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THE FARMER'S ADVOCATE & HOME MAGAZINE

WM. WELD, PROPRIETOR.

THE LEADING AGRICULTURAL JOURNAL PUBLISHED
IN THE DOMINION.

The FARMER'S ADVOCATE is published on or about the first of each month. It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical and reliable information for farmers, dairymen, gardeners and stockmen, of any publication in Canada.

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The Report of Our Dairy Test.

The report of our dairy test for 1890 is completed in this issue. The test was conducted this year by Mr. A. L. F. Lehmann, B. S. A., Assistant Chemist at the Experimental Farm, Ottawa, Ont., who did his work in a most conscientious and thorough manner, sparing no pains or trouble in order to do this work well. He has our hearty thanks, as well as those of the Toronto Industrial Association and the breeders who competed. The officers of the Toronto Industrial also did all in their power to make this test valuable.

We will offer the same prizes next year, and invite all the cattle breeders' associations to appoint delegates to meet the person who may have the test in charge next year. This meeting will take place at as early a date as possible. We hope next year to see a much larger number of breeds compete.

We want Good, Live AGENTS to Canvass for the "Farmer's Advocate" in every locality in the Dominion and United States. Sample copies and subscription blanks free to canvassers who mean business.

Editorial.

The McKinley Tariff, and What Will be its Effects upon Canada and the United States.

BY JOHN S. PEARCE.

Now that the McKinley Tariff Bill has become law, we shall endeavor to review the situation and see the way it is going to affect Canadians. This question has now been pretty thoroughly discussed, both pro and con, and we shall now try and take an impartial view of the question, and see whether the effect of this Bill or Tariff will not in the main be as much if not more to our advantage and to the disadvantage of the United States, as in the eyes of the United States people it will be to their advantage. We do not for one moment believe that this measure was framed with any special view to hurt Canada in any particular way. The ends in view were purely political and selfish motives. But if there is any unfriendly feelings among a few of the United States lawmakers, or if they thought that by framing such a tariff and making it law they were going to drive or force Canada into

ANNEXATION,

they never were more greatly mistaken. One of Canada's ablest and most advanced thinkers said in a recent speech, "During the past fifteen months I have been in every province of the Dominion, and after inviting the frankest interchange of opinion everywhere, I came to the conclusion that there is less thought of annexation now than at any time during the past forty years. The growing sentiment of

CANADIAN NATIONALITY

is quietly killing it out."

We think the United States people have made a great mistake in passing such a Bill, and we look upon this measure as one that will be largely instrumental in bringing about a reaction on this tariff question, and the result of the next general elections in the United States may be a surprise to some of the ardent advocates of high tariffs and protection. That the general effects of this high tariff will not be for the benefit of the masses as claimed for it, is very plain to any clear headed thinker, but the ultimate result will be to benefit the

MANUFACTURERS

and large corporations and syndicates. The loss of our products, such as poultry, eggs, potatoes, &c., to the American consumer will be more severely felt by him than the loss of their market will be felt by the producers of these articles in Canada, and the day may come when

the loss of the

AMERICAN MARKET

will have proved beneficial to Canada.

The Montreal Trade Bulletin, commenting on the new tariff, says:—

"The United States Customs authorities along the border will have to double their vigilance if they intend to cope with the many difficulties they will now have to contend with, in preventing the smuggling of farm products from Canada into the United States. Owing to the exceptionally high McKinley Tariff, there will be found parties on either side of the line willing to take the chances of shipping and receiving goods by the old-time 'underground railway,' to the detriment of the Government of the United States. If smuggling was carried on between Canada and the United States immediately prior to the enforcement of the McKinley Bill, what may not be expected now that the duties are so much higher. New England importers have already made statements to the effect that they are bound to have Canadian produce in spite of McKinley. The meaning of this, of course, can be construed in two ways, but as it had reference to certain products on which the duty is virtually prohibitory, it looks as if its significance hinted at evasion. It will be something extraordinary if some very high jinks are not played by American smugglers now that such splendid opportunities present themselves to that class of contraband operators. The border line dividing the United States and the Dominion of Canada is larger than that of any other two countries in the world, and brother Jonathan will be sorely tested in putting down a horde of smugglers which the McKinley Bill will undoubtedly bring into existence."

The Huntingdon Gleaner, commenting on the McKinley tariff, says:—"The chief products of the county, cheese, butter, peas and cattle, are unaffected by the McKinley Bill, which leaves untouched such small items of our farmers' revenue as tan bark, hides and pulp wood. Those who talk in an alarmist strain about the effects of the McKinley Bill on Canada, forget that a succession of preceding tariffs has restricted trade to such a degree that little was left to this new one to do. The underlying cause of the fears expressed of severe injury to Canada resulting from the McKinley Bill is the notion entertained by many who live at a distance from the frontier, that the United States offer an unlimited market for produce and at much better prices than can be obtained in Britain. The truth is, that depressed as our own farmers are, those across the line are in worse plight. Daily we see American cheese and butter on its way to Montreal for shipment, the market of sixty millions failing to require it, while the price of

cattle and hogs is lower at Malone and Chateaugay than in Montreal, and to such a degree that American farmers weekly smuggle them for sale to our buyers. Take it all round, the farmers of this district get fully more for their produce than those who reside in Franklin and adjoining counties. That being the case, it is unreasonable to assert the McKinley Bill can greatly affect the farming interests of Canada."

We also notice that the

SPANISH GOVERNMENT

has given intimation to the Washington authorities that United States breadstuffs will be excluded from Cuba and Porto Rico unless the products of those islands—tobacco and sugar more especially—are excepted from the restrictions of the new tariff. This would seem to offer Canada an opportunity of making herself heard at Madrid and Havana.

Again, there has been intimations from several sources that European countries, and no doubt other countries also, will intimate that they will not send exhibits to the

COLUMBIAN EXHIBITION

in 1892. Should the various manufacturers of foreign countries carry out this intimation it will be a serious blow to the success of that exhibition.

Another effect will be to diminish the foreign trade of the United States and to give an artificial stimulus to the domestic trade for some time at least.

THE CANADIAN BARLEY

trade with the United States is not after all likely to be destroyed. The opinion has been expressed by persons on both sides of the line that Canadian barley will continue to be imported in spite of the high duty. The fact that the Americans grow barley in excess of their own wants, while they make use of ours, is marshalled in support of this view; but, while a duty of 30 cents a bushel may not wholly exclude, it may well lessen the consumption. It certainly will not affect the trade this year, as most of the barley was across the line before the Bill went into force. A dealer at Kingston, who has handled 250,000 bushels this year, says that the farmers have received 10 cents a bushel more for their barley this year than for several years. There is, he says, very little more than enough barley now in this Province to supply the home demand. A certain quantity of Canadian barley they had to have. The American brewers had to have our barley, and they would pay the duty.

The American demand being now pretty well supplied very little of what is left could have been sold at American prices. Whether the farmers who still have barley on hand will get American prices for it will depend on their ability to act unitedly. The Canadian brewers are holding off in the hope that the farmers will be willing to let what they have left go at lower prices than have been paid heretofore. Whether the Americans would take our barley in as large quantities next year was a question of supply and demand.

Now, if the Canadian farmers went on growing the six-rowed barley the supply would exceed the demand, and they would have to be content with lower prices.

The check to the

EXPORTATION OF HAY

may be a good thing. To export hay is to rob the farm of its natural manure, and is only

courting a decline of production and fertility of the land when such is practised, and we cannot but look upon the stoppage of its sale as a benefit rather than an injury to the country. Let hay exporting sections go into stock or dairying, which will pay them much better.

PEAS

is another article upon which they have put a very-high tariff, yet notwithstanding this they will have to have our green and wrinkled sorts for seed purposes. In fact they can't grow these sorts successfully in the United States. A prominent seed merchant of the United States made the remark that it would not matter if the U. S. Government put one dollar a bushel duty on garden and green peas they would have to have them and pay the duty, for, said he, "I don't know a spot in the United States that these peas can be grown profitably or to good advantage."

THE EGG

question has created a good deal of discussion and controversy, but to us it is clearly a question of a few months, when the trade will right itself, and things will go on as though nothing had happened. The Montreal Trade Bulletin says:—

"Now that McKinley's Tariff Bill has gone into force, and for a time at least excluded Canadian eggs from the markets of the United States, great interest is being manifested in the few trial shipments that are being made from this city to England. Altogether about 400 cases are going forward this week chiefly to London, each case containing thirty dozen eggs, which are put up in very good shape. The freight to Liverpool is 15s per ton, which is considered very reasonable. If the lots now being shipped sell at 9s. 6d. to 10s. per ten dozen, as anticipated, it is calculated that the net proceeds of sales will give shippers here about 20c. per dozen or over, which figures ought to satisfy them. But as we stated before the test is yet to be made. That great results are expected from these shipments to England, may be gleaned from the fact that 19c. has been paid on this market for strictly fresh stock for the London market, put up in first-class style. Several letters have been received from London, Liverpool and Manchester houses, by parties here outside of the egg trade, soliciting consignments, which shows that English dealers are looking to Canada for their supplies of eggs, but whether they can give sufficiently good returns to warrant other shipments has to be proved. It may be mentioned there is an impression in England, that as Canadian eggs have been shut out of the United States our surplus production must of necessity find an outlet on the other side. It is to be hoped that a large and profitable trade may be developed in exporting Canadian eggs to England."

A Montreal shipper has just had the returns from a shipment of 125 cases to the British market, and the returns are very satisfactory, netting the shipper the same price as was quoted in Boston and New York. Another shipment will go forward at once, and no doubt others will follow.

The trade, when it undertook this experiment, seems to have known more about markets and eggs and things than the able editors. It is remarkable in connection with the McKinley Bill discussion that, though the loss on the egg trade is one that the producer would feel least of all,

most talk has been made about it in the press. Though a trade with England is not yet assured, it seems quite within the probabilities. If present indications are borne out the egg cackle will soon stop, and perhaps in articles of much more value to the country the alarm will be found to be just as ill-founded. The

CONSUMPTION OF EGGS IN ENGLAND

is something enormous. Eggs are sent from Russia to England, and the time in transit is ten to twelve days. Now, if the Russians can send eggs surely we can do the same. J. G. Curry, an extensive dealer in dairy and other products in London, England, says, "I can place any quantity weekly on the London markets if Canadian eggs were sent fresh and properly packed. From samples that I have already placed on this market I have the universal testimony of the buyers who say that they are quite as fine as their own home products."

The trade in

POULTRY

will probably suffer more than anything else, the duty being three cents on live and five cents on dressed. But Britain is taking immense quantities of poultry from France and other European countries. Now, if the railway and steamship companies will only give our dealers and shippers every possible facility for the dispatch and careful handling of these goods, we shall have little to fear from the effects of the McKinley Bill. We have this assurance from one of the agents of one of the Montreal steamship companies, and from what we have seen and know, they are going to do all in their power to facilitate this trade. The Canadian route is by far the best for handling these goods in the summer season, and especially in hot weather. So much so that a great deal of the American goods go by this route in the summer season.

The following will give breeders some idea of what

AUSTRALIA

is doing to push the frozen meat trade, and no doubt our shippers will soon take up this same matter if it works and is practical:—

"A firm in Sydney announce that they have completed arrangements whereby parcels of one, two, three, or more frozen sheep or lambs can be delivered at any address in the United Kingdom—'delivery guaranteed.' Whether the practice of sending presents of this sort from the colonies to friends at home is to become established or not must, of course, depend upon the practical results of the experiment. As a fact, parcels containing frozen meat have already arrived in Surrey, and have been delivered in this way to private individuals.

"If mutton parcels from the Antipodes can be sent thus easily, why not butter, cheese, eggs, and fruit goods from Canada? Perhaps some of our enterprising Dominion shippers will catch on to this idea."

Principal Grant, in his address before the National Club in Toronto, when speaking on this question, said:— While our neighbors were preparing their unfriendly Bill, we gave them all the excuse that could have been desired, by placing new taxes on their corn and pork. At the very moment when we are more than ever dependent on the open markets of Great Britain, some of us propose to shut our doors against her, as the price of conciliating those who announce that we cannot be Canadians and

Americans at the same time. The United States may be selfish in politics, but they have never prepared anything quite so selfish as that. What course shall we take between the policy of the United States and that of Britain which are so opposite? We are between the two. What course shall we take? If we imitate the United States we shall proceed to double our duties on almost everything that we tax now. Every sane man will admit that we cannot afford to do that. We simply cannot afford to make living in Canada dearer. If we imitate Great Britain we shall at once reverse all our previous policy. We cannot afford so violent a disturbance as that. Is there any middle course?

For answer I shall indicate these points that I have thought out, though I shall barely do more than state them.

First—That to fill the gap made by the McKinley Bill in our volume of trade we must look chiefly to an increased trade with Great Britain. Great Britain is just as much our natural market as the United States. She is ready to take almost everything we produce, and distance by water is of far less consequence than distance by land. It is clear that we must buy more from her, as well as sell more to her, if we are to largely increase our dealings with her.

Secondly—If we are to have Commercial Union with only one country, it would certainly be more natural to form such a union with Great Britain than with the United States. There would in that case be less disturbance even of our own manufacturing interests, for the differences between Canada and Britain have led here to lines of manufactures, in which, under any arrangement with her, we could easily hold our own, or even preserve an unchallenged supremacy. On the other hand there is not a single line of manufactures in which the United States are not our keen competitors. Again, in any such union with Britain we could depend upon her staple trade policy and her friendliness, both matters of importance, as the history of our relations with the United States for half a century abundantly show.

Thirdly—Retaliation by us would be ridiculous. I do not say that retaliation is out of the question in every case. Sometimes it is the best way of bringing others to a reasonable frame of mind. Canada and Britain will not get any reasonable measure of free trade with the United States till unitedly they can offer something which, in the opinion of Congress, is as good as that which we want from them. Now, if Canada would agree to abolish its duties on British products and manufactures, or even keep on them a small revenue tariff for a short time, and if Britain would agree to discriminate against countries refusing any reasonable reciprocity with her and with us that would give us the weapon we need. That course would have other advantages. In my opinion it would be the best course, not only for Canada, but for Britain. This would teach the power of free trade to the farmers of the United States. They could not complain even a little, for imitation is the sincerest form of flattery. Besides, they have already done their worst. If you agree with me on these points it follows that we should approach the British Government with a reasonable offer, and find out whether any arrangement can be made. We have approached Washington time and again. Should we not try London now? We are dogmatically told that Britain will

never discriminate. It will be time enough for us to believe that when we are willing to share in the sacrifice that any change requires, or when she herself says so. It is clear that if we are to throw in our lot fiscally with any other nation we should do so with the Mother Country. It is also clear to me that the trade theory of Britain is right, though it does not follow that no exceptions can ever be allowed, or that there are no relative degrees of rightness. Since our neighbors will not trade with us we must do everything in reason to open the avenues of trade, not only with Britain, but with other countries. Commercial treaties with the West Indies on our side, and Australia and New Zealand, are all moves in the right direction. The deepening of the St. Lawrence canals, a cable and a line of steamships to Australia and New Zealand, are all moves in the right direction.

The alterations in the United States tariff which especially interests farmers, and not given elsewhere in this article, are as follows:—

	Former Duty.	New Duty.
Apples, green or ripe	Free	5c. lb.
" dried	"	5c. lb.
Eggs	"	5c. doz.
Straw	"	30 p.c.
Barley	10c. bush.	45c. "
Barley malt	10 p.c.	4c. "
Beans	4c. lb.	6c. lb.
Butter and substitutes	10 p.c.	1c. each
Cabbages	4c. lb.	6c. lb.
Cheese	\$2 ton	\$4 ton
Hay	8c. lb.	15c. lb.
Hops	10c. bush.	1c. lb.
Oats	10 p.c.	40c. bush.
Oatmeal	20 p.c.	40c. "
Onions	20 p.c.	15c. "
Peas, green	20 p.c.	50c. "
" dried	20 p.c.	25c. "
" split	20 p.c.	25c. "
Potatoes	15c. bush.	25c. "
Wheat	20 p.c.	25 p.c.
Wheat flour	1c. lb.	2c. lb.
Mutton	10 p.c.	3c. lb.
Poultry, live	"	5c. lb.
Poultry, dressed	10 p.c.	5c. lb.

The New Restrictions as They Affect Live Stock.

The change that the new tariff will have on live stock exported from Canada to the United States is given in the following table:—

	Old Tariff.	New Tariff.
Horses and mules	20 per ct.	\$30 per head
Horses worth \$150 or over	"	30 per ct.
Cattle over one year old	20 "	\$10 per head
Cattle 1 year old or less	Free	\$2 "
Hogs	20 per ct.	\$1.50 "
Sheep one year old or over	"	\$1.50 "
Sheep less than one year old	20 "	75 "
All other live animals	20 "	20 per ct.

By the above it is easily seen that to be on as good a basis as regards the amount of tariff charged against our Canadian horses for work as formerly, \$150, or a few dollars less, must be the valuation. The present regulation is aimed to prohibit the trade in cheap horses. It has long since been foreseen that the horse breeders of the Western States were sooner or later to be considered. They have, like ourselves, a superabundance of cheap horses that no buyer wants, and as it was therefore necessary for the Government to make a show of assisting the producers of this class, hence the clause in the Bill as it now reads. Therefore the day for getting rid of cheap Canadian horses in the United States is practically gone. They have found an outlet hitherto principally for street car work in the eastern cities, which was only temporary, as there is no doubt the day for street car horses is nearly numbered, as the larger cities are fast changing to cable and electric cars.

With cattle the case is somewhat similar. The very best fat steers, fit for the English export

trade, have no higher tariff charges per head than the light-weight stockers, and the present tariff will put an end to this outlet for scrub steers, and will in this case also favor those that are breeding the right class and do more to banish the poor miserable trash that has been tolerated than columns of newspaper controversy.

With sheep the aspect is somewhat different. As regards butchers' lambs for the Buffalo market there will be no great change, as the shippers under the old regulations contrived to so undervalue their stock that they were admitted at the nominal rate of 60 to 65 cents per head, while the present tariff stands 75 cents per head for lambs and \$1.50 for sheep. The worst feature in sheep is in the duty that will be collected on breeding sheep that are not recorded. Many car loads have gone over for breeding purposes free that answered the purpose as well as recorded sheep for ranch and farm sheep raising, therefore the present Bill is a direct stroke at this trade, as the present \$1.50 per head will practically close this trade, and our farmers will have to feed sheep of this class for the English export market, the \$1.50 per head tariff being more than the difference between the two markets. That this tariff will be a benefit to us in the long run is easy for us to see, for with our own Northwest to stock we shall have no competitors in the British markets that are much account, as far as the live sheep trade is concerned, the South American countries being too far to develop an extensive live stock trade, and the United States having but a very small proportion of the mutton breeds, and the closing out of the class of sheep that are just the right foundation for mutton flocks will in time to come damage themselves, while in reality it will benefit us. As regards the commercial class of live stock this is as near the situation as a review of this regulation at present discloses. It will necessitate more care in all lines of stock breeding. They will still want the best class of horses for carriage and saddle use, and they will go into the hands of people who will pay for them. There will also be a demand for all the heavy horses for city dray work we can furnish, and the present Bill does not interfere with those horse that are recorded. In cattle it will prevent any trade whatsoever outside thoroughbreds of some of the recognized breeds. A glance at the Bill as it affects breeding stock will here be of interest, and reads as follows:—"Any animal imported specially for breeding purposes shall be admitted free: Provided, that no such animal shall be admitted free unless pure-bred, of a recognized breed, and duly registered in the book of record established for that breed: And provided further, that certificate of such record and of the pedigree of each animal shall be produced and submitted to the Customs officer, duly authenticated by the proper custodian of such book of record, together with the affidavit of the owner, agent or importer that such animal is the identical animal described in said certificate of record and pedigree. The Secretary of the Treasury may prescribe such additional regulations as may be required for the strict enforcement of this provision."

With horses and cattle the matter is plain, as animals that are eligible for the record that is established for the breed they represent are generally to be found already registered. The high value of the animal, in proportion to the fee for recording, and the comparative small number held by each party, encourages them to

Midland Loan and Savings Company of Port Hope, which necessitated him moving about amongst the farmers in the adjoining counties. He also for some years before selling the farm conducted a considerable insurance and railway ticket business in Port Hope.

In 1882 he was appointed from amongst ten applicants to the position of Secretary of the Council of Agriculture. No doubt his experience as a farmer and cattle breeder was the turning point in his favor. He then applied his usual energy to the management of the Provincial Exhibition, to the organization of Live Stock Associations, and has met with great success in that line, as the heading of this article will show. Since 1882 he has edited five volumes of the Canada Shorthorn Herd Book, five volumes of the Dominion Shorthorn Herd Book, with the irksome labor of the change of Standard, one volume of the Ayrshire Herd Book, four volumes of the Canadian Clydesdale Stud Book and one volume of the Canadian Draught Horse Book, besides overseeing the registration of Hereford, Polled-Angus and Devon cattle, and Berkshire and Suffolk and Yorkshire swine. He also compiles each year a valuable report to the Minister of Agriculture of the proceedings of the Council for the year. As Secretary of the Provincial he has always shown great attention to the breeders of stock, and spares no pains in assisting them to record their animals, visiting a great many of the shows for that purpose. He is also well-known in Chicago, where he has visited nearly all of the fat stock shows that have been held there. He also was instrumental in starting the Provincial Fat Stock Show of Ontario, of which the seventh is to be held in Guelph this winter. He has also taken an active part in the International Association of Fairs and Expositions held at different cities, has been Vice-President for several years, and has read papers at nearly all of them. He is also one of the Directors of the Eastern Dairymen's Association.

Commercial and Green Manures for Wheat.

In an experiment made by the North Carolina Experiment Station, a series of plots was laid out in such manner that one end of each plot should be on land on which cow peas had been previously plowed under, and the other end on land without peas. The whole was sown to wheat, and kainit, acid phosphate and cotton seed meal were applied to the several plots, singly and in combination, two plots being left without any fertilizer.

