Machine in two sizes:

No. One, large size, for Farmers who have a large amount to reap.

No. Two medium size, for Farmers having more use for a Mower than for a Reaper.

With the exception of difference in size, these Machines are similar in every respect. Our No. 2 Machine supplies a want heretofore unfilled, viz. a medium between the Jun. Mower and large combined Machine, both in size and price. We shall distribute our sample machines in March among our Agents, that intending purchasers may have an early opportunity of examining their merits.

And we guarantee that all Machines shipped this season shall be equal in quality and finish to the samples exhibited by our Agents.

We invite the public to withhold giving their orders until they have had an opportunity of inspecting our Machines, as we believe that they are unsurpassed by any other Machines ever yet offered on this continent.

We also offer among our other Machines:

Johnson's Self-Raking Reaper, improved for 1871,
with two knives, smooth and sickle edge, and malleable guards.

Wood's Patent Self-Raking Reaper.

Buckeye Reaper No. 1, with Johnson's Self Rake.

Buckeye Reaper No. 2, with Johnson's Self-Rake.

Ohio Combined Hand Raking Reaper and Mower.

Cayuga Chief, Jr., Mower.

Buckeye Mower No. 1.

Buckeye Mower No. 2.

Ball's Ohio Mower, No. 1.

Ohio, Jr., Mower.

Taylor's Sulky Horse Rake.

Farmer's Favorite Grain Drill.

Champion Hay Tedder.

AND OUR CELEBRATED

HALL THRESHER AND SEPARATOR

Greatly improved for 1871, with either Pitt's, Pelton, Planet, Woodbury, or Hall's 8 or 10 Horse Power. We shall also offer for the Fall trade a

NEW CLOVER THRESHER AND HULLER,

Very much superior to any other heretofore introduced,

A new and complete Illustrated Catalogue of all our Machines is being published, and will be ready for early distribution, free to all applicants.

All our Machines are warranted to give satisfaction, and purchasers will have an opportunity of testing them both in Mowing and Reaping before they will be required to finally conclude the purchase.

For further information address—

F. W. GLEN,

PRESIDENT,

OSHAWA, ONTARIO.

71-4-y