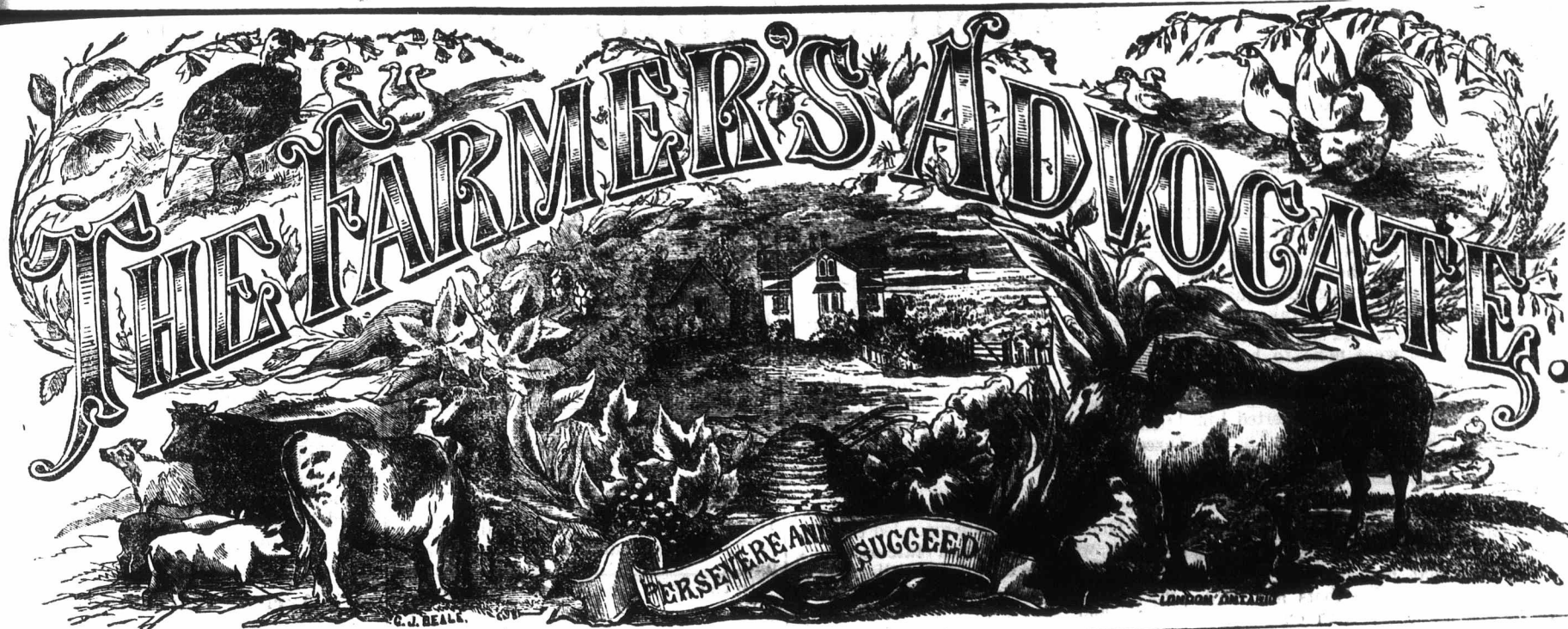


DIRECTORY.

London Hill, Ont., dealer in Best prices given for first-class Horses for sale, 8-11
Breeder of Galloway Leicester Sheep and Berkshire Pigs, 8
Ont., Breeder of Short Yorkshire Pigs, Southdown 8
P. Q., Importers and 8-11
Breeder of Devon 9
Wills, Importer & Breeder of Pigs and Merino Sheep
Marrie, P. O., Breeder of Pigs, 72-1-y
Abraham P. O., Breeder of Cotswold Sheep, 1-y
Brittania P. O., Breeder 72
Galt, Breeder of Cotswold Sheep.



VOL. VII. { WILLIAM WELD, Editor and Proprietor }

LONDON, ONT., NOVEMBER, 1872.

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CONTENTS OF NOVEMBER NO.

Table listing contents of November No. 11, including sections like EDITORIAL, AGRICULTURAL, STOCK AND DAIRY, HORTICULTURAL, ORCHARD AND FOREST, GOOD HEALTH, ENTOMOLOGY, CORRESPONDENCE, MISCELLANEOUS, and YOUTH'S DEPARTMENT.

The Provincial Exhibition of '72.

It has been a grand success, both financially and beneficially, considering the extreme turbulent political feelings that have been agitating the country, and which, we much regret, show more signs of a stronger interference than has yet been felt in regard to the Provincial Exhibition and political agricultural affairs of the country generally.
A most important subject was broached to us while on the ground by one or more gentlemen holding positions of importance in the country. It was the plan of centering the Exhibition in some locality. At the annual meeting of the delegates to the Exhibition, held in the Court House, in Hamilton, it was attempted to pass a resolution to have the Exhibition permanently established near Toronto. We view this attempt to centre it as detrimental to the interests of agriculture, and could not refrain from making some remarks against such a course. The question has yet to be brought up for consideration. At the next annual meeting for the election of officers and delegates of the different agricultural societies, it would be well to have this question brought before the various meetings, and enable the farmers to send such delegates as would represent their views on the question—Is the Provincial Exhibition to be perambulating as heretofore, or shall its influence and utility be extended to other sections, such as Ottawa, Guelph, &c., or would it be best to have it at one place? We believe the delegates from this city, if elected as they have hitherto been, would most assuredly vote for its centralization in Toronto, because this city is the place where the plan of establishing the Mimico Farm originated; that farm was to have been the permanent establishment, and an inhabitant of this city was to have had control of the farm. The Bill for the establishment of the farm was hurriedly passed through the Legislature, without the due consideration it should have had. The whole affair was got up for the benefit of one individual. We are not speaking imaginatively; we know the foundation and objects of this Mimico Farm from its commencement better than any one, and are prepared to convince any one of the correctness of our views when a proper time arrives. If the farmers wish for an Experimental, Test or Educational Farm, they will establish such amongst themselves, if the Government will only give them the same privilege it does to any other business to join capital for such a purpose, which at present it does not allow. It was a pleasing sight to see the Governor General and company walking

among the magnificent prize animals around the main arena of the Exhibition, headed by a plain, sturdy Canadian farmer, who had never passed through any collegiate course. We may mark this as a rarity, but such it ought to be. A plain, practical man should be at the head of our agricultural affairs. You may depend upon it that in nine cases out of ten the plain farmers know what is or what would be most to the interest of agriculture far better than those who have been educated in the colleges, and whose attention is more wrapped up in political influences, which is pretty sure to engulf nearly the whole of the aspirants to position, thus sacrificing all to political ends. Let us all strive, if possible, to build up the Provincial Agricultural Exhibition and all other agricultural institutions, irrespective of party feelings. Much may be said in favor of a Government Educational, Test and Experimental Farm; much may also be said against a Government enacting laws for the purpose of suppressing private enterprise and adopting plans undertaken by private individuals, on which they have expended large sums, and by which they have been doing good service to the country. We still hope that the Government will submit any great change to the voice of the farmers of Canada. They will have to pay all the costs, as the revenue of all others must depend on the products of our soil. The farmers of the country should be consulted on such matters as is of most importance to them. Toronto and other cities have great influence; the most influential speakers come from the cities, and a great effort is being made to centre more influence, wealth and power near Toronto. We strongly oppose the annihilation or centralization of the Provincial Agricultural Exhibition. The Board of Agriculture and Arts and the delegates acted wisely in voting for the Exhibition to be held in London next year, not because Ottawa or Guelph have not just and fair claims for it, but because it will tend to allay the feeling of discord and rivalry that has arisen through political influences between the Provincial Association and some of the controllers of the Western Fair. There is and has been a greater power at work to make the Western Fair what it has been, than the mere directorship of it. Whatever the results may be, we, on behalf of the largest number of unbiased and independent readers of the Canadian agricultural press, say that they do not desire to have the Provincial Agricultural Exhibition centered, neither do they desire to be taxed for the support of the Mimico Farm. If it is the desire of the cities to have the Exhibition centered, or to carry on the Farm, let them pay for it.

The farmers do not want it, as it must be supported by a continual tax, directly or indirectly, of some hundreds of thousands annually, and will, as it has already done, tend to check private enterprise.

THE STOCK DEPARTMENT.

We should weary our readers if we were to describe half what we observed in regard to the merits of each animal or class of animals. The horse department showed a marked indication of improvement. The heavy draught class appear to be drawing much more attention than the blooded horses, and, we think, deservedly so. There is more real wealth for the country in heavy draught horses than in the blooded class. The roadsters and carriage horses made a fine display and were a credit to our country. Blooded stock was not largely exhibited, nor is there as much said about them now as there was some years ago. The display of Durham cattle has never been excelled or equalled in Canada, the competition for prizes being very keen, and giving a great deal of labor to the judges to decide which to award the prizes to, there being so many really superior animals to be judged. We do not condemn the decision of the judges, although there are some who feel aggrieved, and there always will be; all cannot obtain first prizes. There was one animal or two on the ground that had carried off first prizes in Great Britain, but such was the perfection of animals exhibited that they were awarded nothing at our Exhibition. This shows the high standard of our herds. We would like to see a greater list of premiums in this very valuable class; perhaps it might be well if the directors were to add a supplementary list of prizes at lower figures for breeders that have never gained a Prince of Wales prize, or even for those who have never gained prizes before in the Durham class, or taken prizes over \$200, more or less.—We suggest such a course to encourage the small beginners, who are now a numerous class, and who would like to exhibit, but know well they are unable to compete against the old established breeders or the long purses of our importers. This plan, we should think, could be beneficially carried into the Leicester and Cotswold classes of sheep, as there is a very strong competition in these classes and very few small breeders or beginners will bring out their stock to compete against the large breeders and importers. These beginners need encouragement; many we know have attempted to gain prizes, but feel disheartened because they find the prizes carried off by imported stock. We do not wish to discourage importation, but to encourage Canadian breeders as well as importers.

FOR THE ADVOCATE.

The show of Devon and Galloway cattle was better than at Kingston. The Herefords were well represented by Mr. Stone.

Mr. P. Rennie, of Fergus, exhibited some grade cattle that were quite equal to many Durhams exhibited, and superior to half that are in the country, excepting pedigree. Ayrshire cattle were not as numerous as at Kingston, nor did they surpass those exhibited in that place in regard to quality, we mean the principal prize-takers. In Kingston there was a good show of Alderney cattle; there were none to be seen at Hamilton.

The sheep pens were well filled with prime stock. Mr. Gibson's imported Lincoln attracted great attention. The pigs and poultry showed no marked difference from our usual Provincial Exhibitions.

#### THE INTERIOR OF THE PALACE

did not appear as well filled as we have seen it. We presume this was caused by the addition that has been erected for fruits, flowers, &c. The roots and fruits made no better display than on previous occasions, although some new varieties may have been added. Neither the roots or cereals were as good as we have seen them; the dryness of the season was undoubtedly the cause of this.

The prize of \$50 was awarded to Mr. Arnold for his Hybrid Wheat. We understand it was awarded more as an encouragement to cause others to improve, and as an acknowledgment to Mr. Arnold for his exertions, than for the real merit of the grain itself, as it appears very doubtful if it possesses any remarkable qualities or advantages over other wheats. If it should prove to be of value to the country, Mr. Arnold would deserve a great reward from our Legislature. As it is, we believe he has commenced a plan of hybridizing that may be the means of producing some useful results, and as the introducer of such plans he is deserving of encouragement.

Mr. Fleming, for the Association, presented us with a small quantity of fall Rife Wheat, which was grown at Saddle, British Columbia. This is the largest and plumpest wheat we have seen. It surpasses our samples of Australian and Californian wheat; it is also the first fall wheat of that kind we have seen, in fact, we were not aware that there was a fall Rife Wheat. We have put a few grains into the hands of several parties to try, and report to us on it, and we retain a sample for our show windows, which any one may see by calling at the Emporium.

#### IMPLEMENTS.

In the implement department the display was deserving of attention. Many improvements have been made, and some new implements were exhibited. The foremost among the most valuable labor-saving implements was Carter's Open Ditcher, an implement that is destined to come into use as soon as it is known. Another valuable labor-saving implement was a new device of a wind-mill adapted to pumping water and doing various other kinds of work on a farm. This also will come into use where much pumping has to be done. It may be applied for sawing, thrashing, grinding, chaff-cutting, &c. They will soon be found on some farms. But what surprised us more than anything else among the implements was a small, simple turnip cutter, that will cut two bushels of turnips in a minute. Its inventor, Mr. Forfar, claims that as its capacity. However, when its work was shown by actual test, it was awarded the first prize over the celebrated Gardener Machines. Perhaps the lowness of the price might have induced the judges to look favorably on the machine, as it only costs \$6.

There was a novel attachment for reaping machines, but time must tell if it is superior to the present apparently perfect machines. McPherson, Glasgow & Co., of Pingal, carried off the lion's share of prizes for their thrashing machines.

We only treat on the different classes very briefly, and some not at all. As we are saying so much on the Exhibitions in a

general and what we deem more important manner, we fear we shall occupy too much space on the subject, as other departments of the paper must have some attention.

#### The Western Fair.

So much has been said in praise of this institution that we cannot express ourselves candidly without giving offence to some, still, however much we may desire the success of our local Exhibition and local affairs, we feel it our duty to speak openly in regard to it.

The posters and printing done for it excelled that done for the Provincial Association, and the decorations of the city also excelled the decorations at Hamilton. An agricultural or political ball was got up for the occasion.

Our new and highly respected Governor, Lord Dufferin, and suite attended the Exhibition, which, as on such state occasions, drew a very large crowd from all parts of the surrounding country to show their loyalty and respect to our Queen. The sale of tickets was greatly increased by this course. The Exhibition financially was a grand success. We are apt to judge too much of the real utility of anything by the immediate cash returns.

Now to the Exhibition in an agricultural point of view. But few blooded or heavy draught horses were to be seen, but in the road and carriage class the entries were numerous, and a lot of good animals were to be found. In cattle, the show did not come up to our expectations, and would have been inferior had not Messrs. Stone, Snell and Wood come forward with their herds; we have to thank these gentlemen for their aid in making the show of cattle what it was. Col. Taylor, of Westminster, exhibited some valuable stock, and Mr. G. Smith, of McGillivray, exhibited two very fine Durham bulls, which claim some Booth blood.

This section is celebrated for its sheep, and in this department the Exhibition was good. Implements were pretty well represented. The palace was creditably filled; grain was not as well represented as it ought to have been; the show of fruit was good.

In the carriage department the display excelled either of the other Exhibitions, and great credit is claimed by some because in the roof and carriage departments this Fair excelled the Provincial; these two classes are but small items in an Exhibition to make such a great talk about. Some of the first-prize roots were beaten at a Township Show held since.

The Western Fair may always be a good exhibition. There is a large and wealthy country to support it, but other shows will spring up around it, the political feeling will subside, and the main object will be gained or lost before another Western Fair occurs. The directors have labored hard and faithfully, without pay, and, as far as the Western Fair is concerned, it will lose a great charm as soon as political feelings are allayed. We must admit that as far as the number of entries and the amount of money received goes, it has been a success. We know the President and many of his aids to be gentlemen.

A majority of the inhabitants of this city and many in some of the surrounding townships, at the present time, think we are wrong in our views, and some have done their utmost to check us. We only ask for a fair, open discussion, and many will be at once convinced of the correctness of our views, and in a few years our bitterest opponents will say we have been fighting for a right cause, and will regret the hostile steps they have taken against our views. If we are erring, and are doing an injury to any class or section, our pages are open for others to condemn us. We try and write for the country, not for section or party.

We have always, we confess, looked on this Western Fair with suspicion that it was designed by its originators as an auxiliary to the Mimico Farm, and a rival to the Provincial Exhibition. May we hope that better motives prevail.

#### The Central Exhibition.

The Central Exhibition held at Guelph was a grand success, both in regard to the financial receipts and the general display of stock, implements, grain, roots, &c.—The various departments of the arts and manufactures in the main building were well filled.

There are a few things in connection with this Exhibition that are deserving of particular notice; one is the great patronage bestowed on it by the ladies. We have no hesitation in saying that a larger proportion of ladies attended this Exhibition than either the Provincial or Western Fair. The competition for prizes for arts and manufactures in the ladies' department was very keen. The display of butter, in quantity and appearance, excelled that at either of the other Exhibitions.—It was undoubtedly the largest display we have yet noticed, and the quality was very fine.

In the grain department we noticed a variety of wheat not exhibited at either of the other Exhibitions. It is a variety of spring wheat that is succeeding well, on which we shall treat at some future time.

The different varieties of turnips were named, and prizes given to each variety; this we consider a great improvement over the other Exhibitions. Why should not the varieties of turnips receive prizes as well as each variety of apples? We think them as important.

We think Guelph stands pre-eminent as the leading main centre for the improvement of stock and of good farming. This Central Exhibition stands on as safe and sure a foundation as either the Provincial Exhibition or Western Fair. The stock of Guelph will draw the leading American and Canadian purchasers. The stock department was one of the most important.

We heard complaints this year while there that the Exhibition occupied too much valuable time, and that it would be better to reduce the number of days. We think it would be advantageous to do so.

#### The Catarrh, or Horse Disease.

This disease has spread over our country at a rapid rate. It appears to be an epidemic apparently passing through the air, as horses are attacked by it whether they are in the proximity of other horses or not. It is very similar to a severe cold or influenza in the human species; some are attacked but lightly, others the disease has a greater hold on. It comes on with a cough, and in a few days the horse discharges largely and continuously from the nostrils, breathes hard, and appears very sick. We think there is no prevention. Death may result if animals are over-driven, heated and exposed to cold or rain afterwards; but Nature is the best restorer. The horse does not work as freely as he is wont to do; he says, "Rest me, or work me lightly, and I will be well again." We do not approve of heavy doses of medicine; light doses and very mild treatment may do good; but we can see but very little, if any, difference in the horses that have been drugged and those that are allowed to be cured by nature, and whether they are worked lightly or rested entirely, the disease will have its course, and will cure itself. Some persons have been greatly alarmed, and consider the animals require to be drugged, blistered, steamed, purged, stimulated or reduced; but those that are cared for most appear about as long in recovering as those that receive very little attention. The worst to be dreaded about this disease is, that some will work their horses in such a manner as they ought not to do. Other diseases will most probably follow, that may be dangerous and contagious.

This or a similar disease swept over this part of the country about seventeen years ago. It was in the spring of the year; horses could then run on the grass, and soon got over it, but a railway contractor's horses in this city that worked through the disease were taken with glanders; other instances were known, and death to

horses, and, in one instance, to the owner, followed from glanders.

About forty years ago a similar disease spread over some parts of Great Britain. Glanders and death followed; some farmers turned from working their farms with horses to the labor of the ox. We do not think there is any cause for alarm from the present disease; time will cure it, but perhaps a stricter law might with advantage be enforced in regard to horses that have the glanders; they should be shot, or the owners compelled to keep them on their own premises in a stable; or, if in a field, it should not be one by a live fence, but entirely surrounded by his own land.

The country is now becoming supplied with veterinary surgeons, that know if a horse has the glanders or not; each of our cities have veterinary surgeons; no glandered horse should be allowed to travel in the public road.

#### Agricultural Politics.

We withheld important remarks in regard to our agricultural policy during the time of the great excitement of the elections, at which time every remark was sought for that might tend to turn the balance of power. Our desire has been to build up the agricultural interest irrespective of either party. You may all admit that this paper should be maintained for agricultural purposes only, but there are very few, if any, that can imagine the difficulty of such a course. In fact, it appears now to us almost impossible.

Political interests have greater weight and draw more money than agricultural interests. We hope that at the next session of Parliament the questions at issue in regard to agriculture may be discussed without party interest being placed before agricultural interest. Many will condemn us as being political and serving party. Our party has been the agricultural interest, and no fair or honest man can gainsay it if they have read our publication from its commencement.

#### The Importing of Farm Stock by the Provincial Government.—The Model Farm.

The Markham *Economist* charges us with "attempting to prove that the Government is doing a great injustice to the stock breeders and importers in Ontario by establishing a Model Farm." In the article referred to there is not a sentence against the establishment of that Farm.—This is a subject for future consideration. The question on which we are at issue with the Government is this:—We maintain that their becoming stock importers would be opposed to true principles of political economy, and to the plain dictates of justice that should characterize the mutual relations of a Government and the members of the community. Nor is it the importing and raising of a few cattle of the very best breeds, as is now said in palliation of wrong doing—it is the importing of stock "as a means to all farmers of securing the best stock."

Nor was it from any observations made at the meeting of the Farmers' Club that we learned the intentions of the Government. The Minister of Agriculture was our authority—no mean authority on the subject. The palliating excuses put forward amount to an acknowledgment of the error of the project, to give it the mildest name.

In re-publishing from the *Economist* the report of the Farmers' Club meeting, we had no wish or expectation that it should be thought to be from our reporter. We having received the paper, handed it to our printers, expecting that the usual credit would be given. It was omitted, unintentionally, we believe.—As't. Ed.

There is an immense amount of lumber piled on the route of the Southern extension of the W. G. & B. Railway, awaiting the completion of the road to be shipped.

#### The Provincial

GENTLEMEN,

One year since this, we enjoy the address of that time ago! then we the point far! gatherings brought into citizens of the which, I believe the manufac- tion.

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I

Agriculture.

VALUE OF STRAW TO FEED STOCK.

[The report of the meeting of the Blandford Farmers' Club, which we give beneath from an English paper, will be interesting to our readers. The opinion of the several speakers as to the value of straw for feeding stock I can fully corroborate, having used it for that purpose for many years in the old country. I found my pure-bred Durham cattle as well as grades thrive well on it, with the addition of a feed of mangolds, turnips, cabbages, or rape twice a day during the winter season. The cattle were kept perfectly clean, and fed regularly, and care was taken to have the straw as fresh as possible, and free from any taint or foul smell; and they were, when turning out on pasture, about the 12th of May, in good order.—As't Ed.]

At one of the meetings of the Blandford Farmers' Club, Mr. J. Ford said:—"Farmers were obliged to partly feed their beasts and sheep with straw; necessity had driven them to do what they had never done before. I must say I have not been depending so much on hay as many of you have. I have thought for a very long time that hay was some of the dearest food we fed with. What I mean about hay being expensive food is this: I have known many farmers pinch their sheep by keeping them short of food during the months of April and May, all for the sake of having a great stock of hay for the next winter. I think it more to our advantage to be a little more liberal with our clover and rye-grass in the spring, to improve our sheep after the winter is over, and not think so much about the hayricks for the next winter. I think it likely there is not one of you that makes use of so little hay as I do, according to the quantity of stock I keep. I have a notion that if we pay a little more attention to straw-feeding we can keep our stock so as to make it answer our purposes better than to depend so much on hay. We can winter our store beasts well with a liberal allowance of any straw, and a little addition of a few pounds of cake or corn per day for each beast, instead of keeping them on hay. I have for many years past cut my oats rather green, perhaps I may say a week before some people would say they were fit to cut; but I think the crop that is cut at that stage is the most valuable, taking both corn and straw into consideration. In cutting the oats before they are quite ripe we save all the best oats that would perhaps fall out if allowed to get ripe before cutting; and should there be a few under-ripe corns that the threshing machine would not take out, the straw would be none the worse for it. I also like to cut my wheat rather gay. I find by so doing I get a good bold sample, and I find the millers like it better, and the straw is of more value for feeding. I say the same with wheat as I said of oats—we do not get so much prime corn shed out in the fields as we should if we allowed it to be full ripe before cutting. The barley we are obliged to let stand and get ripe before cutting, so as to have, or try to have, it fit for malting. I last year wintered my little Southdown tegs with roots and straw, and have done the same many times before. They ate the straw very well, and were certainly in very good store order. Try your improved Hampshires; see how they like it, if they will eat it. I think it better than to depend so much on hay. Many people, I find, are cutting a great quantity of straw into chaff and mixing corn or cake with it to rub through the winter. For my own part I object to having so much cut; let them have a small quantity of chaff with the cake or corn that you give them; let them have a sufficient quantity of straw as it is, and save the expense of so much cutting. I believe the stock will do much better in that way. I fat some quantity of oxen during the winter months. I never think of giving them hay, but I cut

shall have a skilful veterinary surgeon in every part of the Province on whom to depend in every case of emergency.

The grant to the Entomological Society is still continued with favorable results.

Financially, we are in a sound, healthy and prosperous condition, and notwithstanding the very great falling off in our receipts at the Fair last year, from that of the previous year, amounting to several thousands of dollars, yet we were able to pay all our liabilities and report a reliable balance in the hands of the Treasurer.

With regard to the Denison matters, I have much pleasure in being able to say that a considerable portion has already been paid in, and the balance is amply secured by mortgage on real estate, which has increased fifty per cent in value since the security was taken.

It has been suggested that so grand an opportunity for discussion on agricultural topics as is afforded by the meeting of so many delegates and judges, all leading agriculturists from different parts of the Province, should not be lost; and although the members of the Council might not be able to attend, owing to pressure of other business at that peculiar time, yet a meeting might be organized, different topics of discussion selected, and such discussion form a leading feature of our future exhibitions.

Epizootic Influenza.

The following letter by D. McEachran, Consulting Veterinary Surgeon to the Council of Agriculture, P.Q., is of some importance, and the position of the writer justifies full confidence in his statements:—

SIR,—Seeing the epidemic among horses is rapidly spreading, and even now prevails to such an extent that it is impossible they can all have proper professional attention, I have felt it my duty to the public to offer the following hints as to the management of the disease:—

It is indicated by dullness more or less, the pulse is quick and weak, extremities cold, the breathing quick, a very deep, hacking cough, the lining membrane of the eyes and nose of a yellowish tinge, the throat is swollen and sore internally, consequently he swallows with great difficulty, and in many cases refuses food. There is in most cases a discharge of adhesive brownish yellow matter from both nostrils, and in many cases it is coughed up in lumps from the throat. Weakness is one of the earliest and most prominent symptoms. In most of the stables they have taken it almost simultaneously.

The principles of treatment will consist, in the first place, of thoroughly ventilating and cleaning the stables, and sprinkling the floor with carbolic acid powder, (much better than solution). Keep the animals warmly clothed, but keep the stable cool, without draughts; give them no dry food, especially oats; linseed tea, oatmeal gruel, boiled oats, bran mash, carrots, apples and bread, will be found the most nourishing articles to offer them. They should be encouraged to drink as much linseed tea as possible, and if they should refuse all food, they must be drenched with either the tea or oatmeal gruel. In this disease mild stimulants and vegetable tonics should be given early, of which cinchona bark and gentian are the best.

I have found that the Sulphite of Soda in half ounce doses given three times a day, with gruel, has marked effects both in preventing and modifying the attacks. The throat should be mildly blistered, and, if the lungs become affected, the sides of the chest also. It is of the greatest importance that they be kept from wet or cold; the owner will study his own interests by keeping them from work, especially in cold, damp weather. So long as they continue to feed well and the weather is fine they may be worked moderately, with blankets under the harness.

These remarks refer merely to the disease generally, each case presents its own special peculiarities, and requires special prescription, of which the qualified practitioner is best able to judge; but as it is next to impossible to visit and prescribe for all the cases at present, I hope the above remarks may not only be of use to the public, but of service in relieving the profession.

The President's Address at the Provincial Exhibition, 1872.

GENTLEMEN,

One year since, on an occasion similar to this, we enjoyed the privilege of listening to the address of my predecessor. How short that time appears when looking back into the past! then we were assembled at Kingston, the point farthest east at which these annual gatherings have as yet been held; now, brought into direct communication with the citizens of this ambitious City of Hamilton, which, I believe, deservedly ranks first among the manufacturing centres of our vast Dominion.

Our Fairs here have ever proved a success; and when I look over our grounds on the present occasion, I feel that the farmers, mechanics and others, who have lent their aid in the talent and ability displayed by each, in their various contributions to this vast collection, have indeed something of which to feel proud, and may well rest assured that they are contributing to the building up of that national prosperity and greatness to which we may justly look as the boast of our posterity in the future.

We have great cause of thankfulness to a kind and beneficent Providence for continued peace and prosperity; and although the drouth in the early summer affected the crops in some localities to a considerable extent, and the west has suffered severely from the ravages of the Colorado potato beetle, which has now become one of the worst enemies with which we have to contend, yet the labor of the present year generally has proved productive and remunerative to the husbandman, so that we have plenty, and to spare; and all are blessed with ample means to provide the necessities and comforts of a home.

The cultivation of Flax is increasing in extent, and is marked with decided success, so that those who have advocated its introduction have every reason to anticipate that it will soon rank among our staple productions.

As our country becomes more opened up, we see the greater necessity of providing green food for our stock (particularly cattle during the summer months), when the grass has become parched and dried up by the hot weather; the experiment of sowing broadcast or thickly drilling Indian corn at different times during the season, so as to be cut and fed to them, have been tried with success, and is likely to prove a great boon to the dairyman.

The results of our labors for a short twelve-month have been brought together, and openly exposed to view, and let those who see by judges of the fertility of this fair Province of Ontario, and of the ability of her sons in yet forming the nucleus of one of the strongholds of the British Empire, or, if need should arise (which I pray may never occur), of forming the centre of a great and prosperous Independent Nationality. Our motto is "Defence—not defiance;" and, as was said by my predecessor, "although ready on any and every occasion to resist oppression, we have nothing to gain from, nor do we desire an aggressive policy." Our aim is to promote the peace and goodwill, the wealth, intelligence and happiness of nations.

The drainage now being carried on in the Western Peninsula, by opening up the natural watercourses, and in some cases cutting artificial ones, is producing a marked and growing effect. Lands which heretofore were totally unfit for cultivation, and worthless, with the exception of a small growth of wild grass for pasture, are rapidly being brought under the influence of the plough, and are found to be the most fertile, productive and remunerative; thus amply rewarding the proprietor or tenant for any costs he may have incurred in their production.