The result was that on the land which had had no fertilizer the highest increase of any of the fertilized over the unfertilized plots was four bushels per acre (for 300 pounds cotton-seed meal), while on the green manured land the increase from the pea vines was from six bushels at the least to fifteen bushels per acre, averaging ten bushels.

Stock.

Yorkshires vs. Berkshires.

Mr. Sanders Spencer is certainly an adept in obtaining free advertisements for himself and his stock in England, and from his extending this practice to Canada with success, it may reasonably be inferred that he is an "expert" in such operations. Like others, I have read his letters with amusement, not unmingled with astonishment, at his audacious ingenuity, and certainly he cannot, like Bismarck, "marvel at his own moderation." In one of his letters he claims that the Improved Large Yorkshire was evolved from his herd, as if, by some special dispensation of Providence vouchsafed to him, Sanders Spencer, the whole breed of Large Yorkshires were completely obliterated except those miraculously

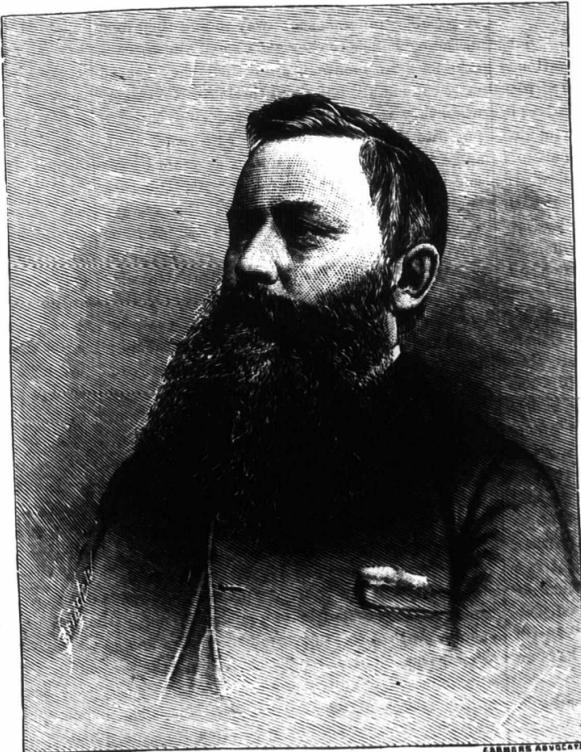
those effected privately, while he does not forget to run in an advertisement at the last exactly like the "patent medicine man." Indeed, when I read his letters, which, when written on the pig question generally, are admirable, I now involuntarily look at the end expecting to see "Ivy Holywell Pigs." I had almost written "Holloway's Pills."

As a matter of fact, I believe Mr. Green's statement will be found substantially correct, but Mr. Spencer in contradicting it offers as proof merely the prices made at a recent auction sale, and carefully refrains from giving any names or some essential particulars, which I will now endeavor to supply. The sale was, I presume, one made by Mr. John Thornton for Lord Moreton, who was removing from an estate in Gloucestershire to one in Oxfordshire, and who had in consequence resolved to dispose of his herd

which was composed of three varieties — Large Yorkshires, Small Yorkshires and Tamworths. The attendance at the sale was not large, and the Large Yorkshires, with due deference to Mr. Sanders Spencer, who was not, I believe, present, were not brought out in as good trim as either of the other two breeds, whose prices were, I see, satisfactory. Mr. Spencer next coolly proceeds to upset all recognized axioms of breeding by the extraordinary statement that "reputed winners" (whatever he means by that), "or being exhibited at Royal Shows, or even entry in the herd book proves nothing, and if your pig breeders buy on that ground alone they are doomed to disappointment." Now, Canadians cannot really swallow this, for we are well aware that the offspring of well-bred ancestors of individual excellence, than which there is no better proof than the result of a show ring, are always to be preferred, yet Mr. Spencer, although he places stress on the prizes won by his pigs, informs us this is all wrong, and the only deduction to be drawn from his letters is that to avoid disappointment one must buy from Mr. Spencer's own herd, and in the next place pay a good

price for them. To an outsider it does look a little selfish, as well as an extravagant claim on Mr. Spencer's part, and it would be more dignified, as well as less trouble to himself, if he placed his advertisement in the proper columns and paid for it as other breeders do instead of taking up valuable space in free advertisements of his pigs. Good stock, like good wine, needs no bush; and here a breeder who persistently adopted such a practice would be set down as a "windbag," a character which does not meet with much approval and gives rise to the suspicion that it must take a lot of blowing to sell his stock. — *Verb. sat sap.*

Professor George E. Morrow thinks artificial coloring detrimental to butter. Colonel Curtis says: "Time will develop chemical changes in the color, which is a foreign substance: and all foreign substances injure butter sooner or later." And Mr. Nicholson, of "The Jersey Bulletin," adds: "For the same reason it may injure the flavor of butter from the beginning, as it surely will in the end. As for good butter-color, man cannot make it. His make is rather bad, worse or worst."



MR. HENRY WADE.

preserved by the fact of being in his herd. It is needless to say that this is not the case, and there are several herds of pure Yorkshires which are beyond all question improved, being quite a different animal to the old Yorkshire, which are quite as good as those contained in Mr. Spencer's herd, and which register in the same swine herd book cheek by jowl with Mr. Spencer's pigs.

In his last letter he gives his opinion that whether the Improved Large Yorkshire is come to stay in Canada depends on Canadian importers and breeders, and as to this there is no doubt he is to a great extent right, and after disputing a statement made by Mr. Green, to which I will refer later on, he ungenerously compares the results of a sale of pigs by auction with his own private sales, as if that were any criterion, when we all know that as a rule prices realized at auction sales are hardly ever as satisfactory as

Ayrshires as Butchers' Beasts.

(Continued from September Number, Page 273.)

Mr. Buchanan in his article on Ayrshire cattle, published by J. P. Sheldon in his work entitled "Dairy Farming," says:—It was no uncommon thing in Scotland, at the time referred to in the last article, for breeders of Ayrshires to systematically under-feed their young heifer calves and yearlings in order to get the points developed which were then in most request, and this could not be continued without weakening and injuring the constitutions of the animals to some extent. Many people, seeing the stunted appearance of these half-starved Ayrshires, naturally concluded that, whatever their value might be for milk, they would never do for butchers' beasts. But this foolish and hurtful fashion has happily passed away, and with it the prejudice against Ayrshires as fattening beasts is fast disappearing also, as feeders have opportunities of testing the breed alongside of others.

Mr. William M'Laren, Herrington Hill, Sunderland, who has for a number of years fattened cattle extensively, says in a letter dated 26th April, 1878:—"I bought four Ayrshire calves in June and July, 1876, from Mr. J. M'Laren, Red House, Sunderland. They were very small and poor-looking, and, indeed, hardly seemed worth rearing at all, but we let them run about with the others, and gave them very little milk or attention; however, they seemed to freshen up wonderfully last summer, except one, which was lame nearly all summer—caused by 'foul' in the foot. They were put into boxes at Martinmas, and got good feeding, and I sold three of them in March at 10s. 3d. per stone of 14 lbs.; they weighed 47, 47, and 43 stones respectively. The one which was lame I have still, and he is now about as good as the others were when they were sold. They were very little to look at, and probably would not have sold for more than 40 stones in a market (they were all bullocks, and as nice as heifers), but I sold them by weight, as I knew they generally weighed much more than any one would call them." Mr. M'Laren gives a number of other instances of Ayrshires which he has fed, and for which he realised very satisfactory prices, and he concludes by saying, "I wish I could buy more of them to feed; if I have an opportunity I shall not miss it."

Those four calves were out of cows I had sold to Mr. J. M'Laren in the beginning of March 1876—cows which were all in calf to an Ayrshire bull, so that the calves were certainly pure Ayrshires. Mr. J. M'Laren sends his new milk into Sunderland, and probably those four bullock calves got very little of it during the two months, or so he kept them before selling—hence their small size; but when sold fat they could not have been above two years old, and yet the two best ones realized over £24 each, and the other, sold at the same time, over £22.

From these statistics in fattening Ayrshires we may conclude that there is not nearly so great a difference in the fattening qualities of the different breeds of cattle as is generally supposed; and when we speak of the lean, lanky, ill-shaped bullocks of sixty years ago, and contrast them with the handsome Shortforn or Hereford which is prime fat at two years of age, we ought to remember that the breeding and treatment of the two animals have been as different as their appearance, and that the fat and handsome young animal we so admire has probably cost more to his owner during the last year of his life than

the other cost his owner during the whole of the four or five years during which he found his food in the fields, with perhaps the addition of a little hay or straw during a severe storm, or if kept in a yard in winter, with no other food but straw.

When estimating the value of any breed of cows for the dairy, we naturally look first to the quantity of milk they yield, but we ought also to take into consideration their aptitude to fatten; and if the Ayrshires were as unsuitable as some people think them for the stall, it might well be doubted whether men farming prime land should keep them, notwithstanding their admitted merits as milch cattle. Several farmers in and about this neighborhood keep pure-bred Ayrshire cows for the dairy. On these they use a pure Shorthorn or Hereford bull, thus increasing the value of the calves as butchers' animals.

Having a dairy, and selling the milk to a dairyman, my calves are reared on as little milk as possible, and soon sent away to find their food in the fields, where they get a small allowance of cake for a few months; after then they get no more cake at all, but about the 1st of November, when they are a little over 2½ years old, they are put into boxes and fattened with roots, meal, and a little hay. For a number of years I have sold nearly all of my own rearing of cattle to a butcher by weight, and in 1877 the average weight of these bullocks was 778 lbs. each, or nearly seven cwt. The first one was killed on the 10th January, the last on April 4th, and their ages would be, on an average, about thirty-four months. These figures were commented on by several persons, and one gentleman thought the cross-breeds, the offspring of an Ayrshire cow and Shorthorn bull, would not fetch the highest price of beef per pound. This drew a reply from Mr. Morris, the butcher to whom I have referred, in which he said, "I may say that I consider the cross admirably adapted for the trade (particularly now, as customers have become so fastidious as to what they eat); they have an abundance of good flesh, without the large quantity of fat common to Shorthorns and some other breeds, and are light in the bone." Further on he continued:—"Let half a dozen half-breeds be bought, with the same number of pure-breeds (Shorthorns), and fed together, I think the result would dispel a little prejudice that exists as to the merits of this cross." Mr. Morris had previously said, in reply to a question from me, as to whether he considered the cross-bred Ayrshires as good butchers' beasts as the Shorthorns, "They are better beasts, both for the butcher and the consumer;" and as he has bought nearly all my winter fed beasts of this breed for the last four years, his opinion is entitled to respect, especially as he is a farmer himself, and fattens a number of good beasts.

In 1878 my cross-bred bullocks weighed from a little over six to nine cwt., each killed between February 13th and end of April, fed in the usual way, ages about thirty-five months on an average. I have no trouble in getting the top price per pound for them. For years they have paid me better than the larger cattle which I have bought in, and I have no doubt that a cross with a Hereford bull would yield equally satisfactory results.

WHAT CANADIAN BREEDERS THINK OF AYRSHIRES.

BY W. C. EDWARDS, M. P., ROCKLAND, ONT.

I have your enquiry as to Ayrshires, and beg to answer your questions as follows:

We have had a herd of 20 to 40 Ayrshires for the past three years.

We are also breeders of Shorthorns, and while they are our favorites, yet we think the Ayrshires a good and profitable stock, and better adapted to some localities and to some farmers, than the Shorthorns. We cannot speak authoritatively of how they would compare with other breeds, as we have had no personal experience with any but the two breeds above named.

Up to the present the Ayrshires have proved more profitable to us than the Shorthorns, the reason being that, on account of the low prices of beef, we have had a very poor demand for Shorthorn bulls, while, on account of the boom in dairy products, we have had a good demand for our Ayrshire bulls. We are not in a position to give comparative values based on the beef and dairy products of the two kinds of stock alone.

Our opinion is that the Ayrshires are best adapted to such parts of the country as are specially adapted for dairy purposes, say in hilly regions where there are tracts of rough pasturage.

We find the Ayrshires particularly healthy, and we believe them to be hardy, but we do not believe in testing the hardy qualities of any kind of cattle. All breeds of cattle can stand our summers, and their care and treatment should be such, from October until May, as not to test how hardy they are, for if it is done it is only at the expense of a depreciated value of the animal, no matter what the breed may be. At some time some breeds may endure hardship better than others, and it is our opinion that the Ayrshires would survive such bad treatment perhaps better than any other of the milking breeds.

We are not the partizans of any breed of cattle. We believe that each of the breeds have their good qualities and adaptabilities. We have chosen to be breeders of Shorthorns and Ayrshires because, in our view, these breeds are as well, or better, adapted to this portion of the country than any other breeds. We have a diversity of character of country in the Ottawa and St. Lawrence regions, and if we were giving advice based on our own observation, we would advise a farmer who has a fairly level farm, with good heavy soil and good grass land, to keep thoroughbred Shorthorn bulls at the head of his herd and breed Shorthorn grades. On the other hand, a farmer having a rough and hilly farm, light soil, and more or less stony, we should advise such to keep thoroughbred Ayrshire bulls at the head of his herd and breed Ayrshire grades. The result to the farmer in each case is sure to be successful if he only takes that care of his stock that he ought to take. In the hands of farmers who are educated properly to the care and treatment of their stock, and who take a pride in their animals, such will make a success of any of the breeds, while the result is sure to be the opposite in the hands of such farmers as neither know or care how their cattle are treated. The great question to solve, in our opinion, is not one of breed, but to get our farmers educated up to the proper care and treatment of their stock.

MR. J. A. JAMES' EXPERIENCE.

I reply to your paper enquiring in regard to my herd of Ayrshire cows and to their production, &c., I shall endeavour to answer you as shortly as possible.

The Ayrshire cows, as a rule, are good feeders,

good milkers, and when I have a good herd of them they are pleasing to the eye and profitable.

I have kept some nearly pure-bred Durham cows of good miling strain, and they have done well; they were larger than the Ayrshire, and they consumed more feed. The Ayrshires are smaller in size and consume less feed than the Shorthorn. The Ayrshire I have give more milk than the Durham on the same quantity of feed. They suit me better for dairy purpose. They give a good quantity of milk late in the season. My herd of twenty cows, mostly all Ayrshires, has averaged me in seven months 6,164 pounds each, beside what I fed to calves, &c., before the factory opened in the spring. I sold, before the factory opened and after it closed, 405 pounds of butter, besides milk for other purposes. The Ayrshire cows are kind, hardy and good feeders.

MR. JAS. M'CORMICK'S EXPERIENCE.

My experience with Ayrshires began in 1865 and has been continued with good results. As dairy cattle I do not think they can be excelled and when crossed on natives or other breeds, the offspring, when females, with rare exceptions, make good dairy cows. I have drawn fifty-five pounds of milk in one day from Ayrshire cows which were feeding on common pasture and received no other food. Twenty-four to twenty-six pounds of this milk made one pound of butter. In 1882 I sold a two-year-old grade heifer to Mr. Williams, ex-M. P. P., of Hamilton. When she was six years old Mr. Williams told me that he had received fourteen quarts of milk from her at one milking, and that she was the best cow he ever saw. In 1883 I sold one to Mr. O. R. Wardel, of Dundas, who afterwards told me she was the best cow that he had ever seen. In 1886 I sold another to Mr. Smith, of Sheffield, who told me he had taken fifty pounds of milk in one day from her. Mr. Adam Thompson, of Rockton, also bought one that gave about the same amount. I merely give the names of these men so that they can be communicated with at any time to prove my statements. My experience has taught me to prefer the Ayrshires. If the cost of keeping is taken into consideration, they are the best all-round dairy cows. We generally stop milking our cows about two months before calving, when we feed them straw and twenty pounds of turnips per day. With this treatment they gain in flesh; this proves how cheaply they can be fed. The profit of a cow depends largely upon the cost of keeping her. I find them to be equally as hardy as any native that I ever saw; I never lost but two, one with milk fever, which could have been prevented, the other, a bull, I had to kill on account of gravel. I might say I have thirty-six head in my stable, and a cough is never heard unless one is choked by something.

WM. STEWART, JR., MENIE, ONT., RECOMMENDS THE AYRSHIRE.

Some eight years ago I concluded to try the Ayrshires. We were then breeding grade Durhams, and previous to this we thought that there was nothing like the Durham, as we got quite a flow of milk when crossed on our native cows, and when too old for dairy purposes, they were worth something for beef. It occurred to me that if we could get as much milk from the Ayrshires as we could get from the Shorthorn grades would they not be much more profitable to keep, as the difference in cost of

keep would more than compensate for the amount realized in the extra amount of beef. Having my mind made up to the above, I concluded to give them a trial, so I purchased two heifers and a bull, with which to start my herd, placing them in the same stable with the others, and feeding the same feed to all alike. I noticed that the Ayrshires did not consume as much food as the Shorthorn grades, and that they appeared to be far thriftier and hardier. I have now kept Ayrshires for eight years, and am not sorry I made the change. With regard to dairy purposes, I think they are the coming cow; they are hardy and healthy, and will live and do well where any native stock will live. They are very quiet, and persistent milkers, at the same time giving a good flow, not for three or four months, but eight and ten months. I have cows in my herd now that have been milked for two years and not been dry a day. They are very prolific, breeding very young, and continuing to breed regularly until up in the teens. I have one cow in my herd that is now rising nine years old, and has had a calf every year since she was fifteen months old; she is now carrying her ninth calf. As cheese is one of our greatest exports it behooves the farmer to turn his attention to the raising of first class dairy stock—stock that will produce the greatest amount of casein or curd to the pound of milk. This is found plentifully in the Ayrshire's milk. This quality, coupled with their thriftiness, hardiness, docile temper and the ability to retain their flow of milk well through the season, makes them a most desirable dairy cow for the general farmer.

SOME COMPARISONS BY GEO. HILL, DELAWARE, ONT.

I am very pleased that you offer me a small space in your paper to say a word for the Ayrshires. I have had them for twelve years. I have had Durhams and Jerseys also in that time, and I find the Ayrshire by far the most profitable as a dairy cow. I find their milk, after the cream is taken off, is more nutritious than Jersey milk similarly treated. I was reading some time ago of a noted doctor of New York that had been testing the milk of these two breeds, and he said the Ayrshires was far the best as food for children, which is a great consideration. I have no doubt but there are some good Jerseys. But where is the farmer that could afford to pay up in the hundreds or thousands of dollars for one of these noted ones? I know of some that cost big money and they do not give enough milk to feed one calf well. I can get a good Ayrshire for from fifty to one hundred dollars. I only paid fifty dollars for my Ayrshire cow which took the first prize in her class at London in 1885. She was second prize cow of all breeds on the ground. I suppose some of Mr. Fuller's Jersey cows which competed cost some thousands, so I conclude the Ayrshires are the poor man's cow. I cannot close without a good word for the ADVOCATE, of which I have been a reader for about twenty years. I think it is like the grain of mustard seed. From a small beginning, it is now spreading its branches of good and useful knowledge over all the Dominion. May you be long spared to go on in the good work.

The Prince of Wales, who is President of the Hackney Horse Society, has been a very successful exhibitor of Hackneys this season. His stud of Hackneys at Sandingham has not yet been established three years and already he has begun exhibiting and winning with horses bred there.

Canadian vs. American Cattle.

The London Live Stock Journal copies the following paragraph from the Rural New Yorker of Sept. 27th:—"Some cattle owners near Grenville, New Jersey, are excited because some of their cattle have been seized and slaughtered by Government inspectors. Dr. Hawk, Chief Inspector for New Jersey, says he discovered a few cases of pleuro-pneumonia among the cattle and is determined to stamp the disease out."

Canada has so determinedly fought against the inroads of disease, by her strict quarantine, that she is absolutely free from any of the plagues that beset the cattle of other countries, and we further trust that our authorities will see to it that our vessels carry nothing but Canadian cattle, as such is the insidious nature of this disease that discredit may arise by our export cattle contracting this disease from a former shipment of diseased cattle shipped from one of the United States ports.

Chatty Letter from the States.

[From our Chicago Correspondent.]

Breaking the record on cattle receipts for two weeks "hand running" is all right for the record, and may be all right for those who have cattle to market after awhile, but it is certainly very rough on cattle prices just at present and those who have to take them. For the week ended Oct. 4 Chicago received 86,799 head of cattle, being the largest on record by about one thousand head. Last week, however, was another record breaker, receipts being 88,351 head. That is rushing cattle in at a rate that must soon make a big impression on the "cattle in sight."

Thousands of men are going on the theory that they must get rid of cattle at any cost before they are compelled to go to feeding them, and as a consequence the markets have been and are now very badly flooded with all sorts of low grade cattle. As illustrating that fact it may be stated that last week, when thousands of 1,000 to 1,400 lb. cattle, in poor condition, were going begging at \$3 to \$3.75, the few really ripe and prime cattle were selling at \$4.90 to \$5.25, or nearly as high as at any time for months.

The man who declares that the surest way of getting fifty cents for corn is in feeding it to cattle this winter may be a little over sanguine, but certain it is that the sacrifice of thin and immature cattle will either be felt in an emphatic way, or there are more cattle in the country than the most "bearish" calculators claim.

The western range cattle have lately sold at very low prices, but for the season so far prices will average about 25c. to 30c. higher than last year. Best western beeves last year, \$4.10; best this year, \$4.50. Handy fat 1,069 lb. steers of fine quality sold at \$4.60, while some good 1,750 lb. beeves sold at \$4.55.

A western sheep man predicts that good sheep will sell very high next spring. He bases it on the reduced numbers on feed and the growing demand.

Car lots of 135 to 140 lb. Dakota pigs sold at \$3.10, the shippers claiming there was nothing to feed them. It seems a shame to waste such material, but if it were not for such sacrifices the production might be overdone.

The London Farming World is in favor of abolishing the practice of offering prizes for steers over three years old at the Smithfield Fat Stock Show, and would offer prizes for steers under twelve months instead.

The Western Fair.**HORSES.**

The show of horses at the recent Western Fair, in point of numbers, was not the success we have seen in former years; especially was this the case in some of the sections of the heavy classes. If the show of stock is intended to be a leading feature in this exhibition, the management will have to see to it that their prize list in this department is larger than in those exhibitions that are being held during the same week, as exhibitors consult closely where the largest money prizes are to be won, and then exhibit accordingly. This is the case in all the stock classes, and as the past show turned out such a financial success it is to be hoped another year will see a larger grant given to this department. The seeming impossibility of holding a show in London without one or more exhibitions being held simultaneously makes this all the more necessary. As usual at the Western Fair the light horses were by far the most numerous.

BLOOD HORSES

are given premier position, and in this class there was rather a meagre entry. The aged thoroughbred stallion owned by J. B. Martin, Forest, was first. He is a horse that should take well among those who are aiming at breeding saddle horses. He is a nicely finished bay of good size, with plenty of bone below the knee, carrying a good middle, but with rather small feet for road work.

T. D. Hodgson, London, was quite a prominent exhibitor in this class, having forward some choice mares and fillies.

CARRIAGE HORSES

had a large entry, and the imported Coach stallions in this class very properly held the winning cards. Fred Rowe, Belmont, received the red for Candidate, a large horse of good Cleveland character, standing fully 16½ hands. Yorkshire Lad, a well-known horse, made a strong second. He is a registered English Coach of good quality, showy action, and has been very successful, having won sweepstakes at Toronto and London as a two-year-old, and has also won frequently here since. He is owned by Messrs. Cameron & Dewar, Duncrief. Messrs. Robson & Ardell's Falconer won third. This is also a horse of good quality, and is leaving a lot of good youngsters, some of which were winners at this show. Falconer is a Cleveland and is a beautiful color, but does not stand as high as either of the other winners in his class. Quite a few promising colts and fillies were brought forward which could boast of Cleveland and English Coach parentage.

ROADSTERS

were the most numerous of any class of horses at this show, no less than twenty-two entering in the ring for aged stallions. The Excelsior Stock Farm, of London, won in this class with Morelight, a horse that was also entered in several of the trotting races. Some well-bred young stallions were also forward among those that won the right colored cards.

AGRICULTURAL HORSES

were represented by a lot of exceedingly useful mares and fillies. Among the exhibitors Prouse & Williamson, Ingersoll; Hider & Parker, Oxford Centre; had a splendid lot. And right here we might remark there is plenty of room for more of this excellent class that was forward, as our farms cannot be worked without plenty of size in our horses.

PERCHERONS.

The Haras National made a show themselves in this breed, having no less than five aged stallions in the ring. D. C. Dorman, and R. Whitelaw, St. Mary's, also exhibiting in this section, Mr. Whitelaw being the sole exhibitor of mares and fillies.

SUFFOLK PUNCH.

Jos. Beck and Messrs. Salmon, of Thorndale, divided the honors in this breed of horses.

CLYDESDALES

were not out in such numbers as we have seen at some previous Western Shows. The aged stallions made a good showing, the Macgregor horse, MacCombie, owned by Bean & Bantlin, of Brinsley, winning first and sweepstakes. This is a horse of good size, with good feet and legs, and capital Clydesdale character, Jos. White, St. Mary's, winning second with Lord Russell, by Jordan Shaw, Anthony Hughes' Good Kind taking third place.

Only two three year-old stallions turned out. A nice blocky horse, owned by Nathan Norton, Westminster, taking first. J. Begg, of St. Thomas, took second with a promising colt shown by James Gault, Glanworth. Two-year-old stallions made the strongest ring of Clydesdales at this show, nine being entered. In this section it was evident that the judges were not in accord, they giving onlookers plenty of time to decide twice, while they disagreed. The first was sent to Jos. White, a good bodied colt in heavy flesh, but certainly not the best at the ground or on the quarter, P. Curtin, of Centralia, winning second with a nicely finished bay, the third going to J. Henderson, Belton, with a neat blocky horse.

Hugh Thomson showed a nice all-round colt by McCammon, that many outsiders expected to see placed higher up. Messrs. A. B. Scott & Son, Vanneck, had a useful colt with plenty of outcome about him, sired by The Belted Knight, Corporal Logan, but this colt unfortunately happened with an accident by which one of his hocks was swelled, he plainly favoring his leg while standing.

Only two yearlings came forward, both shown by Hugh Thomson, St. Mary's.

Very few mares were shown, A. Hughes and D. Acheson dividing the section in the order named. A. B. Scott & Son got first sweepstakes on a very neat filly by MacCombie, also first on a half sister, a yearling, by Good Kind.

CANADIAN DRAUGHTS

were a splendid lot, and showed the attention that has been paid to this branch of horse breeding, and it would well repay more of our farmers to enter into the same line. Good draught animals are wanted everywhere that heavy teaming is to be done, while the rank and file of the lighter classes were too weedy to ever find purchasers.

Messrs. Prouse & Williamson, Ingersoll and Hider & Parker, Oxford Centre, had some grand specimens on exhibition, and took the lion's share of the prizes for mares and fillies. The sections of this class were principally made up of Clydesdale and Shire breeding, and we cannot too strongly urge our horse breeders to look carefully at the good work this breeding has done, and not to be eager in selling the grand young mares that they have been breeding, as they will not be easily replaced if sold.

HACKNEY HORSES

have now quite properly found a place in the

prize list of this and other exhibitions. Mr. Jos. Beck, Thorndale, exhibiting in this class.

THE CATTLE

made a most creditable display, and although some of the breeds were not as largely represented as we have seen them, still there was an absence of anything second-rate, and many of the sections were quite strongly contested.

SHORTHORNS.

In bulls over three Thos. Ballantyne & Son's imported Prince Royal, by Prince Rufus, was first, Snell Bros., Clinton, taking second with Neptune, a bull of the Campbell Ruby Hill family, bred by S. Isaac, Baltimore. Messrs. Nicholson, of Sylvan, carried off third with imported Warrior. Mr. Davis' Nonpareil, a useful good bull was also shown.

The Bow Park two-year-old, Master Ingram, by the sweepstakes sire Sir Arthur Ingram, dam Havering Nonpareil, carried off first and sweepstakes, James Oke, Alvinston, second, and James Milne, White Oak, third.

In one-year-old bulls the Bow Park Roan Duchess bull, by Ingram, took first, a very thick bull, by imported Mariner, bred and owned by T. Russell, Exeter, second, George Dickie, Hyde Park, winning third with a neat bull of his own breeding.

Bull calves were an even class, twelve being forward. Messrs. Nicholson were again to the front with their Warrior calf, Thos. Ballantyne second with a thick useful calf, bred by A. Johnston, by the Cruickshank bull Indian Chief, Smith Bros., of Exeter, gaining third with a neat good one of the Matchless family by Prince Albert.

In cows the Bow Park Waterloo cow won the red, the white Isabella, by Lord Zetlan, second, and Nicholson's third.

In three-year-olds the Bow Park Isabella, a large thick daughter of Lady Isabella, took first, Messrs. Nicholson second.

The Bow Park two-year-old Lady Aberdeen 9th, by Ingram's Chief, took first and their other heifer, by the prize-winning Oscar, second, and Messrs. Snell third with a Vice-Consul heifer.

In yearling heifers the Bow Park Isabella 5th, by the Baronet, was first, Smith Bros., with a Village Blossom, by Prince Albert, second, Nicholson third, with a heifer by Warrior.

A good class of heifer calves, in which a Missie from a Duthie bred dam, and a Meadow Sweet from a Retty dam, both calves sired by Prince Royal, carried a first and second to the credit of Thos. Ballantyne & Son, C. M. Simmons winning third with a well developed calf by Sir Christopher. A number of other real good calves were forward, which should help to keep up the reputation of the breed in future.

HEREFORDS

were lacking in numbers, but the exhibit of Hon. M. H. Cochrane, Hillhurst, P. Q., and Mr. Fleming, Weston, Ont., were well up in quality. Mr. Cochrane's Cassio is just the pattern of what a beef bull should be; he is low down, with a wonderful width, and carrying a depth of natural flesh that is rarely seen, but which he comes honestly by as a son of the noted The Grove 3rd, and a goodly array of his daughters are inheriting his grand beefing qualities, thereby showing that he is equally as good as a sire as he is individually. Mr. Fleming made quite an exhibit, some of which were particularly good.

POLLED-ANGUS

were also represented by Mr. Cochrane, with a contingent from the herd of Mr. Stewart, Sarnia, who is new in the show rings of the country, bringing forward eight as a foretaste of what may be expected of him in future. The prizes were, therefore, divided between these two herds, the majority of the reds going to the Quebec herd.

GALLOWAYS

of Mr. Keough, Owen Sound, were headed by the bull Claverhouse, bred by Thos. Baggar & Sons, Dalbeattie, Scotland, and was purchased of his importer, Mr. McCrae, of Guelph. This is a capital specimen of this hardy breed of cattle; he carries a wealth of smooth, thick, natural flesh, and is turning out a grand sire, as many of the younger things in the herd fully show.

GRADES.

Some grand specimens of what the Shorthorn has done in grading up the cattle stock of the country is found in every show in the beautiful thick steers and heifers that grace our exhibitions—early maturity, smoothness and thickness of flesh, combined with a handsome appearance and good quality, in which none of the pure breeds can excel. The principal exhibitors were James Oke, Alvinston; John Morgan & Sons, Kerwood; and Weir Bros., St. Mary's.

HOLSTEIN CATTLE

made a capital showing, the herd of A. C. Hallman & Co., New Dundee, having fourteen magnificent animals. The young heifers of this herd are particularly promising, showing skillful breeding and careful handling. This herd took a majority of the prizes. Wyton Stock Breeders' Association, Wyton, were also forward with eleven head, most of which received recognition at the hands of the judges.

AYRSHIRES

were out in great numbers, amongst the exhibitors being Kains Bros., Byron, who had twelve, which were a very good lot. They had a particularly good yearling bull of good size and splendid appearance, his sire being imp. Stonealsay, dam Victoria, a prize-winning cow at the Provincial. A grand cow is imp. Jannie, of Auchenbrain. This firm are evidently breeding to bring out large milk development—large teats, and other practical points that tend more to the useful qualities. Their yearling and two-year-old heifers were a particularly breedy lot. Michael Ballantyne, St. Mary's, showed seven head of these useful cattle, amongst which a yearling heifer was a capital specimen of the breed, and Geo. Hill, Delaware, had four to the front. His two-year old heifer was just the type of a good Ayrshire. He also showed some promising calves. The veteran breeder, Thos. Guy, of Oshawa, was here as usual, bearing fresh laurels won at Toronto.

JERSEYS

were not a large exhibit, as far as numbers go, but there were some very meritorious animals forward. John O'Brien, London, showed three, a cow, a yearling bull and a bull calf. These were very fine animals, and won first in their respective classes. Mr. Rock Bailey, of Union, was also an exhibitor.

SHEEP.

The show of sheep was decidedly one of the best in the live stock department. The standard of excellence was high. Few that could be ranked in the middle grade were shown.

Many of the flocks had been already shown at Toronto, but still a goodly number of fresh sheep also appeared upon the scene.

IN COTSWOLDS

Messrs. J. G. Snell & Bro. were again on hand, and Mr. Heber Rawlings, Ravenswood, showed two shearling rams in moderate flesh. Messrs. Laidlaw & Jackson, Wilton Grove, showed three, most of their flock having been disposed of. John Park had nine out which were a nicely woolled lot. James Murray, Wilton Grove, showed two imported ewes and a ram, all bred by Mr. C. Gillet, Gloucester, England. Geo. Weeks, Glanworth, showed eight, a shearling ram of nice even quality and with an extra fleece of good, lustrous wool, bred by Russell Swanwick, Cirencester, England. Mr. Weeks' lambs and shearlings were very good, indeed, the entire lot being in nice breeding condition, although just off the grass without any special fitting. Robert Morgan, Kerwood, had fifteen which were well woolled lot, nicely covered, and having plenty of size.

LEICESTERS.

Mingo McNab, Cowal, showed ten in this class, of various ages, which were a nice useful lot, the lambs being particularly growthy. James Snell, Clinton, showed a few nice ones. There were also a lot that had come from Toronto, such as John Kelly's flock, Shakespeare, and Mr. Whitlaw, Guelph. John Laidlaw, Wilton Grove, showed seven head. Among them was a grand shearling ram, a very fine specimen of the border Leicester, imported this season. He also had out a fine lot of lambs.

LINCOLNS.

Wm. Walker, Ilderton, always a prominent exhibitor in this class, was there in good force. A. & R. Hislop, White Oak, exhibited eleven sheep that showed careful handling. Edward Humphrey, Thamesford, showed six nicely bred sheep.

SHROPSHIRE.

W. E. Wright, Glanworth, showed seven imported and four home-bred sheep in this class, which were a well woolled lot, and also some good specimens of fat sheep.

Mr. Medcraft & Son, Sparta, were forward with thirteen head of really good sheep, eight of which had been imported by themselves this season. This lot were nicely woolled and of capital quality. The imp. shearling ram, which was selected to head the flock, is a particularly good backed sheep, with great length and good quarters. John Dunkin, Brucefield, was out with a flock of ten head, the lambs being a strong growthy lot, the shearlings and older sheep possessing much quality. W. H. Beattie, Wilton Grove, is again forward with the flock he had in Toronto. Richard Gibson, Delaware, had some specimens of his this year's importation, and his aged ram, that was a Royal winner, was first here.

SOUTHDOWNS.

Mr. David H. Dale, Glendale, led off with a flock of beautiful imported sheep and a pair of aged ewes of his owned breeding. His shearling ram, bred by Mr. Jonas Webb, is as good a sheep as we have seen for years. His imported ram lamb shows wonderful development, and is, perhaps, the largest and best Southdown lamb ever imported. The shearling ewes from the flock of Mr. Jonas Webb are capital specimens. Taking in all, this flock makes a splendid showing, and we will be much disappointed

if they are not heard from in the future. Mr. Douglass, Galt, was also on deck with a choice lot of his own breeding.

MERINOS

were quite largely represented, forty-nine of this breed being on the ground—Messrs. Geo. B. Deo, New Sarum, showing 9, Smith Bros. 18, R. Bailey, Union, 22. All these were from large flocks, Mr. Deo having 300, Mr. Bailey 150, Mr. Smith 157. These sheep appear to be increasing in numbers each year, Mr. J. D. More, M. P. P. for Waterloo, having a flock of 600 head. These men claim they are very profitable for the care and feed required, the wool from a well-fed flock shearing from 10 lbs. washed to 15 lbs. unwashed. They live to a great age, and drop their lambs at any season desired.

THE SHOW OF SWINE

was so large that there was not sufficient room for the exhibit in their regular sheds, therefore cattle stalls had to be made use of.

BERKSHIRES.

Simmons & Quirie, Ivan and Delaware, showed ten of various ages, which were a nice, even lot. R. Gibson, Delaware, showed four very nice ones, and John Ackland, Delaware, had ten, which were a smooth, useful lot. J. G. Snell & Bro. were again out with their superb herd. H. J. Davis, Woodstock, had fourteen growthy pigs of this breed. G. C. Keys showed twelve. Among this lot were some very good ones, descended from the stock of Geo. Green, Fairview. The Berkshires made a particularly good showing, some of the specimens being grand representatives of the breed.

CHESTER WHITES

were large and good, the breeders in this class being determined to keep up the reputation of this sort. The principal exhibitors were H. George & Son, Crampton; E. D. George, Putnam; Thomas George, Putnam.

POLAND CHINAS.

R. Dorsey, Burnamthorpe, and Smith Bros., Fairfield Plains, exhibited pigs of good quality and large size, much better specimens than have been usually shown here.

SUFFOLKS

were represented by the herds of J. Featherston Springfield-on-the-Credit, and R. Dorsey, Burnamthorpe. Part of both these herds were being exhibited at Hamilton. Mr. Kingsmill, London, who has for some years been breeding Suffolks, had some very fine specimens.

LARGE YORKSHIRES

were not largely shown. Jos. Featherston showed seven, and Mr. Goodger ten of this breed.

ESSEX

were of exceedingly good quality and nice breeding, but were not out in large numbers. They were shown by Jos. Featherston.

THE DAIRY EXHIBIT AT LONDON.

The exhibit of cheese at the Western Fair was very good, though not quite as large as it should have been. It looks as if there was a want of interest amongst our dairymen in the west, in what may be called their exhibition of dairy produce. There was evidently some new regulations, or some misunderstanding with a number of the dairymen, as five different lots of cheese arrived too late to be examined by the judges when the prizes were awarded.

The cheese and butter were judged on Friday of the first week. Formerly the dairy produce was not judged till Tuesday of the show week. Two of the lots which arrived late would have had a

place in the prize list had they arrived in time. Some of the lots were very fine cheese, others were not, which showed either carelessness or ignorance on the part of the maker who selected them. A few lots were badly off flavor, and some lots showed too much acid and were coarse in the grain and not silky in texture. Perhaps one reason why our dairymen do not take more interest in exhibiting their produce is the want of an opportunity to make comparisons in their products. They complain it does them no good to exhibit their cheese, they are not afforded any opportunity of comparing one factory's produce with another's, and unless something of a more educative system is adopted in connection with dairy produce exhibited, the interest of dairymen is likely to decrease. Why could there not be a dairymen's convention in connection with the Fair, where the manufacture of cheese and butter could be discussed, and a few cheese cut up and the prize winners describe their method of making and how faults could be rectified and the little defects and weak points obviated. There should be engaged for the dairymen's meeting, one or two professors to give an address, who, having the cheese and butter exhibited before them, could give an object lesson of great profit to the meeting. Ladies who are butter-makers should be invited to attend and take part in the discussion of the various subjects brought before the meeting.

The managers of our great Western Fair spend large sums of money to provide amusement for the people. A little money would be well spent to provide instruction, and also entertainment to our cheese and butter-makers, the most important industry in Ontario.

The butter exhibit was very small, some very nice lots of dairy butter, and three lots of very fine creamery. During the Toronto Fair the cattle men, the sheep and hog breeders have their meetings and discuss matters relating to their own lines of business. Our dairymen in the west should unite together to promote their own interests, the advancement of the science of their occupation, to lessen their labor and improve the quality of their produce.

The Great Central Fair.

This exhibition opened at Hamilton on the 22nd September. The weather was fine and every thing appeared favorable, but owing to the Western Fair being held the same week the exhibits were not as numerous as they otherwise would have been. The competition in thoroughbred horses was about the same as last year, there being only two exhibitors, Mr. Wm. Hendrie and Mr. John Dymont, the former winning first in three-year-old stallions with Tulliegorum, and first in brood mares with Bonny Bird. Carriage horses were well represented, and some good animals were on hand, especially in the younger classes. Eleven aged stallions were shown, amongst whom was the veteran Ryshawk, who once more pulled out the red ticket. Roadsters were likewise a very good class, both in merit and numbers, as may be imagined when ten two-year-old stallions were led into the ring. The Heavy Draught class, although not so strongly represented, contained many excellent horses. In the aged stallions the first prize went to Lord Wilton, a good up-standing bay, with plenty of bone and well muscled, sired by the celebrated Lord Erskine, and owned by Mr. A. K. Tegart, of Tottenham, who subsequently gained the diploma for the best Heavy Draught stallion of any age, second going to a horse owned by Mr. Smith, and third to Messrs. Ormsby & Chapman's Leake Crampton. Two-year-old draughts contained rather a miscellaneous collection of draughts, carriage and general purpose, and some little disatisfac-

tion was, we believe, occasioned by the awards; four brood mares competed, first going to a good, short-legged wide mare owned by Mr. Stewart, Oneida, second to a brown mare, rather low in flesh, owned by Mr. Ferguson, and third to Mr. Fothergill's brown mare, a decision which, as regards the second and third prizes, did not meet with general approval.

CATTLE.

The beef breeds were not as well represented as those of milking type, and did not, on the whole, come up to the exhibits we have previously seen at the Central.

Shorthorns were exhibited by Messrs. Watts, Salem; Currie, Everton; W. D. Barker, Paris; Eastwood Bros., Mimico; Stock, Waterdown; Terryberry & Mitchell, of Glanford. Aged bulls were a poor class, only two competing. Two-year-olds contained the roan bull (Eastwood Bros.) which was first in the yearlings at the Industrial, and which was here rightly awarded first in his class and diploma. In yearlings, a thick red bull (Currie's), a trifle slack round the heart, was first, a useful bull (Barker's), in low condition, being second. Four bull calves competed, and a smooth red calf (Watt's) was placed second to an older red and white calf (Currie's), although some felt inclined to reverse their positions. The female classes were much superior to the bulls. Six aged cows were on hand, first going to a good roan (Watt's), second to a roan cow (Stock's) which had only calved the day before and did not show to the same advantage, and third to a stylish roan (Currie's), whom we thought might have been placed a step higher. First in three-year-olds went to a thick roan two-year old heifer (Watt's) with a grand front, second to a lengthy red cow (Barker's), and third to a red from the same herd. Two-year-olds contained a grand roan yearling (Watt's), by old Barmpton Hero, which was placed first, a medium red heifer (Barker's) second, and a thin roan (Terryberry's) third. Among the yearlings a grand roan heifer (Watt's), by Perfection, was easily first, a white heifer (Currie's) second, and a useful roan (Barker's) third. The herd prize, as anticipated, was taken by Messrs. Watt, with Mr. Barker second, and Mr. Currie third, the herd prize, open only to the County of Wentworth, being awarded to Mr. Terryberry, Mr. Stock being second, and Mr. Mitchell third.