In looking over the past few years, I cannot but observe the many changes through which we have passed, and are passing. One of the principal of these is in the manner employed in carrying on the operations of the farm. He who hires farm laborers now can seldom obtain native born young Canadians or Americans—farmers' sons bred up on their fathers' farms and at home in all the minutiae of farming; such as were the hired men on our farms a few years ago. Nor is it any less difficult in most sections of the Province to obtain a farmer's daughter as the "hired girl," either for house work or dairy. To obtain skilled labor now-a-days, is in fact one of the greatest difficulties to be contended with in carrying on a farm. Fortunate indeed is it for us that so many labor-saving machines were introduced, before this great want had become so much felt.

I do not wish it to be understood that I

fail to appreciate our indebtedness for both individual and national prosperity to the strong arms and stout hearts of our foreign immigration, but that class of laborers require a long and patient teaching before they are capable of managing our machines or handling our teams, or of understanding our system of farming generally; yet these men are apt to expect the wages of our first-class Canadians. Besides, as a general rule, unmarried men of that class are unsettled in their habits, roving, and with no local ties to bind them, ready to leave for trifling causes, or small inducements of higher wages.

The question is becoming serious, but how is it to be avoided?

The most feasible system appears to be that of encouraging the employment of married men, and building suitable places on the premises in which they and their families can reside; thus they become permanently settled, and feel that they have a home of their own; their interest becomes more and more identified with ours, and our influence is more directly brought to bear upon them and their growing families, so that they much more rapidly develop into Canadians and citizens. By this means they not only board themselves, but we can frequently avail ourselves of the much needed household assistance, thereby also relieving our over-taxed wives and daughters.

If such a system were generally introduced, I believe all parties, and especially the laborer, would be better satisfied and permanently benefited.

Another very pleasing change is found in the constant improvement which is taking place in the country. The dense forest is fast giving way, and where only a few years since the hardy pioneer could with difficulty find the means to furnish a scanty subsistence, we now find the thrifty farmer, with his land cleared and well tilled, his humble dwelling replaced by one more suited to his present wants and comforts, his outbuildings being renewed or extended to meet the requirements of his increasing stock, which is every year becoming more valuable by importations and direct crosses with pure blood; his orchards, now approaching maturity, supply every want with the choicest varieties of fruit, and he begins to think the pleasure derived from looking at a few shade or ornamental trees will amply reward him for the care and cost of providing them. In short, he just begins to feel a self-respect and independence, which more properly belongs to his than any other calling.

There is another change which, though not productive of emotions of pleasure, yet demands more than a passing notice. I refer to the growing aversion exhibited by many of our young men and boys to honest manly toil, the tendency to leave the farm for the whirl and excitement of the city, the uncertainties of the professional or commercial life.

The very term "Commerce" seems to carry with it a kind of spell, and they forget that it is rarely one in a hundred who succeeds in his speculations and accumulates a fortune. Yet, some agency or patent right, in short, anything that demands travel or produces excitement, has a fascination for the young man that seems irresistible; and we frequently meet sound, able-bodied young men peddling the country with some simple little contrivance with an energy that would have done honor to a better cause.

Commercial pursuits are over-valued, because they lie more upon the surface and are open to observation; but he who is successful has often, nay, always, to toil and labor far more unceasingly than the agriculturist.

This can only be counteracted by making home pleasant to them, and so educating them that work on the farm shall not be considered mere drudgery, but an intelligent use of the resources of nature. Nowhere else do intelligence and taste so readily ripen the conception of the mind into utility and beauty. Go to the towns and cities, and you will find that a large majority of those who went there as country boys, instead of achieving wealth and fame, have attained to less than they would have enjoyed had they followed their agricultural pursuits, and many are rapidly sinking into the lowest depths of degradation and misery.

I have very great pleasure in being able to say that the "Ontario Veterinary College" is being carried on with much success, and is increasing in number and popularity. During the past winter the number of students attending its lectures was upwards of fifty, and at the last examination fifteen candidates were awarded the Diploma of the Board. The prospect is, therefore, that in a short time we

ance, to the owner, to a similar disease of Great Britain. lowered; some farming their farms with the ox. We do not use for alarm from me will cure it, but might with advantage to horses that they should be shot, or to keep them from a stable; or, if in a one by a live fence, and by his own land, becoming supplied with, that know if a or not; each of our surgeons; no glances allowed to travel in

Politics.

stant remarks in real policy during the election of the electors every remark was tend to turn the desire has been to natural interest irres-ly. You may all ad-should be maintained poses only, but there that can imagine the course. In fact, it most impossible.

have greater weight they than agricultural that at the next ses- the questions at issue ure may be discussed best being placed before st. Many will con- political and serving as been the agricultur- fair or honest man iver have read our pub-licament.

of Farm Stock by Government. Model Farm.

*Economist* charges us to prove that the Gov- a great injustice to the importers in Ontario Model Farm." In the there is not a sentence ment of that Farm.— or future consideration, which we are at issue nt is this:—We main- coming stock importers to true principles of po- to the plain dictates should characterize the a Government and the munity. Nor is it the sing of a few cattle of is, as is now said in pal- ing—it is the import- means to all farmers of look."

any observations made the Farmers' Club that tentions of the Govern- ster of Agriculture was mean authority on the liating excuses put for- an acknowledgment of project, to give it the

from the *Economist* the ners' Club meeting, we pection that it should from our reporter. We the paper, handed it to ting that the usual cre- ven. It was omitted, e believe.—As't Ed.

ense amount of lumber of the Southern extension B. Railway, awaiting the road to be shipped.

straw into chaff, and pulp up about one bushel of mangel per day for each beast, and mix it up with about the same quantity of chaff, having one day's food prepared and mixed beforehand; it heats a little, it softens the chaff, and the beasts are very fond of it, and they generally keep in good health and fatten fast. It behoves us to be careful of our straw. If we have more one season than we require, by all means let us thatch it; I have often found sheep and beasts prefer old straw to new. When I pulped the mangels and mixed them with chaff the beasts ate it better than when given whole.—Mr. Homer quite agreed in giving only a small quantity of chaff, mixed with meal or other food, believing that animals did better with the bulk of the straw; and this was reasonable when they considered the formation of the animals' mouths, which were adapted for masticating their food. He had used a great deal of straw this year, and kept a great quantity of stock, and they had got on very well. He gave his sheep straw in the troughs the early part of the season, and afterwards gave them chaff mixed with other food. Mr. H. Richard had found that animals fed upon cake and straw did remarkably well. The only thing with regard to straw was its harshness, to reduce which he understood that a machine had been invented, and was in use for crushing the straw, and this plan, he believed, would be far better than using chaff, for if straw was cut into such small pieces, it was somewhat difficult for the animal to get hold of them. He had not given straw to sheep, but he knew of one gentleman who gave his sheep straw and hay cut into chaff, with a pint of malt-dust mixed with it, and the animals were in first-rate condition.—Mr. C. Fowler stated that some years ago he had a large field of beans partially blighted, and finding it no good as corn, he got an engine, and had the whole bruised as much as possible. The engine stripped off the leaf and pods, which the animals ate, but would not eat the stalk. He then cut some up as chaff, and mixed it with malt-dust and turnip, and the cattle improved upon it. He was of opinion that the straw was too dry for the animals, and that in bean-hauls there was very little proof. He was of the same opinion as Mr. Ford with respect to the advantage of cutting oats and wheat gay. The reason was that the moisture was retained in it. A short time ago he went to Lord Portman's, where he saw a machine at work bruising gorse. When it came out it was reduced to a pulp, and was in a wet state, and the cattle ate it readily. He believed that gorse would be found a valuable substitute for hay.—Mr. T. Fry said he thought they had trusted too much to the hay crop, and if the corn crops were cut earlier it would be better. Wheat straw, he was of opinion, was not so palatable to animals as oats or barley, because it was too flinty. When he cut his oats this year early his man remonstrated with him, but he told him he was going to adopt Mr. Ford's plan—cut the oats green, and let them stand in aisle some time, and he congratulated himself that by so acting he had a first-rate crop, his oats weighing 9 score 16 nett. He had been feeding his ewes on barley straw at night, and hay in the morning, and was surprised to see how they throve upon it. He gave them as much straw as they could eat. His horses had been eating chaff, and chaff alone, but he had picked up a good idea that evening, and would not continue that plan. The first part of the year he began with oats—six bags of oats mixed with chaff, which the animals did well upon. They then had wheat-straw, but would not eat it, and this was, he believed, because it was too cutting to the mouth. He then returned to oat straw mixed with meal, and from his experience he was perfectly satisfied that farmers would do more with straw as an article of food for their cattle than they ever had; and though he would like to have a nice rick or two of hay just now, he should not in future sacrifice his stock because he had not enough in the spring, but should use straw.—The chairman (Mr.

Galpin) said he had never used straw as food for sheep until he looked over his neighbor's (Mr. Ford's) hedge, and saw that his sheep were eating and improving upon it. He gave his dairy cows and stock cake and straw, and was perfectly satisfied with them. Professor Voelcker some time ago wrote an article in the *Royal Agricultural Journal* on the use of straw for feeding purposes, and the practical experience of all who had spoken that evening fully confirmed his views, viz., that the straw cut green was the most nutritious. He also gave an analysis, which showed that oat-straw was the most nutritious of all straws. The result of the Professor's researches proved that pea-haulm was the most nutritious, oats next, then pea-pods, bean-straw next, wheat the next, and barley straw the lowest.

FARMS AND FARMING IN GREAT BRITAIN.

At a recent meeting of the American Institute Farmers' Club, Dr. J. V. C. Smith stated the results of his observations while in Europe, as follows:—

"As we pass rapidly through the best parts of Ireland the amount of land devoted exclusively to grass is a peculiar feature. The present season the hay crop appeared to me to be remarkably heavy. We rarely see on our best fields such a heavy growth of grass. It may not be so considered by those who manage them, but the thick appearance of the grass, its succulent and tender fibre, gave me an impression that it must be both sweet and very nutritious. The humidity of the climate and a lower temperature than with us must contribute essentially to such properties. Barns are an unknown convenience in Ireland, Scotland, Wales, or England. We rarely see any building for storing hay or protecting stock much larger than a one-story stable of very limited capacity.

"Hay is invariably stacked, each pyramid being thatched, as a general rule, with straw. I was repeatedly assured that when three and four years old such hay is considered infinitely improved and always more valuable, having lost none of its essential elements by long atmospheric exposure. It is carefully cut down perpendicularly and fed out without waste. All fences in the kingdom, with few exceptions, are Hawthorn hedges. Fields are usually small compared with our own, and what is particularly observable, hedges once set are rarely removed, and consequently the form and dimensions of fields remain the same for a long while. It is probable that the length of leases through the more lives conduces to that stability of fence render the fence more difficult to pass, while the earth at first thrown out gives elevation to the thick, almost impassable wall.

"Throughout Scotland and England the tillable land is more closely seeded than with us. Instead of hills, potatoes, beets, turnips, and a variety of vegetables are sown in rows very near together. Weeding is admirably conducted. The plants alone are permitted to feed on the soil. As soon as one crop is out of the way another of some sort that may be useful, even late as it may be in the season, for cattle food, is introduced. We cultivate more land ostensibly than is well cared for. They, on the other hand, have less ground under cultivation, but better nurtured, and therefore more profitable. Fertilizers of every possible description are very carefully preserved. We waste, or allow to be wasted, what an English farmer would carefully collect as a precious source of prosperity.

"You see extensive fields of beets in England. They are raised for feeding cattle, and so are turnips—thousands of bushels to our ten. The fact is established that the sugars they contain are superior to many of the grains we deem all important in the production of rich milk, or fat, rich beef. It would be presumptuous in me to suggest they are right and our farmers wrong here in the Middle States, where corn raising is a laborious pursuit, even with shallow ploughing. In cursing over Great Britain we are all struck with the immense culture of trees. They are cash articles, and ever will be for kindling and fires, if no higher purpose were contemplated. We are cutting and hacking them down as though they encumbered the ground. Every range of fence with us, as with them, should be studded with trees. It should be a spring and autumn duty to extend their transplantation. Our farmers ought to have it impressed upon them that such labor would yield a harvest in the future far exceeding their expectations by laborious efforts with uncertain crops, whose value must always vary in volume and value upon the contingencies of the weather. Trees grow tall regardless of seasons. They are a sure crop. Another observable feature in land culture that contrasts strongly with our own, is the general employment of horses instead of oxen. Nor do they use all kinds and breeds for farm work, as we do, without reference to the build, weight, or physical capabilities of the animal. An English

farm horse is a sort of monster for anatomical build and strength. With very large feet, immensely enlarged in appearance, with shaggy hair growing in profusion from their knees to the margin of their hoof, their strength is really prodigious. Of course they rarely move beyond a walk, and are consequently in vigorous health and their powers of endurance unequalled.

IMPROVING THE UNDER-SOIL.

Our land should be mellow under where it comes in contact with the lower roots as well as in the seed bed. The roots want space to luxuriate. We aim at a mellow surface; we should aim at a mellow under soil. This fallow will give us a garden in any soil, thoroughly worked at the proper time; and we see what fallows and gardens and such soils are. The best root crop—a piece of carrots—we ever knew was one where the mellow soil was turned down deep (the plow running to the beam), richness and looseness of soil below for the roots to do their work in. The soil turned down was rich; had received a coat of horse manure, and was well saturated with its substance. It is below where the work goes on—if you let it; otherwise the roots must be confined to the surface, which, in a drought, will be too dry, and will soon have its substance absorbed. A deep, rich under-soil will also keep moisture the longer, hence the soil for a dry time. The air will reach it, which is another benefit; it will plow the better; will measurably drain itself.

By turning down in the fall a rich, mellow clay soil, bringing up the raw harsh ground, by spring there will be a pretty mellow surface. Manure applied, and this harrowed in with the grain, there is a chance for an excellent crop. Corn on such land will do; so will roots; so will clover; and the grasses will flourish exceedingly; they will strike their roots downwards, and the mellow soil (below) will stand in lieu of cultivation, and will retain moisture. For grass it is believed deep cultivation is not necessary—one of the greatest errors in farming. Who ever saw a poor crop of grass on a deep, rich, finely cultivated soil? This never fails where there is plenty of seed used. It is the soil for wheat—this deep, rich, under-cultivated, preventing water from standing and scouring the land during the winter, and from heaving in the spring.

We are afraid to turn down our mellow soils, especially to turn it down deep and bring up loose mellow; we prefer to keep it where we can see it, and put our seed in. But it is wrong; turn it down. Then cultivate and press the top soil. Now is a good time to do this, and apply our manure as it is made, spreading it as it is applied. We want some unmanured soil brought up and worked upon by the elements and manure. The spring will find such a fine mellow bed (with a corresponding soil below) that it will do one good to work it; the evidence of its success is on the face of it. We would not advise the plow to run twelve inches when the land is accumulated to but six; plow eight inches. This will enable the top cultivation to mix some of the old soil with the new, and the manure influencing both.

Thus far we have not used the subsoil plow which, in addition, is a great aid. The lower soil well loosened, it will be benefited for years; and the deepening the culture thereafter may be done with less work, and more profit, as the soil is less raw having been somewhat worked upon by the air and rain water. But never work the subsoil when wet.—*Prairie Farmer.*

SOILING CATTLE.

Mr. George E. Waring, the excellent manager of Ogden Farm, at Newport, R. I., U. S., lays down the following programme for a herd of twelve cows:—

1. Early in the previous autumn, sow three acres of winter rye, to be cut the next spring from May 15 to June 15.
  2. Early in April, sow two acres in oats, to be cut from June 12 to July 1.
  3. Late in April, sow two acres in oats or barley, to be cut from July 1 to July 15.
  4. Early in May, sow two acres of oats or barley, to be cut from July 15 to August 10.
  5. Middle of May sow two acres of oats or barley to be cut from August 19 to Sept. 1.
  6. Middle of June replant plot No. 1 with corn, which is to be cut from September 1 to September 20.
  7. Early in July re-sow plot No. 2 with barley, to be cut from September 29 until roots and cabbages come in, which is usually Oct. 1 to 15.
  8. In September three acres of plots 4 and 5 are to be sown in winter rye for the next spring's use.
- Mr. Waring's experience demonstrates two general principles:—
- 1st. The earliest abundant food will be secured by the use of winter rye.
  - 2nd. The best and most abundant food for the later summer and early autumn time will be secured by the use of Indian corn.
- Joshiah Quincey's method of soiling is as follows:—
1. May 20 to July 1st, feed cut fodder from early clover, rye or orchard grass.

July 1 to 31, cut from oat field which was sown in April.  
August 1 to 31, feed sown corn, planted from May 1 every ten days.  
September 1 to 30, re-cut the oats on field No. 1; also feed one acre late corn, sown in June, every ten days.

October to November, feed tops of vegetables.

After December to next May, feed hay and roots, mixed and finely cut or cooked. Lucerne is most valuable for soiling. It requires no re-seeding every year. The first year it yields two crops—June and September; in succeeding years it will yield four crops each season—June, July, August and September—about a ton per acre from each mowing. Most of its nourishment comes from the atmosphere; hence it is an enriching crop as a green manure.

The following will be found a good practical schedule for a herd of cows. For green food during summer sow—

- 1 acre early rye the previous fall.
  - 1 acre early oats.
  - 1 acre sowed corn, May 1; re-sown Aug. 15.
  - 1 acre cabbages.
  - 4 acres lucerne.
  - 2 acres sugar beets and mangels.
- For winter food, cut hay from ten acres of clover or timothy, and roots from three to five acres additional. As the ground becomes more and more rich the feeding capacity of each acre will be increased, and in time doubled so that twenty acres can easily maintain twelve to fifteen head the year round. All the manure made must be returned as a top-dressing.

THOUGHTS ON FOREIGN FARMING.

I know of no more suggestive material for American farming experience than that afforded by the well-digested results of agriculture in England, France, Belgium and Germany. And although the published records of these fail to give the same accurate idea of the *modus operandi* that would be afforded by practical experience, careful reasoning with reference to the peculiarities of tillage in this country would, in some instances, render the data thus obtained of rare and peculiar value. Perhaps an example of this may be found in the difference, advocated by some English writers, to be observed in laying or lapping furrows, according to the kind of crop to be raised or the character of the growth under cultivation. Where grain is to be sown, especially if the land is seeded down to grass, the furrows are laid flat, the edge of one shutting past the edge of contiguous ones; the complete inversion of the soil not only having a smooth or nearly smooth surface, but also effectually lapping all roughness, etc., that grew upon the top. On the other hand, where vegetables are to be grown and a more pulverulent condition of the mold is desired, the furrows are lapped and lie at an angle from vertically; in about forty-five degrees. The former plan, in our comparatively hot, dry climate, will most certainly be the decomposition of vegetable matter in the soil, and should, therefore, be adopted on lands possessed of much organic matter or on those with a heavy silt or peat. But light soil containing less than, say, five per cent. of humus would profit by a slower decay, and the lapped furrows would be found to be best. One method that abroad gives excellent results is that of lapping in the autumn, one furrow flat on top, of an equal width of land, the stubble, whether of grass or grain, being buried between the two in a state very favorable to decomposition, and also to the early surface drainage of the field in spring. When the "lands" and the furrows are plowed in their turn, a thorough disintegration of the mold is produced. It is laid down as a kind of axiom that the best plowing is done when the depth of the furrow will be one-half of its width; then row turning the mold will be in the proportion of 1 to 1. Another item in the utilization of which many a field and garden might be made to yield with far greater abundance, is found in the practice of using buried clay for sheep bedding, which, from its absorbent power, saves a the liquid manure, constituting thirteen-fourteenths of the whole, which is commonly wasted. The clay is burned to brick dust, of which a wheel-barrow load averages one for twenty sheep. In England seventy-seven bushels burned costs six pence. The manure produced by its use has the peculiarity of being suitable for either light or heavy soils, inasmuch as it increases tenacity and moisture, retaining properties of the former and mechanically lightens and loosens the latter; in either case, contributing, of course, the ammoniacal and other elements of fertility contained in the sheep manure.

While speaking of fertilizers, I may dilate a little upon the chemical experiments that during the past four years have been made with a view of obtaining potash from refractory substances like feldspar. The simple pulverization of feldspar, it is said, brings it to a condition in which its potash will slowly leach out under the action of water in the soil. But the extreme hardness of feldspar too costly for practical application. Recourse has, therefore, been had to the chemical action of lime, which replaces potash in its combinations, and, there-

fore, sets it free should be fresh action will be so class. Lunds which this cow try a liberates the potash trials having sh the potash can wet condition. Reasoning b would prove ad as es, which h by ordinary les ly to yield to c of moisture.

HOW MUCH PO Some years to farm, I was of fat ening h different p ans pork a barrel c floor) en an hgs and put t three of the s lot—average w five pounds. The co-n, with a p average gain hogs in the lot fa tained in the One in the per others were n These hgs when slaughtered of October, snow during gave the hogs would not have favorable; the quality of gra of corn will that the six b and two (y-l and one-half farmer gets tw of twenty-five c faster in Sept in colder wea

Another ve suggest its ita- What is it w weight of on It may be i of the grass hogs feed on one hundred pounds, but hog to wea pounds and will be see lower levels of clover and hundred po and fifty po Hogs do water, and the month hauls it out his labor i the stalks s saving of l field suit.

STUDY of Mont following important s from the "The i of an in land is a Analysis must be ments, c series of er hercal idea. land situ tion each soil, and is intelli by whic one of t has been al acres land, all well, be the new in a few treatme usually plowed the su grown.

fore, sets it free. For this purpose the lime should be freshly burned, and its beneficial action will be seen in the amelioration of heavy clays, which contain much ferruginous matter. In this country a similar means may be taken to liberate the potash from the green sand marls; trials having shown that about two per cent. of the potash can be set free by digesting, in a wet condition, with quick-lime for a few days. Reasoning by analogy, the same method would prove advantageous with leached wood ashes, which have much potash not extracted by ordinary leaching, but which would be likely to yield to caustic lime kept in the presence of moisture. - Prairie Farmer.

HOW MUCH PORK WILL A BUSHEL OF CORN MAKE?

Some years ago, when I was just beginning to farm, I was desirous of knowing the best way of fattening hogs, and I determined to try the different plans, and also to ascertain how much pork a barrel of corn would make. I made a floored pen and covered it in; weighed three hogs and put them in the pen; I also weighed three of the same size and put them in a dry lot—average weight one hundred and seventy-five pounds. I fed six barrels of corn to the six hogs. They were forty days eating the corn, with a plenty of salt and water. Their average gain was seventy-five pounds. The hogs in the lot gained the most. One that was fattened in the lot gained eighty-eight pounds. One in the pen gained eighty-four pounds; the others were not so thrifty.

These hogs were about fourteen months old when slaughtered. I put them up to the 25th of October. There was a good deal of sleet and snow during the month of November, which gave the hogs in the pen an advantage they would not have had if the weather had been favorable; they were each fed on the same quality of grain. It also shows that one bushel of corn will make fifteen pounds of pork, and that the six barrels of corn made eleven dollars and twenty-five cents worth of pork, at two and one-half cents per pound; and that the farmer gets twelve and one-half cents for his labor of feeding per bushel, over selling at twenty-five cents per bushel. Hogs will fatten faster in September and October than they will in colder weather.

Another very important question or inquiry suggests itself in the foregoing, and that is, What is it worth to raise hogs to the average weight of one hundred and seventy-five pounds? It may be difficult to determine the exact value of the grass clover and grain feed that the hogs feed on while growing to a gross weight of one hundred and seventy-five or two hundred pounds, but with these assistants I can raise a hog to weigh one hundred and seventy-five pounds and over, with one barrel of corn. It will be seen from these estimates that two barrels of corn, with the advantage of grass, clover and grain fields, will produce about two hundred pounds of net pork to two hundred and fifty pounds gross.

Hogs do best in large fields, with plenty of water, and the farmer who cuts up his corn in the months of September and October, and hauls it out on his fields, will be amply paid for his labor. In the improvement of his land, from the stalks and manure of hogs. It is a great saving of labor to turn the hogs in the field when the quantity of hogs and the size of the field suit. - Cor. Ohio Farmer.

Agricultural Items.

STUDY YOUR SOIL.—Mr. T. Gniwits, of Montgomery County, N.Y., makes the following judicious remarks on a very important subject to farmers, which we copy from the N.Y. Tribune:—

"The importance, the absolute necessity, of an intimate knowledge of one's own land is a matter not sufficiently considered. Analysis may aid, but chief dependence must be placed on experience and experiments, extending often through a long series of years. Our most successful farmer hereabout is fully impressed with this idea. He has been occupying the same land since 1830, and to his careful observation each season reveals new secrets of his soil, and the influence of climate, &c. He is intelligent, and experience is the lamp by which his feet are guided. He made one of the best farms out of a poor one. He has been adding by purchase to the original acres until now he has a large area of land, all alike good. Knowing the land well, being in the same locality, he gives the new acquisitions similar treatment, and in a few years they are like the rest. The treatment is entirely different from that it usually received. Generally the land is plowed deeper, the manure all kept at the surface, and grass and clover are grown. Where drainage is necessary, it is

done at once. Corn is grown and so managed that it is always a good crop. Heavy sod is selected and the proper soil, with treatment according. Now and then wheat is raised, and sometimes peas. Sometimes winter wheat follows a heavy crop of peas, the peas leaving the land in a rich, mellow condition. Sometimes the fallow is resorted to, as when a newly-purchased piece requires cleaning. Here is success of a high order—perhaps the highest, when we consider profit on the investment. This man knows nothing of the science of farming as popularly taught; he has his own science gathered from his own experience, the science of his locality. To move to another place, with soil and climate different, and apply the same treatment, would be injudicious. The knowledge of the locality must first be acquired, and that can only be done by experience, taking time. The same products are not grown, or not to the same extent; different management is required. And so, not only in different localities suggest each its treatment, but the same farm and even the same field will often vary, and that not unrequently with apparently the same quality of soil. There is a secret, particularly as it affects the quality of produce, notably the grape and tobacco, that is yet to be traced. Test alone will determine this. Our scientific and practical men are the best farmers, but only when they are thoroughly practical as well as versed in theory. Practice must be the first—in importance—as it embraces the local facts not otherwise obtained. It can be aided by theory, and that decidedly. But it will be only aid, as books are an aid to the thinking man, not the whole of the main thing, as they are so often made."

NEW DRAINING PLOW.—Recurring to the subject of plowing I am led to mention a new draining plow lately invented in England, which seems good in theory, as far as it goes, but which will require some additional improvements to make it fulfill all the conditions of a successful invention. It is described as comprising "a series of plows placed one behind the other, and arranged in the same vertical plane, but at increasing depths below the surface of the ground, so that each plow may cut off its own horizontal slice of the required thickness." The trouble with the apparatus will be found in making the soil rise on the plows to the surface and out latterly to the ground at the edges of the ditch (without increasing inordinately the length of the machine), as the earth can hardly be forced up an incline of more than twenty-three degrees by the simple forward motion of the plows. Some mechanical device to aid the upward and backward movement is required, and it is to be hoped may be provided; for there are few improvements more needed in American farming, than cheap and simple means of making drains. It may be remarked, with reference to agricultural machinery, many inventions of foreign origin have a direct bearing on some of the more extensive branches of farming here. As for example, an Australian harvesting and threshing machine, brought out a year or two since, and designed for the same purpose as several harvesters of Californian origin, namely, of "heading" standing grain, threshing the heads, and winnowing and sacking the grain. It differed from the latter in combining off the heads by a kind of metal comb, instead of severing them by the vibratory movement of a harvester's sickle. In the operation of the last mentioned device a somewhat audacious idea has been suggested in England, and, if I remember rightly, patented in that country. It is to attach the connecting rod of a small steam engine direct to the sickle or cutter of a reaping machine, thereby getting power enough to cut a swath twelve or fifteen feet wide, the strength of the horses attached being exerted simply in moving the apparatus over the ground. More recent than the above, and in quite a different line, is a Vermin Asphyxiator, exhibited at the late Cardiff show in Wales. A small vessel is provided in which noxious gases are generated by chemical means, and which has a fan-wheel worked by hand to force the gases out in a stream through a pipe. By thrusting the nozzle of the pipe into a rabbit hole the animal is quickly driven out. Perhaps the device could be applied to the capture of prairie dogs, gophers, woodchucks, and similar burrowing quadrupeds,

to the profit of the farmers in some cases, and the delight of the boys in all.—J. A. Whitney, New York.

LONGEVITY OF FARMERS.—The difference of longevity among the members of the primary vocations is, if we can rely upon statistics, very marked. Dr. Farr, the accomplished Registrar-General of England, to whom we are largely indebted for information in relation to the laws of health and sanitary progress, has, in his Fourteenth Report, given the world the result of his labors. Of the ordinary occupations he makes twelve classes, viz.:—Tailors; shepherders; farmers and graziers; carpenters and joiners; butchers; manufacturers of wool, cotton and silk; bakers and confectioners; hotel-keepers; grocers; miners; labourers (agricultural and otherwise); and blacksmiths. Of all these classes, farmers were found to be, on the whole, the longest lived, although, strange as it may seem, the mortality among young farmers was, between the ages of twenty-five and thirty-five, higher than the mortality among laborers at corresponding ages. The classes among which the heaviest rate of mortality was experienced were miners, bakers, butchers, inn and beer-shop keepers. Between the ages of forty-five and fifty-five the annual rate of mortality among the whole population of England was 18 in 1000. Statistics show that, out of the same number of farmers, twelve died; of shoe makers, fifteen; of weavers and others employed in the manufacture of silk cotton and wool, fifteen; of grocers, sixteen; of blacksmiths, carpenters, tailors and laborers, seventeen; of miners, twenty; of bakers, twenty-one; of butchers, twenty-three; and of inn and beer-shop keepers, twenty-eight. [Such is the great longevity of farmers compared to other classes of society.]—Industrial Monthly.