There was no competition in Herefords, Mr. Reed, Glanford, being the sole exhibitor. The milk breeds were much more strongly represented.

Ayrshires were well to the front, with eight head shown by Messrs. Smith, Fairfield Plains, and a strong contingent from the herd of Mr. Jas. McCormack, Rockton; also the exhibits of Messrs. Gerard, Hamilton and Addison, Hamilton. The largest share of the prizes were awarded to Mr. McCormack, who also won first for his herd, Messrs. Smith winning the diplomas for both the best bull and the best female of any age.

Holsteins were likewise out in force. Messrs. Kennedy, Ayr; Felan & Brecon, Oakville; Stevenson, Ancaster, and McNiven & Son, Winona, being the principal exhibitors, the first and diploma on aged bulls, as well as the first for aged cows, going to Messrs. Kennedy, Messrs. McNiven taking a first on their bull calf Sciptjie 3rd, for the first time exhibited, and first on their two-year-old heifer, the other

exhibitors also obtaining a fair share of the money.

Jerseys were not as strong in numbers as Holsteins, but some good animals were present, Messrs. Geo. Smith & Son, of Grimsby, having seventeen head, the only other exhibitor being Mr. Job, of Waterdown, who won first on his aged bull, all the other prizes going to Messrs. Smith.

Grade cattle were, with the exception of the second prize heifer calf, who was sired by a Hereford, all Shorthorn crosses, the first prizes chiefly falling to the lot of Mr. Atkinson, Mr. Barker securing most of the others.

SHEEP

were not as numerous as we should have anticipated, and many of the pens were vacant.

Leicesters were, however, better represented than last year, and the competition was stronger. Mr. John Kelly, jr., Shakespeare, as usual, won all the first prizes, the others being divided between Messrs. Merrill, Onondaga; Easton, Appleby, and Woods, Freeman.

Oxford Downs were exhibited by Messrs. Evans, Gourcock; Harcourt, of St. Annes, and Hanmer & Sons, Mount Vernon, the competition being stronger this year than last.

Shropshire entries were about the same as last year, the exhibits being from the flocks of Messrs. Petit, Burlington; Brecon, Appleby, and Hanmer & Sons, Mount Vernon, the latter securing the lion's share of the prizes.

Cotswolds were a good average lot, the prizes being about evenly divided between Messrs. Crawford, Canboro, and Patch, Blackheath.

PIGS

formed a good display, and much interest was taken in this department by visitors.

Berkshires were an excellent lot, especially those from the herd of Mr. Geo. Green, Fairview, who literally swept the board, taking all the prizes, and also a highly commended ticket for his fourth aged sow, the other competitors being Messrs. Reid, Seneca; Wickett, York, and Brant, Glanford.

Suffolks were shown by Messrs. Dorsey, Burnamthorpe, and Featherston, Springfield-on-the-Credit, the former winning most of the prizes.

Essex were only represented by the herds of Messrs. Featherstone and Main.

Poland Chinas had more competitors, Messrs. Smith, Dorsey and De Courcy being the principal exhibitors.

Yorkshires and other large breeds were likewise well filled, Messrs. Dorsey, Featherston and Ormsby & Chapman exhibiting Yorkshires, and Mr. De Courcy Chester Whites, all of whom secured a proportion of the prizes.

ROOTS, ETC.

The exhibit of roots was very good, especially potatoes. Fruit was a grand display, the apples being better than at the Industrial. Peas were particularly fine, as were also grapes. Peaches formed a small exhibit, but good. Plums, a moderate show, the time of year being rather late.

During the exhibition, trotting races, balloon ascensions and trapezists drew a large crowd, while those who preferred feats of horsemanship were doubtless interested in the Pierce Combination Co., of Cleveland, Ohio, who gave exhibitions of hurdle jumping, Roman races, and raced their champion running team, Oscar Wild and Nellie May (who have a record of a half-mile in 53 seconds), in 85 lbs. four-wheeled wagons.

Ponies and Pony Breeding.

(Continued from our Sept. Number).

THE SHETLAND PONY.

Sidney, in his admirable work entitled "The Book of the Horse," speaks as follows of the Shetland pony:—

Where a pony under 12 hands is required the Shetland breed is rarely excelled. In the Shetland Islands the soil and the climate make it impossible to breed a large animal of any kind, whether ox, sheep, or horse. There—as also in Devonshire and in Clydesdale—is a tradition that the native breeds were improved by stallions which escaped from the wrecks of the Spanish Armada. But there is not the slightest historical evidence of this cross, and it is much more likely that the Shetland is the descendant of the Norwegian pony, considering that the islands were long part of the Scandinavian kingdom. In districts and countries bordered by lands which will rear a full-sized horse, there is a constant temptation to the breeder to put his mares to large-sized sires. In the Shetlands there is not, and never has been, any such temptation; and, therefore, symmetry has not been neglected in favour of size. The breeds, however, have been very much influenced by the demands of the export trade. Lord Ashley's Acts, which came into operation about the year 1840, and forbade the use of boys as beasts of draught, created a demand for ponies small enough to draw coal-trucks on underground tramways. For the last thirty years they have been bred for that purpose rather than for riding or drawing pleasure-carriages. The "Druid" visited the Shetland Islands for the express purpose of adding a description of the ponies to his agricultural notes. He says: "Every one uses the ponies of the country. The Norwegian colors—dun, with black mane and tail, and a black stripe down the back—are in request; bays and blacks are most common, greys and chesnuts scarce. Piebalds are to be found but are not in favour with many native buyers, from an opinion that they partake of an Iceland cross, and are softer and slower than the true native Shetlander. The Icelanders average two hands higher than the Shetlanders. They are often imported in great numbers at Granton and Aberdeen. The best Shetlanders come from Unst. They are bred on a thin soil, studded with large red stones and kinds of rocks, amongst which one sees scores of ponies. Unst may be regarded as the heart of Shetland. If well kept, the ponies reach 44 inches (11 hands), but the average is 38 to 42 inches. Each cottar has generally a few ponies on the hill, which they catch, and offer to the dealers for sale in May and October. When the trade in ponies for the coal-pits was at its height five hundred were taken every year (not thirty mares amongst them), and about two hundred for general use, of all ages, from two to twelve years. These heavy sales, continued for some years, drained the Shetlands of aged ponies.

"In the Durham collieries Welsh ponies outnumber the Shetland. The Scotch have the lead in Northumberland, where larger ponies are required. The Scotch ponies, bred chiefly in Argyllshire, Mull, and Skye, and the western part of Ross-shire, average 12 hands 2 inches, the Iceland 12, the Welsh 11, and the Shetland 10.

"Some of the ponies have not seen the light

for fifteen years. In well-regulated pits they are kept in as good condition as hunters, with green food in summer, and a full allowance of oats, beans, and peas, crushed and mixed with hay, chaff, and bran. They suffer most from indigestion—viz., greedy feeding when hungry—scarcely ever from diseases of the lungs or eyes. The average work is twenty miles a day, half with empty tubs.

"The Druid (a stallion) headed the Shetland pony contingent. His mares are duns, browns, mealy-bay, and a piebald. Colonel Balfour, the grandfather of the present proprietor, began pony-breeding at the beginning of the century. He improved the form. Where the colors did not come as the natives expected, they laid the blame on the black Orcadian waterkelpie, 'Sprunky,' who was, they say, the sire of the finest original or aboriginal ponies of the island. Three celebrated piebald sires and a grey are mentioned by the Druid. The stock are shifted from island to island as the grass suits. They require careful drafting to keep them down to 9 hands" (36 inches).

A Fleece of Wool.

Read Before the Dominion Sheep Breeders' Association by David McCrae, Guelph.

Wool is the most important of textile fibres. It was early used for clothing, is now a necessity in such a climate as ours, and in all parts of the world has been found the healthiest covering for mankind. Wool is a modified form of hair, distinguished by its slender, soft serrated structure. Just where animal fibre ceases to be hair and becomes wool is hard to say. One class merges into another and a regular gradation can be found from the soft silky Merino to the hard bristles of the wild boar. The serrated edges of wool gives it the property of clinging in yarn and felting in cloth. The serrations all lie one way from the root up. They can be readily noted by drawing a single fibre between the finger and thumb. One way it will slip smoothly, the other way it will feel quite rough. The finest Merino wools have 2,800 serrations per inch, with a diameter of 1-1800ths, Leicester about 1,800. The coarsest wools 500, with a diameter of 1-275ths of an inch. Fine wools are all wavy, those with the most serrations, being most finely waved in structure. In most wools the closer the staple and the more wavy the wool the more will it yield of the finer qualities. Loose, open fleeces yield more of coarser quality. Wools with a soft rich feel improve during the process of manufacture, whilst those with a hard bristly feel get coarser as they are worked. Wool varies in character according to the peculiar breed of sheep which yield it, and also with the nature of the soil, the food, shelter and climate. In wool of first-rate quality the fibres are fine, soft, elastic, sound, of good color and free from impurities. Combing wools require to be long instead of fine and soft, and for some purposes require to have a good lustre. Very little fine wool is grown in Ontario, combing and medium wools forming the bulk of the clip. Canadian combing wools are usually of a good length and with a strong elastic fibre, sound and good. There are, however, in some sections far too many cotted fleeces, and some with a disagreeable yellow bottom. Otherwise for a sound elastic fibre Ontario wools compare favorably with any other part of the world. In Manitoba and the Northwest some wools grown are brashy and tender and apt to be unsound in staple. In color our wools compare unfavorably with

British wools. The reason of this is not known to me. It may be the confinement in winter or the hot suns of summer, but the color is not in them. We are much worse in the matter of impurities. The big soft burrs in Canadian wool are a disgrace to the wool-grower and a source of much annoyance and loss to the manufacturer. They have to be clipped out singly or in bunches by hand. The same labor would have removed the weed before the damage was done. The best of farmers market their wool with a quantity of seeds, bits of straw, etc., about the neck of the fleece. Feeding, as many do with racks, it may be difficult to avoid this, but it is none the less a drawback in the value of the wool. Wool may either be shorn washed or unwashed. An increasing number of farmers are shearing their wool unwashed; considering that the greater weight of unwashed wool counterbalances the difference in price. The washing which a fleece receives on the sheep is not enough for the manufacturer and the work has to be done again. Most Canadian wools are washed before being clipped, but the great bulk of the world's clip is shorn unwashed. A skilful shearer will clip the fleece from a sheep in one unbroken sheet. In this condition the fleece is spread out on a table or sheet, tags and dirty locks removed and loose pieces put by themselves, the sides folded over and the fleece rolled up inside out, the neck twisted and put around to bind the whole. When opened on the sorters table the fleece will unroll, retaining its form which greatly helps the sorting. There are two or three qualities in every fleece. Most Canadians will give from four to six grades. All wool has to be graded into qualities before it is ready for manufacturing. Generally the best part of the fleece is from the shoulder and sides of the animal. Over the neck and back the staple is more irregular and has frequently seeds and impurities. The loin is somewhat shorter in staple. The breech is often the coarsest and sometimes is hairy and kempy. Belly wool is usually short and dirty. The front of the throat, fine but short. Some farmers do not remove the dirty dung locks, which should always be removed. Others gather them and put them in a single good fleece. Any careful handler can quickly detect this without opening the fleece. Others roll up a cotted fleece with staple out, and if many be cotted roll all their clip in this way. Buyers are always suspicious of such wool and dealers ought only to buy at a reduction fleeces put up in this way. Wool clipped under a year old is known as "shorn lambs;" very little of this is made in Canada. First clip, at 12 to 15 months, is known as "hogg" or "teg" wool, and for many purposes this is finer and more valuable than the bulk of the clip. British dealers keep it separate. Second and following clips are distinguished as "wether" or "ewe" fleeces. Usually in Canada all are marketed together.

Selling cattle by their live weight does not yet give satisfaction to buyers in some parts of England and Scotland, as it is an innovation that does not allow of the balance always in the buyer's favor.

Prof. Kedzie of the Michigan Agricultural College, before the State Dairy Convention, said, "The most economical general manure for the farm is stable manure. It is a complete manure, containing all the elements necessary for plant growth, and in the most available form. Special and commercial fertilizers may be used to supplement barn-yard manure, but they only hold a secondary position."

Studs, Herds and Flocks.

MESSRS. PROUSE & WILLIAMSON,

whose stock farm lies a short drive east of Ingersoll, on the Woodstock road, have of late years built up a large stud of most superior Clydesdales. These gentlemen have, through their good judgment and excellent business tact, founded what should prove a most successful breeding establishment. Formerly they were engaged largely in supplying the town of Ingersoll with milk, but finding that their business would not allow of their time being divided, they sold out their interest in the latter, and are now giving their undivided attention to their stock farm.

The imported stock horse Norman is proving himself a most satisfactory sire, as the young things on the farm testify. A number of Stud Book mares, of more than ordinary quality are to be found here. When sires and dams are both up to the mark it is not surprising that we find such a grand array of young stallions and fillies. The first of the former that fixed our attention was the beautifully turned colt Ardie. He is a nicely colored chesnut, with capital feet and legs, which he moves in a way that shows he has the full use of them. He is a horse that is likely to prove a desirable investment to some fortunate buyer. He was first in his class at Toronto. The yearling colt Lochiel, also of their own breeding, is a promising animal and nicely bred out of a capitally bred imported mare. He is a nice brown, with good bone, capital feet, and in fact is right all round, being a particularly well-bodied colt, with good style. He also was successful in a very strong class at the recent Toronto show. The mare Lady, a neat general purpose animal, is of beautiful quality, and has a still better foal by her side. She won second, and the foal first in their respective classes at Toronto. We particularly admired the three-year-old mare Theresa, which also won second at Toronto. Taking all in all this firm showed to great advantage both at Toronto and London, being most successful at the latter place, and winning a large number of premiums.

MESSRS. W. MEDCRAFT & SON,

Sparta, have been intimately associated with breeding Shropshire sheep in England, as they are natives of one of the Midland shires and right in the centre of the breeding grounds of this popular sort, and it is not surprising they should have easily turned their attention to breeding them after coming to Canada. Their first purchase was a selection made from an importation of Geary Bros., London, and these proving such a profitable investment they have this year made quite an extensive importation, selecting in person a number from that well-known breeder Mr. H. J. Sheldon, Braibs House, Warwickshire. From this flock the shearling ram that is intended to head the flock was purchased. He is sired by Barrington, bred in the justly celebrated flock of Mrs. Barr. A lot of shearling ewes, also from the Braibs House flock, and not akin to the ram, together with some very promising ram and ewe lambs, completes the lot from this selection. A lot of shearling ewes from Mr. Francis Bath, Ormibury, and some equally good from Mr. H. Mansell, of Preston, completes a remarkably useful lot which should prove satisfactory alike to their importers or anyone who may be fortunate enough to purchase them. Along with the sheep the Messrs. Medcraft also brought some of the now well-known Improved White York-

shire pigs, and as those are from some of the most successful prize-winning strains in England, they should prove equally successful in this stock breeding establishment.

MR. W. D. REESOR,

whose stock farm is quite close to the village of Markham, and whose advertisement appeared in our September issue, is quite a Jersey fancier, and the little butter cow is doubtless in her proper sphere, situated as Mr. Reesor is, sending a goodly shipment of cream daily to Toronto. He has a lot of choicely bred and good performing cows, and finds that it is in the highest breeding where the heaviest yields are to be obtained. This herd is managed on thoroughly practical lines, and the surplus stock, including young bulls and heifers, combined with the products of the pail, make this Jersey herd exceedingly profitable. With his extensive dairy herd Mr. Reesor has always found room for a choice flock of sheep. The present flock embraces a useful lot of imported Shropshire ewes and their lambs. The former were purchased last fall from Messrs. John Miller & Sons, Brougham. For particulars see advertisement in our September number.

Texas Fever—A Warning!

BY WM. THOMPSON.

While Texas fever, tuberculosis and other diseases are doing deadly work in the United States, pleuro-pneumonia raging in Great Britain, foot and mouth disease in Germany, Poland and Austria, anthrax, actinomycosis and tuberculosis rapidly increasing in the Australian world, Canada enjoys singular immunity from these terrible plagues. That our flocks and herds present a clean health bill is worth millions to the country. At whatever cost, it must be preserved.

The freedom of Canadian cattle from lung and other diseases has given them entry without restriction into British ports, while United States beeves must be slaughtered within ten days after landing. This great advantage is variously estimated as worth from \$10 to \$20 a head on Canadian stock. As to those figures I do not speak with certainty, but that the privilege is worth hard cash is certain, or else the United States Government would not be foolish enough to maintain, as they have been doing this year, one Special Commissioner, three Veterinary Inspectors, together with Dr. Salmon, Chief of the Bureau of Animal Industry in Great Britain, in order to convince the British authorities that U. S. export cattle are free from lung plague. Depend upon it, to secure a privilege corresponding to that of Canada, would mean thousands of dollars to the U. S. cattle men; else, why such desperate efforts in that direction? Whether in the face of recent hostile tariff legislation at Washington, and fresh outbreaks of Texas fever in the north, that boon will be conferred with its incidental prejudice to Canadian cattle feeders and exporters, is a question.

Texas or Southern cattle fever is no myth. During the last twenty-five years it has probably caused more losses of cattle than any other form of disease. It not only affects the South but the West and the East. Fifty to seventy per cent. of Northern cattle shipped south die from Texas fever. Ticks, feet, excreta (solid or liquid), saliva, etc., carry the germs of disease even, as Dr. Paul Paquin observes, to distant lands.

Furthermore, the calves of Southern cattle really have the germs of Texas fever in their systems before birth. The germs exist in all Southern cattle coming from infectious grounds, being found in manure, blood, liver, spleen, kidneys, urine, etc., notwithstanding that they remain apparently perfectly healthy. Not only is the disease so easily communicable, but in Northern animals it assumes a more fatal form, and under favorable conditions is inoculable between Northern natives. The United States have spent immense sums investigating this disease. A "fever line" was established, quarantine and other regulations adopted but still the plague periodically breaks out in the North. Not long ago car cleanings dumped near Chicago gave dairy cows the fever pasturing close to the track. Early in August 1,000 cattle perished in two Kansas counties. But the danger has come nearer home. At the close of the recent International Fair, Detroit, the splendid Ayrshire herd of Farmer & Wright, Ohio, was taken down with Texas fever and every one is said to have perished. The disease was contracted probably from shipment in an infected car. Part of Sotham & Stickney's well-known Hereford herd caught the disease in an infected chute and railroad yard at Toledo, and several valuable animals died. Dairy herds in the vicinity of Detroit are reported thoroughly infected with this desperate malady, large numbers of cows having died from it. This pest, existing just across the Detroit river, and the constant shipment in bond of American cattle, and possibly infected cars through Canada, doubtless jeopardizes Canadian herds. The situation calls for renewed vigilance in quarantine and all other regulations calculated to protect our herds from being infected and destroyed by this most deadly cattle disease. Complaint is frequently made, for example, by importers of dairy stock for breeding purposes of the vexation and expense incident to ninety days in quarantine, but over against this disadvantage must be set the splendid reputation of Canadian cattle for sound health, their preservation from fatal infection, and our exceptional beef cattle privileges at British ports.

The O. A. C. Sale.

The annual sale at the Agricultural College farm, Guelph, held on Oct. 7, went off quite satisfactorily. Numbers of prominent agriculturists and stock breeders from different parts of the country were present, and although the afternoon turned out unpleasant, the interest was kept up until all the stock was sold. Specimens of seven breeds of cattle were sold, including Shorthorn, Hereford, Polled-Angus Galloway, Devon, Ayrshire and Holstein, and four breeds of sheep, including Oxford, Shropshires, Southdowns and Leicesters, also Berkshire and Improved Yorkshire swine. The following is a summary of the prices obtained for cattle and sheep:—

3 Shorthorns, average	\$75 00
2 Herefords, "	58 00
2 Angus, "	46 00
1 Galloway, "	78 00
2 Devons, "	61 00
2 Ayrshires, "	47 00
3 Holsteins, "	75 00
5 Oxford Downs, "	25 60
3 Shropshires, "	29 30
1 Southdown, "	15 00
3 Leicesters, "	18 00

Both sorts of pigs sold very well, and appeared to be in great demand.

Hogs Wanted Early in the Season.

BY WM. DAVIES.

You will be glad to know that our efforts, aided by you, the Bureau of Agriculture and other auxiliaries, have very considerably increased the supply of hogs. Farmers appear to be realizing that it is a remunerative branch of stock raising, but they have yet to learn that it is to their interest to have them ready early in the season. In May last we were paying as high as \$5.70. In June \$5.60. At the same time we were buying in the Western States for nearly two cents less. In July we paid for Canadians \$5.25, in August \$5.50, in September as high as \$5.65, and we were compelled to supplement our supply very largely from Chicago, St. Louis and Kansas City. At this writing we are getting quite as many as we can handle of Canadians, thus you will see that the farmers by not having them ready early in the season, are losers to a very considerable amount. It is well known that hogs fatten more rapidly through the warm weather. There is one other point to which we wish to call the attention of farmers. There are too many heavy hogs being produced, and if they want the highest price they must first produce a long, lean, well fed hog, weighing from 140 to 200 lbs. alive, and have them for sale in June, July, August and September. A man who has his hogs for sale when every one else has gets left.

Mr. W. Kough's Cattle were not Specially Prepared for the Show Ring.

In your report of the Galloway cattle at the Toronto Industrial an injustice is done them when you lead your readers to infer that my herd had received blanketing and grooming to bring them to the bloom in which they then were. Since the first year I showed Galloways, viz., in 1886, I have not used a blanket when in or out of the stable. The facts are that the cattle with me are in better bloom on the grass, a rocky boulderland pasture, than they were when shown. Of course in order to make them stand the hardships of long railroad journeys, and the fatigue of the show ring and show stalls, where so many of the visitors think they have a perfect right to rouse the cattle when lying down, heavy bulls and in-calf-cows are from necessity stabled part of the time a month before they are brought to the shows, and given some grain to harden their flesh, but this detracts from their bloom and shining coats which they have when on pasture without grain. So soon as my cattle returned from the show they were turned out to grass without grain, and they are now in their old sleek condition. Wm. Kough.

[We are very glad to receive and publish the above letter. As many of the breeders know we did not spare expense in procuring the best known experts to report all the live stock classes at the Toronto Industrial. Although very capable and honorable men were employed, we expect errors were made; if they did not make errors they would not be human. If any of our readers discover any of these errors we would be glad to hear from them. Our object is to give fair, impartial reports in all cases. If we make mistakes we are always willing to correct them.—Ed.]

Are not great men models of nations? For what is a state but the many's confused imitation of one?

The Dairy.

Sugar Beets vs. Corn Crop in Feeding Milch Cows.

A bulletin of the Ohio Agricultural Experiment Station gives the results of an experiment in feeding sugar beets to milch cows, made during the past winter, together with a summary of two similar experiments, one made by the Station in 1889 and one by the Farm Department of the Ohio State University in 1879.

In the last named experiment eight cows were kept under test for eleven weeks; in 1889, twelve cows for eight weeks, and in 1890, twelve cows for nine weeks, the cows in each case being weighed daily, as well as their feed and milk.

In each of the three experiments the cows ate more hay and more total dry matter when feeding on beets than on other foods (hay, meal and bran in 1879, corn silage in 1889 and 1890) and in each case more milk was given from the beets than from the other foods, but it is not yet demonstrated that the increase of milk was produced economically.

For twelve years records have been kept on the farm now occupied by the Station, which shows that the average yield of beets over this period has been nearly sixteen tons per acre, against an annual yield of about fifty-five bushels of shelled corn per acre.

But a crop of fifty-five bushels of shelled corn, with its fodder, will contain nearly twice as much dry matter as sixteen tons of beets, and these experiments indicate that, whether fed dry, as corn meal and dry fodder, or as corn ensilage, the dry matter of the corn crop will be found about as effective, pound for pound, as the dry matter of the beet crop.

It is possible to raise much more than sixteen tons of beets to the acre. One crop of two acres is reported at 37½ tons per acre, and smaller areas have given still larger yields, but such crops require very rich land and thorough culture. Whether it is possible to produce a pound of dry matter in beets as economically as it can be done in corn is not yet definitely settled, but the probabilities are against it.

Cream Raising by Dilution.

It has been recommended that in the absence of ice the addition of an equal quantity of water either hot or cold to fresh milk in deep cans would secure rapid and complete creaming. To compare this method with the ordinary one of setting the milk in deep cans in ice water, and further to test the efficiency of creaming by diluting the milk with water in various amounts and at different temperatures, experiments have been taken at Cornell University Experimental Station.

The milk was in all cases the mixed milk of the University herd, the cows of which are about two-thirds high grade Holstein and one-third high grade Jersey. About one-third of the cows were fresh and the rest had been in milk from five to eight months. The analyses were made by Mr. Harry Snyder, Assistant Chemist.

A large number of trials were made in which portions of milk diluted with an equal weight of cold water were compared with portions from the same milkings set in ice water in the Cooley creamer. The milk in some instances was brought directly to the dairy house after milking, thoroughly mixed and one portion set at once in ice water in the Cooley creamer, the remainder

was diluted with an equal weight of cold water and set in a Cooley can in the open room. In other cases milk was taken for the settings that had been carried on the milk route for about an hour and a half. All such cases are marked in the tables with an asterisk (*).

Skimming from deep cans was in all cases done by drawing the skim milk from the bottom of the can, care being taken not to draw the skim milk off so closely as to disturb the cream.

Trials were also made in which a smaller amount of both warm and cold water was added to the milk, and a few trials were made with deep setting in the open air without the addition of water, of setting in shallow pans, and of setting in the creamer with the water of the University waterworks at a temperature of something over sixty running through it.

In the following table the results of the comparisons between setting in ice water and diluting with an equal bulk of cold water are shown, those on the same horizontal line being in all cases from the same sample of milk. The percentage of fat in the skim milk has been corrected for the amount of water added.

TABLE I.

DATE AND TIME OF SETTING.	Set in Ice Water in Cooley Creamer, Temp. 44 deg.		Set in Cooley Can in Air and Diluted with Equal Weight of Cold Water.	
	Temp. of Milk.	Per cent. of Fat in Milk.	Temp. of water added.	Per cent. of Fat in Skim Milk.
Sept. 10, 7.00 a.m.	90	3.29	60	1.58
10, 8.30 a.m.	87	3.22	60	1.58
10, 10.30 p.m.	84	4.31	60	1.50
11, 5.45 p.m.	84	4.28	60	1.50
11, 2.45 p.m.	81	4.28	60	1.50
12, 4.00 a.m.	81	4.08	60	1.50
15, 4.00 a.m.	101	4.08	60	1.50
15, 6.00 p.m.	91	3.75	60	1.50
16, 8.00 a.m.	88	3.75	60	1.50
16, 6.00 p.m.	86	3.75	60	1.50
17, 5.30 a.m.	81	3.75	60	1.50
Average, 11 trials		85	60	1.50

*Carried on route. †The milk in these two cases had been carried on the route, but was heated up to 100 degrees before setting.

Armsby found in between two or three hundred settings of the milk of single cows, Jerseys and Jersey grades, an average of .35 per cent. of fat in the skim milk. We may therefore use our results with the Cooley creamer as a standard of comparison. It will be seen that when the milk was diluted with water there was contained in the skim milk nearly six times as much fat as when the milk was set in the Cooley creamer with ice water, or in other words, while 95.18 per cent. of the fat in the whole milk was recovered in the cream under the cold deep setting process, but 69.19 per cent. of the fat in the whole milk was recovered in the cream when set in the diluted process. That is, in 100 lbs. of milk containing 4.12 lbs. of butter fat, under the Cooley process, there would be a loss of but .20 lbs. of butter fat, and under the diluting process a loss of 1.27 lbs. It will be noticed

In eleven trials where the milk was set in the Cooley creamer with ice water, at a temperature of 44°, the average per cent. of fat in the skim milk was..... .23

In eleven trials where milk was diluted with an equal weight of cold water and set in the open air, the average per cent. of fat in the skim milk was..... .1.28

In six trials where milk was diluted with 20 to 50 per cent. of cold water, the average per cent. of fat in the skim milk was..... .1.34

In ten trials where milk was diluted with 10 to 100 per cent. of its weight of hot water, the average per cent. of fat in the skim milk was..... .1.11

In two trials where milk was set in deep cans without dilution, in running water at 60°-65°, the average per cent. of fat in the skim milk was..... .89

In two trials where milk was set in shallow pans, at 60°-64°, the average per cent. of fat in the skim milk was..... .48

In one trial where milk was set in shallow pans and one-third of its weight of water at 120° added, the per cent. of fat in the skim milk was..... .75

Our Dairy Competition for 1890.

The following tables show the quantity of milk given by each cow in our dairy competition at the recent Industrial Fair at Toronto, together with the values in each case:

MILK RECORD OF FIRST PRIZE HERD
(Jerseys) owned by W. H. Reburn, St. Annes.
Jolie St. Lambert IV., calved Aug. 5th, 1890; served Sept. 6th, 1890.

Milkings.	Weight of Milk.	Per cent. of butter fat.	Total butter fat.	Per cent. of solids other than fat.	Total solids other than fat.
lbs. oz.	lbs.		lbs.	lbs.	lbs.
12 9	2.83	.3554	9.63	1.2095	
13 9 1/2	4.57	.6212	9.33	1.2688	
13 13	4.92	.6789	9.07	1.3316	
11 13	3.63	.4259	9.48	1.1186	
11 15 1/2	3.96	.4752	9.07	1.0884	
11 7	4.57	.5047	9.02	1.0353	
Total		3.0640		6.9722	

8,064 lbs. of butter fat at 16c..... 49.02
6,972 lbs. of solids other than fat at 2 1/2c..... 17.43

No additional value being allowed for length of time after calving and pregnancy, the total value of milk is..... 66.45

Jolie St. Lambert V., calved last March 31st; served last July 2nd.

Milkings.	Weight of Milk.	Per cent. of butter fat.	Total butter fat.	Per cent. of solids other than fat.	Total solids other than fat.
lbs. oz.	lbs.		lbs.	lbs.	lbs.
10	4.07	.407	9.08	.908	
8 15 1/2	4.85	.4365	9.19	.8271	
9 11 1/2	4.17	.3919	9.20	.8648	
9 9 1/2	4.28	.3337	9.12	.839	
10	4.36	.3313	9.08	.89	
7 8 1/2	4.64	.3480	9.04	.878	
Total		3.3084		4.806	

2,308 lbs. of butter fat at 16c..... 36.93
4,806 lbs. of solids other than fat at 2.5c. per lb. 12.02

Value of milk, 36.93 and 12.02..... 48.95
Allowance for milking period (169 days, minus 90 days = 79 days, 79 5-30 per cent. = allowance for each day after the first 90 days, 13 per cent.) 13 per cent. of 48.95 = 6.36, which, added to the former value of milk, gives..... 55.3

Jolie St. Lambert II., calved April 4th, 1890; served June 26th, 1890.

Milkings.	Weight of Milk.	Per cent. of butter fat.	Total butter fat.	Per cent. of solids other than fat.	Total solids other than fat.
Sept. 17th, a. m.	lbs. oz.	lbs.	lbs.	lbs.	lbs.
	11 1	4.16	.5430	9.35	1.0341
	10 13 1/2	4.26	.4617	9.32	1.0102
	12 1 1/2	4.87	.5844	9.15	1.098
	11 11	4.68	.5475	9.22	1.0787
	11 5 1/2	4.06	.4604	8.96	1.016
	9 7 1/2	5.17	.4912	9.17	.8711
Total		3.0882		6.1081	

3,088 lbs. of butter fat at 16c per lb..... 49.40
6,108 lbs. of solids other than fat at 2 1/2c. per lb. 15.27

Value of milk without the extra allowance..... 64.67
Number of days giving milk after the first 90 days, 75; allowance for each of these days, 5-30 or 1-6 per cent.; allowance for the whole period 1-6 per cent., 75 x 64.67 = 7.75, making a total allowance of..... 72.47

MILK RECORD OF SECOND PRIZE HERD
(Devons) owned by Mr. Samuel Harper, of Cobourg.
Rose of Cobourg, calved Jan. 2nd, 1890; served May 10th, 1890.

Milkings.	Weight of Milk.	Per cent. of butter fat.	Total butter fat.	Per cent. of solids other than fat.	Total solids other than fat.
Sept.	lbs. oz.	lbs.	lbs.	lbs.	lbs.
	17 4 1/2	4.94	.8546	8.53	1.475
	16 7	3.88	.8373	8.79	1.443
	17 11 1/2	3.30	.6000	8.56	1.515
	17 11 1/2	2.82	.4794	8.91	1.515
	17 15 1/2	3.36	.6048	8.52	1.533
	16 15 1/2	3.80	.6460	8.60	1.462
Total		3.8226		8.944	

3,822 lbs. of butter fat at 16c. per lb..... 61.16
8,944 lbs. of solids other than fat at 2 1/2c. per lb. 22.36

Value of milk without extra allowance..... 83.52
Number of days giving milk after the first 90 days, 167; number of days pregnant after the first 90 days, 29; extra allowance for 167 days giving milk, 167 x 5 30 = 83.52 = 19.67; extra allowance for 29 days pregnant, 29 x 2-30 x 83.52 = 1.72; total allowance for milk, 61.16 + 22.36 + 19.67 + 1.72..... 108.57

Susan, calved Nov. 6th, 1890; served April 5th, 1890.

Milkings.	Weight of Milk.	Per cent. of butter fat.	Total butter fat.	Per cent. of solids other than fat.	Total solids other than fat.
Sept.	lbs. oz.	lbs.	lbs.	lbs.	lbs.
	3 4	5.83	.184	9.34	.335
	3 9	5.07	.137	9.97	.252
	3 2	4.18	.1365	9.39	.2910
	3 10	3.42	.1231	9.75	.3510
	3 11 1/2	3.47	.1284	9.31	.3444
	3 11	3.71	.1372	9.31	.3444
Total		.8373		1.889	

.8373 lbs. of butter fat at 16c. per lb..... 13.39
1,889 lbs. of solids other than fat at 2 1/2c. per lb. 4.72

Value of milk without extra allowance..... 18.11
Number of days giving milk after the first 90 days, 224

Number of days pregnant after the first 90 days, 54
Extra allowance for 224 days giving milk, 2-30 x 224 x 18.11..... 7.0
Extra allowance for 54 days pregnant, 2-30 x 54 x 18.11..... .7
Total allowance for milk..... 25.7

Polly Perkins, calved.....; served.....

Milkings.	Weight of Milk.	Per cent. of butter fat.	Total butter fat.	Per cent. of solids other than fat.	Total solids other than fat.
Sept.	lbs. oz.	lbs.	lbs.	lbs.	lbs.
	9 5	4.51	.4239	9.64	.9061
	9 9	4.07	.3960	9.20	.8795
	9 14 1/2	3.46	.3425	9.78	.96*2
	8 3	3.32	.3132	9.65	.7513
	9 8 1/2	4.08	.3876	9.33	.8863
	8 11 1/2	3.75	.362	9.19	.7965
Total		2.1824		5.2309	

2,182 lbs. of butter fat at 16c. per lb..... 34.92
5,230 lbs. of solids other than fat at 2 1/2c. per lb. 13.07

Value of milk without extra allowance..... 47.99
Number of days giving milk after first 90 days up to 11 months..... 245

Number of days pregnant after first 90 days, 54
Extra allowance for 245 days giving milk, 5-30 x 245 x 47.99..... 19.67
Extra allowance for 54 days pregnant, 2-30 x 54 x 47.99..... 1.72
Total allowance for milk..... 69.38

MILK RECORD FOR THIRD PRIZE HERD
(Jerseys) owned by Smith & Sons, Grimsby.
Lady Lorne, calved April 3rd, 1890; served Aug. 6th, 1890.

Milkings.	Weight of Milk.	Per cent. of butter fat.	Total butter fat.	Per cent. of solids other than fat.	Total solids other than fat.
Sept. 17th, a. m.	lbs. oz.	lbs.	lbs.	lbs.	lbs.
	8 8	4.92	.4182	9.08	.7718
	7 12	5.11	.396	9.55	.7401
	7 11	5.67	.4365	9.06	.8998
	7 14	5.11	.4036	8.75	.8513
	8 12	4.90	.436	8.83	.7717
	8 6	5.36	.4484	8.85	.7426
Total		2.539		4.4142	

2,539 lbs. of butter fat at 16c. per lb..... 41.44
4,414 lbs. of solids other than fat at 2 1/2c. per lb. 11.03

Value of milk without extra allowance..... 52.57
Number of days giving milk after first 90 days..... 245

Number of days pregnant after first 90 days.....
Extra allowance for 245 days giving milk, 5-30 x 245 x 52.47..... 21.18
Total allowance for milk..... 73.84

Miss Stoke Pogis, calved May 6th, 1890; served July 28th, 1890.

Milkings.	Weight of Milk.	Per cent. of butter fat.	Total butter fat.	Per cent. of solids other than fat.	Total solids other than fat.
Sept.	lbs. oz.	lbs.	lbs.	lbs.	lbs.
	10 8 1/2	5.84	.6132	9.5	1.029
	9 9	5.61	.5363	9.9	.946
	10 12	5.65	.6373	9.78	1.051
	9 11	5.41	.5247	9.88	.958
	10 6 1/2	5.49	.5709	9.71	1.000
	9 8	5.47	.5196	9.98	.948
Total		3.372		5.943	

3,372 lbs. of butter fat at 16c. per lb..... 53.96
5,943 lbs. of solids other than fat at 2 1/2c. per lb. 14.85

Value of milk without extra allowance..... 68.8
Number of days giving milk before first 90 days..... 53

Extra allowance for 53 days giving milk, 5-30 x 53 x 68.8..... 6.19
Total allowance for milk..... 74.99

Nettle of Grimsby, calved March 2nd, 1890; served May 20th, 1890.

Milkings.	Weight of Milk.	Per cent. of butter fat.	Total butter fat.	Per cent. of solids other than fat.	Total solids other than fat.
Sept.	lbs. oz.	lbs.	lbs.	lbs.	lbs.
	8 7	5.57	.4701	9.52	.8394
	8 11	5.13	.4155	9.65	.7816
	8 11	5.22	.4628	9.55	.8308
	7 15 1/2	5.20	.4160	9.95	.7960
	8 6	5.63	.4729	9.82	.8248
	7 12	5.18	.4014	9.87	.7649
Total		2.6387		4.8015	

2,638 lbs. of butter fat at 16c. per lb..... 42.32
4,801 lbs. of solids other than fat at 2 1/2c. per lb. 12.00

Value of milk without extra allowance..... 54.32
Number of days giving milk after first 90 days..... 107

Number of days pregnant after first 90 days, 23
Extra allowance for 107 days giving milk, 5-30 x 107 x 54.32..... 9.77
Extra allowance for 23 days pregnant, 2-30 x 23 x 54.32..... .86
Total allowance for milk..... 64.95

Respectfully submitted by
A. LEHMANN, B.S.A.,
Asst. Chemist, Exp. Farm, Ottawa.

The Stillwater (Minn.) Penitentiary has arranged to manufacture binding twine.

The reported disease in the Canadian cattle landed at Dundee from the steamer Norse King was a mistake by the local veterinary, but all the same it caused considerable trouble as the cattle had to be held over, although advertised for sale.

Cheesemakers' Work, Wages and Thinking.

BY PROF. J. W. ROBERTSON.

I look back and see that cheesemakers are, perhaps, beginning to feel rather favorable to the endeavors of the Association along the line of its late work. They are not confining themselves to reading hints as to how to get through two hours earlier in the day, or to get an average that will read rather better than their neighbors'. The Association is beginning to lead the cheesemakers to look to a larger sphere of operations, and not to confine their thoughts to a narrow cheese vat, or to drown their intellects while considering its contents, but with eyes of observation to look out around and see where to apply themselves to make profits better, and how to keep a better cow which at the least cost will give better milk. Cheesemaking has not been paying the farmers of this Province as it should have been paying, and cheesemakers can never afford to live satisfactorily upon the losses of the farmers. But if cheesemakers will reach up to lead the farmers to multiply their profits they will get an advantage from the increased abundance the farmers have. If they are far-seeing enough to plan, not to get the whole of the profit, but a share of it, and not so much to reduce the average pounds of milk per pound of cheese, as to raise the average amount of production of 3,000 pounds of milk per cow to 6,000 pounds, they will not have to complain so much about what they are paid for making a pound of cheese. If the farmer gets, instead of 3,000 pounds of milk per cow, 6,000 pounds, he will not be so cheese-paring in regard to the cheesemaker's compensation.

Then cheesemakers render the best service they can to the factories in which they work when they expect something for something. I do not like a cheesemaker to expect something for nothing. I do not like a man to expect 95 cents per hundred-weight for doing the work of a man worth a dollar a day; and I do not expect the cheesemaker to give something for nothing, to give the skill of a man worth \$125 a month with his board, for such wages as would pay a man who can only shovel coal \$1.25 per day without his board. I would have a union to encourage the factory owners to pay for skill, lest the skill be driven out and the whole business goes down, and the whole Province suffer from the loss. I would have a man earning \$60 a month or quit and be a man somewhere else.

I would also have a cheesemaker become an experimental cheesemaker. The whole business of making cheese is experimental. No man knows the peculiar qualities of any cow's milk right down to their ultimate and peculiar characteristics, from day to day, and therefore every day's work is experimental. Now, we will reach safe conclusions only when cheesemakers learn to carry on experimental work with clearness by regarding every relation and result, and when cheesemakers do that, they will find by-and-by a plan by which they can make uniformly better cheese.

I would not have a cheesemaker blindly grinding out blind results by routine practice. I would have him so think out his business that his thought will go ahead of his curd-knife or steam-pipe. No machinery and no printed code of instructions can take the place of personal thought with any man who wants to succeed in his business. This is rather trying for some cheesemakers. It is probably tiresome sometimes for a man to think, or even to be stimulated to thought. Some men dislike to think seriously as much as they would dislike to be called out of bed at half-past four to catch the train by which they might be going to get married.

Guenon's Theory of the Escutcheon.

FOR THE FARMER'S ADVOCATE, BY JAS. W. ROBERTSON, DAIRY COMMISSIONER.

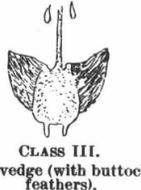
Francis Guenon was the son of a fruit grower and nurseryman in France. He had a great fondness for and displayed superior skill in the art of grafting fruits, and of propagating varieties to which he took special liking. A casual remark dropped by the boy's grandfather to the effect that in his opinion cows might be judged as easily and surely as fruit trees, if one only knew their good points, quickened his observation, and



CLASS I.
Flandrine (with oval feathers and tabine feather).



CLASS II.
Left Flandrine (with thigh feather).



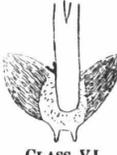
CLASS III.
Selvedge (with buttock feathers).



CLASS IV.
Curveline (with batard feather).



CLASS V.
Bicorn.



CLASS VI.
Double Selvedge (with dart feather).



CLASS VII.
Demijohn.



CLASS VIII.
Square.



CLASS IX.
Limousine (with vulvous feather).



CLASS X.
Carresine or Level.

enabled him to make a discovery of the feature in cow form and life by which he has made his name immortal.

He classified the shapes into ten typical forms, as per the rough diagrams; each of these classes he divided into six orders, according to the growth and position of certain "epis" or feathers, which were the terms he used to designate certain particular marks or patches with a reverse growth of hair on the escutcheon. To the first class he gave the name of *Flandrine*, simply because he observed that many of the great milking cows which he saw in the Province of Flanders had escutcheons of that peculiar form. The second class was left-hand and to one side of the perineum. The third class or *Selvedge* received its name from its resemblance to the selvedge on a piece of cloth.