POTASH IN THE SOIL NECESSARY FOOD FOR THE POTATO.—In order to produce good crops of potatoes it is necessary that the soil wherein they are planted have within itself, or supplied to it by manure, a sufficient quantity of potash. Every potato crop takes from the soil a quantity of potash and of phosphoric acid, which must be supplied anew. Dr. Nichols, in an address to a board of agriculture, thus tells why a crop of potatoes exhausts the fertilizing qualities of the soil:—"A field of potatoes yielding 200 bushels to the acre will remove from the soil in tubers and tops at least 400 lb. of potash; also it will remove 150 lb. of phosphoric acid." Now, these amounts are very large, and show that the potato plant is a great consumer of the two substances, and also show that in order to restore our potato fields to their former productive condition, we must supply phosphatic compounds and substances holding potash in large quantities. For six or eight generations our farmers have been exhausting the soil by these agents in their potato and other crops, and we have reached the time when the vegetable is starving in our fields for want of its proper food. Our farmers have found that new land gives the best crops and this is due to the fact that such fields afford the most potash. A potato field which gives but one hundred bushels to the acre, requires at least one hundred and forty pounds of potash; but by allowing the tops to decay upon the field, sixty pounds are restored to the soil again, as that amount is contained in them.

LETTER FROM FRANCE.—We give some extracts from the correspondence of the Iowa Homestead:—"Crops of 1872.—This year the harvest is exceptionally good, which makes farmers forget former losses and previous sorrows. Spain ranks next to France in having well filled granaries, then Switzerland, and finally Germany. Root crops promise well though the blight has in some districts attacked the potato. Black cattle and hogs are very dear, and, as elsewhere, the meat question is one of prominence. Fall plowing.—French farmers, as soon as the corn is lifted, or even when it is ranged in shocks, break up the stubble, either by a skid plough, or, better, by a scarifier. The advantages of a short fallow are thus secured; the light covering the seeds or weeds are subjected to induces them to sprout and consequently to be destroyed by subsequent tillage. The practice does get rid of the weeds beyond doubt, to say nothing of the benefit the exposed soil derives from the atmosphere.

CORN LAND FOR WHEAT.—The culture of corn suitable for spring grain should begin in the autumn—in fact the succeeding crop should be kept in view when tilling the corn in the summer, and an extra cultivation given quite late, in order to destroy weeds to as great an extent as possible; for the weeds which ripen

their annual seeds, or strengthen their perennial roots after mid-summer, are great pests of the grain crop the following year. But after the crop is off the field, preparation for the next crop should begin by levelling the surface with the plow and harrow, to be followed by plowing. This fall ploughing should be done as early as possible, and when the ground is fairly dry, and if sub-soiling could be done, it would prove highly beneficial, as the frost would thus better ameliorate the subsoil than if left unstirred.—Am. Rural Home.

THE PORK AND CORN CROP.—It is the opinion of those best informed that the hog crop this year will be 25 per cent. greater than last season. The corn crop is now matured, and advices from various parts of the country indicate that it is one of the largest ever raised in the West. This, with the large surplus left over from last year, will keep the price low, and have a tendency to keep pork down. Packers seem to think that they must buy at less than \$4.00 per hundred to make a safe business. In some portions of the country there is a scarcity of hogs to consume the corn, which may tend to keep prices up. Live hogs are keeping up in Chicago to \$5.00 yet.—Iowa Homestead.

THE POTATO DISEASE.—Dr. Kuha has shown that the fungus which causes the potato disease (Botrytis, or Peronospora infestans) only propagates itself while the potato plant is living. Therefore, the potato tuber receives its infection from the haulm or stems, and one potato cannot communicate the disease to another.

CURING MEAT.—The Germantown Telegraph says:—"To one gallon of water add one and a half pounds of salt, half a pound of sugar, half an ounce of saltpetre, half an ounce of potash. In this ratio the pickle to be increased to any quantity desired. Let these be boiled together until all the dirt from the sugar rises to the top and is skimmed off. Then throw it into a tub to cool, and when cold pour it over your beef or pork, to remain the usual time, say four or five weeks. The meat must be well covered with pickle, and should not be put down for at least two days after killing, during which time it should be slightly sprinkled with powdered saltpetre, which removes all the surface blood, etc., leaving the meat fresh and clean. Some omit boiling the pickle, and find it to answer well; though the operation of boiling purifies the pickle by throwing off the dirt always to be found in salt and sugar. If this recipe is properly tried it will never be abandoned. There is none that surpasses it, if so good."

TURNIP-FLY.—For the last fifteen years, on sowing turnips, I provide, ready slaked, one ton of lime per acre. As soon as the plants appear, the lime is spread from a cart over the young plants in the rows. In hot seasons the plants have had rough usage from their tormentors, but sufficient plants escape. I never missed a crop, nor have I had to sow a second time. If evenly spread over the row, the young plants will push through the coat of lime and present a beautiful green line on the white surface. The lime must be put on dry, and on a warm or hot and dry day; for if any dew or moisture be on the plants they will be destroyed. The lime must be ready to be put on the moment the mischief begins, for in the twenty-four hours of a hot season the fly can ruin any crop; it is of no use then going for the lime.—Mr. Bainbridge, of Oulton Hall, Essex, England.

CARROTS are recommended as feed for farm horses, as they save oats and give a fine gloss to the skin, besides promoting a healthy condition of the system. From 14 to 21 pounds is a liberal allowance, anything over that being apt to affect the kidneys and induce excessive staling.

PROLIFIC.—A Prescott paper speaks of a stool of oats grown by Mr. Daniel Caughey, which contained 55 shoots, each shoot averaging 150 grains, or 8,250 grains in all. A pretty good crop from one seed. It is an imported variety.

IN ENGLAND there are about 40,000 acres of young oaks and other growing timber planted in enclosures, by authority of acts of Parliament, of which 10,000 were planted last year.

ROSELLA RICE tells the Ohio Farmer that it is a great help in dog days to add a gallon of cold water to cream just before churning.

RESOLUTIONS.—The man who will not execute his resolutions when they are fresh upon him, can have no hope from them afterwards; they will be dissipated, lost and stifled in the hurry-scurry of the world, or swamped in the slough of indolence.

Stock and Dairy.

SHEEP FOR COMBING WOOL.

Under the above head I noticed in the Rural New Yorker some time since the question was asked by J. W. H., Pickville, Tenn., what is the best cross or kind for growing a good kind of combing wool; and whether such sheep will thrive in large flocks. Seeing no answer to the interrogatory of J. W. H., I shall venture, in a very brief way, to give my opinion in regard to the above questions.

In the first place, had I the old-fashioned Dutch sheep, Cheviot, or any of the ordinary coarse wool and wished to raise lambs for market, I should cross them with a pure-bred Leicester ram. I believe that cross not only gives you larger lambs than you can otherwise get, but they fatten at an earlier age; and should a person wish to raise a flock from this cross he would get a good quality of combing wool; for if your ram is pure bred, his get will most of them be similar to himself; but the next cross would quite likely take back on both sides, and the consequence would be that you would have an uneven and not very desirable flock. For the above reason I should prefer the pure-bred Leicesters. I have kept a few of them for a few years, and I know that they are easy keepers—very quiet in their habits, which enables them to take on fat rapidly, while a wild, shy breed would keep more lean; and I do not hesitate to say that for beauty and symmetry they are not surpassed by any breed. They shear a third more wool than the Cheviot, with the same keep; their wool is long, with a beautiful lustre, and a great deal finer and softer, and will command from fifteen to twenty cents more per pound.

I cannot speak of them as mutton sheep from experience, never having butchered any; but it is claimed that they will dress from thirty to fifty pounds the quarter at maturity, when well fattened.

In Dec., 1869, I went to Canada and purchased a few of the Leicester sheep; while there, there was a fair at Galt, and a drover named Oliver was purchasing his Christmas drove for New York. I saw four old ewes, older than the owner wished to breed from, that he had fed up to the week before Christmas. When put upon the scales their average weight was 295 pounds. A friend told me that five or six three-year-old wethers had been weighed before I arrived, and their average weight was 325 lbs.; so you see that although they are small boned and short-legged, they are monsters when put upon the scales.

In reply to the enquiry whether they will thrive if kept in large flocks, I do not believe it makes as much difference in the size of the flock as in the place where they are kept. For instance, put 50 to 75 sheep of any breed in a building or under a shed that will keep them from the storms of winter, and give them plenty of air, and they will do better, in my opinion, than a small flock of ten or fifteen shut up close, where they will be deprived of pure air. Give any animal pure air and steady, wholesome food, and the numbers will not matter much, in my opinion. When in Canada I noticed flocks of from twenty to sixty sheep, and some persons had larger, of the Leicester breed, and all looked well.

I should not, in my preference for the Leicester, omit mentioning the other two combing breeds—the Cotswolds and Lincoln. They are similar to each other; both are coarser boned than the Leicester, and larger—require better care and feed, shear a trifle more wool of a coarser grade and inferior quality, worth less by the pound, and all things considered, are not as profitable sheep for the farmer as my favorite Leicesters.

It is claimed by the Cotswolds men that their wool is a trifle longer than the Leicester, but I can see no need of that, for I pulled some wool out of one of my lambs at ten months old that measures twelve inches in length; if you hesitate to believe it, ask the editor of the Rural who has the sample I mentioned.—Horticulturalist.

COLD WATER BAD FOR COWS.

During the last summer in the hot days of July and August, the animals resorted to the lake to drink, and after slacking their thirst, they would wade into the water, and remain sometimes an hour or two with their legs half immersed. This habit, it was found, invariably diminished the flow of milk at night, and in order to learn the extent of the diminution, careful observations were made. It was ascertained that standing in the water an hour diminished the flow of milk to the amount of eight or ten quarts in a herd of thirteen cows.

The loss was so great that whenever they resorted to the water they were driven away to the pasture again at once. We have learned that from simply turning the herd into the yard upon a cold day in winter, and allowing them to remain fifteen minutes, the flow of milk was diminished to a serious extent, and consequently the animals are not now allowed to leave the warm stable during the entire winter, except for a brief period upon warm, sunshiny days. Water is brought directly from a well into the barn, and drinking vessels are arranged so that the animals have but to move but a step or two to supply their wants. The nature of the water supply and convenience of access are most important points in the management of milk cows. A draught of ice-cold water taken by a cow in winter cuts short the milk yield for the day from one to two pints.—Journal of Chemistry.

THE SUPPLIES OF STOCK.

In 1868 and subsequent very dry years, the scarcity of grass and other stock-feed, obliged the breeders to sacrifice their stock at ruinous prices, thus diminishing their capital and discouraging the breeding of stock. It is to be hoped and expected that the present very high prices of lean and fat stock will greatly stimulate increased stock-breeding. The increase of population and industrial prosperity cause a greater demand for animal food, and a consequent rise in price. I do not think that meat will be cheaper for some years to come. I have always had an opinion that we do not, as farmers, make meat enough, and it is evident that with so vast an extent of grass land (half of the kingdom), much of it very poor, we shall be often subject to the evils arising from dry seasons on permanent pastures. An ample and more certain supply of stock food can be produced on arable land by growing winter and spring beans, clover, winter tares, Italian rye-grass, mangle, turnips and cabbage, and winter oats all available for animal consumption. By the use of cake and foreign corn, with cut straw, &c., much meat may be made. All this requires a greater acreable capital than is generally invested.—J. J. Mechi in Markham Express.

SOILING STOCK.

This business of soiling involves extra labor, of course, and that is the chief obstacle to its more general adoption. But it brings ample compensation, for it diminishes the area of land needed to produce the same crops and support the same stock, thus diminishing the first and permanent investment, which is often, as many farms are managed, almost wholly unremunerative. If the investment in land is less, that in labor can be greater, the culture given better, fertilizers used more freely, and the profits more certain, because these three elements in agriculture diminish the chances of failure always. Again, it is enough to put a man in a shooting mood to see work-horses turned out into pastures that will not afford a good meal per acre for once a week, even if he forages over the whole acre. Think of keeping a horse in such a place in a fly and mosquito time, and then expect him to do a good day's work besides! But this is scarcely more barbarous and unprofitable than keeping cows in the dry pastures of clay hill-sides, as many do, without a bite of green forage or the shelter of a stable—often not a tree—from the 1st of July to the 1st of October.—Ed.

WATER FOR SHEEP.

It is believed by some that water, as a drink, is wholly or quite unnecessary for sheep. No one could make a greater mistake than to believe the idea stated above. If sheep are allowed access to water, they will be as regular in drinking as other stock. A regular supply of water throughout the winter as well as summer, should be regarded as indispensable for the welfare of our flocks. Every flock-master is aware of the difference there will be in the condition of sheep that have, and of those that have not, been watered during a winter; although the latter may seem to be in fair condition, they are not in as good condition as they would have been had they been watered daily.

LICE ON CATTLE AND COLTS.

A correspondent from Nashwaaksis hands us the following simple method, long used in that locality, for killing lice on cattle:—Make a strong brine with common salt, and apply it two or three times, rubbing in well with a brush. This never fails to remove the vermin. Scoury on cattle can be successfully treated by the application of fresh hog's lard to the

affected parts, previously washed clean with soap and water.—Colonist Farmer.

IT IS SAID that sweet or sour milk will sweeten frozen butter much better than salt or saltpetre; there is nothing which absorbs whatever is offensive to the smell or taste so quickly as milk, cream or butter, and no agent can be employed that will so quickly or surely extract the flavor of the wood from new dairy utensils.

THE Willamette Farmer, of Oregon, learns that many calves on large dairy farms at Sandy are dying off, and when examined after death, it is found that the heart is much enlarged and the lungs all gone. One dairy, where they keep a hundred cows, has already lost thirty, and the same state of things exists all around them.

BY FEEDING chopped straw, oats and rape-seed, thoroughly cooked by steam, and raw Swedish turnips, one of the largest dairies in England increased the yield of milk from 553 to 570 gallons per cow per annum.

A WRITER in the American Agriculturist says he has found his cows will always let down their milk when inclined to hold it up if he gives them some salt to lick.

Sales of Thorough-Bred Stock.

THOROUGH-BRED STOCK FOR NOVA SCOTIA.

The report of the committee appointed by the Central Board of Agriculture of Nova Scotia to make purchases of thorough-bred stock, will possess interest for our agricultural readers.

The committee report:—"At Hamilton, Ont., there was a very extensive exhibition of live stock, the largest that has ever been held in Canada. There we purchased two powerful English draught horses, "Marquis of Lorne" and "Netterly, Junior."

Of Short-horn Durham bulls, the following purchases of animals of perfectly pure blood were made:—General Grant, roan, 3 1/2 years old; Lord York, roan, 4 years and 8 months old, a splendid animal imported from England, and containing much Duchess blood, being from Duchess of York by third Duke of Wharfedale, and closer than half-brother to the celebrated Duchess Ninety-Seventh, for which Mr. Cochrane paid to Captain Gunter one thousand guineas when a heifer scarcely a year old; Mara Duke, a year and a half old; Royal George, a yearling from Strawberry by Prince Louis; Duke of Greenwood, a year and a half old, bred by Birrell & Johnston from Young Dumpty, by Bill Duke of Markham (the Cornwallis Bull); Oliver Twist, of the same age, from Kentucky Jane, by the same sire. There are also two Short-horn calves, one named Sir Roger Tichborne, bred by Mr. S. Beattie, from Graceful by Clifton Duke the Second; the other, William, bred by Mr. Aitchison, of Guelph, from Isabella, from His Majesty.

We have succeeded in securing from Messrs. Aitchison, Rudd and Guy, a splendid herd of theoughbred Devon cattle, consisting of eight males and six females, three of the latter in calf.

The following Ayrshire cattle have been purchased:—Lord Lisgar, 2 1/2 years old, bred by Mr. Crawford, Montreal, from Paley, by Lord Cathbert; Lord Raglan, of the same age, bred by Mr. Morton, of Morton, from Maggie, by Carrick Farmer; Independence, a yearling bull, bred by Mr. Guy, from Flora, by Lion; Dufferin, Bangor Chief, and a calf not yet named. The Ayrshire cows and heifers are:—Effie the Second, from Effie, by Jack; Flora, likely to calve about the time of the sale; Lilly and Cinderella the Second, both about 17 months old.

In addition to the above, we have purchased, from some of the best flocks to be found in Ontario, twenty rams and ewes of the Cotswold and Leicester breeds, one Shropshire ram, two Shropshire ram lambs, one South-down ram, one yearling Southdown ewe, and two Southdown ewe lambs.

The following is an analysis of the purchases made:—

Table with 2 columns: Animal type and Price. Includes Horses, Shorthorn Durhams, Devons, Ayrshires, Long-wooled Sheep, Doves.

SALE OF SHROPSHIRE SHEEP AT ATHERSTONE.

The sale of Shropshire rams, ewes and theaves belonging to Mr. Wm. Baker, of Moor Barns, near Atherstone, Warwickshire, took place last month. There were thirty-six lots of rams submitted, and after a good com-

petition they were all sold off at remarkably good prices, the average being £17 13s. 6d. Among the highest priced lots were a pair of the Reflection and Perfection pedigree, which sold to Mr. Rose for 33 guineas. Another lot by Reflection and Monach went to Mr. Bennett for 35 guineas; while the same gentleman secured the shearing ram Chance for a similar figure. Two other lots sold for 30 guineas and 33 guineas respectively, and others were disposed of at 20 and 15 guineas. The lettings were Charley to Mr. Lightfoot for 17 guineas; Valentine, to Mr. Marston, at 25 guineas; Rocket, to Mr. Atkin, for 15 guineas, and F ash, to Mr. Princes, for 15 guineas.

SALES OF THOROUGH-BRED STOCK.

A sale of short-horned cattle and Cotswold and Leicester sheep took place on the farm of the Hon. D. Christie, near Paris, Brant Co. Twenty-eight cows and heifers, and eleven bulls and bull calves were sold. The twenty-eight females brought \$8,330, being an average of nearly \$300 each. The eleven bulls brought \$2,765, being an average of nearly \$251.—The sheep averaged nearly \$10 each. Most of the purchasers were from the United States, Mr. Hyde, of Ohio, taking fifteen cattle. One bull, "Knight of St. George," was sold for \$1,235 to Mr. Rust, of Chicago. Two heifers went to Ohio at \$675 each. Several animals were sold to buyers from Illinois, Iowa, and Nebraska.

DUNMORE PARK SALE OF SHORT-HORNS.

In the Irish Farmers' Gazette of the 14th ult., we find the report of the sale of the chief part of Earl Dunmore's herd of Shorthorns.—To those in this country who think the interest in this breed of cattle is on the wane, or that the days of fancy stocks are over, we commend this report. Fifty-four animals in all—bulls, cows and heifers—were sold, realizing an average price of more than one thousand dollars per head, being the highest average on record. Among the list of purchasers we do not recognize the names of any Americans, although it is not improbable that Mr. Cochrane and others may have had authorized agents there to pick up some of the beauties of this celebrated herd.

CATTLE SALES.

Messrs. Hunter, of Pilkington, sold to Mr. G. Miller, of Markham, for \$600, at the Guelph Show, their prize bull, "Oxford Duke," the winner of first prize and diploma at London, and also at Guelph, last year. He also gained the first prize at Hamilton this year amongst the three year olds. The same parties also sold to Mr. P. Rennie, of Garafra, for \$200, their two year old grade heifer, which has stood first of her class wherever shown. Their entire horse, "Marquis of Lorne," has also been sold to the Committee appointed by the Government of Nova Scotia, to select stock in Ontario for that Province. The price realized was \$600.

SHEEP SALES AND LETTINGS.

Among the sheep sales and lettings of the season in England, we particularly notice that of Mr. Ri-dou's Southdowns at Hove. The prices made were unusually high, 100 ewes having been sold for £520, and 16 rams bringing £344—an average for the latter of over £21 10s., say \$107.50 each. Ten rams were also let, realizing £310 in the aggregate—the highest price made being 90 guineas! Mr. Kirkham, Basethrippe, also sold Lincolnshires as follows:—68 s'ring rams averaging over £27 each; 52 rams of other ages were offered, and the average per head on the whole 120 was £25 11s., a very high figure for so large a number.

ANOTHER SALE.

Amongst the valuable animals shown at the Hamilton and Guelph Exhibitions, was a fine Durham bull calf, eight months old, owned by Messrs. J. & B. McQueen, of Pilkington.—At Guelph it carried off the 2nd prize against quite a number of entries of first-class breeders, and Mr. Sproat, of Seaforth, bought the animal for \$200.

Messrs. Long and Thompson's sale, which took place near St. Mary's, was well attended by buyers. Bulls realized from \$350 to \$400; cows, \$375 to \$380. One grade heifer, two years old, sold at \$115. The sales realised between \$4,000 and \$5,000.

A sale of imported draught horses and short-horned cattle took place, Oct. 3rd, at the farm of Mr. D. Reeson, Markham, Ont. The animals sold well.

We hear that the Hon. G. Brown realized the sum of \$13,000 from his sale of farm stock at Bew Park.

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To check snail soil-liming with the days are su dry to allow of freedom. Use merely hoeing, face; give good berry drills, by walls, and on newing surface when it becom inert. Nor sh lime, or lime-w when they dist laws and buy earthy outcast small recently-tent as to cau them out of th into their holes.

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THE GARDEN USES OF LIME.

To check snails and slugs in time, commence soil-liming with the sowing of early seeds, when the days are sunny and the earth sufficiently dry to allow of working among the soil with freedom.

Nor should the extirpating effects of lime, or lime-water, upon worms pass unheeded, when they disfigure the surfaces of fine grassy lawns and bowling greens with their unsightly earthy outcasts; or when they abound among small recently-planted seedlings to such an extent as to cause their destruction by turning them out of the earth, and by drawing them into their holes.

Though hot lime may not extirpate many of the numerous insects which infest fruit trees and bushes, yet it is less or more hurtful to most of them; and the best time and mode of applying it is just before the buds begin to open; then on the morning of a quiet day that is likely to continue dry and sunny, syringe over all the branches with water, or, better still, with soap-suds, till they are thoroughly wet, then dust on the hot lime till no portion remains unwhitened.

HOW TO KILL WEEDS.

By attending to the following directions, weeds may be completely extirpated:—

1.—Study their habits. Without this you are working in the dark. You are shooting without taking aim, and are more likely to miss than to hit.

2.—Have faith that weeds can be killed.

3.—Should you, for the first year or two, see little benefit from your labor, do not relax your efforts. You will certainly triumph in the end. This is the experience of all gardeners; and a firm conviction of this truth is one of the strongest incentives to perseverance.

4.—Be forehanded with your work. This is exceedingly important. It is so not merely because weeds actually go to seed before they get large enough to attract attention. Chickweed (stellaria) is quite a pest in many gardens.—We have known much labor and time spent, year after year, in efforts to keep this little plant in check, but all in vain, because the work was not commenced early enough in the spring and continued late enough in the autumn.

The plant will flower in the snow, and tens of thousands of seeds were matured before the ground was cultivated in the spring. The garden was forked over and hoed repeatedly during the summer, and every weed raked off (after they had gone to seed), but during the wet weather thousands of little plants would spring up, but were not thought to be injurious and were suffered to remain to grow all winter and seed the land again early in the spring.

The gardener declared it was impossible to get rid of chickweed. And so it is with many other weeds. We could get rid of them if our labor was directed by a little correct knowledge of the habits of the plants, and was applied at the right time. Many think it impossible to free the land of couch, or quick grass (triticum repens), and their experience seems to them to justify the opinion. But it will be found that they are not forehanded in their work. They let the plants grow until the ground is covered with the leaves of the couch, and then they hoe and rake and cultivate, and maybe fork out as many roots as possible. But they cannot get out the whole. The roots are broken into small pieces, and each piece produces a new plant, which soon pushes out its roots in all directions in the loose and mellow soil. Had the work been commenced before the couch plant pushed out their leaves, and been kept up so vigorously and continuously that the young shoots could not get to the surface, and the soil constantly cultivated during the hot dry summer months, every couch plant would be destroyed. We have tried the plan, and know that couch can be effectually got rid of in this way. But no half-way measures will succeed with it.

5.—Burn all the thistle heads and other weeds that are cleaned out of the garden. Many seem to think the best place to put these weeds is in the roads. The man that does it should be indicted for a nuisance. He forgets that these weed seeds will stick to the feet of horses and other animals. Another plan is to feed these seeds to the fowls. All that are not digested will grow. If there is so much grain among the weed seeds that you do not like to burn them, boil before feeding.

6.—Look to the manure. This is a fruitful source of weeds. If the crops are foul, the manure will certainly be full of weed seeds.—Fermenting the manure will not kill these seeds, unless the seeds themselves are decom-

posed, which is seldom the case. The better plan is to pile the manure, turn it, and get it thoroughly rotted, and then apply as a top-dressing.—London Farmer.

TRANSPLANTING CURRANT AND GOOSEBERRY BUSHES.

In reply to "An Amateur," we give him the result of our experience: I have only this month (October) been able to transplant my gooseberry and currant bushes from the nursery, as the crop in the ground was late in coming to maturity. Though somewhat late, I prefer transplanting them in October to allowing them to remain in the nursery not transplanted till spring. They may be safely transplanted even later in the season if they are removed with sufficient care. I have transplanted currant bushes in the months of September, October, and the early part of November, and in every instance without a failure. I have learned by experience that by delaying the transplanting till spring, a season's growth and a season's fruit are generally lost. The best month for transplanting is September; there will then be more time for the young trees to take root well before the frost sets in. If planted late it will be well to protect them by slightly mulching the surface over the roots. Currant bushes are best propagated by cuttings, early in the fall. They strike root very freely. Propagating them from the suckers or by dividing the bush does not produce so good bushes. I tried keeping the currant bush confined to a single stem here, as I had done in the old country, but it does not answer so well, owing to the greater summer heat.—A. S. T. Ed.

WINTER GARDENS IN OUR ROOMS.

From Arthur's Home Magazine we condense the following notes for November:—

"Hanging baskets are the most graceful ornaments that can be used in making a winter flower garden. They may be hung from the windows or in corners; brackets on the wall may support pots containing the same kind of pendant foliage, and ivy may be trained over mantels and picture frames.

"A common sweet potato, placed in a hyacinth glass, and treated the same as a hyacinth bulb, will send out long, delicate roots until the glass is filled, while at the same time a beautiful and graceful vine will shoot from the top and may be trained in a variety of ways. The flower-stand containing the plants suited for winter blooming must be drawn near the window, where they can obtain both light and shade.

"Arrange into bouquets the pressed ferns and dried mosses gathered in July. You can make out of them a perfect bower, either over the mantel or in a corner.—They can be fastened on strips of paper and tacked to the wall, the tops of each successive row of ferns hiding the paper and the fastening of those immediately above.

"Now is the time to obtain bouquets of autumn leaves which rival colours with the brilliancy of their coloring. If they are renewed once a week during the season they will always be fresh and brilliant.—Those bouquets are seen to the best advantage if placed where the light will shine through their leaves and bring out the colors in all their brilliancy.

"The Virginia Creeper is a beautiful subject for parlor decoration. Its leaves present the most brilliant tints, and its clusters of purple-black berries are very graceful. Oak berries will retain their color and form longer than anything else, and their red, green and bronze foliage can be arranged in a variety of ornamental forms over the tops of cabinets, book-cases and picture frames."

HINTS ABOUT FLOWERS.

House plants ought to be stimulated gently once or twice a week. Rain water, so refreshing to summer flowers, always contains ammonia, which also abounds in all liquid manures. If you take an ounce of pulverized carbonate of ammonia, dissolved in one gallon of water, it will make spring water even more stimulating to your plants than rain water. If you water your plants once in two weeks with guano water (one tablespoonful to a pail of water), they will grow more thrifty.—Chicken manure dissolved in water is excellent. Always keep the soil in your flower-pots loose. A common hair-pin used daily will stir the earth sufficiently.

—Boston Journal of Chemistry.

POTASH FOR PEACH TREES.

At a recent meeting of the Cincinnati Horticultural Society, a Mr. Sheppard stated that he had a peach orchard of twenty-five acres, the soil of which was poor, and was manured with potash only. One barrel, costing \$35, or 15 cents per pound, lasted him four years. He dissolved it in water so that the lye would be so weak that a potato put in would not quite come to the surface, and then applied two quarts of this liquid close around the trunk every spring. From 200 peach trees he had sold, during the past five years, \$12,000 worth of peaches. He had also a good crop this year.—The Horticulturist.

ONIONS will withstand far more cold than is

usually supposed. If packed dry in tight barrels and all interstices filled with chaff, they may be kept in a barn or where they will freeze quite hard, and not be injured, provided the barrels are closed tight and not opened until the onions are again thawed. Onions stored in a warm cellar are very likely to sprout in winter and then decay, emitting anything but an agreeable odor.

The too general custom in the country of putting all kinds of vegetables in the cellar under the dwelling-house is not conducive to the health of the inmates at least; besides, it is scarcely possible to keep all kinds equally well preserved in the same temperature. It is a far better plan to store the different kinds separate, or at least place them where ventilation can be given when necessary. Potatoes and carrots are about the only roots that can be preserved in a cellar which is not ventilated in winter; and then no very large quantity can be safely placed together.

CABBAGES.—This is one of the quickest decaying vegetables, if kept in a warm place; and the usual practice in this vicinity is to set the heads in a furrow, with the roots up, and then cover very lightly with earth. In such a position they remain frozen nearly all winter, and come out in spring almost as fresh as when gathered in autumn. We cannot say how this plan would answer farther North or South; but it answers every purpose here, and New York city market is supplied in winter and spring from the open fields.

We believe that, as a rule, farmers fail in preserving their vegetables, simply because they try to keep too many kinds together, and all in far too warm a temperature.—Rural New Yorker.

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Orchard and Forest.

THE CONCORD GRAPES.

Objections are frequently made to the Concord grape on account of its acidity. It is very easily accounted for by the fact that too much fruit is allowed to grow upon the vines. The idea sometimes advanced, that the vine or fruit should not be pruned at all, has been proved incorrect by the experience of the most practical vine-dressers. This variety has been fully tested as a table grape, and its superior merits have been demonstrated. If it is properly cultivated, it is best for general culture, and takes the lead in vigor and adaptability of any that is now grown in the open air in this section of the country.

Vines that have been planted four years and are perfectly healthy and vigorous, will, if rightfully pruned, bear from forty to sixty bunches of grapes annually. One-half of the clusters should be removed soon after the fruit sets. By this method the fruit will ripen some two or three weeks in advance of vines upon which all of it is allowed to grow. Older vines will produce like results under the same treatment. To improve the flavor of the fruit, place it on earthenware in a well ventilated cellar for several weeks. By this means its acid properties will be changed, and it will then have more of the saccharine matter, which is a most desirable quality in fine fruit.

It will be found that this grape can be grown in this manner with a fair prospect of profit to those who cultivate it for the market, as its value would be greatly inclined to pay a fair price for choice fruit rather than purchase that of an inferior quality at a cheaper rate. Here then is one important requirement to grow first-class fruit.—Newburyport Herald.

PLENTIFULNESS OF FRUIT.

The orchards of Canada are teeming with fruit. Apples were never in greater abundance in the markets, and, as a consequence, they are sold at very low prices. Some of our most extensive fruit growers intend shipping considerable quantities to England. The fruit crop there has been almost a failure from the cold spring. Notwithstanding the abundance of fruit in the markets, it all meets with a ready sale; and though it brings a low price—very low if of an inferior quality—good fruit sell comparatively well. Fruit will always find a ready market and generally pay the producer well for his outlay and labor. When planting an orchard it is essential to future profit to make the best selection of the different sorts to be procured. We give from the pages of the Country Gentleman a fruit grower's list of apples which are said to sell well, give excellent satisfaction and ripen in succession:—

"The trees are very hardy, good growers; fruit large, regular bearers and of good quality. In 100 trees the following proportions will be found nearly right:—6 Primate, 10 Red Astrachan, 10 Lowell, or Tallow Pippin, 6 Golden Sweet, 5 Hawley, 6 Twentyounce, 7 Poundsweet, 10 Baldwin, 10 Greening, 10 Northern Spy, 10 Roxbury Russet, 10 Northern Spy, 10 Roxbury Russet. While in this list we meet some well known favorites, we also miss some that we would be sorry to see omitted from our Canadian orchards; among others, the Fameuse, or Snow apple, the Duchess of Oldenburgh, the Alexander, the Winesap, and some of the Pippins and Russets not included in this list. It will, however, be a help to a person about to plant an orchard.

Of the Primate Apple, a writer in the same journal writes as follows:—"As an early fruit this variety ranks the best where most known. It does not crack and blotch like Early Harvest—is a ways of good size, large, very handsome, and of superior quality. Tree, a strong grower, with very stout new wood, always hardy and healthy, and producing good crops annually. The fruit continues to ripen gradually, as desired for use, from 1st of August till middle of September."

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off at remarkably being £17 13s. 6d. lots were a pair of pedigree, which means. Another lot went to Mr. Ben-

the same gentleman chance for a similar for 30 guineas and others were dis-

the lettings cost for 17 guineas; n, at 25 guineas; r 15 guineas, and 5 guineas.

THE GARDEN USES OF LIME. To check snails and slugs in time, commence soil-liming with the sowing of early seeds, when the days are sunny and the earth sufficiently dry to allow of working among the soil with freedom.

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Good Health.

LOCATION OF HOUSES.

Houses should be built on upland ground, with exposure to sunlight on every side. During epidemics, it has been noted by physicians that deaths occur much less frequently on the sunny side of the street than on the shady side; and in hospitals, physicians have testified to the readiness with which diseases have yielded to treatment in sunny rooms, while in shaded rooms they have proved intractable. Let there be no bogs, nor marshes, nor stagnant water in the neighborhood, then let the cellars be thoroughly drained. Inattention to this subject has caused the death of many a person. No father and mother should rest one moment in peace while their innocent babes are sleeping in rooms over damp and mouldy cellars. Cellars should not only be drained, but thoroughly ventilated, otherwise the house must be unwholesome. Let the drains also be constructed for the conduction of slops and sewerage of all kinds to a common reservoir, at a distance from the dwelling, to be used for fertilizing purposes. Door-yards should be kept clean and dry, composed largely of greensward, on which children may romp and play. They are entitled to it, that the breath of Nature and of Nature's God, as it filters down through the blue sky, may fan their rosy cheeks, and fill their souls with joy and their bodies with health. If beautiful and useful flowers and plants can be cultured, they will add to the attractiveness of the place, and help to cultivate a kindly spirit among its inhabitants.—*Science of Health.*

SLEEPLESSNESS AND THE REMEDY.

The best anodyne is a liberal amount of muscular activity out of doors every day. Persons who sit around the fire, or lounge on the sofa, or read or sew a great part of the day, need not expect sound sleep; only the laboring man can taste it in all its sweetness. Many fail to sleep at night because they will persist in sleeping in the day time. It is just as impossible to healthfully force more sleep on the system than the proportion of exercise requires, as to force the stomach to digest more food than the body requires. Rather than court sleep by industrious activities, many persons resort to medicine, and every new drug which is heralded as a promoter of sleep becomes at once immensely popular, even though it is known to possess dangerous qualities. Coloral hydrate has had a great run, and even young men are known to be purchasing it at the drug stores, to be used in promoting sleep; it should never be taken unless advised by the family physician, for the medical journals are constantly publishing cases where serious harm and even fatal results attend its habitual use.—*Journal of Health.*

STAGNANT WATER DRUNK BY COWS PRODUCTIVE OF TYPHOID FEVER.

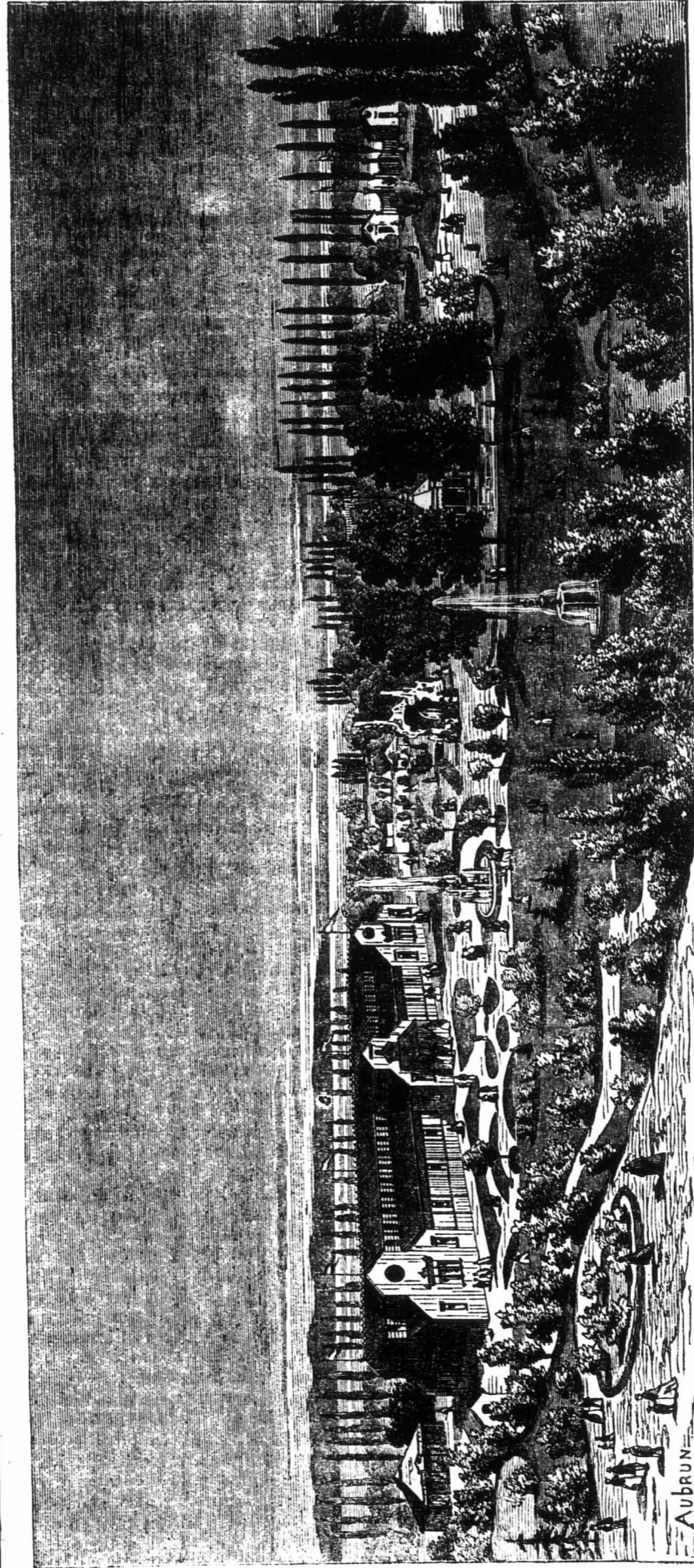
Of 140 families supplied with milk from a dairy in Islington, England, seventy suffered from typhoid fever. One hundred and sixty-eight individual cases occurred within ten weeks, and thirty died. An investigation showed that the cows drank water from an old underground tank, built of wood, and much decayed. The milk cans were washed in the same water, and in all probability the water was also mixed with the milk. As the fever attacked only such parties in that district as used the milk, the water in the rotten tank must have been the cause. This is only one more evidence of the danger of using foul water, and giving it to animals. It has been shown that stagnant water acts as a slow poison to animals as well as men; and it is a matter of the first importance to all dairymen and stockraisers, as well as families, to use only pure fresh water.—*Moore's Rural New Yorker.*

A CORRESPONDENT of *The Builder* states that he had occasion for several years to examine rooms occupied by young women for manufacturing purposes, and he has observed that while the workers in

one room would be very cheerful and healthy, the occupants of a similar room, who were employed on the same kind of business, were all inclined to be melancholy, and complained of a pain in the forehead and eyes, and were often ill and unable to work. The only difference he could discover in the rooms was that the one occupied by the healthy workers was wholly whitewashed, and that occupied by the melancholy workers was covered with yellow ochre. As soon as the difference

struck him, he had the yellow ochre washed off the walls, and then whitened. At once an improvement took place in the health and spirits of the occupants.

GREEN fruit has always been considered as tending to produce the choleric diseases, but we believe that over ripe or partially decayed fruit is fully as productive of disease as the former; but fresh, ripe fruits are always healthful and nourishing, and are among the natural foods of man.



EXPOSITION BUILDING AND GROUNDS AT CORDOVA, WHICH IS ONE OF THE MOST ENTERPRISING AND PROGRESSIVE CITIES OF SOUTH AMERICA, IN THE ARGENTINE REPUBLIC.

The above cut is kindly lent to us by the *Prairie Farmer* Co., who publish an excellent agricultural paper in Chicago, from which we occasionally make extracts. We, or some of us in this part of Ontario, are apt to think we are far in advance of many parts of the new world in agriculture. We must confess we are rather astonished to find them so far advanced

in South America, judging from the above illustration. We think we may receive a hint from it in regard to beautifying our agricultural grounds. It is with that view we insert it. We expect some of our Canadian breeders' stock may some day gain prizes at the Cordova Exhibition. We are not aware of any having been sent

Entomology.

BY PROF. C. E. BESSEY, OF IOWA AGRICULTURAL COLLEGE.

Every year Iowa feeds of her productions about ten millions of dollars worth to insects. Not a crop but what pays a heavy percentage to one or more of these piratical little animals. Prof. Riley, in his Third Annual Report upon the Noxious Insects of Missouri, makes mention of thirty-seven different insects which infest the apple tree alone, while some English entomologists estimate that in England every different species of plants has on an average six different species of insects.

The loss annually in the whole United States is stated to be three hundred millions of dollars, and I have no doubt the statement is rather below than above the truth. Could this enormous sum be applied to the payment of our National Debt, in ten years all would be paid, principal and interest; yet year by year we pay tribute, and have as yet made but little united, intelligent effort to free ourselves from the necessity. In our own State next to nothing has been done; a committee or two appointed by our Agricultural and Horticultural Societies constitutes the whole force now mustered by Iowa to protest against paying ten millions a year for the support of a hungry horde of insects. Is this wisdom? Is this so trivial a matter as to be beneath the province of legislation? We have laws against permitting certain noxious weeds to grow and send their seeds from farm to farm, and yet so far as I know, nothing has been done to prevent the growth and spread of hundreds of insects which are worse to eradicate and much more injurious than even the Canada Thistle.

How shall we best fight these insects? This is the question which first comes to us when our choice plums wither under the puncture of the Curculio—when our potatoes disappear before a army of Potato Beetles, or when the Grasshoppers come down upon our oats, corn and grass like a personation of Destruction itself. We plant, we give anxious care and hard labor that our planting may come to full fruition; but the worm comes in for his share first—too often it is a "lion's share," and chooses the best and finest for his eating.

The worm, the bug, the beetle, the fly, the moth, they follow us everywhere, and claim a portion of ours as their own. How shall we escape from them? There is no way but to set to work and study them until we know them—know not only their appearance, but their habits, their hiding places, their weakest moments, their most vulnerable points of attack.

We must do with these enemies as we would do in case of larger, two-footed ones; we must first find out how to attack best, and then make an attack all along the line. We must all rouse ourselves and go into the fight energetically and understandingly.—*Iowa Home-Stead.*

OF INJURIOUS INSECTS.

Deserving notice, are the second-brood caterpillars of the fall web worm, *Hyphantria testator*, the webs of which can be seen on most all kinds of orchard forest trees, as on the osage hedge. While in the web the worms are scarcely an inch long, and are the very conveniently destroyed; they are light-colored, hairy, with black dots on the back. At that size they leave their web and run singly over every object and off almost any green thing. They produce a white moth, the male measuring about an inch, the female 1 1/2 inches. They pass the winter in the pupa state.

THE HANDMAID MOTH (*Datana minima*).

The caterpillar of this month can be found in almost any orchard of young trees; its presence on the trees is easily detected by the conspicuous and defoliated limbs; they are now found in lumps of from 20 to 30 together; are black worms, one and a half to two inches long, with six white longitudinal lines and a little hairy when not feeding, they raise both ends. Pupate in the ground and winter as pupa moths; issue in July, and are also found on oak, hazel and black walnut.

THE AMERICAN PROCRIS (*Procris Americana*).

A short, thick, yellow caterpillar, slightly hairy with black dots, is a gregarious worm, 20 to 30 occupying one single leaf, which they only leave when full-grown, and they are for this reason easily destroyed by picking off the infested leaves; it produces a small black moth with an orange colored moth which issues in July following. In Southern latitudes there are two broods, and the first brood of caterpillars sometimes proves quite injurious, committing its depredations at a season when the foliage is essential to the health of the vine and fruit.

WE issue a Supplement this month containing a list of the most important awards of Prizes given at the Provincial Exhibition.—There may be a few inaccuracies, but it is as correct as we have been able to procure it. We were promised a revised or corrected list from the Secretary, but it has not yet come to hand.

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The plac... air, an... the bes... usually... draclim... This s... Nitrat... ammon... of am... This is... night... pear d... of the... may b... applic... be un... water... last sh... it be n... as mu... anima... rende... slight... as the... his dr... chop... shou... then... allow... ve d... h a b... aft r... a qu... will... havi...



The Horse.

HORSE EPIDEMIC.

During the past few weeks several horses have been seized with a disorder of the respiratory organs, but nothing was thought of the trouble until within the last few days, since which time the disease has attacked hundreds of animals. The malady, according to our best veterinary surgeons, may be characterized as a catarrhal fever. It commences with a severe hacking cough accompanied by considerable fever, restlessness of the animal, coldness of the extremities. After a short time a discharge of matter from the nose occurs. When the animal is exposed to any vitiating influence such as a cold draft, or impure stable, or when it is kept at hard work, the lungs become affected, and of course more severe symptoms appear. Thus far, notwithstanding all reports to the contrary, no deaths have occurred, and where rational treatment is pursued there will be little danger. During the past couple of days, Dr. A. Smith, veterinary surgeon, has treated no less than six hundred of the diseased animals. The epidemic is not confined to any particular stable, but has appeared in all the large ones in the city. It is impossible to ascribe any tangible cause for the disease, but it is supposed to be due to a peculiar condition of the atmosphere, and if such be the case it is more than likely that all horses throughout the country will be more or less affected. In support of this supposition, it may be mentioned that several of the prize animals at the Guelph exhibition yesterday showed symptoms of having caught heavy colds. It is more than probable that instead of colds, they are afflicted with the catarrhal fever. -Mail.

The Parrot Tulip.

We spoke of the handsome flowers of this variety that we had seen in our last issue. We are importing some from Holland, and expect them in a few days. They merely require placing in the earth where you wish them to grow, some time this autumn; cover the ground with a few leaves, rough manure, straw or tan-bark. They will then top and be ready to shoot up as soon as spring opens. If you admire flowers as much as we do, you will be highly pleased with the bright and varied colors of this variety.

Little girls and boys go and ask your neighbors to take the ADVOCATE next year; tell them you want to get a prize, and, if you succeed, you will soon be able to give them a bulb and ornament their gardens. Your fathers and mothers will be pleased to see you decorate the garden in this way, and may help you. If you obtain one new subscriber you will have two bulbs sent you; you must mention that you are trying to get up a club. See the larger prizes for getting up clubs, and try and get one.

Veterinary.

DISTEMPER IN HORSES.

The treatment of this disease consists in placing the animal where it can breathe fresh air, and be without restraint. A loose box is the best place to keep it in. A mild purge will usually benefit the animal. Cape aloes, three drachms; extract of gentian, three drachms. This should be followed up by the following: Nitrate of potassa, two ounces; carbonate of ammonia, one ounce; solution of the acetate of ammonia, twelve ounces; water, twelve oz. This is to be divided into four doses, to be given night and morning. If the animal should appear distressed with short breathing, or effusion of the chest is threatened, the last-named dose may be continued, and mustard poultices be applied to the chest. A good bedding should be under him, and a pall of good whitened water or thin gruel placed in his manger. This last should be changed twice every day, a though it be not touched. Silence should be maintained as much as possible near to and about the animal prostrated by this disorder. Distemper renders horses extremely nervous, and the slightest noise seriously affects them. As soon as the strength of the animal has subsided, his drink may be made rather thicker; carrots chopped fine, and fresh grass, when in season, should compose his food for the first few days, then a few crushed and scalded oats may be allowed; and at any time give any kind of provender, rather than the horse should consume hard food. Good, wholesome stimulating food is, after all, the best tonic; and plenty of this, with a quart of good porter, morning and evening, will soon leave the horse none the worse for having had the distemper. -Prairie Farmer.

Correspondence.

INTERESTING LETTER FROM OTTAWA.

To the Editor of the Farmer's Advocate.

Well, my dear friend, we have just had our first Horticultural Show in Ottawa. We have had spasmodic attempts before, but this time we began with a determination to continue, all being well. The 5th and 6th of September were the appointed days and you, who do so love to win your way (as we have done in this matter) in the midst of all sorts of opposition, wish I am sure, rejoice with us in our complete success. We had quite expected that our big elder sister, the Agricultural, would have given us a helping hand in encouragement and sympathy; but no—frowning upon us in august displeasure, she bade us wait till after her fete days (when the best flowers would be done, and our success almost impossible!). Was she jealous, do you think? We wanted to go on peacefully hand-in-hand, but if we may not do so, I doubt not the nursing will fight its way onwards, and right brave too. But that is past, we'll let it be; but take a peep through my spectacles at the pretty sight which Gowen's Hall presented last Thursday afternoon. The Hall itself is handsomely decorated for the occasion, and the arrangement and disposition of the various articles exhibited reflects great credit on those who have the management of affairs. A long table occupying the centre of the room, supports a magnificent display of green-house plants, amongst which the rich glowing leaves of a large number of Coleus exhibited by Mr. Emite, attract universal attention and admiration. Here are far too many beauties to enumerate, but graceful acacia, tropical novities, geraniums, single, double and scented; hilotopes, bigonias, verbenas, petunias, lantanas, and the elegant fuschias,



THE PARROT TULIP.

with fairy-like ferns among them, form a small part of the array of floral beauties, rightly called "God's smiles upon the earth." Zinnias are unusually fine, so are the gladioli; while the boxes of cut flowers, the bouquets and floral designs are really deserving of highest praise. Turn aside for a moment, however, and see "The Gem of the Fair," 'tis an alcove displayed by Mr. E. J. O'Neil, of this city, and styled by him "The Irish Nursery Department." The alcove is composed of two ribs of a whale, and resting on a vertebrae of the same, and contains a collection of about 30 plants imported from the Emerald Isle and still growing in Irish soil; they consist of Irish yew and laurel, laurustinus, holly, laburnum, furze or gorse, cape heather, woodbine, and the never-to-be-forgotten cowslip, primrose and daisy, while bouquets of cut flowers placed in front add much to the effect by their glowing beauty.

The display of fruit is very limited; a few grapes, open air as well as hothouse growth; a plate of splendid peaches; a few plums and Siberian crabs, are, I believe, nearly all, but what there is, is remarkably fine in quality. But as for vegetables—just listen how those side tables groan beneath their weight, it is not enough to make one turn vegetarian! See those Murphys, enough to make an Irishman blush for his country and confess it beaten; in-cious melons; creamy marrows, with comical looking squashes and immense pumpkins; citrons; egg plants, purple and white; corn, of various kinds, and all of it good; smooth sound tomatoes and fragrant celery; cabbage, sound and hard enough to make you declare

caterpillars a myth; cucumbers, to delight an epicure; fatbery Scotch kale; carrots and blushing beets; saucy looking peppers in their scarlet coats; all these, and more than these, in such profusion as to make one say, "Surely this our land is a very goodly country; God bless Canada our Home, our bonnie New Dominion!" If equal prosperity crown our future efforts in the coming years, we shall indeed have no cause to complain. In the meantime, wishing both you and your readers every happiness and success, believe me, yours truly, AUNT PATTY.

["Aunt Patty" has our heartiest thanks for her kind remembrance of us, and her interesting epistle from the great metropolis. "Aunt Patty"—how droll a name for Miss ——— to assume! Well, "Aunt Patty," as well as "Uncle Tom," is much liked by our tens of thousands of readers. We know she is a great favourite with some.—Ed.]

INTERESTING COMMUNICATION FROM THE PROVINCE OF QUEBEC.

SIR—I am yet rambling in Lower Canada, and through the prettiest and most romantic part I have yet seen. Here are magnificent ranges of mountains, interspersed with beautiful little lakes, the views of which are of the most enchanting description, and must be seen to be appreciated. One thing I give the Lower Canadians credit for, and that is, the very pretty manner in which they get up and finish their villages and farm houses. Take the latter as a whole, I see nothing like it in Ontario. Well, I must tell you that this is a very grassy section of country, consequently people devote their attention to cows. The dairies here are large, employing from 30 to 60 hands, some going altogether into cheese-making, others to butter; but it is generally thought the former makes the most money, but then this is counteracted by the loss of the milk for the calves and hogs. They consider 20 cents a round here for butter by the tub to be an ordinary price. It has been an exceedingly wet summer throughout this section, raining from two to three days a week on an average, so that it has been very troublesome to save the luxuriant and heavy hay crop; but, upon the whole, it is pretty well secured, and is worth about \$10 per ton. Oats are extensively raised here, and there is quite a quantity of late-sown to secure and cut yet, but they generally use this in the straw to feed the cattle; the early-sown is secured, and is a good crop. Threshing has commenced, and turns out well—so they tell me. Wheat, little or none grown.

I am sorry to say that the potatoes are rotting badly with the wet; they were also a heavy crop. What with the failure of these in this Province and in the Upper one from the Colorado Bug, I fear, sir, we must expect a high price and a scarcity this winter of this, one of the most useful roots to mankind. I was pleased to get an ADVOCATE or two, and I will make a remark about one thing I saw in last month's paper, relative to using arsenic for the destruction of the Potato Bug; let me advise your readers by no means to do so. I came from a part of England where tens of thousands of tons are raised annually from the earth. Be it remembered, that this is a mineral poison, not a vegetable one. I recollect in the old country, some years ago, a neighbor using this on his turnip crop to kill the fly; in the winter several of his cattle died rather mysteriously; he had their stomachs at last analyzed, and discovered enough arsenic to kill them; on examining the turnips it was found (by the aid of a microscope) to be adhering to the fibres and leaves.

A word now for the ADVOCATE. The postmasters here tell me they never get it now—why not? you would find scores would take it here. Wake up a little in this section, send some handbills to the post office, as there is a wealthy class of farmers in this neighbourhood, many of whom I am sure would take it. Yours truly, RAMBLER.

Belford District, P. Q., Sept. 18, 1872.

[We thank our kind correspondent "Rambler" for his valuable communications. His testimony to the great danger attendant on the use of arsenic confirms the information given in a previous number of the ADVOCATE. We are glad to have to say the value of an agricultural paper is increasingly felt by the farmers. Repeatedly they tell us that we have done more for the agricultural interest in Canada than any other institution—more than the Government. Our constantly increasing subscription list proves the estimation in which farmers hold the ADVOCATE.

We regret the last letter from "Rambler" came to hand too late for insertion. He told

us "the potatoes had so far escaped the attacks of the Colorado Bug, but they have an insect almost as bad, a long, black bug or fly, as bad as the ten-striped one." This black bug has been met with in the United States, in company with the others. For them, as for the striped bugs, Paris Green is the best remedy.—Ed.]

SIR.—Will you oblige me by answering the following questions?—What quantity of corn does it take to put on 100 lbs. of pork, under favorable circumstances? How much if ground and steamed? How much if ground and cooked? How many bushels of turnips to put on 100 lbs. of beef? What is the cost per bushel and per car load for corn from Chicago to London or Toronto? Will it pay in Canada to feed a quantity of hogs, especially where a large dairy is kept? I have found by actual experiment that it takes 7 bushels of peas to put 100 lbs. of pork on a good thriving hog, but the difficulty I have experienced is this: the price of peas may rise to 65 or 75 cts. in the fall or winter, and then I feed my own peas at a loss, and find it difficult to buy the quantity I need. If corn feeding will pay, then it is easy to buy as many car loads as are needed.—Yours truly,

A SUBSCRIBER.

["What quantity of corn does it take to put on 100 lbs. of pork, under favorable circumstances? In reply to this query from "A Subscriber," we must premise that the figures we give may not be quite correct as regards the hogs he proposes to feed. In feeding stock of any kind so much depends on circumstances other than the food given, that the result of one feeder's experience may differ very much from that of another. The condition of the stock when put up for fattening should be taken into account. Nor is this all.—A good house, good bedding and cleanliness are to receive due attention in the fattening even of hogs. The quality of the corn or other food to be given, and whether it be given whole or ground, cooked or uncooked, are to be taken into account. And there is yet another consideration as to the hogs—what is their breed? Berkshire or what? Some breeds of hogs will put up more pork in a given time and with the same quantity of food than others. A writer in the Rural New Yorker says one acre, if seeded with clover, will feed and keep in good condition five hogs; and that a half acre of corn will fatten them. This is rather indefinite. A writer in the Country Gentleman gives the results of his experience, which we give condensed as follows:—"Corn meal steeped in boiling water at night for the next day's use, made in one instance 16½ lbs. of pork to the bushel of corn; in another instance 18 lbs. to the bushel. Marketable corn made 118 lbs. to 10 bushels of corn, being a fraction less than 12 lbs. of pork to the bushel." Another authority says one bushel of corn will make 15 lbs. of pork. We have met with other calculations very different from those given. An Ohio farmer, whose article on the subject we give in another column, says also that fifteen pounds of pork are made from one bushel of corn.—As. T. Ed.]

ECONOMY.

SIR.—Some time ago, under the general caption, "A Few Thoughts," I gave in the ADVOCATE a very few thoughts on "Economy." I will now, with the Editor's permission, add a few more on the same subject, which may be regarded as a supplement to cluster No. 10 of the above-mentioned series.

First, then, it is not good economy for farmers to butcher or sell to the butchers all the best of their lambs, and keep a few of the poorer ones for ewes. Nor is it a good plan to let them have lambs when only one year old; give the lambs one year to grow in. By neglecting these two things a flock of sheep will soon run down so as to be hardly worth their keep. The proper plan is to kill or sell off all the worst of the lambs and keep a few—what-

ny.

OWA AGRICULTURAL

her productions worth to insects. heavy percentage of little animals. Annual Report upon sari, makes men insects which in- English every as on an average

whole United States ed millions of dol- the statement is truth. Could this to the payment of years all would be ; yet year by year yet made but little ree ourselves from State next to noth- mittee or two ap- and Horticultural ale force now mus- against paying ten port of a hungry idom? Is this so outh the province s against permit- to grow and send n, and yet so far as one to prevent the ands of insects e and much more ada Thisle

ese insects? This omes to us when or the puncture of the es disappear before or when the Grass- our oats, corn and Destruction itself. care and hard labor e to full fruition; his share first—too and chooses the

beetle, the fly, the where, and claim a n. How shall we is no way but to set til we know them- earance, but their weakest mo- points of attack. omies as we would oted ones; we must ack best, and then e line. We must into the fight ener- gly. -Iowa Home-

INSECTS. second brood cater- Aphantia tator, en on most all kinds on the osage hedge. are scarcely an inch veniently destroyed; y, with black dots on eave their web and t and off almost any ce a wh to moth, the inch, the female ½ er in the pupa state.