The fourth was *Curveline*, because of the curved top; this is a common form among many of Jersey bulls in Canada. The *Bicorn* is so called because of the double horn top which it has. The *Double Selvedge* has a double strip instead of a single one like that possessed by the third class. The *Demijohn* was supposed to have some likeness in shape to a wine jug, and hence its name. The carpenter's *Square* lends its name to the eighth class from the similarity in shape of that tool to the perineum of this escutcheon. The steeple-topped *Limousine* was one frequently seen in the Province of Limoges, and from that it received its name. The tenth is horizontal or level topped, and is sometimes called *Level* and sometimes *Carresine*.

1. The name escutcheon is given from the shield-like form of upward or reverse growth of hair on the thighs, udder and perineum.
2. It is also called milk mirror.
3. Its size and shape are believed to indicate the direction of the arterial circulation.
4. When the lower part (called also the "mammary part") is large and broad a large flow of milk may be expected.
5. When the upper part (called also the "perineum part") is broad and smooth it is counted favorable for a prolonged milking period.
6. A blending of the hair of the escutcheon into that of the hips is considered of more value than an abrupt division.
7. Tufts near the vulva indicate a large supply of arterial blood to the organs of generation. They are said to point to a tendency to dry up early in the period of pregnancy.
8. Crescent or angular indications or interruptions into the edges of the escutcheon indicate a proportionally smaller yield of milk.
9. It was his general conclusion that the larger the escutcheon the better milker the animal would be compared with others of her own breed.
10. It should not be considered alone in judging of the milking power and capacity, but as an additional evidence of merit.
11. It is of real value in examining calves.

That Glenboro Meeting.

BY JAS. W. ROBERTSON.

The following sentences are published in your October issue in an article written by Mr. Geo. Steele:—

"You will perhaps pardon me if I trouble you with another short letter, which will be my last on this great and only milking competition conducted by Prof. Robertson. * * * * But seeing that we were to have a visit from Prof. Robertson, at Glenboro, I thought I would get him to enlighten me there. At the close of his address questions were invited. I asked him to explain how he figured it out. He rose and explained the rules. I again rose to tell him that it was not the rules I needed an explanation of, when I was politely told that the time of the meeting could not be taken up in that way. Prof. Robertson then said that he had written the *ADVOCATE* again, and given a full explanation of everything."

A simple statement of the facts as they occurred is a sufficient answer to the utterly misleading version supplied by Mr. Steele. These are the facts: At the close of my address at Glenboro the chairman invited questions. Mr. Steele (whose name I learned by inquiry afterwards) asked some question about the *FARMER'S ADVOCATE* milking competition at London. I am not aware that I had made even a passing reference to the competition in the course of my address. However, I answered the question put by Mr. Steele, when he rose to tell me that it was not the rules he needed an explanation of. At that juncture a gentleman in the meeting, a resident of Manitoba, well known and esteemed

among the farmers there, objected to the time of the meeting being taken up by any questions and answers apparently of only personal interest to Mr. Steele. Then, immediately I stated that I would be glad to figure out on paper or on a blackboard, for Mr. Steele or any other person, the full details of the calculations which show the results from the tests, at the close of the meeting either in the hall or at my room at the hotel. I also mentioned that an additional explanation of the reasons why the standards of values had been fixed as they were, would appear in the *ADVOCATE*. After the meeting I could not find Mr. Steele though I was in the hall for some five or ten minutes. Outside on the street I enquired from his brother if he knew where I could find him. But this ardent seeker for truth eluded my search.

Mr. Steele's grim effort at being loftily ironical on the amusing stories which it suits me to tell, furnishes me with one more humorous illustration. I have found them to be such excellent and almost indispensable helps in one part of my work, that I cannot promise him that I will try to desist, even though one mind may fail to perceive or rather to acknowledge their value. The blindness of one man in our garden does not abolish the beauty of its flowers.

Veterinary.

Diseases of Pigs.

BY J. Y. ORMSBY, V. S.

Of all the domestic animals perhaps there is none that has received so little attention at the hands of the veterinary profession as the pig, and, while I am not prepared to say that the profession is to blame principally for this, for I am well aware that most farmers look upon a pig as an animal that is "not worth doctoring," and so prefer to let him take his chances of living or dying to going to the expense of calling in professional skill, still I would submit to my fellow vets. that we are to blame to a certain extent, for, with the exception of that porcine scourge, "hog cholera," which has of late years attracted a good deal of attention among veterinary authorities, on this continent in particular, I find that in the various works on the practice of veterinary medicine and surgery, very little if any attention is given to the diseases that pigs are subject to, and as a result, this, to my mind, very important branch of veterinary medicine is almost entirely overlooked in the course of study taken up at most veterinary colleges of the present day.

When we consider that the pig is endowed with an unusually voracious appetite, which will invariably lead him to eat more than he can properly digest, if permitted to do so, and couple this fact with the unsanitary conditions under which pigs are expected to exist on the average farm, it cannot but seem strange that a greater mortality does not take place annually among the common pigs of the country; still, from my own experience, I am well aware that very many pigs are lost annually to the farmers of this Province, not from any wide-spread pestilence, but from commoner diseases that could be cured by very simple remedies if properly applied. I shall, therefore, in succeeding papers, draw attention to the commoner diseases of pigs and the remedies that I have found most useful in combating them, but before doing so I shall draw my readers' attention to the best methods of

ADMINISTERING MEDICINE TO PIGS.

The simplest way, I need hardly say, to do this is to add it to the food; but should, as sometimes happens, the animal refuse to eat it the best plan I have found to be as follows:—

Slip a noose over the upper jaw behind the tusks, then fasten the rope to a staple driven in a post, about five feet from the ground, so that the pig is drawn up slightly from the ground; now, take an old shoe, cut the toe off, and when the pig opens his mouth, as he continually will in his struggles to get free, thrust the shoe in his mouth, and then pour the medicine from a long necked bottle into the shoe. By doing this the necessity of putting the neck of the bottle in the pig's mouth is entirely avoided, and the medicine will be found to pass down his throat without any trouble.

The Farm.

Parasitic Plants—The Farmer's Microscopic Foes.

J. HOYES PANTON, M. A., F. G. S.
(Continued from September issue.)

We now come to the consideration of a parasitic plant, which belongs to another family than that to which those belong we have discussed in the last two issues of the *ADVOCATE*. I refer to the so-called rust of wheat, well known to all farmers, as it appears on the straw at certain seasons of the year, especially when the weather is close, warm, and the atmosphere damp.

Puccinia Graminis—Rust.

Rust is the product of a minute plant developed from a spore, that has reached favorable con-

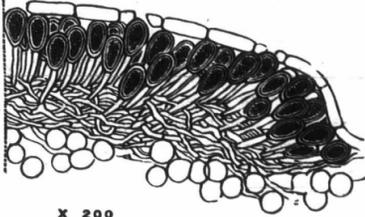


FIG. 1.—Transverse section of straw showing Uredospores, or Summer Spores.

ditions for its growth upon the wheat plant. Here the spore germinates and soon finds its way into the affected plant, and gives rise to a mass of thread-like structures (*Mycelium*) which permeate the host plant and feed upon its juices. Not long after this vegetative condition has been attained spores are produced in myriads on the threads of which it is composed. So numerous do they become that they burst the thin covering of the leaf or stalk, and show the rust colored rupture. If the powdery-like substance thus exposed be examined under a microscope about 200 diameters it will reveal, that what appears to be dust is really a mass of regularly formed seed-like bodies consisting of one cell, oval in shape and reddish in color (Fig. 1).

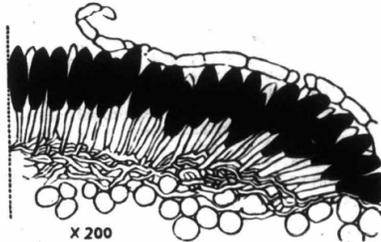


FIG. 2.—Transverse section of straw showing Teleutospores, or Winter Spores.

These spores (*Uredo*) finding their way to wheat plants soon germinate, and again myriads of spores are produced, so that in a very short time, if conditions are favorable, viz., damp, close, sultry weather, a whole field will be

affected. The rapidity of growth in these lower forms of plant life is almost incredible, but the facts are too evident to doubt it. The rust plant does not stop here. A little later in the season on the same thread-like structure (*Mycelium*) another form of spore is produced, but these are usually more common on the lower part of the stalk, and are destined to carry the trouble into another season. The former are frequently spoken of as "summer spores," the latter as "winter spores," these last formed spores (*Teleuto*) are two-celled, pear-shaped and black. (See Fig. 2.)

Affected plants are then said to be attacked with "mildew," and suffer severely from the

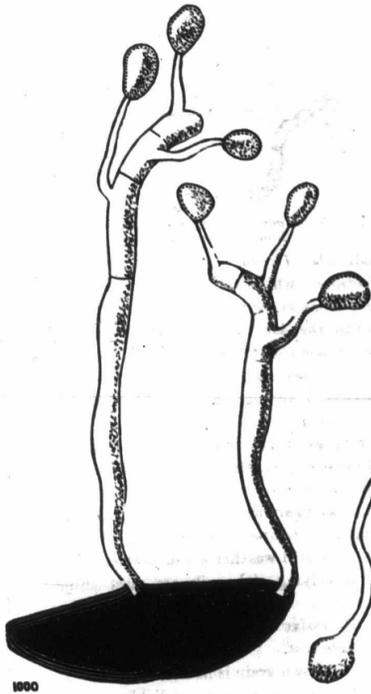


FIG. 3.—Teleutospores germinating and producing Sporidia.

effects of this parasite, just at the time when the plant has reached a stage to mature its seed. These black spores proceed no further that season, and will not again give rise to mildew on wheat until another plant has served as nurse for awhile. Here, then, we have a strange feature in nature; a plant passing through certain



FIG. 4.—Section of a Barberry Leaf showing Aecidia below.

stages of growth upon different plants, which serve for a time as host. We see something similar in animal life in the case of a parasite tapeworm in man. This is developed to a certain extent in the ox, and finally in man when he eats the affected meat of the ox.

In spring the dark spores germinate and give rise to another form of simple spores (*Sporidia*) formed at the ends of threads growing from each cell of the black spores. (See Fig. 3.) These (*Sporidia*), when they reach the leaves of the barberry shrub, germinate, enter the leaf and soon give rise on the underside to masses of cup-like structures, in which are produced innumerable round golden-colored spores, (*Aecidium*) (see fig. 4) which will produce a vegetative growth only when they germinate on the wheat or some closely allied plant. They then give rise to the condition referred to as "rust." Thus we see in the rust plant a very complicated life history, there being no less than four kinds of spores

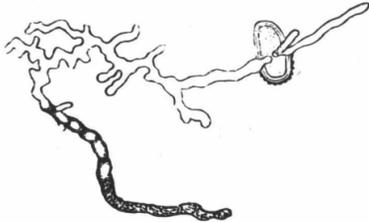


FIG. 5.—A germinating spore *Uredo* fourteen hours after it was shed.

produced, *Uredo*, *Teleuto*, *Sporidia*, and *Aecidium*, which for convenience we might name summer, winter and spring, spring referring to the last two. Two grow on the wheat plant, upon the stalks (*Uredo* and *Teleuto*), one in spring on stubble or fragments of straw (*Sporidia*), and one on the leaves of the barberry (*Aecidium*).

From extensive inquiries into the presence and cause of rust, the following conclusions have been reached:—

1. Seasons are the chief cause of rust. Sudden changes of temperature and rain, accompanied with close still weather are favorable.
2. Low-lying rich soils are most subject to attack.
3. Excessive use of manures rich in nitrogen encourage rust.
4. Late sown grain is liable to attack.
5. Thinly sown crops seem liable to injury.
6. Red wheats are less affected than white varieties.

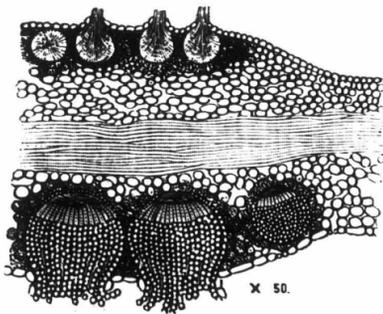


FIG. 6.—Section through Barberry Leaf showing *Aecidia* below.

7. Rust is more common in the vicinity of barberry hedges than at a distance.

To protect ourselves against this foe we should, as far as possible, avoid the conditions favorable to its growth; by doing this we are following in the line of practical and theoretical teaching, and may reasonably expect favorable results.

The question has frequently been raised, "Is the barberry shrub to be blamed for all the rust?" In answer to this several views have been set forward.

1. The *Uredo* spores may be carried over the winter months upon plants that do not perish like wheat at the close of the season, e. g., couch grass, etc.

2. *Sporidia* may germinate on wheat without the intervention of another plant. This has been done in the laboratory.

3. *Sporidia* may develop on other plants than the barberry.

However, it does seem that a sufficient case has been made out against the barberry, as a hedge plant in the neighborhood of wheat fields. We may reasonably expect that other sources than this shrub will be found, but in the meantime farmers are acting in harmony with the teachings of science in using it no longer as a hedge plant.

Application of Chemistry and Geology to Agriculture.

BY JAMES MILLER.

(Continued from September issue.)

OXYGEN—ITS PROPERTIES AND RELATIONS TO VEGETABLE LIFE.

Oxygen is the most wonderful and important of all the elementary substances. We are only acquainted with it in a gaseous or aeriform state. It is readily obtained by heating in glass retorts the red oxide of mercury of the shops, or a white salt known by the name of chlorate of potash. Without assistance we cannot perceive it from common air; it is without taste, color, or smell. It exists in the free (uncombined) state in the atmosphere we breathe, but there is no way we can obtain it pure except from some of its compounds. Oxygen is a recent discovery, being discovered by Dr. Priestly in 1774. Many metals unite readily with oxygen, forming compounds (oxides) which, when heated again, separate into their ingredients, and thus pure oxygen is formed. Oxygen in its pure state has a deadly effect on animals and vegetable life. When a living animal or plant is placed in a large vessel containing pure oxygen the rapidity of the circulation is increased, all the living functions are stimulated and excited, fever comes on, and in a short time life becomes extinct. It exists in the atmosphere to the amount of about one-fifth of the whole, and this state is necessary to the existence of animals and plants and to the support of combustion on the earth's surface. It exists largely in water, containing eight-ninths of the whole.

The quantity stored up in the solid rocks is still more remarkable. It forms one-third of the soils and rocks, as well as of all the plants and animals that exist upon the globe, known to us, as I have already said, in the form of a gas. In fact there are not many compound substances occurring in nature into which oxygen does not enter as a necessary ingredient, and it is a remarkable work of our Creator that this element should constitute the means by which all animal and plant life depends, and nothing less than wonderful, that a substance which we know only in the state of thin air should by some wonderful mechanism be bound up and imprisoned in such vast stores in the solid mountains of the earth, be destined to pervade and refresh all nature in the form of water, and to beautify and adorn the earth in the solid parts of animals and plants. Again, all nature is full of such wonders, and every step you take in the study of the principles of the art by which we live, you will not fail to perceive the united skill and bounty of the same originator.

Oxygen gas is heavier than common air in the proportion of about eleven to ten. One hundred measures of water dissolves six and one-half parts of this gas. (According to Dr. Henry, one hundred parts of water absorb only three and one-half parts of oxygen.) All kinds of water always contain a certain portion of oxygen, as they pass through the soil administering to the growth and nourishment of plants in various ways which will be explained further on.

[TO BE CONTINUED.]

A Speech by Ontario's Minister of Agriculture.

On a recent occasion, when speaking before a large number of leading farmers and breeders, the Hon. John Dryden expressed himself in the following characteristic speech:—

It is very gratifying indeed to anyone who undertakes new duties and assumes new responsibilities to be able to realize that he has the sympathy and hearty co-operation of those in whose interests he labors. The Legislature to which I have had the honor of belonging so long is composed of able men, chosen from different classes of the community, and I think we may fairly say that they represent all classes. But I have this to say to you—the Legislature will be all the better for being watched. The members will be able to perform their duties all the better if they are able to listen to the free and frank expression of opinion of those who sent them there. I believe that our Legislatures are largely what we make them, and if the people speak out their views will be listened to by those who represent them. A statesman in England once, sitting with other gentlemen at the festive board, was asked what he considered the great object of legislation. He replied that the great object was to bring about the greatest good to the greatest number. When asked what he regarded as the greatest number, he replied, "Number One." I am afraid that some of us are sometimes disposed to think that the legislation is carried on with that idea. Speaking for myself, if the doctrine of Number One is to be accepted, I want to associate with myself the thousands of farmers we have in Ontario. I am sure that no position in which I am placed will ever separate me from the farmers with whom I have been associated ever since I reached manhood. I have lived among the farmers all my life, and I expect to live among them and to be known as a plain, practical farmer. I think I know something of their needs. I think I know something of the difficulties they meet in fighting life's battle. I think I know something of the value of the industry they represent in this country, and I am sure, in the position to which I have just been called it will be my highest ambition and earnest effort to do what can be done to assist men all over the country to produce the best quality and greatest quantity of the products of the soil. No one born in this country or intending to make this his home could go from department to department of the last Toronto exhibition without feeling instinctively an emotion of pride at what has been done. Not one of us would feel like holding down his head with shame at the display. We are proud to show out exhibits to those coming from any other country, whether Britain, the United States, France or elsewhere. We are proud of the products that were shown at Toronto, and those products, I am bound to say, express fairly the best efforts of some of our best men following agricultural pursuits in this country. But some of us feel that we would be rejoiced all the more were we able to realize that the average product of our country came fairly up to what we saw there. I think what we ought to aim at in this country is to so educate our farmers that the great mass of them will be able to come up somewhat to what we see at exhibitions. I am of those who believe in a man in any pursuit having an ideal—some high purpose and object. A man may achieve a little temporary success by accident, but to continue in a successful course he must have some ideal before him. Where are the mass of our people to get their ideals? I say largely they must get them at the exhibitions. The man who goes to the exhibition cattle shed or the horse ring or among the grain or vegetables will be able to see what his ideal ought to be, and will be able to copy it. The difficulty is that a great many people say, "That is well enough for these men, but I can never accomplish the same." I would like to inspire our young men who are following agriculture with the idea that what one man has done he, under like circumstances, can do also. Let us have ambition to excel in these matters, and so educate the farmer that the bulk of our products will fairly equal those which we see represented

on exhibition grounds. There are two or three institutions in this country which are accomplishing this object. I think we owe a great deal to these institutions, to one or two of which I wish to refer more particularly to. One is the Agricultural College and

EXPERIMENTAL FARM AT GUELPH.

This has been in the past a useful institution, but I hope it may be made still more useful and efficient in the future. I hope our farmers all over the country will stand by our institution at Guelph, and that the experiments carried on there will give practical value to what is being done. This institution is educative. We educate not only the young men in the College, but these on coming out become educative forces in the community, and not only that but the information scattered over the country by frequent bulletins from this College is intended to instruct our farmers. We have another institution which we ought to encourage. I refer to the

FARMERS' INSTITUTES.

I have great hopes of what will be done in the future through these institutes. They are in their infancy in this country, but I trust we may be able to make them still more efficient than in the past. It is wonderful what our farmers can learn from one another when they come together. The farmer lives a secluded life and has very little opportunity to copy except from his immediate neighbors. I have heard of farmers who doubted the utility of these institutes, but who, after attending one of them, declared themselves delighted so that they would not have missed the meeting for a good deal. I think that the object of the Government and of all should be to make these institutes still more efficient in the future. As farmers we are interested in one another's welfare. Once in awhile we come across men who seem to think it is their duty to be selfish in this matter, and if they have more knowledge than their neighbors, to keep that knowledge to themselves. He thinks: I must not tell my neighbor how I feed my steers, how I grow such good fruit, how I manage with my wheat crop, because he will be able to do the work as well as I do and perhaps better. I think that is false doctrine. I always say what I can against it. I believe that, as a farmer, I am interested not merely in what is done on my own farm, but in what is done on every other. It is foolish for me to think, because I grow 500 bushels of the best wheat, therefore I can do better by not having my neighbor grow wheat of equal quality. A gentleman interested in the exporting industry said to me: "I could give you more for your sheep if your neighbors had as good. I must put yours with a thousand others of low quality. I have to sell at an average price. Yours help to raise the average, but I could give you better prices if all were better. It is to my interest, therefore, to induce my neighbors to produce the same quality of sheep as I do myself. And it is so with every department. We can help each other. Let us not feel that it is necessary for us to keep our information to ourselves, but that we ought to help each other in every possible way. I don't want to sit down without saying a word in reference to

THE INDUSTRIAL EXHIBITION OF TORONTO.

It is a successful institution. There are some people living in remote districts who say that Toronto is swallowing up everything. But I believe I express the honest sentiments of a large majority of the people of the Province when I say we are glad we have the city of Toronto. I know I speak the sentiments of the majority when I say that we are delighted that we have a number of men residing in Toronto who are public-spirited enough to give their time and talents to carrying forward such an exhibition as this. I am not saying too much when I say that this exhibition has become the leading one in this Dominion. I am not saying too much when I say that in a few years it will be the leading exhibition on the Continent of America. It will not be excelled by any exhibition in the United States, and every one of us as a farmer is interested in the success and prosperity of this institution. I think we ought to

be very grateful, instead of finding fault, for the labors of the gentlemen put forward in the furtherance of this exhibition. Some of us who are among the common people cannot understand how it is that though there is land alongside that seems to be comparatively unoccupied, yet the Exhibition Association cannot get more space for the purposes of this exhibition. There seems to us to be

SOME RED TAPE, AS WE CALL IT.