Datana ninis ra). month can be found ung trees; its pre- ly detected by the limbs; they a now to 30 together; are if t two inches long, l lines and a little nd winter both ends. nd raised as pupa are also found on out.

Proctis Americana). caterpillar, slightly a gregarious worm, igle leaf, which they n, and they are for ed by picking off the s a small black moth which issues in ernal latitudes there r t brood of cater- quite injuri us, com- t a season when the e health of the vine

ment this n on h con- mportant awards of vincial Exhibiti-n. — curacies, but it is as ble to procure it. We or corrected list from not yet come to hand,

ever number you wish—of the very best for breeding. No matter what the butcher offers you, never let him have the pick of the flock, that is, of the ewe lambs. Then, to keep your flock of sheep from getting too large, every year select from it as many of the older and poorer ewes as you have lambs. In this way you will always have a good flock of sheep. I have seen both plans tried; the former—the wrong one—by a neighbor, and the latter—the right plan—by my father, who is a first-rate, practical farmer (which is known to others as well as myself). He always had good sheep.

The same plan, though of course somewhat modified, should be pursued with reference to cattle. A farmer should never allow his stock, sheep or pigs, to run out by neglecting to observe the plan just given, or by being so careful of a little time and labor or money as not to procure the best breeds which can be obtained. No one need expect to succeed in farming, as far as stock-raising, &c., is concerned, who does not make it his constant aim to improve his breeds.

Again: it is bad, very bad economy, to keep a horse for trotting or running. A "fast horse" is a curse to its owner; grain, time, money, and many other things as good as money, are squandered away where there is a "fast horse." They are a perfect nuisance in the country; no possible good can result from them. They are only evil, and that continually. The practice of keeping them cannot be too strongly condemned.

Neither is it good economy to spend a great amount of time, money, grain, &c., in fitting up an animal for the Fall Show at the expense of those left at home. Feeding up one or two to take to the Show, just for the sake of a prize of a few paltry dollars, whilst the rest suffer for it, is a very foolish thing, but is very often done. This is poor economy, or, more properly, not economy at all. JAS. LAWSON. Batterssea, Oct. 7, 1872.

DEEP PLOUGHING—IMPROVEMENT IN AGRICULTURE.

SIR,—I am sorry in having neglected so long to send my dollar for this year's ADVOCATE. It looks too much like as if I did not appreciate the paper, whereas I take pleasure in even anticipating its arrival. I was just longing for such an article as appeared in the October No. on "Deep Ploughing," treating the matter at some length, and satisfying me that soils in general, and mine in particular, would yield more from deep ploughing in the proper season. I believe many in Summerville have suffered from the neglect of ploughing in the fall, and that deep ploughing for winter is the thing wanted.

This Township is waking up, having its annual Show and Ploughing Match following, in October, while there is a general pressing towards steady industry in clearing and improving the farms, and looking also to the improvement of stock. Horses, sheep and pigs are receiving considerable attention from enterprising parties; particularly in this the case with horses.—As yet, however, though much talked of by a few, there lacks the bringing in of a good bull or two. I doubt not but some spirited farmer will ere long set us an example in this, and give us meanwhile the benefit of his enterprise.

The Early Rose Potato is becoming quite common this season, and much liked. I like Breesee's Prolific and King of Earlies very well also. This fall most of the farmers have sown Treadwell Wheat. ALEX. HISLOP.

P. S.—Crops were good this year here. Hay is rising in price; \$12 offered for it in stack. Potatoes are selling for 25 cents per bushel. Bugs—plenty for nothing; what will they be next year? A. H. STAYNER P. O., 11th Oct., 1872.

[This letter from our esteemed correspondent needs no comment. We shall always have great pleasure in hearing from him. We hope our agricultural friends will continue sending us their communi-

tions, as a means of maintaining the character of the ADVOCATE as THE FARMER'S PAPER.—Ed.]

ROLLING FALL WHEAT.

SIR—In remitting to you the money for your No. 1 Scott wheat, I would say, also, that I like very much the FARMER'S ADVOCATE. Every farmer should have the ADVOCATE; every one that has a house and garden should have it. I take four papers, and I like the ADVOCATE best. Several of my neighbours have read it, and they like it. The harvest in this part is all housed, and it is good. I would like to know if rolling fall wheat in the fall would serve it. Would you, or some of your subscribers, give me some information on the subject?

Yours, &c., JOHN HOWARD. Howick, Co. Huron, Sept. 14, 1872.

[We would not recommend rolling wheat in the fall. In a previous issue we gave an extract from an agricultural paper, "Packing the Soil," strongly recommending rolling crops; but it is spring crops, not fall crops, that rolling serves. The severe frosts here would, we believe, be more likely to injure the fall-sown wheat in the winter, if rolled; besides, the rough clods mouldering in the spring will nurture and strengthen the tender wheat plants.—Ed.]

FARMERS' CLUB.

SIR,—I am about to start a Farmers' Club here. If you would send me a plan of organizing it—whether it requires a President, Secretary, or how many officers are requisite to form a Club—you would oblige yours truly, JAMES POTTER. Berlin, Sept. 18, 1872.

[It gives us pleasure to learn that there is a prospect of Berlin having a Farmers' Club. The club will require a President, Secretary, and Board of Directors. It would be well that they be elected annually by the members of the club. The meetings can be held monthly in some appointed place, and some agricultural subject discussed, notice of it having been given at the previous meeting. Mr. Potter can induce a few of the intelligent farmers in the vicinity to meet at a given place, and at an appointed time, when they can organize the club, and there is little doubt the roll of membership will soon have many names added to it.—Ed.]

RECIPE FOR SORE SHOULDERS ON HORSES.

SIR,—I now send you my simple cure for sore shoulders on horses while at work, which may be useful to many of your readers. Take 3 quarts of chamber lye, and mix in 1 quart of salt; wash the sores three times a day and they will heal up quite sound, and the horse can be kept at work during the whole time. H. Y. S. Gorrie, Oct., 1872.

[This remedy is very simple, and of its efficacy I had abundant proof, having seen it applied for many such cases.—As'r. Ed.]

OPINIONS OF OUR SUBSCRIBERS.

SIR—I am leaving Quebec for Ottawa in October. I do not know where my destination may be after that, so I have to withdraw from your valuable paper till I get settled, when I hope to be a subscriber again. Believe me when I tell you that in my opinion it is the best paper in the Dominion to enlighten the farmers.—Yours truly, HENRY MOSS. St. Hove, Province of Quebec.

EMPORIUM SEED WHEAT.

SIR—We threshed the McCarling wheat yesterday, and it surprised us all by yielding 15 bushels of good clean wheat for the one-half bushel supplied by you. It is considered to be by far the best wheat in the neighbourhood.—Yours truly, Wm. J. E. COUSE. Wyoming, Sept. 15, 1872.

CUCUMBERS IN ENGLAND.

A correspondent of the Gardener's Monthly saw in Liverpool a new cucumber, four feet six inches, from China, called the Soolyqua. The best cucumbers for forcing are the Marquis of Lorne, British Challenge and Blue Gown; the first a fine fruit, straight as an arrow, two feet long green and crisp.

A HANDFUL of salt and ashes, mixed, thrown into a horse's food, is of great benefit as a condition powder. A little sulphur may also be added to advantage.

Canadian Progress.

POST OFFICE, AND POST OFFICE SAVINGS BANKS.—The general progress of the Dominion is shown very clearly by the statistics of the Post Office and the Savings Banks. We have no doubt the Post Office statistics for the present year will present even a more favorable record than we had in 1871. In that year there were nearly twelve millions of miles traveled in the Post Office service; the deliveries were upwards of twenty millions of letters and postal cards, two and one-fourth millions of newspapers, and upwards of one million registered letters. The expenditure was \$1,271,006, while the revenue was \$1,079,767.77, leaving a balance against the P. O. department of \$191,238.83. The deficiency is less than we would expect, when we take into account the distances often travelled to remote and sparsely-settled districts. The transactions in the Money Order Office amounted to \$4,537,902.41. The P. O. Savings Banks present also a very satisfactory account. The Government has issued a document showing their progress and condition.—There has been a steady increase in the number of depositors from their commencement, 1st of April, 1868, to the date of the report, June 30, 1872. At that time they amounted to 21,059. The balance then due depositors was \$3,096,540.91. The proportion of the depositors in Ontario is one in eighty-three, and in Quebec one in 786. The names of seven cities are given, viz.: Quebec, Montreal, Ottawa, Kingston, Toronto, Hamilton, and London. In Hamilton, the proportion of depositors to the population is 1 to 12; in Kingston, 1 to 14; in London, 1 to 15; in Toronto, 1 to 18; in Ottawa, 1 to 35; in Montreal, 1 to 175; and in Kingston, 1 to 528. This relative proportion to the population is a pretty fair index of the progressive prosperity of those classes who are principally depositors of comparatively small sums in the Savings Banks connected with the Post Office. We have no return of the deposits in Savings Banks other than those of the Post Office. We have no doubt they are very large.

ONE GOOD RESULT OF THE RAILWAY.—The Kingston and Pembroke Railroad is already producing its effect in the development of the rich mineral country lying north of that city. The township of Bedford is rich in iron ore, plumbago and lead. Two of the most prominent iron mines are the Chaffey and H. W., which, since the Kingston and Pembroke Railroad has become a certainty, have changed hands, having been purchased by the National Iron Company of Danville, Penn., who, under the superintendence of Mr. Lewis B. Hyler, have already erected workshops on the premises, and will commence mining immediately, with a strong force of workmen, intending to get out about 100,000 tons per year, drawing this winter's production of the proposed line of railway, anticipating the construction of that portion of the line from Kingston by next spring, it will be shipped to the United States via Kingston. The iron is considered by Mr. Hyler, who is a thorough practical man, to be the best in Ontario.

AIR LINE STATIONS.—The contract for the building of station houses for the Air Line Railway has been let to Mr. Frank Shanly, of Toronto. St. Thomas is to have a passenger station 113 feet by 26 feet, and a freight house 145x40. Two platforms, 400 feet long by 15 wide, will be erected in front of the passenger station—one between the building and the siding and the other between the siding and the main track. The freight house will have a platform 250 feet long and 10 feet wide. All the other stations along the line will have combined freight and passenger houses, with apartments for the station master over the ticket office. The Aylmer, Fredericksburg and Jarvis houses will each be 112x33 feet; the Tilsonburg and Cayuga, 148x33; and the Simcoe, 148x50. The latter will be a first-class station. All the buildings are to be finished by December 31st, and by that date it is expected that the track will be completed to Canfield. The rails are now laid as far east as Aylmer.

TILT COVE MINE.—The English Mining Co. who lately purchased Tilt Cove copper mine, at the handsome figure of 150,000 sterling, have lately sent out Professor Vincent to inspect the mine, the sale being contingent on his report. Mr. Vincent stands very high as a mining engineer, economic geology being his speciality. He has just returned from Tilt Cove, and speaks very favorably of the mine. The works are in excellent order, and the productiveness of the mine as great as ever. It is every way likely the sale will at once be closed, and this company, having plenty of capital, will greatly extend operations. Prof. Vincent's opinion of the mining prospects of this country are very favorable. He considers that a fine lead mine being at one end of the island and Tilt Cove mine at the opposite, indicate that the metalliferous zone extends right through the country.—Globe.

THE NORTHERN COUNTIES AS FIELDS FOR IMMIGRANT COLONIES.—York, and parts of Carleton and Victoria, N.B., have been specially favored in the location of immigrants. The last mentioned county is shortly to receive a

Kincardineshire colony, of whose success we entertain high hopes. The Harvey settlers, the Glassville and Knowlesville and Johnsville people, the Scandinavians, are all doing well for the up river counties and for themselves, and the Kincardineshire settlers may well be expected to do the same. There are other counties, however, containing the choicest lands, fine rivers, rich forests, fishing and other privileges, in which immigrants could do equally well, and in which immigrants are much needed, to which the special attention of immigrants has not been directed.

TORONTO AND NIPISSING RAILWAY.—We believe that the rails have been laid to the present terminus of the road at Cobocook, and the whole line may now be said to be open for traffic. The energy of the directors in thus pushing the work on to completion is deserving of great praise. Under the able management of Wm. Goddard, jun., Managing Director, the road has already achieved a success which most roads can only attain after years of persistent effort. It is now ranked amongst the best managed and best paying Railways in the Dominion. We observe that the Company have lately added a number of box cars capable of carrying double the quantity of freight of the first on the line. These will be a great convenience, especially to the shippers of grain.

REVENUE AND EXPENDITURE OF THE DOMINION.—The following is the statement of the revenue and expenditure of the Dominion of Canada for the month ending 31st August, 1872:—

Table with 2 columns: Revenue and Expenditure. Revenue total: \$1,851,977 60. Expenditure total: \$1,042,901 48.

CHEESE FOR THE OLD COUNTRY.—The Ingersoll News, after quoting some remarks made by a Kingston contemporary with reference to the fact that about forty wagon loads of cheese passed through that city lately, consigned to England, and the importance of the cheese industry, adds that—"It may be of some interest to our contemporary and the public to know that it is not an unusual thing to see over two hundred and fifty wagon loads of cheese passing through Ingersoll in one day for shipment to the old country. The daily average during the season undoubtedly exceeds fifty wagon loads."

CROWN LANDS SALE.—The sale of timber berths on the Miramichi took place as advertised in the Royal Gazette. The advance on the upset price from last year was from \$5 to \$8. The bidding was of the most spirited character, exceeding anything ever witnessed before in that institution. The sales realized at competition \$17,442, and the total receipts amount to \$5,000, being no less than \$7,054 in excess of the entire sales of the previous year. Presuming that the sales during the balance of the year do not exceed those of 1871, it will exhibit an increase in the receipts of not less than \$10,000.

RECENT reports by the Emigration Commissioners in Great Britain show that the outflow of English emigrants has become much greater than that of the Irish. Previous to 1869 the contrary was the case. In 1864 the number of English emigrants was 56,618, and of Irish 115,428; in 1871, about 100,000 persons left England to about 70,000 from Ireland. The loss of Ireland, however, in proportion to population, is much greater than that of either England or Scotland. Nearly four-fifths of all the emigrants from Great Britain find their homes in the United States.

G. W. R. TRAFFIC.—EXHIBITION WEEK.—A statement of the traffic over the G. W. R. during the week of the Provincial Exhibition at Hamilton, places the amount of receipts at \$150,700, and the number of passengers carried at over 67,000. This is said to be much in excess of any week in the history of the road. It must afford the management of the line extreme satisfaction that, although their resources were taxed to their utmost capacity, delays in transportation were quite trifling, and no accident occurred.

LAKE SUPERIOR SILVER.—At a recent meeting of the New York Lyceum of Natural History, Prof. Henry Wintz exhibited some beautiful crystallized specimens of heavy tin stone of cassiterite, discovered a few months since on the most northerly shore of Lake Superior, near Neepigon Bay. The deposits are said to be extensive and valuable.

INTERCOLONIAL BRIDGE.—The Colonial Farmer informs us that the Intercolonial bridge across the Miramichi is progressing very satisfactorily; and a new stone abutment is being built under the iron railway bridge crossing the Sackville. It is 37 feet high, and consists of 90 feet of masonry work, and will be finished this fall.

LAKE SUPERIOR.—A very rich vein of tin has been discovered on the north shore of Lake

Superior, 160 miles... imbedded in... upon the... Nova Scotia... showing the... in 57 vesse... new world... The Pro... The com... and Bo... visited Ha... of the Gr... the propo... St. Catha... HARBO... projecte... which an... mate by... immu-dia... Works' D... to superi... CANADA... Sir Hugh... construct... that he v... negotiate... RICH S... Record is... Mining C... a depth... which wi... OTTAW... estimated... this city... Hull has... by immig... New... have bee... boat com... route nee... MORE... weeks 15... of whom... THE N... The... slowly... is com... being t... clear s... chalky... cracks... tween... when c... tree, as... wood, a... and by... years i... the gr... kinds... season... or in r... expos... shelve... two y... size, t... part, I... public... in thi... the m... season... terial... to a c... dryin... and s... per ce... dry a... stant... will r... cay... years... durin... timbe... es ar... way... railwa... carel... for t... W... ly w... moim... ing, ... to t... will... with...

Superior, opposite Mishmacotton Island, about 160 miles below Silver Island. The tin is pure, imbedded in quartz and large veins. Lumps of pure tin, weighing several pounds, were found upon the surface.

NOVA SCOTIA COAL.—There has arisen a remarkable demand for Nova Scotia coal. Statistics are published in a Lower Province paper, showing that in one week, ending September 28th, 4,241 tons coal were shipped from Preston in 57 vessels, to various points in the old and new world.

THE PROPOSED NEW RAILWAY AT QUEENSTON.—The committees appointed by the Town Council and Board of Trade of St. Catharines lately visited Hamilton to confer with the Directors of the Great Western Railway in reference to the proposed railway from Queenston through St. Catharines.

HARBOR IMPROVEMENTS AT KINGSTON.—The projected harbor improvements at Kingston, for which an appropriation of \$100,000 has been made by the Government, are to be commenced immediately. Mr. Douglas, of the Public Works Department, has been sent to Kingston to superintend the works of the improvements.

CANADA PACIFIC RAILWAY.—It is said that Sir Hugh Allan has secured the contract for constructing the Canada Pacific Railway, and that he will proceed at once to England to negotiate for the necessary funds.

RICH STRIKE OF SILVER ORE.—The Windsor Record is informed that the North Shore Silver Mining Company have struck rich silver ore at a depth of only eight feet from the surface, which will produce \$50 of silver to the ton.

OTTAWA.—An Ottawa paper says: "It is estimated by Mr. Willis, Immigration Agent at this city, that the population of Ottawa and Hull has been increased at least two thousand by immigration this spring."

NEW STEAMERS.—Two splendid steamers have been acquired by the St. Lawrence Tow-boat Company, and will be put on the Sagua route next season, making it a daily line.

MORE IMMIGRANTS.—Within the past three weeks 150 immigrants arrived at Montreal, most of whom have found good employment.

Miscellaneous.

THE NATURE AND PRESERVATION OF TIMBER.

The best timber is that which has grown slowly, on soil rather dry than moist, and is compact and heavy, the annual rings being thin and uniform, showing a hard, clear surface when cut and not a dull or chalky one, free from clefts or radical cracks, and from cupshakers or cracks between the annual layers. Timber is best when cut at or near the maturity of the tree, as a young tree has too much sapwood, and an old one is likely to get hard and brittle at the core. Probably fifty years is the least and one hundred years the greatest age at which the ordinary kinds of wood should be cut. The best seasons for felling is when the sap is quiet, or in midsummer and midwinter. Timber exposed freely to the air in a dry place, sheltered from the sun and rain, requires two years and upwards, according to the size, to become well seasoned. A small part, however, of the material put into our public works receives sufficient treatment in this respect, and hence the short life of the majority of these structures. Artificial seasoning is effected by exposing the material, properly piled in a suitable building, to a current of hot air. Timber loses in drying from 15 to 30 per cent. of its weight, and shrinks across the grain from 2 to 5 per cent. Wood lasts longest when kept dry and well ventilated. When kept constantly wet it is somewhat softened, and will not resist so much, but it does not decay. Piles placed in the Rhine nearly 2,000 years ago have been found quite sound during the present century, and the roof timbers of some of the older Italian churches are still in good condition. Many highway bridges in this country are apparently uninjured by from 40 to 50 years' use; the railway bridges, made of good material and carefully protected, have been in service for twenty years, and are yet in good order.

Wood decays the fastest when alternately wet and dry, or when subjected to a hot, moist, close atmosphere. Thorough seasoning, protection from the sun and rain, and the free circulation of air, are the essentials to the preservation of timber. Oil paint will protect wood from moisture from without, but unless it is perfectly dry when

painted, the moisture within will be unable to escape, and will cause decay. Several different methods of preservation are now in use, consisting of an injection of different chemical preparations into the pores. Chapman's process employs sulphate of iron (copperas); Kyan's process, corrosive sublimate (bichloride of mercury); Bennett's process, chloride of zinc; Boucherie's method, sulphate of copper; and Mr. Bettinell saturates the timber with creosote. In these several operations the air is exhausted from the tank in which the timber is placed, and the sap drawn out from the pores, and the solution forced in.

The woody fibre is seen by the microscope to consist of long, slender tubes, upon the tenacity of which depends the tensile strength of the timber. The lateral adhesion or the strength across the grain depends upon the adhesion of the sides of the tubes. The pines, or cone-bearing trees, have a straight and regular fibre, and are well adapted to direct tensile strains; but the lateral adhesion is small, so that they are split along the grain, and much less suitable to resist the shearing endwise, or sliding of the fibres on each other, than the hard woods.—Ex.

IMMIGRATION INTO CANADA.

Under the above heading the New York Herald makes the following remarks upon the progress of Canada in material prosperity:—"We think our northern neighbors slow. So they are, if we contrast their history with ours for the past century. Still, the statistics show that during the last decade Canada has received by immigration an addition of more than forty per cent to her population, and during the last thirty-three years more than twice doubled her number of inhabitants, counting now two and a-half millions, against half a million a third of a century ago. As our population exceeds that of the Canadian Dominion by more than ten-fold, it is natural for us to look upon her growth as insignificant. Yet, since the breaking out of our late war, she has gained at a more rapid proportionate rate than we have, our increment of population having been thirty-five per cent. As Canada has three hundred and fifty thousand square miles of territory, being equal in extent to Great Britain, France and Prussia, or six times the size of England and Wales, she has as yet only ten persons for each six hundred and forty acres of land. Consequently, she has abundance of room for all who may come to find homes upon her fertile soil, or to win fortune from the abundant facilities she offers for profitable commercial or industrial enterprise. Should she continue to grow at her present rate till the end of this century, she will then have a population of twenty millions, or about half our present number. Though events do not move with a rush so rapidly beyond our northern frontier as on this side of it, Canada has vast enterprises which mark her population as embracing the same elements of thrift which are developing our own greatness. Her great rivers and excellent harbors, her canals and railways, when completed, will offer to the product of her fields, forests and mines easy means of export, while her rapidly growing and prosperous population will furnish abundant consumers for the fabrics with which Europe balances the traffic. It cannot be doubted that for British subjects who wish to escape the over-crowding and excessive competition in all industrial and commercial pursuits "at home," and who hesitate about trying our experiment of self-government, Canada offers abundant hope for an improved condition, and it is fair to believe that for several decades she will receive a constant and liberal flow of immigration, and that the two English-speaking nations must control the destinies of North America. If, in time, Canada wishes to take her place in the constellation of stars upon our banner of freedom, we hold ourselves ready to comply with the dictates of "manifest destiny." Should she prefer to stay out of the Union, we shall still be true friends, generous rivals, and good neighbors. Her prosperity will only stimulate ours."

HOW TO DRIVE RATS AWAY WITHOUT POISON.

We know of three methods:—First, the old French plan; this is followed chiefly in Paris by men who make it a special business. They take a deep tub with water on the bottom, and a little elevation in the middle, like an island, on which is only place for just one rat to sit on. The top is covered, and a large balanced valve, opening downward, on the middle of this valve a piece of fried pork or cheese is placed; when a rat walks on it to get the cheese, the valve goes down, drops the rat into the water, and moves back in position. A road is made from a rat-hole to the top of the tub, by means of a piece of board rubbed with cheese, so as to make the walk attractive for the rats. In the course of a single night some ten, twenty, or even more rats may go down, and if the island was not there they would be found most all alive in the morning quietly swimming round; but the provision of the little kindness saves the trouble of killing them, for their egotistic instinct for self-preservation causes them to fight for the exclusive possession of the island, on which in the morning the strongest rat is found in solitary possession, all the others being killed and drowned around him. Second, the New York plan invented by one of our friends. The floor near the rat hole is covered with a thin layer of a moist caustic potassa. When the rats walk on this it makes their feet sore; these they lick with their tongue, which makes their mouths sore; and the result is, that they shun this locality, not alone, but appear to tell all the rats in the neighborhood about it, and eventually the house is entirely abandoned by them, notwithstanding the houses around may be full of rats. Third, the Dutch method. This is said to be used successfully in Holland; we have, however, never tried it. A number of rats are left together to themselves in a very large trap or cage, with no food what ever; their craving hunger will cause them to fight, and the weakest will be eaten by the strongest. After a short time the fight is renewed, and the next weakest is the victim, and so it goes on till one strong rat is left. When this one has eaten the last remains of any of the others it is at loose; the animal has now acquired such a taste for rat-flesh that he is the terror of rats, no going round seeking what rat he can devour. In an incredibly short time the premises are abandoned by all other rats, which will not come back before the cannibal rat has left or died.—Manufacturer and Builder.

A SIMPLE REMEDY FOR DANDRUFF.

There are, doubtless, few persons, especially among gentlemen, who do not suffer from the inconvenience of dandruff. Physicians do not consider it of sufficient importance to engage their attention, and the poor victims are left to practice their endurance, or, for a cure, to try some of the many nostrums advertised in the public prints. The intolerable itching which accompanies the troublesome complaint is not the only unpleasant feature; as to persons of any pretensions to neatness, the appearance of the white scales on the coat collar and shoulders is very objectionable. The writer, during a number of years, tried the different alcoholic solutions of castor oil, and many other preparations, without permanent benefit, and as a last resort was led to adopt the plan of cleaning the scalp with borax and carb. potassa. This proved effectual, but after a persistent treatment of some months, the hair became sensibly thinner, and perhaps would have soon disappeared altogether. The belief that dandruff arises from a disease of the skin, although physicians do not seem to agree on this point, and the knowledge that the use of sulphur is frequently attended with very happy results in such diseases, induced me to try it in my own case. A preparation of one ounce of flour of sulphur and one quart of water was made. The clear liquid was poured off after the mixture had been repeatedly agitated during an interval of a few hours, and the head was saturated with this every morning. In a few weeks every trace of dandruff had disappeared, the hair became soft and glossy, and now, after a discontinuance of this treatment for 18 months, there is no indication of the return of the disease. I do not pretend to explain the *modus operandi* of the treatment, for it is well known that sublimed sulphur is almost wholly insoluble, and the liquid used was destitute of taste, color or smell. The effect speaks for itself.—Journal of Pharmacy.

MAKING AND REPAIRING THE ROADS.

A writer in the Colonial Farmer, Fredericton, N.B., proposes a change in the whole administration of the keeping in repair of the roads of the Province. We doubt not some of the farmers of Ontario, who complain of being mud-bound in the fall and spring, would wish for some change to improve the roads in their vicinity. The writer thus speaks of the cost at present of their road-making, and proposes a change in the management:—"It is often the boast of those who write of the attractions New Brunswick offers to intending emigrants, that no settled portion of our Province is without its good highway road kept in repair at public expense and free to all who use it; and it is true that large sums of money have been and are annually expended upon our

roads and bridges. The annual grant for this purpose is about \$175,000; the statute labor amounts to about \$160,000, making \$335,000 the total amount expended upon roads and bridges. It will scarcely be claimed that this large sum of one-third of a million is in all cases wisely and carefully expended. As a means of attaining this desirable end (employing those who are best qualified for the work), I would suggest that the following changes be made in the law:

- 1. That each county be charged with the maintenance and repair of the roads and bridges within its limits, so as to render it liable for all damages resulting to travellers or their conveyances by reason of the neglect of this duty.
2. That an officer of road commissioners be established for each county, with a fixed salary, without commission; the duty of the incumbent to be the expenditure of the road money from whatever source derived.
3. That statute labor be abolished, and a money tax substituted.
4. That the offices of Supervisors of great roads, bye-road commissioners, and Surveyor of roads be abolished.

THE ENGLISH HARVEST.

The following statement is from returns collected at the office of the London Agricultural Gazette:—Of 262 reports on the wheat crop, 135 state it to be an average crop, 98 put it at low, and 29 above an average. Of the 255 barley reports, 111 pronounce it to be an average, 95 below, and 49 above an average. Of the 262 returns of the oats, 129 declare it to be an average, 26 below, and 107 above an average. Of the 186 returns of the bean crop, 94 put it at an average, 9 below, and 83 above an average; and of the 18 reports of the pea crop, 10 put it at an average, 38 below, and 49 above an average. The pea crop also is unusually good. Wheat, on the other hand, must be pronounced decidedly below an average crop on the whole, and barley as an average.

IRON RUST ON WHITE GOODS.

A remedy tried and found effectual, is this: One ounce of oxalic acid dissolved in one quart of water. Wet the iron rust spots in this solution and lay in the hot sun; the rust will disappear in from three to twenty minutes according to its depth. By holding the cloth, wet in this solution, over the steam of a boiling tea-kettle, the rust disappeared almost instantly. In either case, the cloth should be well rinsed in water as soon as the rust disappears, to prevent injury from the acid. Many use this acid to remove fruit and ink stains from the white fabrics. When diluted still more, it may be used to remove fruit stains from the hands.

LUCK AND PROFIT.

Under this heading, a writer in the Bee-keeper's Journal advises bee-keepers as follows:—"I desire to tell bee-keepers how to have luck and profit in the apiary. Have your hives placed so that you can get to the rear of them, and then never let the grass grow there. You must tramp it out, however, and while you are doing this, work with the bees. Work intelligently, guided by some good journal, and a good work on the subject. I winter in double rows, with a space of two inches between walls, which is filled with straw. I have wintered this way for two years with perfect success."

BENEFIT OF RAILWAYS.

The following from an impartial Toronto paper, is regarding the benefit railways may be to a country at large:—"As an illustration of the advantage of railway communication, it is mentioned that from the township of Uxbridge and immediate neighbourhood about seventeen thousand cords of wood were sold, at an advance of two dollars per cord on the price previously obtainable. Here is \$34,000 realized on a single article at one station of the Nipissing railway during one year. This fact is worth a dozen arguments to show how railways benefit the country."

COAL AND PEAT.

Coal has risen so much in price in Britain that there is a strong agitation getting in favour of using peat, and setting rangers and criminals to dig it in large quantities. The supply, it is said, is in Scotland and Ireland unlimited. We heard a great deal about peat companies in Canada a year or two ago, and the possibility of \$3 a ton, quite equal in heating power to a cord and a half of wood. What has become of the project? Has it gone to join many other unrealized projects? Coal and wood are still dear enough in Canada to encourage, one would think, such competition.

CANADA THISTLES.

The board of supervisors of a county in Illinois appointed a committee on Canada thistles, to collect all the information possible in regard to that weed, and report. They solicit facts on the following points:—1st. Give township section, and owner of farm on which Canada thistles are growing, or have been, and destroyed. 2nd. Where and how and from what place imported. 3rd. Present space of land occupied. 4th. How they have been killed out after being thoroughly rooted.

Success we... settlers, the... well for... ourselves, and... other counties... usually well, and... which grants has not

RAILWAY.—We... Jobcock, and... to be open for... rector in this... is deserving... management... Director, a... success which... years of per... amongst the... Railways in the... Company... capable... of freight of... be a great con... of grain.

E OF THE DO... statement of the... Dominion of... 31st August,

...\$1,310,336 74... 287,170 80... 79,040 76... 116,388 73... 22 100 00... 36,340 57

...\$1,851,977 60

...\$1,042,901 48

RY.—The Inger... marks made by... reference to the... loads of cheese... consigned to... of the cheese in... of some interest... public to know... to see over two... of cheese passag... for shipment... average during... fifty waggon

the sale of timber... place as adver... advance on the... as from \$5 to \$8... spirited character... pressed before in... realized at com... receipts amount... \$7,054 in excess... vious year. Pre... balance of the... 1871, it will exhibit... of not less than

igration Commis... that the outflow... much greater... vious to 1869 the... 1864 the number of... 18, and of Irish... 0,000 persons left... on Ireland. The... proportion to popu... of either Eng... our-fifths of all the... n find their homes

RTION WEEK.—A... the G. W. R. dur... Exhibition at... of receipts at... passengers carried... be much in excess... of the road. It... of the line ex... through their resources... capacity, delays in... trifling, and no

—At a recent meet... of Natural His... inhibited some beau... of heavy tin stone... months since on the... Lake Superior, near... is said to be

—The Colonial Farm... colonial bridge... pressing very satis... abatement is being... y bridge crossing the... igh, and co sis is... will be finished this

y rich vein of tin has... orth shore of Lake

NEW METHOD OF WASHING.

A new method of washing has been extensively adopted in Germany to obviate the ill-effects of soda on linen. The operation consists in dissolving two pounds of soap in about three gallons of water as hot as the hand can bear, and adding to this one table-spoonful of turpentine and three of liquid ammonia; the mixture must then be well stirred, and the linen steeped in it for two or three hours, taking care to cover the vessel which contains them as nearly hermetically as possible. The clothes are afterwards washed out and rinsed in the usual way. The soap and water may be re-used and used a second time, but in that case, half a table-spoonful of turpentine and a table-spoonful of ammonia must be added. The linen scarcely suffers at all, as there is little necessity for rubbing, and its cleanliness and color are perfect.

REMEDY FOR WHITE HAIRS.

A correspondent of the Massachusetts Ploughman recommends the following remedy for the white hairs which sometimes appear on horses from the use of the saddle. Take a piece of lard large enough to give the spot a thorough greasing; rub the same with the hand until it becomes right hot, repeating the operation at least three or four times, and the white hairs will soon come out, and hair of a natural color take their place. —Live Stock Jour. (Buffalo.)

EXCELLENT PREMIUMS.

The Iowa State Agricultural Society offers a premium of one thousand dollars for the best ten acres of artificial timber, payable in 1881; five hundred dollars for the best cultivated farm, payable in 1875; two hundred and fifty dollars, payable in 1878, for the best orchard of ten acres and two hundred dollars for the best mile of hedge, payable in 1877. —Live Stock Journal (Buffalo.)

DAIRY FACTORIES IN ENGLAND.

The London Milk Journal says:—In England the system of Associated Dairies steadily gains ground, and butter factories on this principle are being opened. The quality also of the butter is steadily improving, and bids fair to rival that produced in Holstein and Mecklenburg, which now stands first in that market.

WHOLESALE STARVATION.

The Union Intelligence of Texas reports that more than one half of the cattle in the western part of Texas have died from starvation during the past winter. From other sources we also learn that the mortality among the cattle of Texas and Southern Kansas has been very great. —Prairie Farmer.

GRAPE LEAVES are said to be in many respects superior to hops for making yeast. The bread rises so ner, and has not that peculiar taste to which many object in that made from hops. The directions are to use eight or ten leaves for a quart of yeast, boiling them about ten minutes, and pouring the hot liquor on the flour, the quantity of the latter being determined by whether you want the yeast thick or thin. Use hop yeast for raising it to begin with, and a terward that made of the grape leaves. Dried leaves are equally as good as fresh. Sometimes the yeast has a dark film over its surface when rising, but this entirely disappears when stirred.

THE VARIETIES of wood produced in different parts of the world are far more numerous than most people are aware of. At the Paris Exposition of 1867 there were, from 45 different countries, no less than 3,769 different kinds of wood exhibited, 375 coming from Europe, 252 from Africa, 858 from Asia, 966 from Oceania, and 1,298 from America.

TO REMOVE old putty from broken windows, dip a small brush in nitric or muriatic acid (obtainable at any druggist's), and with it anoint or paint over the dry putty that adheres to the broken glass and frames of your windows; after an hour's interval, the putty will become as soft as to be removed easily.

THE SMALLEST steam engine in the world is in possession of John Penn, of Greenwich, England. It will stand on a three-penny piece, and really is smaller than the coin, for its baseplate is only three-eighths by about three-tenths. Its whole weight is less than three penny-weights.

DRIED alderberries eaten will, it is said, cure ringworm.

AGRICULTURAL EMPORIUM.—It is our intention to again petition Parliament at its next session for an Act to allow us to form a joint stock company to carry on the Agricultural Emporium. We could now form a company for the ADVOCATE, but consider that the results would be more beneficial if both were carried on together. You will be informed if our petition is granted, and an opportunity will be given you to have a voice in its management.

Old England.

Old England though she be,  
Her bulwarks yet are sound,  
And she the fairest vessel  
That ever sail'd earth round:—  
That ever sail'd earth round, my lad!  
And you will live to see  
Her name go round the world again  
As the watchword of the free:  
For so it shall be to the end,  
As of yore, as of yore:—  
One cheer, then, for Old England!  
And one cheer more!

The masts are firm and true;  
The keel is straight and true;  
Her ancient crew of glory  
Rides blazing through the blue:—  
Rides blazing through the blue, my lad!  
While underneath it go  
The strong and stubborn hero-hearts  
Who smile at storm and foe;  
Like lions onward to the end,  
As of yore, as of yore:—  
One cheer, then, for Old England!  
And one cheer more!

Prophets of wreck and woe,  
There is no place for you,  
Weak-kneed and coward-hearted,  
Among the bold and true:—  
Among the bold and true, my lad!  
Who, as the waves run high,  
And they can almost touch the dark,  
Behind it see the sky;  
True to the core, and to the end,  
As of yore, as of yore:—  
One cheer, then, for Old England!  
And one cheer more!

As youth disguised in man,  
Although her build be changed,  
It is the same Old England  
That erst o'er ocean ranged:—  
That still has kept the seas, my lad!  
Since Danish raven flew,  
To him who off Trafalgar fell,  
The tender and the true,  
Unchanged amid changes to the end,  
As of yore, as of yore:—  
One cheer, then, for Old England!  
And one cheer more!

—People's Magazine.

The Haggis.

An advertisement in a Western paper informs the public that a bard for the summer can be obtained at a large and shady brick gentleman's residence in the country.

A Connecticut editor says:—"Our early peas came up in two days after they were planted this year." Any one's peas will do like-wise if the hens are allowed to run in the garden.

"Wife," said a man, looking for a bootjack, "I have places where I keep my things, and you ought to know it." "Yes, I ought to know where you keep your late hours, but I don't."

An old lady gives this as her idea of a gentleman:—"One who is careful of his clothes, don't drink sperrets, ken read the Bible without speling the words, and eat a cold dinner on wash days without grumbling."

A lad arrested for theft when taken before the magistrate and asked what his occupation was, frankly answered, "stealing." "You can't our a-ton-ies me," said the judge. "I thought it would," responded the youth, "seeing how many big uns there are in the business, and is ashamed to own it."

A negro who was suspected of surreptitiously meddling with his neighbor's fruit being caught in a garden by moonlight, nonplussed his detectors, by raising his eyes, clasping his hands, and piously exclaiming, "Good Lord! this yer darkey can't go no-wheres to pray any more without been starved."

There is a young lady in Milford who has been taking music lessons on the piano for some eight years. The other day she sent an order to a music store in New Haven, and fearing her spelling might not be just right added this postscript:—"You must excuse this letter, as I pla bi noat, butt spel by ere."

Youths' Department.

UNCLE TOM'S COLUMN.

Here we are again, children, ready for a frolic with you all. Winter is coming on again, and the long evenings around the fire will give us time for indoor amusements. How pleasant it is to see a whole family gathered in the evening ready to make home happy, and each one, from the gray-headed father to the little one on the knee, doing his or her part in amusing the rest! H. C. Brown, Berlin, sends a series of Decapitations and Alphabetical Puzzles; and also a Decapitation for this number. He will see the answers to the Puzzle which puzzled him, below. I have G. Brown, jun., sends answers to Decapitations, Double Acrostic, Alphabetical Puzzle, Square Word, and 17 pieces of wood Puzzle. S. Wherry, jun., sends his answer to 17, as the month is just.

ANSWERS TO PUZZLES IN OCT. NO.

DOUBLE ACROSTIC.  
Paris, on the Riv'r Seine.

DECAPITATIONS.  
1—O-possum. 2—P-ear. 3—T-rent. 4—G-host. 5—M-ink. 6—B-r-ad.

ALPHABETICAL PUZZLE—He-r-o-ine.

SQUARE WORD—  
Rose  
Oxen  
Send  
Ends

PUZZLE.  
[A 3x3 grid with dots in some cells]

PUZZLES FOR NOV. NO.

- 1. Behead a small animal and leave a large one.  
2. Behead an animal and leave part of the human body.  
3. Behead a small animal and leave a preposition.  
4. Behead a grain and leave a preposition.  
5. Behead a grain and leave a personal pronoun.  
6. Behead a grain and leave what we feel most in summer.

PUZZLE No. 1.—A lady met a gentleman on the street; the gentleman said, "I think I know you;" the lady said he ought, as his mother was her mother's only daughter. What relation was he?

ACROSTICS.  
Summer now has passed away,  
Ushering Autumn in again—  
Making hearts feel light and gay;  
Mirth and gladness now should reign;  
Every barn is filled with grain,  
Ready now for snow and rain.

Autumn, the richest of the four,  
Unlabeled now her precious store;  
The leaves decay, they drop and die,  
Under the trees they wither and lie,  
Make ready now for frost and snow,  
North winds will soon begin to blow.

THE POLE KAT.

My friend did you ever examine the fragrant pole kat closely?  
I guess not, they are a critter who won't bear examining with a microscope.  
They are butiful beings, but oh! how desceptive.  
Their habits are phew but unique.  
They are called pole kats because it is not convenient to kill them with a club, but with a pole, and the longer the pole the more convenient.  
Writers on natural history disagree about the right length of the pole to be used, and I would suggest that the pole be about 365 feet, especially if the wind is in favor of the pole kat.  
When the pole kat is suddenly walloped with a long pole, the first thing he she or it does is, to embalm the air for many miles in diameter with an aromatic olfactory refreshment which permeates the etherial fluid with an entirely original smell.  
The smell is less popular in the fashionable world than lubins extract, but the day may come when it will be bottled up, like musk, and sold for 87 cents per bottle, bottles small at that.  
One pole kat in a township is enough, especially if the wind changes once in a while.  
A pole kat's skin is worth 2 dollars in market, after it is skinned, but it is worth \$3.50 to skin it.  
This is one way to make 12 shillings in a wet day.—  
Josh Billings.

STOCK SALE.—Col. Taylor, of this city, sold his first prize short-horn bull calf, "Duke of Springwood," to Mr. W. Bell, of Shakspeare, for the sum of \$500.

TO CLEAN CARPETS.—Salt sprinkled upon the carpet before sweeping will make it look bright and clean. This is also a good preventive against moths.

Editorial Notices.

"Outside the thoroughbred class there were two animals especially deserving of notice.— One was a four year old coach-horse, 'Sir John Stevenson,' imported from Yorkshire at a cost of \$1500, and the best we have seen here; the other, a general-purpose stallion, 'Canadian Leopard,' by 'Anglo-Saxon,' out of a 'Leopard' mare, five years old, owned by Mr. G. McKay, Delaware, and as well-built, active a horse for his age as one could wish to see."

[We extract the above from the Toronto Mail's account of the Western Fair. There are many of the "Anglo-Saxon" colts now improving the stock of the country. We are aware the management of the horse was not satisfactory either to the owner or the public during the first attempts to establish the Agricultural Emporium; but, despite prejudices that have been raised and attempts made to trample both the horse and the Emporium out of existence, it is still pleasing to see the horse stock venturing to rival any importation. No attempt has ever been made to rank "Anglo-Saxon" as a rival to the heavy draft horses or the fast st roadsters; but for beauty, docility, hardness of constitution, and general utility as a carriage and general-purpose horse, we still believe him to be as useful and valuable a horse for the improving of our stock as we can procure.— We yet expect to see the Emporium and the Emporium horse both holding the position to which they are so pre-eminently entitled.]

MANITOBA PEAS.—We have had the pleasure of hearing from our old subscriber, Mr. J. D. Campbell, Stapleton, Manitoba, and receiving from him by mail a small package of the very valuable pea that is of so much importance to the stock-owners of the great Northwest. This pea is indigenous to the country, and springs up from year to year on the prairie, giving an abundant and highly nutritive food to the rapidly-increasing herds, as well as to the bison. We hope, from the package of seed sent us, to be able to raise a considerable quantity and test its value for agriculturists in this section. Mr. Campbell will accept our thanks for his kind remembrance of us.

PHOTOGRAPHS.—We have just received from Messrs. Notman & Fraser two Photographs, cabinet size, of his Excellency Earl Dufferin, Governor-General. Messrs. N. & F. are well known as first-class artists not only in Canada but in England and France. The photographs before us are splendidly executed, and calculated to bring additional praise to this well-known firm. The photographs may be seen at this office.

PEARS.—From Mr. W. Grieve, of Westminster, we have received a very choice and fine assortment of pears, which we think equal to any seen at any exhibition, and far superior to us.

ENGLISH THORN.—We have received a package of English thorn seed from G. B. Shop, of Adelaide. He has hedges from the same kind of thorn.

RESOLUTION OF DELAWARE TOWNSHIP COUNCIL.

The following is a copy of a resolution passed by the Delaware Township Council on the 14th of October, 1872:—

Moved by Mr. Filid, seconded by Mr. Harris.—That in consequence of an erroneous survey and by the law of limitation Mr. Weld was deprived of a portion of his land and a quantity of valuable timber, and further, paid heavy law expenses in testing the matter, this Council would therefore recommend him to the consideration of Government believing him to be justly entitled to some remuneration.

Further, we fully recognize and appreciate his efforts in advancing the interests of the farming community by the publication of the FARMER'S ADVOCATE, and by the introduction and dissemination of seeds and roots. Carried.  
JOHN JOHNSTONE Tp. Clerk.

ELDERBERRY WINE.

Elderberries, 10 gallons; water, 10 gallons; white sugar, 45 pounds; red tartar, 8 ounces; ferment with yeast in the usual manner. When in the cask, add ginger-root, sliced, or allspice, 4 ounces; bitter aloes, 4 ounces, suspended in a bag, may be allowed to infuse in the liquor when it is fermenting; they are then to be removed. Brandy may be added or not. When the wine is clear, which will be in about three months, it may be drawn off from the lees and bottled. The spices may be varied according to taste.

A New York paper says, "that the streets of that city are now in a much cleaner condition than a few weeks ago, and that by holding a handkerchief to one's nose, it is possible to pass through several of the thoroughfares."

Emporium

Carter's Op...  
Carter's Tile...  
Patent Stump...  
Little Giant...  
Forfar's Chur...  
Chorus, other...  
Chaff Cutters...  
from \$16 to...  
Gardiner's...  
Horse Powers...  
Cider Presses...  
Jones' Amalg...  
farms, &c.,...  
Matheson's...  
Improved Ch...  
rollers, \$8...  
Taylor's Pat...  
from \$35 a...  
Lamb's Pat...  
Lockman's...  
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Osborne Sew...  
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11-47

Emporium Price List for Nov.

Carter's Op n Ditching Machine. \$160. Carter's Tile Ditching Machine. \$13. Patent Stump Extra tors. \$50, \$75, \$100. Little Giant Thresher, \$185. Forfar's Churn, Pride of the Dairy, \$4.50. Churns, other varieties. Chaff Cutters on the most approved principles, from \$16 to \$30. Gardiner's Root Cutters, from \$28. Horse Powers, a one, \$35. Cider Presses, single rear \$32, double gear \$36. Jones' Amalgam B-ils, for schools, churches, farms, &c., from \$10 to \$120. Matheson's Patent W shing Machine, \$10. Improved Clothes Wringer, with india rubber rollers, \$8. Taylor's Patent Burglar and Fire Proof Safes, from \$35 and upwards. Lamb's Patent Knitting Machine, \$53. Lockman's Patent Sewing Machine, \$30 and \$35. Gardner's Patent Sewing Machine, \$30 and \$35. Gates' Patent Sewing Machine, \$35. Osborne Sewing Machine, \$35. Wood's Sewing Machines, \$30, \$35, and \$100. Forfar's Root Cutter, \$6; took first prize at Provincial Exhibition, 1872; efficient and cheap. Sim's-n's Cattle Spice, 25c. per packet.

London Market—Oct. 28.

White Fall Wheat, per bush, \$1 15 to 1 2 1/2. R of Winter Wheat, 1 10 to 1 16. Barley, 0 55 to 0 65. Peas, 0 55 to 0 63. Oats, 0 34 to 0 36.

Great Western Railway.

Trains leave London as follows:— GOING WEST.—12.50 p. m.; 5.25 p. m.; 2.45 a. m.; and 5.45 a. m. GOING EAST.—6.00 a. m.; 8.40 a. m.; 12.35 p. m.; 4.40 p. m.; 11.35 p. m.; and 1.15 a. 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, 2.45 p. m.

The FARMER'S ADVOCATE, edited in London, Ont., D. C. Terms, 1 per annum, in advance; \$ 2, if in arrears; postage prepaid. Advertisements 10c. per line, agate space. Communications and advertisements should be in the office by the 15th of the month to ensure insertion in the following number. Postage and all other expenses charged on collection of accounts, if in arrears.

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HORSES COMPLETELY CURED OF ALL vicious habits, such as Kicking, Balking, Running away, &c. &c. Advice free. Address M. J. BARROWS, Box 283 BALAVIA, N. Y. 11-2

FARMERS, Improve your Stock of Pigs.

THE SUBSCRIBER has at GREAT EXPENSE secured the services of the following Bore, in order to improve the stock of pigs in this section of the country. They will be found at the "MIDDLESEX HOTEL," over Blackfriar's Bridge,

KENSINGTON, (Formerly called Petersville), London, Ont.

1st.—The Essex Boar bred by Joseph Harris, Esq., Morton Farm, Rochester, N. Y., (author of the complete work, "Har is on the Pig" and "Walks and Talks" in the "American Agriculturalist.")

"Young Adam"

Is from the universally known imported Boar, "Adam" bred by Mr. Thorne, the noted English stock-raiser, and renowned improver on the old Lord Western-bred of Essex—this boar is owned by Mr. Harris, and is from the stock of the late Col. Morris. "Young Adam" took the prize at the Western Fair in 1872, and is pronounced by all judges to be the handsomest hog of his class in Canada. For further pedigrees, vide "Har is on the Pig."

"Captain Jinks,"

Bred by George Martin, Esq., of Port Dover, Ont.; Sire, "Storm King;" Grand-sire, "Snow Ball;" imp. bred, "Dam;" Emphess;" Grand Dam;" "Ida;" Great Grand Dam "Promise." These pigs have taken First prizes at every Fair either in the United States or Canada, at which they have been exhibited \$50 was offered and refused for "Storm King" and "Captain Jinks" cost his present owner, at 3 months old, \$10.

Terms.—Very liberal, and Sows sent for services will be well taken care of at the smallest possible expense.

R. C. McDONALD, "Middlesex Hotel," Kensington, near London, Ont. 11-4f

MERCHANT'S GARGLING OIL

IS GOOD FOR Burns and Scalds, Rheumatism, Chilblains, Hem'roids or Piles, Sprains and Bruises, Sore Nipples, Chapped Hands, Caked Boasts, Flesh Wounds, Fistula, Mango, Frost-Bites, Spavins, Swoney, External Poisons, Scratohes or Grasses, Sand Cracks, Stringhalt, Wind-galls, Galls of All Kinds, Foundered Feet, Siftast, Ringbone, Cracked Heels, Poll Evil, Bites of Animals and Foot Rot in Sheep, Insects, Koup in Poultry, Toothache, &c., &c. Lame Back, &c.

The Gargling Oil has been in use as a Liniment since 1833. All we ask is a fair trial, but be sure and follow directions. Ask your nearest Druggist or dealer in Patent Medicines, for one of our Almanacs, and read what the people say about the Oil. The Gargling Oil is for sale by all respectable dealers throughout the United States and other Countries. Our testimonials date from 1833 to the present, and are unsolicited. Use the Gargling Oil, and tell your neighbors what good it has done. We also manufacture "MERCHANT'S WORM TABLETS." We deal fair and liberal with all, and defy contradiction. Write for an Almanac. Manufactured at Lockport, N. Y., by MERCHANT'S GARGLING OIL COMPANY JOHN HODGE, Secretary. 11-3

HILTON'S NEW Patent Washing Machine.

WHAT IS CLAIMED FOR IT: 1st.—It is the best ever offered to the public for the following reasons, viz: It will do its work quicker, easier, and better than any other machine, cleaning effectually and perfectly, no hand rubbing being necessary, and without the slightest injury to any article submitted to its operation, neither breaking nor misplacing buttons or other fastenings. 2nd.—Its range or scope of action is greater, acting singly upon a lace or linen collar, and accommodating itself to the heaviest article of bedding without change or adjustment of the machine. 3rd.—It is durable, not likely to get out of order, and when so easily repaired, being constructed in such a manner that any of its parts can be supplied by the manufacturer without the presence of the machine, and adjusted to its place by any person, which is evident at first sight of the machine. In witness of the above read the following: We, the undersigned, having used Mr. Hilton's Patent Washing Machine one year, on fully endorse the above claims:—Wm. Kayser, S. A. Eakins, Jos. Benjamin, W. W. Hull, Jas. Manson, Laazo Moore, G. Street and others. Strathroy, Ont., February, 1872. Town and County Rights for sale. Price of Machines, \$14. All orders addressed to the undersigned will be promptly filled. 11-y ALEX. HILTON, Strathroy, Ont.

CIDER! APPLE BILLY! VINEGAR!

SELLS' PATENT CIDER MILLS for Hand or Horse Power. This Machine always takes the FIRST PRIZE at every Exhibition, both in Canada and the States, who exhibited. At the late Provincial Exhibition in Hamilton, in October last it was awarded the First Prize; and at a trial before the judges with the opposing mill, it was awarded the Second Prize also. GET THE BEST: the BEST is the CHEAP. E. T. Sells' Cider Mill is now improved, and works much easier than the old mills. You can make two barrels of cider daily. The price of the old is \$30; the new and improved mill, 36. H. SELLS, Manufacturer. W. WELD, Agt., London.

The Empire Root Cutter!

THIS ROOT CUTTER CARRIED OFF THE FIRST PRIZE at the Provincial Exhibition at Hamilton, 1872; also, at Ottawa and Milton, where it was shown against \$30 machines. It was tried by the Judges at these Exhibitions, and that is the reason it carried off first prizes. It is a PERFECT FILE-FREEDER, easily worked, and regulated to cut any thickness required. It will cut from ONE TO TWO BUSHELS A MINUTE! A trial is all that is necessary to secure a sale. This Machine has a Metallic Plate having my name as Patentee. Sent free to any Station on the G. W. R. on receipt of \$1. T. FORBES, WATERDOWN, ONT. W. WELD, Agent.

W. BELL & CO., GUELPH, ONT.



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AND MELODEONS, Sole Proprietors and Manufacturers of "THE ORGANETTE," Containing Scribner's Patent Qualifying Tubes. AWARDED THE ONLY MEDAL! Ever given to makers of Reed Instruments at Provincial Exhibitions, besides Diplomas and First Prizes at other Exhibitions too numerous to specify. CAUTION! As we have purchased the sole right of manufacturing Scribner's Patent Qualifying Tubes for the Dominion of Canada, we hereby caution all parties from purchasing them elsewhere, as they will be liable to prosecution. We have copyrighted the name of the "ORGANETTE," For our instruments containing this wonderful improvement. Any manufacturer infringing on this copyright will be prosecuted. Illustrated Catalogues furnished by addressing W. BELL & CO., Guelph.

VALUABLE FARM for SALE.

LOT NO. 1, N. HALF 14th CON., TOWNSHIP of London, consisting of 167 acres; 30 acres of excellent wood land, and the remainder in a good state of cultivation. Well fenced, well watered; never-failing creek; excellent young orchard of choicest fruits of all kinds; good brick house—90,000 bricks in it—with slate roof. Good barns, sheds and outbuildings. Distance from London, 5 miles. Soil unsurpassed in quality. Price, \$5,500. This is a rare opportunity, as the proprietor is determined to leave. Apply to—REUBEN BISBEE, Devises P.O., or to this office.

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TWO FIRST-CLASS YOUNG BULLS at reasonable prices and best pedigrees. Also some Cows and Heifers. Apply to JOHN B. TAYLOR, Springwood, LONDON, ONT. 8-4f

Gardener Wanted.

ONE who will take charge of a market garden of about fourteen acres; one who will work it on shares is preferred. References as to character and ability will be required. For further particulars apply to W. WELD, Esq., of Farmer's Advocate, London, Ont., or to the undersigned. A. A. BURNHAM, Jr., Cobourg, Ont. 8-4f

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180 acres; 4 acres wood; new two-story brick house; 3 barns and driving shed; two good wells; a spring creek runs through the farm; soil rich and loam; splendid wheat land; cannot be beat in Canada; good orchard; gravel road running past the house.—Apply at this office. August 27, 1872. 8-4f

WRITE FOR THE FARMER'S ADVOCATE.

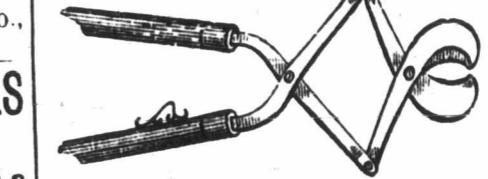
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THE OSBORN LOCK STITCH Sewing Machine

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. Lucas, Mount Brydges, Agent for West Middlesex. 71-2

HUGHES' GARDEN AND ORCHARD TRIMMER & PRUNER.



AN IMPLEMENT INDISPENSABLE to any go-a-head farmer who expects to get a fair return for his labor. PRICE, - - ONLY \$3.

With this Pruner any person can do at least five times the amount of work with much less fatigue, than with any other implement ever offered to the public. For sale by agents only, who will be duly appointed by the general agent.

AGENTS WANTED IN EVERY TOWNSHIP IN THE DOMINION. For further information address JOS. P. CONNELL, Box 13 AYLMER, ONT.

The following gentlemen have been appointed to sell this Pruner in the Townships set opposite their names:—

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**CHEESE FACTORY TO RENT ON SHARES.**

**AN EXCELLENT CHEESE FACTORY AND FARM to rent.**  
 Thirty-five cows are kept on the farm. The milk from 225 cows is manufactured in the factory.  
 The tenant must pay half the value of the stock and implements now on the farm.  
 This is a rare opportunity to make money with but little investment.  
 The farm consists of 220 acres, with good buildings, orchards, &c.  
 None need apply unless a man with a family, and one who can come well recommended.  
 Applications, stating particulars and circumstances of applicant, to be made to this office.  
 London, Aug. 1872.

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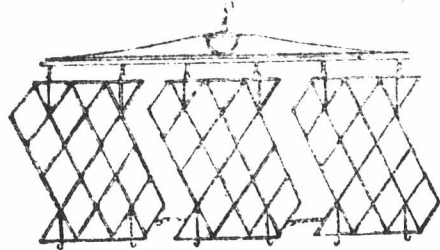
**GUELPH, ONT.,**  
 MANUFACTURE all kinds of Agricultural Implements—  
 Canadian Sifter Fanning Mills  
 Paris Straw Cutter  
 Little Giant Straw Cutter  
 One Horse Seed Drills  
 Hand Seed Drills  
 One Horse Ploughs  
 Turnip Cultivators, &c.  
 All orders from a distance carefully attended to, and satisfaction guaranteed.  
**LEVI COSSITT.**  
 Nelson Crescent, Guelph. 72-3-y

**Great Sale of Cutters & Sleighs**

in all varieties and designs, on and after December 1st, 1871. Warranted first rate material and workmanship.  
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 Richmond Street, near Crystal Palace, LONDON, ONT. 12-6i  
 Nov. 25th, 1871.

**G. MOORHEAD,**  
 WHOLESALE AND RETAIL  
**Manufacturer of Furniture, UPHOLSTERER, &c.**  
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**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.