For my part, I feel indignant to think that persons who ought to be interested in the progress of our country should stand in the way. This Association must have more room somehow, and I trust the authorities will be able to give it to them in the ground adjacent. I have only this to say in conclusion: I am rejoiced to appear before you as a farmer. A good many of you are not farmers. You need not be ashamed of the farmers of Ontario. They are as plucky, as enterprising and as energetic a lot of men as you will find in any country. I am not afraid for them if they are given a fair chance. Let us get rid of any shackles that hold us and have an equal chance. We have a good climate, a good soil and a good country, and it is filled with good men, and we have reason to be proud of our agriculture and of our agriculturists.

There are many good points brought out in this speech, which our farmers would do well to ponder over. In our next issue we will discuss some of these points, such as we wish to stamp on the minds of our readers.

A WORD TO AGENTS.

Farmers' Sons and Daughters, Students and Teachers.

Any honest, thrifty person, male or female, can earn good wages and obtain regular employment canvassing for new subscribers to the FARMER'S ADVOCATE. This is honorable work, benefiting the subscriber, the agent and the publisher.

The past year has been a very successful one with us. Our subscription list has grown very rapidly. Our paper is daily becoming more popular all over the Dominion. The regular agents now in our employ are doing exceedingly well, earning for themselves, above expenses, from \$30 to \$100 per month, depending on the energy and industry of the individual. One of our regular men frequently clears \$70 per week. He will clear, one month with another throughout the year, \$100 per month. With a little practice any man equally industrious and earnest could do as well. At what business, without capital invested, can you do as well? Beginning with September we will give to all new paid-up subscribers the balance of this year and 1891 for \$1.00; for \$1.25 we will give the ADVOCATE for the same period and one copy of our splendid picture, "Canada's Pride." With such inducements as these we trust our friends will send us many new names between now and Christmas. If possible start to work immediately, before the other papers are in the field.

The following cash commissions are given to all our agents: From 10 to 20 names, 25c. each; 20 to 50 names, 35c. each; 50 to 100 names and upwards, 40c. each. Special terms will be made with those who wish to canvass continually. Last season a farmer and his daughter earned \$180 in ten days taking new subscribers for us. Those who would sooner receive live stock or implements than cash commissions can be supplied advantageously. See our prize list advertised in other columns. We will guarantee the safe arrival of every animal and article, and will further guarantee that all prizes will be of good quality and satisfactory in every respect.

A man does wisely who invests in his own business. The farmer making money ought to have the farm supplied with best stock and implements. Then as money accumulates, it should be invested in a second farm.

Poultry.

Fattening Poultry.

BY JAMES ANDERSON.

Fowls should be kept in such condition that they are always ready to kill, but about Christmas time we generally look for something extra, and as I have had some experience in fattening fowls, "having exhibited at our Guelph Fat Stock Show for the last twenty years," I will now give it. Three weeks ought to be quite sufficient to fatten fowls if in anything like good condition when shut up. I generally shut mine up in a room of an old unoccupied house, keep it as dark as possible, give them plenty of scalded corn meal, chopped barley and oats, mixed, for a change. They want to be fed three times a day all they can eat up clean. I often give them a few boiled potatoes mashed up with a little oatmeal in it, which they relish very much. For drink give them all the milk they want, either sweet or sour. In fact, I think they prefer buttermilk, and it makes the flesh fine and white and firm. A little salt mixed with the boiled food is beneficial and highly relished by the fowls. They also relish a little bran mixed with the milk and it keeps them healthy. You must not forget plenty of gravel, crushed oyster shells, or any gritty substance to help digestion. To prevent indigestion a little pulverized charcoal is an excellent thing mixed with the food. To prevent lice on the fowls fill a large box with dry earth, in which thoroughly incorporate one pound of sulphur, as it is impossible for fowls to fatten if covered with vermin. Keep your box or boxes in a perfectly dry place, for if it gets wet or damp it will be entirely worthless. The fowls will enjoy this dust bath very much, and they will fatten in a great deal less time. Fowls for show purposes should never be scalded. Scalding spoils the appearance of poultry intended for the market, and if the best prices are to be obtained they must be plucked instead of scalded. Poultry packed for shipment should not be drawn. I generally cull out all my worst fowls in the fall, also geese, ducks and turkeys, fatten them up, kill them off in freezing weather, pack them in snow in a large hoghead, a layer of fowls and a layer of snow alternately. Keep them in an outhouse constantly frozen, or nearly so; have a lid on the barrel to prevent mice, rats or cats from entering, and you have fine fresh poultry all winter. Put on fresh snow if the first packing should melt and thaw. I have done this for years and never lost a fowl. You must not kill them too early—not until the really cold weather sets in.

Now is the time to look after your chicken house and see that it is made warm and comfortable for winter, for without warm quarters you will not have many winter eggs, the time they bring twenty cents a dozen. When the fowls are moulting, which is generally about this season, they require an extra feed and to be kept warm. One night of exposure when in moult may cause disease which may extend to the whole flock. Lay in a stock of gravel, dry earth for dust baths, etc., for winter use, and sprinkle the hen house floor plentifully with plaster. There is no use of a farmer or anyone else trying to raise poultry profitably unless they have a house set apart expressly for their use. A good tonic in the moulting season is a few nails or a piece of iron in a gallon or two of cider; this after standing awhile can be used in mixing with their food; more cider may be added, and during the moulting season it will be found very beneficial.

Family Circle.

A God After All.

We laid in a cell, Mr. Judge, all night long,
Jimmie and me, waitin' and wishin' for the mornin'
to dawn.
'Cause we couldn't sleep, Mr. Judge, in that cold,
damp place,
And Jimmie was scared to death at the wild, mad
race,
That the rats kept runnin' all through the dark
night;
That's why we were glad, Mr. Judge, to see the
daylight.

Please, Mr. Judge, we are not very bad little boys,
And the policeman that took us said we're some
mother's joys.
He was wrong, Mr. Judge, and should only have said
That we are two little outcasts, and our mother is
dead;
And there's no one to care for us, at least here
below,
And no roof that shelters us from the rain and the
snow.

A preacher once told us that way up in the blue
There was a God that was watchin' all that little
boys do;
And that He loved little children, and His love it
was free;
But I guess, Mr. Judge, he don't love Jimmie or
me.
For I prayed and I prayed till I was most out of
breath,
For somethin' to eat to keep Jimmie from death.

And that's why we're here, Mr. Judge, for you know
There was no help from above, I must find it below.
'Twas no use beggin' and be told in God I must
trust.
For I'd begged all the day and got never a crust;
And there was poor Jimmie, holdin' his cold little
feet,
And cryin' and moanin' for somethin' to eat.

So I went to a house that was not very far,
And saw, Mr. Judge, that the back door was ajar;
And a table was settin' right close to the door,
Just loaded with pies, about twenty or more.
So I quickly slipped in and grabbed one to my
breast.
The policeman then caught us, and you know the
rest.

Discharged, did you say, Mr. Judge? both Jimmie
and I?
And—and we ain't got to be jailed 'cause I took a
pie?
And we can eat all we want?—how funny 'twill
seem—
Say, Jimmie, pinch me, for I—I think it's a dream,
And you'll give us work, all summer, winter and
fall—
Say, Jimmie, I think there's a God after all!

THE FIVE-DOLLAR BILL.

BY GENEVA MARCH.

"Tommie! are my boots blacked?"
"Tommie! what did you do with that paper
parcel?"
"Tommie! run around to the corner and get me
two ten-cent cigars!"
"Tommie! sweep down the front steps and the
pavement, and look sharp about it, d'ye hear?"
"Tommie, aren't those knives ready yet? I
never saw such a loiterer in my life!"
And little Tommie Sorrel, errand boy, table waiter,
and general factotum at Mrs. Green's boarding-
house, stood in bewilderment, scarcely knowing
which way to turn.

"Yes, sir, your boots are blacked, sir. I put the
paper parcel under the hall hat-rack, Mr. Millet.
The knives were cleaned ten minutes ago, madam,
and I'll do the steps and pavement just as soon as
I've run to the corner for Mr. Gusto's cigars."

"Humph! pretty well managed," said old Mr.
Murdock, as he sat in the sunny bay-window of the
boarding-house parlor, and saw little Tommie dart
down the street like an animated arrow. "Smart
lad that. Where did you get him, Mrs. Green?" to
the landlady who was dusting off the china mantel
ornaments with an old silk pocket handkerchief.

"I've had him some time," said Mrs. Green.
"He came to the house one winter day, and asked
leave to carry in a load of coal and kindlings that
had just been dumped at the door. He was very ill
clad and hungry, and told me such a pitiful tale
about his ailing mother and sick sister, that I told
him if he was a mind to come in, and work for his
board, and such odd scraps as come off the table to
carry home to his folks, he could; and he has been
here ever since."

"Don't you pay him any wages?"
"Dear me, no, sir. A lad like that ought to be
thankful for enough to eat and drink, these hard
times."
"O, yes, useful enough."
"And yet he seems very useful."
"He has a nice face," said Mr. Murdock. And
that was all that was said about it; but that even-
ing, when Tommie came up to Mr. Murdock's room
to put on fresh coal for the evening, the old gentle-
man spoke to him.

"My lad," said he, "do you always expect to be
errand boy?"

Tommie looked at him, with an odd smudge of
black across his eyebrows, and earnest, glittering
eyes.

"I hope not, sir," said he.
"How old are you?"
"Twelve, sir, last November."
"Twelve, eh?" said Mr. Murdock. "Quite old
enough to earn a little something for yourself, I
should say."
Tommie dropped his coal shovel and came a little
nearer, in his eagerness.
"Please, sir," said he, "do you know of any place
where I should suit? Because I ain't earning any-
thing here only my board, and the cold victuals
Mrs. Green is kind enough to give me. Mother's
rheumatism is bad, and little Katy ain't old enough
to help, and I'm all they've got to depend upon,
sir. If I could earn a little, sir, even though it was
but a trifle."
"There, there my lad, you're going too fast,"
said Mr. Murdock, abruptly, though not unkindly.
"No, I don't know of any place in particular, just
now. If I do, I'll let you know."
"Thank you, sir," said Tommie, evidently a little
disappointed. "I tried several times to get some-
thing to do. There's Honer Clark that keeps the
news-stand on the corner, he would take me in
partner if I could raise five dollars, and it is a very
good stand, sir, and I could carry papers around to
the customers if once I could get in. But five
dollars! sir, why, I never had one dollar in my
life?"
"Well, well, Tommie, have patience. Rome
wasn't built in a day. Perhaps some day you may
get a chance to earn five dollars."
Perhaps so, sir," said Tommie, rather dejected-
ly. He took up his heavy coal scuttle of ashes
and cinders, and went out of the door, bowed down,
and stooping under its weight.

The next morning old Mr. Murdock went early
down town, and so it happened that the grate and
hearth in his room were about the first that Tommie
cleaned. As the little fellow was down on his
knees, whistling softly, as he brushed up the loose
ashes, his foot struck Mr. Murdock's big easy chair.
"I guess I'd better move it back," said he to him-
self. But as he wheeled the heavy piece of
furniture back, he saw something lying on the floor
close to the old-fashioned carved leg of the chair,
something like a crumpled bit of paper. "It's
money! said Tommie. It's a bill, I do believe!"
So it was, a five-dollar bill.

Tommie Sorrel smoothed it out with trembling
fingers, and eyes that glittered strangely. He had
so longed for five dollars of his own: he had
thought of so many easy roads to fortune, if only
the first step could be on a five-dollar bill. And now
fortune seemed to have listened to his prayers, and
sent him the longed for sum. Here it was, so to
speak, rained down at his very feet. It was a
terrible temptation. Tommie had always believed
himself an honest boy; but then, he had never had
any incentive to be otherwise. Miss Tilton had
once dropped a ten cent stamp, and he had found
it and restored it to her.

Tommie! Tommie! take care! Satan is very
near these now. The kingdom of darkness is envelop-
ing these around with its net of gloom.

"No! no!" cried Tommie, out loud, as he dashed
the bill to the floor. "It isn't mine, it's the kind
old gentleman's. If I were to take it, I would be a
mean thief. Mother would rather starve, than have
me grow rich by stolen money."

Nevertheless it was a great disappointment, and
we hope our readers won't think Tommie Sorrel
unmanly, when we confess that he wept a few
tears over the ashes and coals. He was waiting at
the door with a beaming face, when Mr. Murdock
came home in the evening.

"Please, Mr. Murdock," cried he eagerly, "have
you missed anything?"
"Missed anything, Tommie?"
"Because I found a five-dollar bill by your chair,
sir, when I was tidying up the hearth, and here it
is."

Slowly Mr. Murdock fitted his spectacles across
the bridge of his nose, slowly he unfolded the bill
and scrutinized it closely by the hall gas-light.

"Yes," said he nodding his head. "Yes, exactly,
it's the bill I lost. Do you see that little red cross
across the point of the letter V?"

"I do see it now, sir," said Tommie, as Mr. Mur-
dock held it toward him, "I didn't before."
"If it had been dishonestly taken, stolen, in
short," said Mr. Murdock, "it could have been
easily identified by that mark; Tommie, I believe
you are an honest boy."

"Thank you, sir," said Tommie much gratified.
"But did you really know you had left the money on
the floor?"

"I really did know it," answered the old gentle-
man with a twinkle in his eyes. "I wanted to know
if I could depend on you, Tommie, in fact, I set a
trap for you. And the old gentleman laughed so
heartily he shook all over like a mould of jelly."

"That's the first chapter," said he, "and now
here comes the second. Would you like a nice
place in my office as errand boy, at a dollar and a
half a week?" Tommie uttered an exclamation of
delight. "Because," continued Mr. Murdock, "I
think after this affair of the five-dollar bill you may
be trusted down there. We want a boy, we'll give
you the refusal of the situation."

And that was the way Tommie got a place in the
down-town office. He proved so willing and use-
ful, that in the spring they raised his wages to two
dollars a week, and Mr. Murdock sent a barrel of
flour and a warm, black shawl, to his mother. "I
like the boy," said he.

And Tommie feels as if he were makin' his way
in the world now.

Minnie May's Dep't.

One Afternoon.

Papa and mamma went out to row,
And left us alone at home, you know,
Roderick, James, and me,
"Now, dears," they said, "just play with your toys,
Like dear little, good little, sweet little boys,
And we will come home to tea."

We played with our toys the longest while!
We built up our blocks for nearly a mile,
Roderick, James, and I,
But when they came tumbling down, alas!
They fell right against the locking-glass.
Oh, how the pieces did fly!

Then we found a pillow that had a rip,
And all the feathers we out did slip,
Roderick, James, and I,
And we made a snow-storm, a glorious one,
All over the room. Oh, wasn't it fun,
As the feathery flakes did fly?

But just as the storm was raging around,
Papa and mamma came in and found
Roderick, James, and me,
Oh! terrible, terrible things they said,
And they put us all three right straight to bed,
With the empty pillow-case under my head,
And none of us had any tea.

— St. Nicholas.

MY DEAR NIECES:—

I was for a short time a guest in a house of
a wealthy family. Everything about the place
betokened means. The grounds tastefully kept,
the house, a veritable mansion, beautifully fur-
nished. But there was something lacking. On
looking about on tables and shelves I could not
find a single book or scrap of reading matter.
What a desert that house seemed to me. Better
dispense with carpets and upholstered furniture,
and have food for the mind. How could child-
ren grow up in such a home, with minds other
than warped, narrow and prejudiced. Those not
having formed reading habits little know what
a world of undiscovered pleasure and delight lies
within their reach, for reading is a habit, and
a very strong one, and may be acquired by most
people if they resolve to begin and honestly per-
severe. A lady informed me that she com-
menced reading to oblige an elder sister, and so
acquired a taste for that which before was a
drudgery. I trust that many of my nieces are
readers; if not, pray begin at once. Ask some
educated friend to select books for you; avoid
as a plague the trashy works of fiction that
poison the mind by giving false views of life
and sympathy to wrongdoing, or the silly stories
that yield no sustenance. Read good novels or
none. How varied the feast spread before us.
We may accompany the traveller across burning
deserts, and become acquainted with the inhabi-
tants of distant regions and their mode of life;
or with the Arctic explorer, sail past cities and
mountains of ice into unknown seas, and learn
what human nature can dare and endure. Let
us learn something of what life is really made of.
Why lead a mole-like existence with the means
of information and culture at hand? Why not
know something of the lives of

"Bards, patriots, martyrs, sages,
The noble of all ages,
Whose deeds crown history's pages
And times great volume make,"

and gather inspiration from these deeds, suffer-
ing and attainments? "But when have farmers'
daughters time for all this reading?" say you.
I will tell you, in the pauses of work. "Where
there's a will there's a way." The old adage holds
good here. An eminent man prepared himself
for a great life work by having a book at hand
on the breast beam of his loom, and seizing
every spare moment to study its contents.
With a thirst for reading you will pick up some
scrap of reading matter just as naturally as you

would seek a draught of water, and what a solace and pleasure to beguile time of its tedium is an interesting book—a friend always at hand from whose pages we may catch a spark from the minds of the great thinkers of all time. How pitiful to see old people unable to occupy their time in any way, and without a taste for reading, sit hopelessly brooding with no fresh food for thought. What wonder that they become more querulous and despondent, until the intellect drifts mercifully into the cloudland of a second childhood. Cultivate your minds as you have opportunity; lay up stores of knowledge, food for thought, and above all read God's Holy Word, study its precepts and gracious promises. Without this firm basis mere culture is superficial and fruitless.

MINNIE MAY.

Fashion Notes.

October's changes in the styles of feminine attire are always welcome, for they harmonize with the season in tints and texture. With the chilly days of autumn we think first of our top garment, be it jacket or cape. The military cape will be a favorite for autumn, walking, driving or travelling, the pretty lining tempting its wearer to throw the right front backwards over her shoulder whenever its warmth is not required. On pleasant days, when the mildness of the air renders it unnecessary, the tasteful young woman will fold its lining outward and carry it over her arm in true military style. For travelling this cape can be made of the costume material, with a lining of gay-colored flannel. Women with finely proportioned figures will look particularly well in a lately designed, closely curved long cloak, called the "Grand Duchesse." It has a deep shoulder cape, so arranged with hooks and loops beneath the stylish turn-over collar that it may be omitted at pleasure.

The latest costume patterns are particularly appropriate for the making up of bordered dress fabrics, which are handsomer than ever, although they are cheaper than last year. The majority of the new costumes have dress-coat or habit backs, and this style is certainly improving to the many skirts that have full unlooped breadths, and no tournure to relieve the severity.

Styles for misses and children follow those for women much more closely than they have done of late, and they are wonderfully pretty and appropriate to the little figures.

Pepper-pod red is the name of a new shade that is much used to illuminate hats, bonnets and gowns.

A much admired method of arranging the hair is in low coils or braids. Few persons now wear the high coil with under-frizzes upon the nape of the neck. The most distinguished women now brush their tresses smoothly back and fasten low upon the neck.

Woman sashes are again popular with all sorts of house textures and also with many street fabrics, and they have a very good effect on the most sombre attire. These sashes are not the expensive luxuries they once were, for they are within the reach of most young women.

Hussar-blue will be a favorite color for heavy walking jackets, top coats and reefers, and numerous gilt buttons will be used on them with fine effect. Women with white throats wear strings of large plain beads of Etruscan gold with fashionable collarless gowns. Silver beads are worn by young women in complimentary mourning.

A pretty table decoration is two fern leaves crossed, of perfect shape, laid here and there upon the table cloth, and upon each crossed leaf is laid a bird's nest filled with bonbons, the nest being made of half an egg-shell, covered with fine moss. When the shell is quite dry inside fill it with pretty candies, not too large, of several colors.

The divided skirt is gaining favor, but the advantages of it yet have never been sufficiently proved. It must feel very uncomfortable, and cause the skirt of the dress to fall in ungracefully more especially. Women of good taste will not adopt them.

All traces of darts have disappeared from the fashionable bodice, and loose fronts are the rule for stout as well as for slender women.

Sleeves are all worn high on the shoulder, some are elaborately puffed for some distance down the arm, but they give a gigantic effect to the arm, which is not becoming to many.

Jet garniture is still fashionable. Jet edgings are shown in fine, open patterns, and are used for outdoor decoration on the richest as well as the simplest of fabrics.

An attempt to introduce plaid skirts with a bodice the darkest shade of the plaid, has been a failure. A glimpse of plaid may be seen sometimes in a panel or fold, maybe in a small vest, but their universal unbecomingness will never admit them to general favor.

Bonnets will be worn the color of the gown, or some color in it, as flashy contrasts are no longer good style. An over-trimmed bonnet is in bad style, whether worn by a young woman or elderly matron.

Veils will be worn with bonnets on chilly days, but all wise women will avoid a red veil for, irrespective of its unbecomingness, red is vulgar.

French Sofa Pillow.

This will require twenty inches square of wine-colored silk plush. Have a conventional design stamped upon it, and work in three shades of green rope-silk.

Take for bottom of pillow, plush the same as for top, and join together with a puffing of surah silk, three inches wide, to match the lightest shade of rope-silk; underneath this put a piece of firm lining, two inches wide, so as to remove all pressure from the puffing. Another way to finish is to work eyelet-holes an inch and a-half apart in the plush, and lace together over the puffing with wine-colored cord. Either of these make a handsome sofa pillow.

Match-Safe.

A very ornamental match-safe to suspend from bottom of hanging-lamp, can be made in the following way:—

Take a small basket, about four or five inches in diameter and two inches high; gild the outside, and when perfectly dry, line with colored silk, have lining full enough to have the edge slightly shirred.

Now, take about ten or twelve pieces of narrow ribbon each being four inches long, and of a different color, and fasten at equal distances around top of basket, firmly attaching ends between it and the lining.

To the free end of one ribbon, sew a little bell, to another a tiny teakettle, to a third a banjo, etc.