**HOWARD'S IMPROVED IRON HARROW.**

**THIS Harrow is superior to all others, because it is the most complete. It covers 14 feet of land. It leaves the ground finer, works freer, and adapts itself to uneven land. It does not bend, and chokes less 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 lightly over the surface, as the teeth are beveled on one side. It can be worked with a span or three horses, or it may be jointed 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.  
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 Samples may be seen and order taken at the Agricultural Emporium. 71-4e

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

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

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

The latest out, needed by every lady in the land,  
**THE CRESCENT GRADUATED Button Hole Cutter.**  
 Send 25 cents for sample, and get your county right.

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**H. Bailey, 205, Yonge-st. Toronto**  
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 W. WELD, Agent, London.

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**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

**Toronto Safe Works.**

**J. & J. TAYLOR,**  
 MANUFACTURERS OF  
**FIRE AND BURGLAR PROOF SAFES**  
 Combining all the latest improvements, at the lowest prices.  
 Send for Price List.  
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**GO TO DYSON'S for CHEESE VATS and the best Stoves, Cheap as any, Dundas St. London.**

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 King Street, London, Ont. Manufacturer of Walmesley's Patent Potato Digger. Horse Shoeing & General Blacksmith's Work promptly attended to. 8

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**CRESSALL'S Penitentiary Shoe Store** is without doubt the cheapest place in London to buy Boots and Shoes. Dundas Street and Arcade. 12-y

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 King Street, London, Manufacturer of all kinds of FURNITURE. Upholsterer and Undertaker. 12y

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**DEALER in all kinds of MUSICAL INSTRUMENTS.** BRASS BANDS supplied with new or second-hand Instruments, at from One Hundred to Two Hundred Dollars per set of from ten to twelve pieces. Brass and Brass Side Drums. Musical Instruments of all kinds Tuned and Repaired.  
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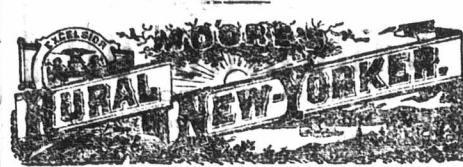
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**G. EDLESTON,**  
 Dundas St., London, Ont. Dealer in STOVES, LAMPS, OIL, TINWARE, and JAPANNED GOODS. A large Stock always on hand. Cheap and good—cannot be undersold. Call and See.

**J. BEATTIE & Co.,**  
**IS the cheapest Dry Goods, Millinery and Mantle Store in the City of London.** 3-y

**BEST OFFER YET!—\$8 FOR \$3!**



**Rural, Literary and Family Weekly,**  
 Has for over Twenty Years been the Standard in its class—and now has more Editors, more Departments, and more and better Illustrations than any other Journal of its Class. It is the acknowledged

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 And is, as an Exchange says, "the most Able Edited, Elegantly Printed, Weekly Circulated and Readily Widely Read Paper, accessible, which now finds its way among the People." It is not only the STANDARD in Rural and Domestic Affairs, but a superior Literary and Family Paper. Sixteen Quarto Pages, weekly, and issued from Practical and Literary Matter, Illustrations, &c., contains late News, Financial and Market Reports, &c.  
**A GRAND PREMIUM!**

MOORE'S RURAL is \$2.50 a year, but we will send it for the ensuing Fifteen Months, (Oct. 1, 72, to Jan. 1, '74—45 numbers), and a copy of our Splendid Steel Engraving, "Birth-Day Morning, or The Golden Age Present" (size 2 1/2 x 3 1/2 picture), for only \$3—or we will send the Engraving to every one remitting \$5 for ten Trial Subscribers for next Quarter, Oct. to Jan. (13 Numbers.) The Engraving is first-class—8 mm. 5: to adorn any Home in Town or Country. Address **D. D. T. MOORE,** New York City.

**New Business Notice.**  
**"THE FARMER'S STORE,"**  
 Cor. Dundas and Talbot Sts., LONDON.

**Dry Goods, Groceries, Hardware, Boots and Shoes**  
**H. CHISHOLM.**  
 Formerly Lawrason & Chisholm. 8-2

**TYTLER & ROSE,**  
**Family Grocers & Seedsmen.**

**TIMOTHY and CLOVER SEED:** all KINDS of FIELD SEED, TURNIP, MANGEL, &c. &c., imported direct by themselves, and of the very best quality.—LAND PLASTER.

**TYTLER & ROSE,**  
**WINE MERCHANTS AND SEEDSMEN,**  
 DUNDAS STREET. LONDON, April, 1872. 2

**GETTING UP CLUBS.**  
**Great Saving to Consumers.**

**PARTIES** inquire how to get up CLUBS. Our answer is—You should send for Price List, and a Club Form will accompany it, with full directions, making a large saving to consumers and remunerating to Club organizers. Send for it at once, to

**MILLER'S GREAT TEA WAREHOUSE,**  
 52 and 54, Front Street East, Toronto, Ontario.  
 Local Agents Wanted. Toronto, April 26, 1872. 5-1f

**FOR SALE,**  
**FOUR PURE-BRED AYRSHIRE BULLS,** with Pedigree—One 4 year old; one 2 year old; two 1 year old.  
**AARON CHOATE,**  
 Breeder of Pure Ayrshires, Perrytown. Perrytown, April 26, 1872. 5-1f

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

**ABEL HINES, TAXIDERMIST,** Clarence St., London, Ont. All kinds of BIRDS & ANIMALS neatly and expeditiously stuffed. Charges Moderate.

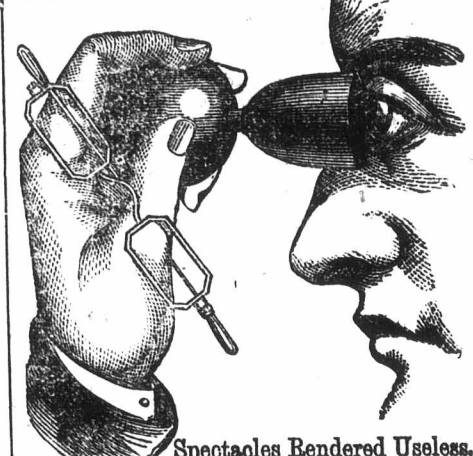
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**JAMES LENNOX,** Merchant Tailor, Dundas St. West, Wilson's Block, keeps constantly on hand an assortment of English and Canadian Tweeds and Cloths. The patronage of the public is respectfully solicited. 1-12

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All diseases of the Eye successfully treated by **Ball's New Patent Ivory Eye Cups.**  
 Read for yourself and restore your sight. Spectacles and Surgical operations rendered useless. The inestimable blessing of Sight is made perpetual by the use of the new PATENT IMPROVED IVORY EYE CUPS.

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

**2309 Certificates of Cure,** From honest Farmers, Mechanics, and Merchants, some of them the most eminent leading professional and business men and women of education and refinement, in our country, may be seen at our office.

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Truly am I grateful to your noble invention: may Heaven bless and preserve you. I have been using Spectacles twenty years; I am seventy-one years old. Truly Yours, PROF. W. MERRICK.

Rev. Joseph Smith, Malden, Mass., cured of partial Blindness, of 18 years' standing, in one minute, by the Patent Ivory Eye Cups.

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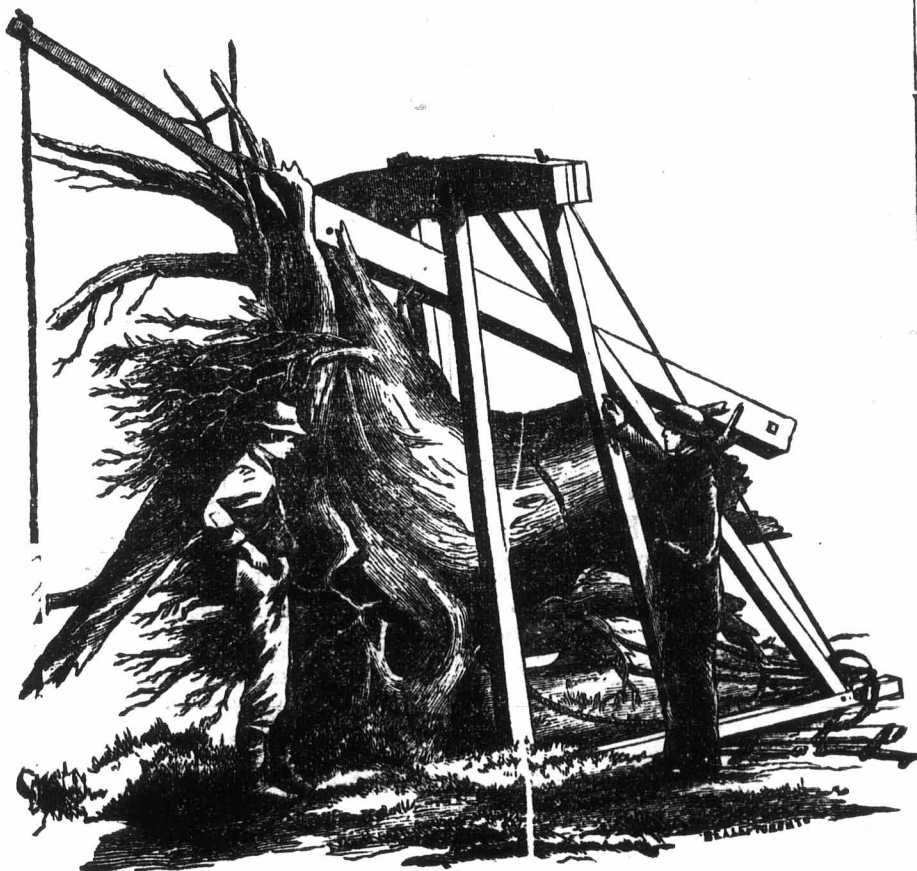
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April 26, 1872.

(5-tf)

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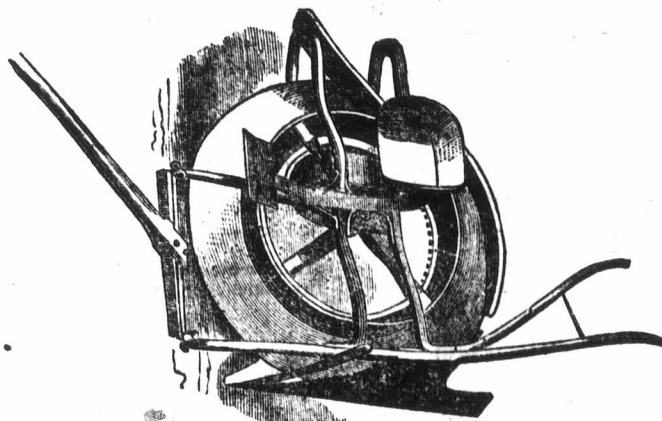
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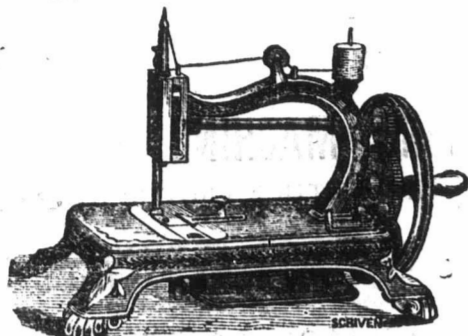
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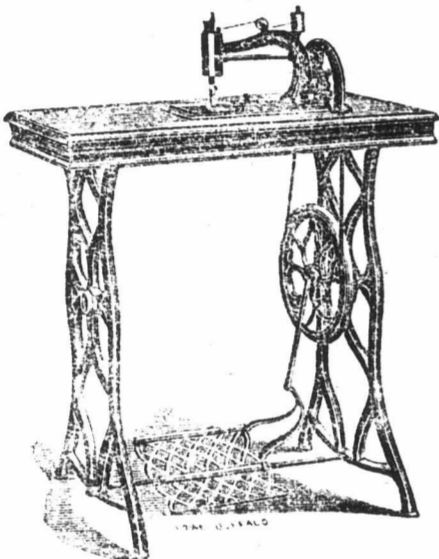
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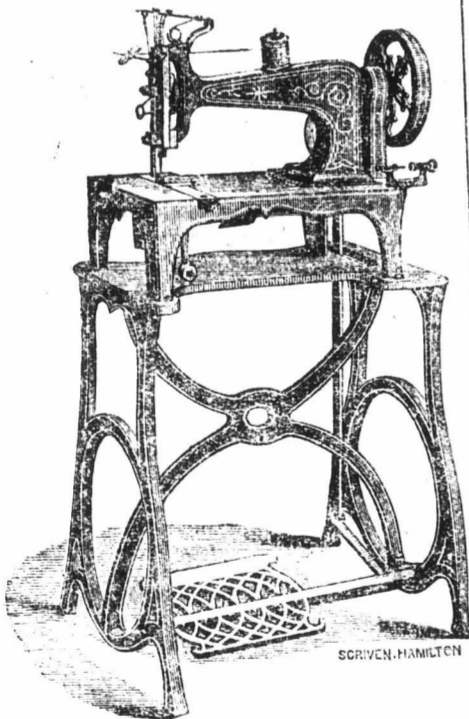
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# SUPPLEMENT TO THE FARMERS' ADVOCATE

FOR THE ELEVENTH NUMBER OF THE SEVENTH VOLUME.

List of Prizes and Successful Competitors' Names and Amount of Prize, awarded at the

## PROVINCIAL EXHIBITION,

Held in Hamilton, Ont., D.C., in the year 1872.

### PRIZE LIST.

<b>CLASS 2.—AGRICULTURAL HORSES.</b>			
<p><b>JUDGES.</b>—Messrs J. Gould, St. Mary's; J. D. Ham, Newburg; Jacob Pollard, Orono; R. D. Byers, L'Orignal; and Emerson Taylor, Credit.</p>			
Best Stallion for agricultural purposes, 4 years old and upwards, James Coulter, Brampton.....	\$30		
2nd do, Geo Teasdale, London township.....	20		
3rd do, Andrew Haney, Beverley.....	10		
Best 3 year old stallion, John Hewitt, Seneca.....	24		
2nd do, M. Stewart, Albion township.....	18		
3rd do, Abraham Hoover, Jun, York township.....	12		
Best 2 year old stallion, Christopher Dale, Tuckersmith.....	12		
2nd do, Wm. Peck, Stanley.....	8		
3rd do, H. & R. Beith, Darlington.....	4		
Best yearling colt, Wm. Vanden, Hullet.....	10		
2nd do, Abraham Hoover, Jun, York township.....	7		
3rd do, Thos. Goulard, Seneca.....	4		
Best 3 years old filly, Jos J. Fischer, Colborne.....	15		
2nd do, Peter Miller, Binbrook.....	11		
3rd do, Matthew Hale, Cayuga.....	7		
Best 2 years old filly, Neal Taylor, Newcastle.....	14		
2nd do, John Johnston, N. Dumfries.....	9		
3rd do, Wm. Herbison, Goderich township.....	5		
Best yearling filly, Thos. Coker, Glanford.....	8		
Best brood mare and foal, or evidence that a foal has been raised, J. & R. Hunter, Pikington.....	21		
2nd do, Neal Taylor, Newcastle.....	14		
3rd do, Simon Shunk, Jun, Vaughan.....	7		
Best span matched farm team (goldings or mares in harness) David Choate, Ingersoll.....	50		
2nd do, J. H. Stuts, Grassley.....	15		
3rd do, Isaac R. Howell.....	10		
Sweepstakes—Best agricultural stallion, of any age, Chris Dale, Tuckersmith, Diploma and.....	50		
<b>CLASS 3.—HEAVY DRAUGHT HORSES.</b>			
<p><b>JUDGES.</b>—Messrs J. H. Crawford, Stamford; L. Sovereign, Paris; &amp; Alex. McMurichie, Clinton.</p>			
Best heavy draught stallion, 4 years and upwards, Jas. Boag, E. Gwillimbury.....	\$40		
2nd do, Andrew Harvey, Beverley.....	30		
3rd do, Wm. Long, Lansing.....	20		
Best 3 years old stallion, J. J. Fischer, Colborne.....	24		
2nd do, A. Harvey.....	18		
3rd do, Thos. Colquhoun, Mitchell.....	12		
Best 2 years old stallion, Chas. Mason, Tuckersmith.....	12		
2nd do, Wm. Peck, Stanley.....	8		
3rd do, John Jackson, Chingacousy.....	4		
Best yearling colt, John Jackson.....	7		
2nd do, Thos. Wilson, Whitby.....	4		
3rd do, Wm. Long.....	1		
Best draught stallion, any age, Jas. Boag.....	40		
2nd do, J. H. Stuts, Grassley.....	15		
3rd do, Isaac R. Howell.....	10		
Best 3 years old filly, Robert Smith, Glanford.....	18		
2nd do, Wm. Gerrie, Dundas.....	11		
3rd do, do.....	7		
Best 2 years old filly, H. & R. Beith, Darlington.....	14		
2nd do, J. J. Fischer, Colborne.....	9		
3rd do, D. McCannachie, Clark.....	5		
Best yearling filly, Jas. Norton, Ancaster.....	8		
2nd do, Thos. Webber, Jun, Glanford.....	6		
Best brood mare and foal, or evidence that a foal has been raised, Walter Hutchinson, Toronto Gore.....	21		
2nd do, Alex. Beith, Clarke.....	14		
3rd do, D. McCannachie.....	7		
<b>CLASS 4.—DURHAM.</b>			
<p><b>JUDGES.</b>—Messrs. Edward Jones, Stamford; Chas. Mitchell, Credit; R. G. McDonald, Cornwall; J. W. Johnson, Jas. Higgins, Clinton; Wm. Wright, Sandwich; James Vine, Louth, and John Tennant, Paris.</p>			
Best bull, 4 years old and upwards, John Miller, Brougham.....	\$40		
2nd do, Humphrey Snell.....	30		
3rd do, Simon Beattie, Pickering.....	20		
Best 3 years old bull, J. & R. Hunter, Pikington.....	30		
2nd do, Robert Colcautt, Darlington.....	20		
3rd do, George Miller, Markham.....	10		
Best 2 years old bull, John M. Bell, Pickering.....	40		
2nd do, John Snell & Sons, Edmononton.....	30		
3rd do, J. S. and Geo. Thomson, Whitby.....	20		
Best 1 year old bull, John Snell & Sons.....	25		
2nd do, John Miller.....	20		
3rd do, John Dryden, Brooklyn.....	15		
Best bull calf, under 1 year, John Snell & Sons.....	20		
2nd do, Col. J. B. Taylor, London.....	15		
3rd do, John Snell & Sons.....	10		
Best bull of any age, J. Bell, Pickering.....	Diploma.		
Best cow, John Snell & Sons.....	30		
2nd do, George Miller.....	22		
3rd do, J. & R. Hunter.....	15		
Best 3 years old cow, John Snell & Sons.....	25		
2nd do, George Miller.....	20		
3rd do, J. & Geo. Thomson, Whitby.....	15		
Best 2 years old cow, Geo. Jardine.....	20		
2nd do, John Snell & Sons.....	15		
3rd do, F. W. Stone, Guelph.....	10		
Best 1 year old heifer, John Snell & Sons.....	20		
2nd do, Duncan McDougall, E. Flamboro.....	15		
3rd do, John M. Bell.....	10		
Best heifer calf, under one year, F. W. Stone.....	15		
2nd do, John Miller.....	10		
3rd do, John Russell, Pickering.....	5		
Best herd of Durham cattle, consisting of one bull and five females of any age or ages, John Snell & Sons.....	40		

Table listing various agricultural implements and machinery for harvest, including reapers, mowers, and threshers, with names of manufacturers and locations.

Table listing chickens and ducks of 1872, including various breeds like Dorkings, Polish, and Game, with their respective owners and locations.

EXTRA.—Pair Angora Rabbits, 1st prize, H M Thomas, Edmontan; trio dark Brahmas, H M Thomas, Edmontan; do, F Sturdy, trio golden spangled Hamburgs, do; John Munn.

Table listing judges for various classes, including names like J. B. Bessy, St. Catharines, and David Rae, Dundas.

Table listing judges for various classes, including names like Peter Hay, Galt; David McCrea, Guelph; James Gledstone, Salem; T M Dallyn and Son, Hamilton.

Table listing judges for various classes, including names like John McDougall, Waterloo; John Junkin, St. Catharines; Daniel Cameron, Galt.

EXTRAS.—Osborne Sewing Machine Co, Guelph, sewing machine; Appleton Manufacturing Co, sewing machine with engine; W G Nunn, Belleville, Tucker sewing machine; Gardner Sewing Machine Co, Hamilton, model sewing machine; Duncan B Shaw, Toronto, corking machine.

HORSES.

Table listing horses, including judges like J. Burnham, Jr, Cobourg; J W Monk, Ottawa; John Canworth, Paris.

CLASS 2.—ROAD OR CARRIAGE HORSES.

Table listing road or carriage horses, including judges like Messrs Wm McBride, Paisley; W H Comstock, Brockville; A Goodfellow, Guelph; Henry Man, Markham; and Benj. Gilbert, Belleville.

CLASS 3.—LARGE BREEDS.

Table listing large breeds, including judges like Messrs R McDonald, South La Grace; John Robinson, Ailsa Craig; Jacob Young, York; O A Johnson, Wellman's Corners; and Henry Parsons, Guelph.

CLASS 4.—GALLOWAYS.

Table listing Galloways, including judges like Messrs Joseph Garner, Fonthill; George Phillips, Thurston; Wm R Havens, Ramer, and Wm Gibson, Layfield.

SHEEP—MEDIUM WOOLLED.

Table listing medium woolled sheep, including judges like Messrs H J Brown, Niagara; Geo Jones, West Flamboro; W Scott, Lumbago; and Matthew Walton, Peterborough.

Table listing sheep, including judges like Messrs Wm McBride, Paisley; W H Comstock, Brockville; A Goodfellow, Guelph; Henry Man, Markham; and Benj. Gilbert, Belleville.

SHEEP—FINE WOOLLED.

Table listing fine woolled sheep, including judges like Messrs Wm McBride, Paisley; W H Comstock, Brockville; A Goodfellow, Guelph; Henry Man, Markham; and Benj. Gilbert, Belleville.

CLASS 5.—SMALL BREEDS.

Table listing small breeds, including judges like Messrs F M Evans, Cobourg; W Moyle, Brantford; A K Seefeld, Yorkville; T Vaubern, Galt.

CLASS 6.—LARGE BREEDS.

Table listing large breeds, including judges like Messrs R McDonald, South La Grace; John Robinson, Ailsa Craig; Jacob Young, York; O A Johnson, Wellman's Corners; and Henry Parsons, Guelph.

AGRICULTURAL IMPLEMENTS.

CLASS 20.—IMPLEMENTS FOR CULTIVATING AND SOWING THE SOIL, HORSE, STEAM, OR OTHER POWER.

Table listing agricultural implements, including judges like Messrs S G Southworth, Franklinville; Archibald McEwen, Ridgetown; R Kunciman, Goddard; Thos Todd, Galt; and Joseph Lowrie, Barrie.

Table listing various agricultural implements and machinery, including reapers, mowers, and threshers, with names of manufacturers and locations.

Partial table on the left edge of the page, showing names and numbers.

Best wooden roller, B Bell and Son 10  
2nd do, John Watson 5  
Best grain drill, John Watson, diploma and 12  
2nd do, L. D. Sawyer and Co, Hamilton 8  
3rd do, David Maxwell, Paris 4  
Best seed drill, for sowing two or more drills of 10  
turnips, mangels, or other seeds, John Watson  
2nd do, B Bell and Son 8  
3rd do, Thain, Elliott and Co 6  
Best ditching plough or ditching machine for 12  
digging drains, L. D. Sawyer and Co  
2nd do, MacPherson, Glasgow and Co, Pinal 8  
Best stump extractor, Daniel Comfort, Hamilton 8  
EXTRAS.—First prizes, A. Copp, hand seed drill, cul- 8  
tinator and strawberry cutter combined; John Ben- 8  
nett and Son, Chatham, road scraper; Thomas Clarke, 8  
Hamilton, seed drill for sowing on single drills; Kirk- 8  
land and Robb, Seneca, set of chain harrows; John 8  
Westbrick, Hops, cultivator and grain sower com- 8  
bined.

CLASS 23—AGRICULTURAL TOOLS AND IMPLEMENTS, 8  
CHIEFLY FOR HAND USE.

JUDGES.—Messrs John Stitt, Prescott; K. Wishart, 8  
West Flamboro; Walter Riddell, Baltimore; F. A. Nel- 8  
son, York; and Geo. Cheyena, Windsor.

Best machine for making drain tiles, Wm Gibbs, 8  
West Flamboro, diploma and 8  
Best assortment of drain tiles, Close and Fal- 8  
gner, Woodstock  
2nd do, Wm Gibbs 2  
Best seed drill or harrow, for turnips, etc., Wm 8  
Walker, Westminster  
2nd do, J. Lawson and Sons, Palermo 4  
3rd do, do 2  
Best machine for sowing grass seeds, David Bate- 8  
man, Scourge  
Best half dozen scythe snaths, Andrew Tait, 8  
Duart  
Best grain cradle, Peter Dick, Orillia 1  
Best lawn machine, Jno A. Bruce and Co, Ham- 8  
ilton  
2nd do, Graham, Emlen and Pasmore, Philadel- 8  
phia  
Best half dozen hay rakes, Andrew Tait 8  
2nd do, W. C. Vanzicko, Jerseyville  
Best straw or barley fork, wood, A. Terrill, 8  
Wooler  
Best flanning-mill, Henry Switzer, Stephen- 8  
ston  
Best straw cutter, L. D. Sawyer and Co, Hamil- 8  
ton  
2nd do, do 4  
3rd do, do 3  
Best machine for cutting roots for stock, Thos 8  
Forfar, East Flamboro  
2nd do, John Watson, Ayr 4  
3rd do, David Maxwell, Paris 2  
Best cheese press, John Amor, Hamilton 8  
Best churn, Corridor Lewis, Salford 8  
2nd do, Thos Forfar 2  
3rd do, Porter, Blanshard and Sons, Concord, 8  
U. S.  
Best beehive, A. C. Attwood, Vanneck 2  
2nd do, Philip Nicolle, Lindsay 2  
3rd do, George Ott, Arkansas 1  
Best half dozen axe handles, Corridor Lewis 8  
Best six chopping axes, Cosgriff and Hourigan  
Dundas 3  
Best set horse shoes, Geo Ayres, Whitley 8  
2nd do, Graham Williamson, Seafort 2  
3rd do, John Leask, Caledonia 1  
Best ox-yoke and bow, Henry Reed, Glanford 2  
Best farm gate, Joseph E. Story, Newtonbrook 2  
2nd do, R. H. Huggin, Fairfield 2  
3rd do, Moses B. Selter, Blain 2  
Best specimen farm fence, wood, Wm Mow, 8  
York  
Best specimen wire fencing, not less than two 8  
rods, erected on the ground, Moses B. Selter

HIGHLY COMMENDED.—Churning machine for dash 8  
churn, J. C. Todd, Toronto; best smoking honey ex- 8  
tractor, D. Loebe, Cobourg; honey extractor, A. C 8  
Attwood, Vanneck.

COMMENDED.—Cheese hoop, John Amor, Jr, Hamil- 8  
ton; cheese hoop (wood), do; bee feeder, D. Loebe; 8  
heloboro and sulphur duster, P. S. Vanwagner, Stoney 8  
Creek; labor-saving invention, operating the old fas- 8  
hioned churn and dash, Jasper Bates, Thornbury; 8  
washing machine, G. I. Baker, Oakville; best marked 8  
Italian queen bees, A. C. Attwood.

AGRICULTURAL PRODUCTIONS.

CLASS 24—FIELD GRAINS, HOPS, ETC.

JUDGES.—David Thompson, M. P. Cayuga; 8  
John Mitchell, Mona Mills, Job Wright, Algonquin; 8  
John Hattie, Allanburgh; J. J. Watson, Adolphus- 8  
town; Robert Currie and James Taylor.

The Canada Company's prize for the best 25 8  
bushels Fall Wheat, the produce of the Province 8  
of Ontario, being the growth of 1872. Each sample 8  
must be of one distinct variety, pure and unmix- 8  
ed, of the best quality for seed, and not to be tested 8  
merely by weight. The prize to be awarded to the 8  
actual grower only of the wheat, which is to be given up to and 8  
become the property of the Association, for 8  
distribution in the several Agricultural Dis- 8  
tricts for seed, Roseton, Barton

2nd do, by the Association, Jno Robt, Ancaster 8  
Two bushels of white winter wheat, Stephen 8  
Blain, Ancaster  
2nd do, John Smith, Brant 8  
3rd do, Moses Freeman, Wentworth 8  
4th do, R. Pack, Newson 4  
For the best half bushel new variety of hybrid- 8  
ized fall wheat, exhibited by the original 8  
producer, who must notify the Association of his 8  
intention to exhibit before the wheat is 8  
harvested, in order that it may be examined 8  
in the field. A portion of the wheat must be 8  
exhibited in the head, with the straw attach- 8  
ed. A written statement of the origin and 8  
percentage of the wheat must be pre- 8  
sented.

Prize, Chas Arnold, Paris 50  
Best two bushels of Fyfe spring wheat, Lineman 8  
McKivers, Hamilton  
2nd do, James Little, Nelson 8  
3rd do, Thos Gray, Oshawa 8  
Best two bushels spring wheat any other vari- 8  
ety, D. McDougall, E. Flamboro  
2nd do, John Smith, Burford 8  
3rd do, J. H. Richardson, Ancaster 8

Best two bushels barley, two rowed, Thos Gib- 8  
son, Markham 6  
2nd do, John Pratt, Cobourg 4  
Best two bushels barley, 6 rowed, Reuben 8  
Sparks, E. Flamboro  
2nd do, Geo. Barnes, Barton 2  
3rd do, Ira Rymal, Barton 2  
4th do, Jos McNair 2  
Best two bushels winter rye, J. D. Lafferty, W 8  
Flamboro  
2nd do, John Evans, Watertown 6  
3rd do, two bushels oats, white, C. Collain, Smith- 8  
ville  
2nd do, Robt Raspberry, Hamilton 6  
3rd do, W. A. Forfar, Scarborough 2  
4th do, Jos Main, Trafalgar 2  
Best two bushels of oats, black, John Pratt, Co- 8  
bourg  
2nd do, J. Rowatt, Dorchester 4  
3rd do, W. M. Smith, Burford 2  
4th do, Walter Riddle, Baltimore 2  
Best two bushels small field peas, Wm Forfar, 8  
Agriculture, Hamilton  
2nd do, Simpson Rennie, Scarborough 6  
3rd do, J. R. Watt 2  
4th do, A. Boover, sr, York Tp 2  
Best two bushels marrowfat peas, Jas Main, Tra- 8  
falgar  
2nd do, John Callis, Hamilton Tp 4  
3rd do, Andrew Black, Baltimore 2  
Best two bushels of any other kind of field 8  
peas, J. Rowatt 6  
2nd do, Jas G. Biggar, Trafalgar 4  
3rd do, E. Bulgen, E. Flamboro 2  
4th do, Jas R. Foster, Flamboro 2  
Best bushel of small white field beans, Walter 8  
Riddell  
2nd do, John Richardson, Louth 4  
3rd do, Lewis Coridon, Salford 2  
4th do, Moses Freeman, do 2  
Best bushel of large white field beans, Lewis 8  
Cordon  
2nd do, John Richardson 4  
Best two bushels of Indian corn in the ear, 8  
white, F. Morrison, Hamilton  
2nd do, Hon H. G. Niagara Tp 6  
3rd do, Wm Updell, Grimsby 2  
4th do, G. J. Miller, Virgil 2  
Best two do, yellow, W. G. Pettit, Wellington 8  
Square  
2nd do, G. Morrison, Hamilton 2  
3rd do, Wm Lottridge, Barky 2  
4th do, Alex. McD. Ugal, E. Flamboro 2  
Best bale of hops, not less than 112 lbs, N 8  
Sprague, Demorestville 20  
2nd do, Coolidge & Dunning, Demorestville 10  
3rd do, John Wheaton, London 10

SMALL FIELD SEEDS, FLAX, HEMP, ETC.

JUDGES.—Wm McKercher, Bethany; A. R. Kidd, 8  
Warsaw; C. Sharp, Guelph; Abraham Martin, New- 8  
hall.

Best bushel of timothy seed, J. C. Teneyck, 8  
Grimsby 80  
2nd do, E. Walker, Omada 2  
3rd do, J. H. Richardson, Hamilton 2  
4th do, Coridan Lewis, Salford 2  
Best bushel of clover seed, W. M. Smith, Burford 8  
2nd do, John Smith, Burford 6  
Best half-bushel of Alsike clover seed, H. M 8  
Thomas, Brookville  
2nd do, J. H. Richardson, Louth 4  
3rd do, J. H. Smith, Burford 2  
Best bushel of flaxseed, Levi Wilson, Trafalgar 8  
2nd do, David Ait, Nelson 2  
3rd do, John Richardson, Louth 2  
Best Swedish turnip seed, from transplanted 8  
bulbs, not less than 12 lbs, Alfred Crumb, 8  
Darlington  
2nd do, John Crumb, Darlington 2  
3rd do, R. Foley & Son, do 2  
Best 12 lbs of white, Belgian field carrot seed, H. A. R 8  
Beth, Darlington  
2nd do, F. Morrison, Hamilton 4  
3rd do, John Raspberry, Hamilton 2  
Best 12 lbs of long red mangold wurzel seed, John 8  
Pratt, Cobourg  
2nd do, John Raspberry, Hamilton 4  
3rd do, J. H. Richardson, Louth 2  
Best 12 lbs of yellow globe mangold wurzel, Walter 8  
Riddell, Baltimore  
2nd do, Wm. Thompson, Whitley 6  
3rd do, John Raspberry, Hamilton 2  
Best bushel of tares, Wm. Thompson, Whitley 8  
2nd do, W. Riddell 2  
3rd do, John Raspberry, Hamilton 2  
Best bushel of buckwheat, Jas. Carey, West 8  
Flamboro  
2nd do, A. Thompson, E. Flamboro 4  
3rd do, J. Raspberry 2  
Best bushel millet, Wm. Smith 4  
Best 10 lbs of cured tobacco, leaf growth of Ont., 8  
2nd do, Thos. Friendship, Kingston  
2nd do, Robert Shearer, Niagara 4  
Best broom corn brush, 25 lbs., A. Esson, Ham- 8  
ilton  
Best 112 lbs. flax, scutched, J. B. Rutherford, Mill 8  
bank  
Extra entries, half bushel Lucerne seed, N. Bethel 10  
JUDGES.—David Nesbitt, Mandarin; A. G. Hill, 8  
Welland; James Thorndyke, Oakwood; Hugh Mc- 8  
Diarmid, Avonmore; Jas. Jackson, Mono Mills.

FIELD ROOTS.

Best bushel of early Gooderich potatoes, E. 8  
Walker, Ontario 80  
2nd do, D. Langton, E. Flamboro 2  
3rd do, Richard Carey 2  
Best bushel cup potatoes, Jas. Porter, Beverly 8  
2nd do, Alex. Robertson, W. Flamboro  
Best bushel Garnet Chills, D. McDougall, East 8  
Flamboro 8  
2nd do, E. Blagden, E. Flamboro 2  
3rd do, Thos. Thompson, W. Flamboro 2  
Best bushel Fuke potatoes, D. McDougall 2  
2nd do, D. Langton 2  
3rd do, A. McDougall 1  
Best bushel Early Rose potatoes, E. Blagden 3  
2nd do, A. McDougall 2  
3rd do, R. Carey 1  
Best bushel Peachblow, James Forie, 8  
2nd do, Thos. Thompson 1  
3rd do, E. Blagden 1  
Best bushel B. C. eyes or Carters, D. Lamont, 8  
Hamilton  
2nd do, Harry Webb, Yorkville 2  
3rd do, Archd Thompson 2  
4th do, James Harrison potatoes, Archibald 8  
Thompson  
Best bushel any other sort potatoes, H. Webb 8  
2nd do, E. Blagden 2  
3rd do, H. Webb 1

Best collection of field potatoes, half peck each 8  
sort, named, James Carey 6  
2nd do, Richard Carey 4  
3rd do, H. Webb 2

CLASS 31—ROTS, HOPS, FIELD CROPS, &c.

Best eight roots, Marshall's improved Swede Tur- 8  
nips, D. McDougall, East Flamboro 80  
2nd do, John Weir, jr., W. Flamboro 2  
3rd do, Wm. Burgess, Mimico 1  
Best eight roots green-top Swede turnips, James 8  
Liddle, Ancaster  
2nd do, Thos. Stock, Watertown 8  
Best eight roots skirling's Swede turnips, Thomas 8  
Thompson, W. Flamboro  
2nd do, Jas. Porter, Beverly 2  
3rd do, Wm. Burgess 1  
Best eight roots white globe turnips, Rich. Carey, 8  
E. Flamboro  
2nd do, Walter Riddle, Baltimore 2  
3rd do, Jas. Porter, Beverly 2  
4th do, Wm. Burgess 1  
Best 12 roots red carrots, Jacob Baker 8  
2nd do, Jas. Porter, Beverly 2  
3rd do, Jas. R. Foster, E. Flamboro 2  
Best 12 roots white or Belgian carrots, W. Walker, 8  
Westminster  
2nd do, Jas. Carey 2  
3rd do, Jacob Baker 1  
4th do, Jas. Porter, Beverly 2  
Best 12 roots red carrots, Jacob Baker 8  
2nd do, Jas. Porter, Beverly 2  
3rd do, Wm. Burgess 1  
3rd do, Hon. Geo. Brown 1  
Best eight roots red globe mangold wurzel, Wm. 8  
Burgess  
2nd do, John Pratt 1  
3rd do, F. Morrison, Hamilton 1  
Best eight roots yellow globe mangold wurzel, Wm. 8  
Burgess  
2nd do, John Pratt 1  
3rd do, F. Morrison, Hamilton 1  
Best eight roots long yellow mangold wurzel, Wm. 8  
Burgess  
2nd do, John Pratt 1  
3rd do, F. Morrison, Hamilton 1  
Best 8 roots white sugar beet, Simpson Rennie, 8  
Scarboro  
2nd do, Wm. Burgess 2  
3rd do, Jas. Carey 2  
Best 12 roots parsley, James Carey, Gooderich 8  
2nd do, R. Carey, E. Flamboro 2  
3rd do, Wm. Burgess 1  
Best 12 roots chicory, Walter Rennie 8  
2nd do, W. Burgess 2  
Best 2 large squashes for cattle, Wm. Lottridge, 8  
Barton  
2nd do, D. Lamont, Hamilton 2  
3rd do, F. W. Freeman, Hamilton 1  
Best 2 mammoth field pumpkins, R. Carey 8  
Best four common yellow field pumpkins, R. 8  
Carey  
2nd do, Thos. Stock 2  
3rd do, Chas. Foster 2

DAIRY PRODUCTS, &c.

CLASS 32—DAIRY PRODUCTS, HONEY, BACON, &c., &c.

JUDGES.—T. P. Wheeler, Woburn; P. R. Palmer, 8  
Toronto; F. R. Smith, London; Joshua Legge, Jr., 8  
Gananoque; Joseph Walker, Virgil; and A. McKellar, 8  
Ottawa.

Best 3 firkins of butter, fitted for exportation, not 8  
less than 50 lbs in each firkin, made by the 8  
exhibitor, Wm. Herison, Gooderich Town- 8  
ship 80  
Best firkin of butter in shipping order, not less 8  
than 50 lbs., Geo. Stranger, Nassagaweya  
2nd do, John McClung, Falkirk 12  
3rd do, Jas. Liddell, Ancaster 10  
4th do, Donald Clark, Puslinch 6  
5th do, D. McDougall, E. Flamboro 6  
6th do, Alex. McDougall, E. Flamboro 6  
Best butter, not less than 25 lbs. in firkins, crocks, 10  
or tubs, John McClung  
2nd do, Jas. Freeman, Salford 8  
3rd do, Geo. Stranger, Puslinch 6  
4th do, Donald Clark 6  
5th do, Daniel Burt, Harrisburg 4  
6th do, Miss E. J. Lyons, W. Flamboro 4  
Best 3 factory cheeses, not less than 50 lbs. each, 30  
2nd do, J. H. Richardson, Louth  
3rd do, J. H. Richardson, Louth  
4th do, J. H. Richardson, Louth  
5th do, J. H. Richardson, Louth  
6th do, J. H. Richardson, Louth  
Best 20 lbs. of cheese, not less than 10 lbs. each, 20  
2nd do, T. Ballantine, Downie  
3rd do, J. H. Richardson, Louth  
4th do, J. H. Richardson, Louth  
5th do, J. H. Richardson, Louth  
6th do, J. H. Richardson, Louth  
Best 20 lbs. of cheese, not less than 10 lbs. each, 20  
2nd do, J. H. Richardson, Louth  
3rd do, J. H. Richardson, Louth  
4th do, J. H. Richardson, Louth  
5th do, J. H. Richardson, Louth  
6th do, J. H. Richardson, Louth  
Best 20 lbs. of cheese, not less than 10 lbs. each, 20  
2nd do, J. H. Richardson, Louth  
3rd do, J. H. Richardson, Louth  
4th do, J. H. Richardson, Louth  
5th do, J. H. Richardson, Louth  
6th do, J. H. Richardson, Louth

other variety, 5 entries shown; 1st prize, F. C. Youre- 8  
side, Hamilton; 2d, Wm. Updell, Grimsby; 3d, Wm. 8  
Calder, Hamilton.  
Nectarine, one entry, John Young, 1st prize.

GRAPES.

Best collection of open-air-grown grapes, 15 varieties, 8  
3 bunches of each. There were 5 entries. 1st prize, 8  
James Taylor, St. Catharines; 2nd, W. Haskins, Ham- 8  
ilton; 3rd, S. Burner, Hamilton.  
Six varieties of open-air-grown, 2 bunches of each, 10 8  
entries, 1st prize, J. Taylor, St. Catharines; 2nd, John 8  
Forsyth, Toronto; 3rd, G. Durand, Niagara.  
3 bunches of Concord, nine entries, 1st prize, W. 8  
Haskins, Hamilton; 2nd, W. H. Brooklin, Ancaster.  
8 bunches of Delaware, 12 entries, very fine speci- 8  
mens; worthy of special mention. 1st prize, H. E. 8  
Brown, Niagara; 2nd, G. J. Miller, Virgil.  
Adorundack; no entry.  
Three bunches of Isara; 6 entries; 1st prize, H. Bauer, 8  
Hamilton; 2nd, E. C. Pearnside, do.  
3 bunches Creveling, 3 entries; 1st p., A. M. Ross, 8  
Goderich; 2nd, W. Haskins, Hamilton.  
Rogers No. 4, 7 entries; 1st prize, H. Hodgins, St 8  
Catharines; 2nd, J. Taylor, do.  
Rogers No. 5, 4 entries; 1st prize, John Forsyth, 8  
Toronto; 2nd, J. Taylor, St. Catharines.  
Rogers No. 19, three entries; 1st p.; R. Hodgins, 8  
St. Catharines; 2nd, S. Burner, Hamilton;  
Rogers No. 44, 3 entries; 1st p., S. Burner, Ham- 8  
ilton; 2nd, J. Taylor, St. Catharines.  
3 bunches Hamilton, 2 entries, 1st prize, A. M. Ross, 8  
Goderich; 2nd, M. Bell, Hamilton.  
Hartford Profile, 1 entry, M. Bell, Hamilton.  
Tona, 9 entries, 1st p., W. Haskins, Hamilton; 2nd, 8  
M. Bell, do.  
3 bunches Isabella, 1st p., M. Bell, Hamilton; 2nd, 8  
W. Haskins, do.  
Allen Hybrids, 7 entries; 1st p., J. Taylor, St. Cath- 8  
arines; 2nd, A. M. Ross, Goderich.  
Any other variety, 3 bunches, 1st p., W. 8  
Haskins, Hamilton; 2nd, J. Forsyth, Toronto.  
Grapes under glass there were 12 varieties, 1st p., 8  
J. M. Williams, Hamilton; 2nd, J. Young, do.  
Black Hamburg Grapes, 1st p., John Young, Ham- 8  
ilton; 2d, J. M. Williams, do.  
Black Grapes, any other variety, 1st p., J. M. Williams, 8  
Hamilton.  
White Grapes, any variety, 1st p., J. Young, Ham- 8  
ilton; 2d, S. Burner.  
Quinces, 6 each, 6 entries, 1st p., J. Freed, Ham- 8  
ilton; 2nd, G. J. Miller, Virgil.  
Water Melons, 6 entries, 1st p., J. Freed, Hamilton; 8  
2d, Wm. Updell, Grimsby.  
Green Flesh Melons, 7 entries, 1st prize, H. Webb, 8  
Yorkville; 2d, G. J. Miller, Virgil.  
Citrons, 11 entries, 1st p., A. W. Taylor, Hamilton; 8  
2d, D. Burton, Barton.  
Crab Apples (salix wild), two entries, 1st prize, J. 8  
Freed, Hamilton; 2d, J. Walker, Niagara.  
Cultivated Crab, three varieties, 1 doz. each, eight 8  
entries, 1st prize, L. Springer, Barton; 2d, J. C. 8  
Pearnside, Hamilton.

CLASS 43—LADIES' WORK.

JUDGES.—Miss Anderson, Galt; Miss Burdett, Tem 8  
pton; Mrs Col Goulay, Hamilton.

Embroidery, Needlework, etc.

Best work, Miss E. J. Lyons, West Flamboro 80  
2nd do, Mr James Park, East Oxford 2  
3rd do, Mrs Bates, Hamilton 2  
4th do, Mrs E. J. Lyons 2  
5th do, Mrs M. Strickland, Oshawa 2  
6th do, Mrs M. Strickland, do 2  
7th do, Mrs M. Strickland, do 2  
8th do, Mrs M. Strickland, do 2  
9th do, Mrs M. Strickland, do 2  
10th do, Mrs M. Strickland, do 2  
11th do, Mrs M. Strickland, do 2  
12th do, Mrs M. Strickland, do 2  
13th do, Mrs M. Strickland, do 2  
14th do, Mrs M. Strickland, do 2  
15th do, Mrs M. Strickland, do 2  
16th do, Mrs M. Strickland, do 2  
17th do, Mrs M. Strickland, do 2  
18th do, Mrs M. Strickland, do 2  
19th do, Mrs M. Strickland, do 2  
20th do, Mrs M. Strickland, do 2

Gloves, 3 pairs, Mrs Hinman, Haldimand	3
2d do, Miss M A McIntyre	2
3d do, D Clark, Pushtich	1
Hair work, Mrs James Park	3
2d do, Mrs H Barkholder, Hamilton	3
3d do, Miss E J Lyons, East Flamboro	1
Mittens, 2 pairs Woolen, Mrs James Park	3
2d do, Mrs Hinman	2
3d do, Mrs James Gray, Pushtich	1
Moss picture, Missy Bond, Toronto	3
2d do, S Strickland, Oshawa	1
3d do, Amelia Cook, Barton	1
Moss work, Mrs Jas Park, E Oxford	3
Shell work, Miss E J Lyons, West Flamboro	3
2d do, Miss A Lyons	2
3d do, Miss N Strickland, Oshawa	1
Knock, 3 pairs woolen, Mrs Foster, E Flamboro	3
2d do, Miss M I McMillan, Galt	2
3d do, Miss Ptolemy, Binbrook	1
Stockings, 3 pairs woolen, Miss J McMillan	3
2d do, Miss Hinman, Haldimand	1
3d do, Miss Ptolemy	2
Wax flowers, Miss M Shively, St. Catharines	5
2d do, Mr S R Kane, Hamilton	5
3d do, Mrs Appleton	2
Wax fruit, Miss M Shively	5
2d do, Miss E J Lyons	3
3d do, Miss A Lyons	2
Wax shells, a collection, Mrs Jas Park	5
2d do, Miss E J Lyons	3
3d do, Miss A Lyons	2
Worsted work, Miss Pettit, Trafalgar	3
2d do, Mrs Bates, Hamilton	1
3d do, Mrs Colbeck	1
Worsted work, fancy, for framing, Mrs Colbeck	3
2d do, Mrs Alex McGregor Galt	3
3d do, Misses Pettit, Trafalgar	1
Worsted work, raised, Miss E J Lyons	2
2d do, Misses Bates, Hamilton	2
3d do, Mrs J C Johnson	1
Wreath, flower, Jos Bates, Glanford	5
2d do, Miss N Duffy, Binbrook	2
3d do, Miss N Duffy, Binbrook	2
2d do, Alice Lamb, Saltfleet	1
3d do, Alice Lamb, Saltfleet	1

No. 43—Delaware, 98 acres, 80 clear. Beech, Maple, Oak. Frame house, barns and stables, orchard, good water, excellent soil, 8 miles from London; close to churches and schools; a good chance; \$5000. Terms easy.

No. 44—Flamboro, 150 acres, 125 clear; maple, beech, and some pine; superior soil, good buildings, with every convenience; 15 miles from Hamilton. \$50 per acre.

No. 45—Delaware, 50 acres, all clear, sandy loam, clay sub-soil, well fenced, good spring; on gravel road; no buildings; 10 miles from London; \$2000, easy terms.

No. 46—London, 40 acres, 32 clear, good soil, spring creek, brick and frame house, barn, stable, orchard; on gravel road; an excellent place; \$2200.

No. 47—Delaware, 30 acres; good brick cottage and stable, 5 sheds, 2 frame barns, granary, large and fine orchard, on gravel road; a capital place, \$4000, terms easy.

No. 48—North Easthope, one hundred acres, nearly clear, good land; brick house, 2 orchards, board fence, good barns, driving board and stables, on gravel road, close to Stratford, \$9000.

No. 49—South Easthope, 150 acres, ninety clear, frame house and barn, well watered, good land, on gravel opposite to above, \$7500.

No. 50—South Easthope, 25 acres bush, hard wood principally, back of above lot, \$600, all cheap for cash.

No. 51—Delaware, ninety-eight and one half acres 80 clear, balance oak, beech, maple, orchard, frame house, barn and stables, spring creek on the place, 8 miles from city, 3 from Komoka. \$5000, easy terms.

No. 52—London, 40 acres, 28 clear, capital land, good house and buildings, 8 miles from city, \$2200. Easy terms.

Lands advertised and sold on commission. Terms, from 1 to 24, on sales only. Parties with farms or wild lands to dispose of will address, enclosing stamp, or apply to Canadian Agricultural Emporium, or to J. NATTRASS, Land Agent; Office, Market Lane, London.

- The History of Inventions.
  - The History of Industry.
  - Exhibition of Musical Instruments of Cremona.
  - Exhibition of the use of waste materials and their products.
  - The History of Prices.
  - The representation of the Commerce and Trade of the World, and the latter having reference to
    - Live animals (horses, cattle, sheep, pigs, dogs, fowls, game, fish, &c.)
    - Butchers' meat, venison, poultry, pork, &c.
    - Dairy produce.
    - Garden produce (fresh fruits, fresh vegetables, flowers, plants, &c.)
    - Living plants injurious to agriculture and forestry.
- The Managing Committee above mentioned of colonial productions is under the presidency of the Marquis of Ripon.
- The Secretary of Her Majesty's Commissioners for the Vienna Exhibition is Philip Cunliffe Owen, Esq., who is to be addressed "Vienna Exhibition Office, 41, Parliament Street, London, S. W."
- The following is an abstract of the rules as far as it may concern private individuals, i.e. a. Her Majesty's Commission is appointed to represent British and Colonial Exhibitors.
- b. Exhibitors will have to defray all expenses including transport of goods.
- c. The Austrian Committee will communicate solely through Her Majesty's Commissioners.
- d. The Exhibition will open at Vienna on the 1st May, and close on the 31st October, 1872.
- e. Exhibitors are responsible for the packing, forwarding, receiving and unpacking of their goods both for the opening and after the close of the Exhibition.
- f. The objects will be submitted to the judgment of an International Jury.

g. The objects for Exhibition will be received at Vienna from the 1st February until the 15th day of April, 1872.

h. The objects exhibited will be protected against piracy of invention or design.

i. Exhibitors and their Agents will receive tickets entitling them to free admission to the Exhibition.

On account of the limited space of time remaining, intending Exhibitors should lose no time in placing themselves in communication with Her Majesty's Commission Committee.

J. H. POPK,  
Minister of Agriculture.  
London, Oct 26, 1872. d-v

LONDON LAND AGENCY.

No. 4—Westminster, 100 acres, 8 miles from the city, 50 acres cleared, good fruit section, 3,800 dollars.

No. 5—West Zorra, 50 acres, very snug place, 6 miles from Woodstock, good land, every convenience. 2,400 dollars.

No. 7—Lobo, 50 acres, 45 clear, brick house cost \$1,350, good land and every convenience—3,000 dollars.

No. 8—London Township, 50 acres, 6 miles from city on gravel road, 35 acres cleared, good land and conveniences. 2,200 dollars.

No. 9—Township of Blandford, Co. of Oxford, 40 acres, 6 miles from Woodstock, good water—12 dollars per acre.

No. 13—Euphemia, 100 acres, 70 clear, 3 miles from Newbury Station. 1,000 dollars.

No. 14—Glencoe, 100 acres, 4 miles from Glencoe; price, 1,000 dollars.

No. 15—Nisouri, 100 acres, 70 cleared; plenty of cut timber; clay loam; creek and well; young orchard; frame house, etc.; clear deed. 3,700 dollars; 10 miles from London.

No. 17—100 acres, 7 and a half miles from London gravel road; good clay loam; well, creek, and orchard. 5,000 dollars.

No. 18—600 acres within ten miles of this city. 25 dollars per acre.

No. 19—two hundred acres, ten miles from this city. 30 dollars per acre.

No. 20—One hundred acres, four and a half miles from London. \$5,500.

No. 21—One hundred and twenty acres, four and a half miles from Glencoe. \$9 per acre—all woods. The timber will more than pay for the lot.

No. 23—Metcalfe, 220 acres, 180 clear; frame house, barn, sheds, splendid orchard; brick Cheese Factory; light clay land; hard wood. 2 1/2 miles from Strathroy; \$10,000. Easy terms.

No. 24—London, 100 acres, 70 clear; hard wood; frame house and barn; orchard; spring creek; clay loam; 4 miles from city limits, near gravel road; 2000 dollars.

No. 25—North Dorchester, 100 acres, 60 improved; house, barn, root-house; on gravel road, 10 miles from London; 3350 dollars.

No. 27—London Gore, 50 acres, 35 clear, clay loam; house and barn; orchard, good spring; 7 acres fall wheat; 4 1/2 miles from city; 2500 dollars.

No. 23—Carleton, 96 acres, 60 clear; frame house and barn; orchard; good wheat soil; 3 miles from Komoka; \$2300 dollars.

No. 23—Faul, Wellington Co.; 50 acres cleared; house and barn; well watered; 1650 dollars; terms easy.

No. 30—Dorchester, 100 acres, 65 clear; house, barn, orchard; well watered; lightish land; 3000 dollars.

No. 31—Dover East, 100 acres, 40 clear; 2 houses, barn, small orchard; 1 1/2 miles from shipping port; 1000 dollars; easy terms.

No. 32—London Gore, 57 acres, 40 clear; house, barns, good water; loamy land; easy terms.

No. 38—Osprey, 100 acres, 12 clear, hard wood, well watered; new frame house; 1000 dollars.

No. 34—Houghton, 100 acres, well wooded; \$400.

No. 35—London Gore, 30 acres, clear, finely cultivated; 3 miles from London, 1/2 mile from gravel road. \$1350.

No. 37—Delaware, 96 acres, 85 clear; brick house, first-class farm buildings, 3 acres of orchard; a frame house, rents for \$8 per month; good spring; on gravel road, 10 miles from city. \$5000.

No. 38—West Williams, 100 acres, 70 clear; excellent timber; clay and sandy loam; good buildings, orchard; 1 miles from Arkona, 8 miles from Parkhill. \$3500.

No. 41—Gore of London, 50 acres, mostly clear, good bush, near gravel road, close to city, excellent land. \$2,500.

No. 42—Ashfield, Huron Co., 158 acres, good loamy land, beech, maple, hemlock; no clearance; spring creek; on stage road, 18 miles from Goderich; cheap 1500 dollars.

PUBLIC NOTICE.

DEPARTMENT OF AGRICULTURE,  
Ottawa, 11th October, 1872.  
VIENNA EXHIBITION.

In pursuance of an Order in Council, dated 2nd October, 1872, notice is hereby given to Companies, Firms or Individuals who may desire, to send on their own account articles to the forthcoming Vienna Exhibition, of the following abstracts of rules furnished, and the offer of services tendered by the Committee of Her Majesty's Commission entrusted with the management of the Exhibition of Colonial productions.

The Vienna Exhibition programme refers to objects coming under a classification comprising twenty-six groups, viz.:

- Group 1. Mining and Metallurgy.
- Group 2. Agriculture, Horticulture and Forestry.
- Group 3. Chemical industry.
- Group 4. Substances of Food, as products of industry.
- Group 5. Textile Industry and Clothing.
- Group 6. Leather and India Rubber industry.
- Group 7. Metal industry.
- Group 8. Wood industry.
- Group 9. Stone, Earthenware and Glass industry.
- Group 10. Small Ware and Fancy Goods.
- Group 11. Paper industry and Stationery.
- Group 12. Graphic Arts and Industrial Drawing.
- Group 13. Machinery and Means of Transport.
- Group 14. Philosophical, Surgical Instruments.
- Group 15. Musical Instruments.
- Group 16. The Art of War.
- Group 17. The Navy.
- Group 18. Civil Engineering, Public Works and Architecture.
- Group 19. The Private Dwelling House, its inner arrangement and decoration.
- Group 20. The Farm House, its arrangements, furniture and utensils.
- Group 21. National Domestic industry.
- Group 22. Exhibition showing the organization and influence of Museums of Fine Art, as applied to Industry.
- Group 23. Art applied to religion.
- Group 24. Objects of Fine Arts of the Past, exhibited by Amateurs and Owners of Collections (Exposition des Amateurs).
- Group 25. Fine Arts of the present time—Works produced since the Second London Exhibition of 1862.
- Group 26. Education, Teaching and Instruction.

To the exhibition of articles, coming under the above mentioned titles, are added what is called ADDITIONAL EXHIBITIONS and TEMPORARY EXHIBITIONS, the former having reference to

LIST OF PRIZES GIVEN TO PARTIES GETTING UP CLUBS FOR THE FARMERS' ADVOCATE.

For a Club of 4 new Subscribers.—Ten choice Parrot Tulip Bulbs. This is a chance no lady should neglect. Secure them and plant this autumn. See cut.

SPECIMEN OF PRIZE OFFERED.



NOW IS THE TIME TO SUBSCRIBE! Great Inducements to Agents.

For a Club of 6 new Subscribers.—A very large, handsome, and beautifully executed chromo, representing a vase of choicest flowers. Size 18 by 24. This picture is a perfect gem, and no one having seen it can fail being pleased. It is a beautiful ornament for any house. See cut. Three parrot tulip bulbs will also be given with it.

For a Club of 11 new Subscribers.—Two splendid chromos, same size as above, one representing a collection of the choicest lilies, and the other summer flowers. These are in every respect equal to the one described above, and form a beautiful pair of pictures. Six parrot tulip bulbs will be given with these.

For a Club of 20.—A very choice young improved Berkshire pig, either sex, and from the best stock; will be ready to send early in December.

For 30 Subscribers.—One good Cotswold ram lamb, raised from F. W. Stone's stock.

Any one preferring Seed Grain, Small Seeds, Roots, Stock, Implements, Poultry of any breed, or Eggs in the spring, may receive them as prizes. A more complete list will appear in our December number.



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