These ornaments are not larger than a ten-cent piece and are inexpensive.

The basket can be fastened to bottom of lamp by sewing two ribbons to top of basket, one on each side, and tying to lamp.

Make one, and see how pretty it is.

Recipes.

OATMEAL GEMS.

Two cups of the finest oatmeal, two cups milk, two eggs, one tablespoonful butter, one tablespoonful sugar, one saltspoonful salt.

JELLY TOAST.

Cut stale bread into neat rounds or squares; fry each slice in boiling deep fat; spread it thickly with some fruit jelly and serve very hot.

TURKEY HASH.

Remove the meat from the bones of a turkey and cut it into neat bits; stir two cups of this into two cups of white sauce; season to taste. Make the stuffing of the turkey into neat cakes, fry them, and arrange them on the dish around the hash.

NURSERY MUFFINS.

Two cups milk, two cups fine bread-crumbs, one cup flour, saltspoonful salt, one egg, one tablespoonful butter, three teaspoonfuls baking powder. Beat the egg light, stir in the butter, the bread soaked in the milk, and the flour and baking powder. Bake in a steady oven, greasing the muffin tins well, so that the batter may not stick to them.

STUFFED EGGS.

These will be found very good for picnic or travelling lunch. Remove the shells from eggs that have been boiled hard, cut them lengthwise, take out the yolks, rub them fine with a little dry mustard, pepper and salt, and add a few drops of melted butter for each egg. Then put the stuffing back in the white of the eggs and put the halves together. The yolks should be removed very carefully, so that the traces will not be left on the white part.

CHOCOLATE-COCOANUT CAKE.

For the cake, one cup of sugar, one tablespoonful of butter, one-half cup of milk, two eggs, 1½ cups flour, one teaspoonful of baking powder. Bake in jelly tins. This will make two thick layers. For the filling, melt one-third of a cake of chocolate, add half a cup of sugar, three tablespoonfuls of milk and a half-teaspoonful of vanilla. Mix these ingredients until smooth, then add one-half a grated cocoanut to the chocolate and spread between the layers and on top.

TAPIOCA PUDDING.

Soak one-half cupful of tapioca for three or four hours in just enough water to cover it, then stir the tapioca in a pint of boiling milk. Beat the yolks of three eggs with two-thirds of a cupful of sugar and a bit of salt, then add this to the milk and tapioca. Take from the fire, and beat in gradually—a spoonful at a time—the whites of the eggs beaten very light, and set to cool; or the whites may be spread on top, and the pudding set in the oven till of a light, delicate brown.

LITTLE SPONGE CAKES.

Break into separate bowls the whites and yolks of six eggs. Add six ounces of sugar to the yolks of the eggs and the juice of one lemon. Beat the yolks, sugar and lemon juice together till the mass breaks into bubbles; then add the whites of the eggs, which have been beaten to a stiff froth. The whites of the eggs must be stirred in carefully, so as not to break the mass down, and six ounces of flour must be added. The moment the sponge cake is mixed it must be poured into the small forms intended for it, which should be well greased, and just before they are set in the oven dredged with powdered sugar. Bake sponge cake in a steady but moderately heated oven.

The Claims of Love and Lucre.

The instances are very rare in which two strong wills can harmonize in close companionship.

Most young women study the character of men but little, because they have but little opportunity.

A brilliant match, in the eyes of the world, atones for low morals, uncongenial tastes, and lukewarm hearts.

A woman possessing the best elements of womanhood cannot be happy with a man who has not a sound character.

It is hard to examine character, and profit by the study, after the heart has become the seat of an absorbing passion.

Wealth in hand, without business habits, business tastes, and business interests, is the most unreliable thing in the world.

"Love in a cottage!" is laughed at by very "judicious people," but it is a very sweet thing by the side of indifference in a palace.

Good business habits, good character, enterprise, ambition—all these combined—are almost sure to secure competence and success.

There is nothing more disgusting in all the world than that mercenary tie, which, under the name of marriage, binds a woman to the bosom of one who bought her with his money.

Proverbs of the Sea.

The sea refuses no river.

The ocean is made of small drops.

It is a great way to the bottom of the sea.

It is but a stone's throw to the bottom of the sea.

He that would sail without danger must never come on the main sea.

He sets his sail to every wind.

Hoist your sail when the wind is fair.

Being at sea, sail; being on land, settle.

He who goes to sea must sail or sink.

It is easy to sail with the wind and tide.

A big ship needs deep water.

A mariner must have his eyes on the rocks and sand as well as the North Star.

He that will not sail till all dangers are over will never put to sea.

He that will not sail till he have fair wind will lose many a voyage.

Many grains of sand will sink a ship.

Better lose an anchor than a ship.

With broken rudder the vessel is soon lost.

He who can steer need not row.

The first in the boat can choose his oar.

Ill goes the boat without oars.

To have an oar in every man's barge.

Good riding at two anchors men have told,

For if one fail the other will hold.

Do not trust all in the same boat.

Too many sailors will sink a ship.

Ships fear fire more than water.

To cast water in the sea.

He cannot find water in the sea.

He seeks water in the sea.

Helping the unworthy is throwing water in the sea.

As true as the sea burns.

As welcome as water in a leaky ship.

The water that supports the ship is the same that sinks it.

Large fish live in deep waters.

By the small boat one reaches the ship.

Who embarks with the devil must sail with him.

The soul is the ship, the mind is the rudder, the thoughts are the oars and the truth is the port.

Women are ships, and must be named.

A ship and a woman always want trimming.

A ship and a woman are always repairing.

Give a woman luck and cast her into the sea.

Who won't be ruled by rudder must be ruled by rock.—[American Notes and Queries.]

Grains of Gold.

Give not advice without being asked, and when asked do it briefly.

Keep your business and your conscience well, and they will be sure to keep you well.

One may as well expect to be at ease without money, as happy without.

Half of the failures of life are from the want of faith, patience and persistence.

A slip of the foot may be recovered, but that of the tongue—never.

Dost thou love life? Then do not squander time, for that is the stuff life is made of.

If we flatter not ourselves, the flattery of others will not hurt us.

A ploughman on his legs is higher than a gentleman on his knees.

Pride is easily seen in others, but we rarely see it in ourselves.

"Love God," says St. Augustine, "then do what you please."

The friendship of a great man is like the shadow of a bush—it is soon gone.

Great talkers are like leaky pitchers—everything runs out of them.

The gem cannot be polished without friction, nor man perfected without adversity.

If you have no arrows in your quiver, go not out with archers.

Speak kindly and act kindly to others, and you will be sure to win affection as well as esteem.

When we know how to appreciate a merit, we have the germ of it within ourselves.

It is worthy of note that the men and women who think most highly of themselves, and most meanly of others, are those who render back to society for the good things they enjoy the smallest return of personal effort.

Most of the common sneering at good resolutions comes from those who are content to drift along through life without taking the trouble to determine on any fixed course of action. Without good resolutions from within we need hardly look for excellent results from without.

Presence of mind is greatly dependent on knowing what is best to be done under conditions of alarm or danger. If this knowledge is acquired, a very moderate amount of courage and some common sense will enable persons to act with discretion and consequent safety in very trying circumstances.

"If pen or lips would keep from dips,
Five things observe with care—
Of whom you speak, to whom you speak,
And how, and when, and where."

The heights by great men reached and kept,
Were not attained by sudden flight;
But they, while their companions slept,
Were toiling upward in the night."
Longfellow.

The pursuit of the dollar is responsible for the wreck of countless lives. It makes young men old, and adds physical debility to the sorrows of old age. In the increasing effort to obtain riches the best objects of human existence are driven out of sight.

Uncle Tom's Department.

MY DEAR NIECES AND NEPHEWS:—

I intend giving you an interesting letter from Australia this month instead of a letter from me. We have not space for both, and I'm sure you will be pleased with the following.

UNCLE TOM.

AUSTRALIAN BIRDS.

(Written for the FARMER'S ADVOCATE.)

Some of the Canadian girls and boys who read Minnie May's Department and Uncle Tom's Puzzles in the *ADVOCATE* may like to hear about a few of the feathered tribes of this sunny land. I cannot promise to tell you anything very funny, but rather what may seem curious and interesting, and better than that, what is true.

It is easy enough to find and to read wonderful stories or yarns told by travellers and novel writers, but I am sure, from the good advices and sound wisdom set before you in your own department of the *ADVOCATE*, that you all try to cultivate what is pure and beautiful, loving and true, in study, in play, and in every-day life.

The birds of Australia have a very different home and surroundings to what the birds of England or Canada have. Generally speaking, there is no winter over the greater portion of this island continent. The cold, frosty winds of winter never blow, the flowers never fade, the leaves never fall. The forests are mostly ever-green, and from month to month there is a succession of blooming flowers and shrubs. So, then, the birds do not need to pack up their nests and migrate to warmer lands. Of course they move from place to place as men do, seeking a better home or a finer climate, by the coast or up on the mountains, on the cold, green shores of Tasmania, or by the man grove-lined Gulf of Carpentaria. As the seasons here are directly opposite to those of the northern world, the birds brought from England or Europe have to learn the lessons of colonial ways and experience.

But I must notice a few native birds. Australia's big bird is the emu or cassowary—long legs and neck, as large and of the same nature as the ostrich of Africa. It is quite common on the plains to see a flock of emus interspersed with a hobbling herd of kangaroos and wallabies. The brush turkey resembles the Canadian wild turkey. But there is one peculiarity about some of the large birds here, they build mounds of brush and sand for nests, or scoop out a nest on the level plain, cover the eggs with sand, and leave them to be hatched by the heat of the sand, decaying vegetation composing the nest.

But here is a funny, good-natured fellow, jacko, or the laughing jackass of Australia. The name is an apt one, admirably descriptive. Merry jacko begins with a regular ha! ha! ha! and goes on varying the tones, so intensely human, as if it had to hold its sides from bursting with the merriest laughter. It is about the size of a crow, dressed in white and brown, a burly, bright-eyed kingfisher. From singing at sunrise and sunset it, in the bush, gets the name of settler's clock, and from its crested head and witty ways it is called the laughing philosopher. In walking by the bush-grown river bank, or in the Botanical Gardens, at all hours of the day, jacko is heard filling the air with a melody which would have delighted the soul of Handel,

or, if aught earthly could do it, would bring a smile on the stern, staid features of Sir Henry Parkes (never known to laugh), ex-Premier of N. S. W. Our friend and favorite is never killed; its skill in snake killing has thrown around it the arm of the law. Fines are enforced to save jacko, and the best of feeling exists towards the merry songster. The favorite method of destroying snakes is to swoop down suddenly, seize the reptile, bear it aloft, and from a sufficient height let it fall on a rock or on hard ground. If once is not enough, jacko tries another fall till the task is done. To avoid the fangs of the serpent it is caught near the head, and thus our useful friend aids in ridding Australia of her dangerous reptiles. I have witnessed a deadly struggle between a large black snake—so venomous as to be hated and dreaded by all—and a number of merry snake killers. One poor bird was caught and crushed beneath a fold of the serpent on the limb of the tree, but the others fought bravely, and after a terrible contest inflicted fatal wounds on the snake's head and back. It is little wonder, then, that the poor degraded natives of Australia give birds a prominent place amongst their beneficent deities.

The cockatoo is one of the large family of parrots which abound in the colonies.

The white cockatoo is a bonnie bird—snow-white plumage and beautiful yellow crest, of which it is as proud as an Indian warrior of his plumes and feathers. Its place is near the house, where it talks to the visitors and enjoys a pat from the passer-by. Its knowledge of the language is quite limited—lack of education probably. Sometimes sullen, it bites severely when teased, but generally passes for a good sort of a body amongst the youngsters.

Parrots are like Joseph's coat, of many colors. One species, the galah, is largely shipped to the cities for sale. By careful training the parrot repeats a few common phrases, a few set expressions, such as greet us in every-day life, in civil, social and religious society.

The beauty of the smaller species of parrots—parroquets, loriquets and humming-birds—is much admired, but for gay plumage the wonderful decoration of the lyre bird is hardly paralleled. But we come to the magpie, the pet of colonial homes. "Maggie" is taught songs, but mischief comes naturally. They revel in such matins as "Pop goes the weasel," "There's no luck about the house," "Darling I am coming," or ask "Who are you?" "Where are you going?" &c.

What a pity that a bird so gifted should have bad qualities also. Mag. is often guilty of petty thefts, and screeches harshly, and makes much ado about nothing.

The general belief that Australian birds, though fine in plumage, are lacking in melody, is not strictly correct, as some of the small native birds have sweet notes and music unknown in other lands. There are also many imported birds which sing as sweetly here as in their old homes over the sea.

Australia, beyond the lines of civilization, is cruel and remorseless, and on her arid wastes, or in her unexplored wild woods have perished not a few of her bravest sons. Even Canadian children know the fate of Burke and Willis, Stuart and Leichardt, and others lost in the desert, or rather who perished of fever and thirst on the burning sands of the interior. To such bewildered wanderers, or to the weary

traveller under the fiery rays of the summer sun, how welcome the sight of water or the news that a spring or river is near. There is a little bird, from its note called the bell-bird, whose music is hope and joy to the weary explorer, for it sings only where water is at hand. Dear little bell bird, many a despairing soul has been roused to hope and vigor by hearing thy voice.

Before me lies a small volume of "Leaves from Australian Forests," by Henry Kendall, the late lamented poet, of Sydney. Of the bell-bird he says:—

"By channels of coolness the echoes are calling,
And down the dim gorges I hear the creek falling;
It lives in the mountain, where moss and the sedges
Touch with their beauty the banks and the ledges.
Through breaks of the cedar and sycamore bowers
Struggles the light that is love to the flowers:
And softer than slumber, and sweeter than singing,
The notes of the bell-birds are running and ringing.

"The silver-voiced bell-birds, the darlings of day-time!
They sing in September their songs of the May-time:
When shadows wax strong, and the thunder-bolts hurtle,
They hide with their fears in the leaves of the myrtle.
When rain and the sunbeams shine mingled together
They start up like fairies that follow fair weather,
And straightway the hues of their feathers unfold
Are the green and the purple, the blue and the golden.

"Welcome as waters unquipped by the summers
Are the voices of bell-birds to thirsty far-comers.
When fiery December sets foot in the forest,
And the need of the wayfarer presses the sorest,
Pens in the hedges forever and ever,
The bell-birds direct him to spring and to river
With ring and with ripple, like runnels whose torrents
Are toned by the pebbles and leaves in the currents."

That every dear niece and nephew who reads the ADVOCATE may, in the darkest hour of trouble and grief, hear a heaven-sent bell-bird whispering hope and deliverance, is the earnest wish of your Australian friend,
J. M. LACHLIN, Brisbane, Qd.

Puzzles.

1—NOVEMBER, 1890.

							1
2	3	4	5	6	7	8	
9	10	11	12	13	14	15	
16	17	18	19	20	21	22	
23	24	25	26	27	28	29	
30							

- ACROSS.—1. A consonant.
2. A wall, breast high.
3. A family of mites, ticks, &c.
4. One who murmurs.
5. Having credit.
6. A diphthong.
DOWN.—1. The three fates (LAT).
2. The maple tree (LAT).
3. A plant.
4. Dry.
5. An evergreen tree.
6. A garden (scriptural).
7. To invent.

FAIRBROTHER.

2—CHARADE.
Well and Total done, Cousin Ed,
Was your song of welcome;
And your First puts you away ahead
In our puzzling kingdom.

With you we all Last coincide
That perseverance will be crowned at last,
And our highest aims surpassed
If we but faithfully puzzle away, puzzle away.
HENRY REEVE.

3—ANAGRAM.

In politics I meddle not because I am afraid,
But sometime I may change my mind and join the
COMICAL TRADE.
ADA ARMAND.

4—A HAPPY CROWD.

A motley crowd you will admit I've gathered here
together,
But they are e'er a merry group, in fair or stormy
weather.
"In what manner, our relations;" "an animal"
very sly;
"The foreman" of the whole affair; "an official"
you'll not deny;
"An honest associate;" "a garden of fruit;" our
"fuel and its price;"
"Crafty and what you often eat;" and "some one
very nice."
ADA ARMAND.

5—CHARADE.

It's all very fine to sing your song,
Puzzle away, puzzle away.
Who have nothing to do these evenings long,
But puzzle away, away.
But this poor child has dishes to wash,
And things to prepare for the morning "hash,"
And knitting to do while the needles flash.
Puzzle, oh! puzzle away.
One stanza more—not another bit
Will I puzzle away, away.
For "brevity is the soul of wit,"
Puzzle away, away.
I fear you will LAST this puzzle commend,
But I TOTAL afford more time to spend,
Perhaps next month I FIRST make amends,
Then puzzle, oh! puzzle away.
ADA ARMAND.

6—CHARADE.

Come one and all,
Both great and small,
Unto my text give ear:
My name is Ed,
Living or dead,
Perchance you think I'm queer.
The text I'll take
Is not sponge cake
That's made to win a prize:
Or salt yeast bread,
With butter spread,
But home-made pumpkin pies.
Sometimes I sigh,
Esteem that I
Am not permitted to
Eat pumpkin pie
Off! on the sly;
They catch me when I do.
They never lick
Me, with a stick,
Or LAST me once to cry.
FIRST off to bed,
They say instead,
For stealing pumpkin pie.
FAIRBROTHER.

7—ILLUSTRATED REBUS.



8—NUMERICAL ENIGMA.

If you would an "equal" see,
Behold it now in 1, 2, 3.
Or "a nobleman" transfix.
Spanish, too; take 4, 5, 6.
Go to bed you sleepy bore,
I just seen you 6, 5, 4.
If you don't, I'll 3, 2, 1
On your bald pate, just for fun.
May I ask your TOTAL now,
Before we get into a row.
FAIRBROTHER.

9—CHARADE.

Love figuratively told,
True love is 1 derfully prime,
Oft un 2 lovers sworn;
The earth 3 sembles Paradise,
And sometimes its 4 lorn.

Some lovers can't sur 5 alone,
And love 6 symptoms show;
Some think its 7 with their own,
And some cre 8 their woe.

Some, when their TOTAL look be 9,
Feel such a 10 der thrill;
Some, when they don't for 0 will pine,
And seek a grave 3 fill.

A weighty maid fell down at length,
Her beau rushed 2 assist her:
She was 2 80 4 his strength,
So 10 derly he kissed her.

She candy 8 4 her beau,
And had a toothache 4 it;
When her 2 30 cried, although
With 40 tude she bore it.

"4 0 I've waited long," cried Will,
"Now 1/2 me, my LAST I give to thee."
"You'll have 2 8 4 me until
You've 1 a 4 tune," said she.
HENRY REEVE.

Answers to October Puzzles.

- 1—CALP 2—Rue-fully.
PALATAL 3—Astronomers.
ALAMODE 4—Proud looks make foul
CANELLA work in fair faces.
AREOLE 5—Crow. 6—Order.
7—Kindness. 8—Disproportionableness. 9—Welcome.

Names of those who have Sent Correct Answers to Oct. Puzzles.

Elihor Moore, John F. Orchard, Elsie Irwin,
Beatrice Moore, S. H. Ferguson, Geo. Armstrong,
Harriet Gibson, Drustilla A. Fairbrother, Ed. A.
Fairbrother, A. H. Boss, Morley T. Boss, J. Irvine
Devitt, Dorothy Fox, Henry Reeve, Mary Ellison,
Frank Colville, J. K. Wright.

P. T. Barnum's Advice to Young Men.

To young men who would "get on" in this world and reach the age of fourscore years, with happiness and prosperity, there is little more to be said; but I will refer them to a study of my own rules of action:—

Briefly, I would say: Be honest; do not spend as much as you make; don't smoke or drink; depend upon your own personal exertions, and do not leave important affairs to a third person; don't have too many irons in the fire; do not get above your own business; and above all be systematic. Advertise your business on all occasions, but attend to it, too, and see that your claims and promises made to the public are fulfilled. It does not pay to have a single customer go away dissatisfied, nor does it pay to take money for services for which you do not render an equivalent.

The best working years of a man's life are usually between 20 and 60; but much good work is possible long after the threescore-year mark has been passed. I can say, for myself, that every moment of my time is put to some definite purpose, and though I have numberless calls and demands, I enjoy a reasonable recreation each day. Both work and rest, and joy also, should make up the sum of a busy life.

NEW ADVERTISEMENTS.

SPECIAL NOTICE.

THE FARMER'S ADVOCATE refuses hundreds of dollars offered for advertisements suspected of being of a swindling character. Nevertheless, we cannot undertake to relieve our readers from the need of exercising common prudence on their own behalf. They must judge for themselves whether the goods advertised can, in the nature of things, be furnished for the price asked. They will find it a good rule to be careful about extraordinary bargains, and they can always find safety in doubtful cases by paying for goods only upon their delivery. Advertisements unaccompanied by specific instructions inserted until ordered out, and charged at regular rates.

The FARMER'S ADVOCATE is the unrivalled advertising medium to reach the farmers of Canada, exceeding in circulation the combined issues of all the other agricultural publications in the Dominion. Send for an advertising circular and an estimate.

All Advertisements, to insure insertion, must be in this office by the twentieth of each month.

Auction Sale

— OF —

REGISTERED

CLYDESDALE HORSES,

Berkshire Pigs and Southdown Sheep,

On Lot 3, Con. 3, Markham Township, County York, situated within four miles of Unionville Station, on Midland Division G. T. R., on

WEDNESDAY, Nov. 19, 1890.

Registered Clydesdale Horses—1 registered mare, bred to Lord Fitzerskine; 1 registered filly, bred to Macneillage; 1 registered stallion, two years old, by Campsie Lad; 1 registered stallion, one year old, by Lord Fitzerskine; 1 registered stallion, one year old by Self Esteem; 1 registered spring stallion, by Lord Fitzerskine.

Registered Berkshire Swine—3 brood sows; 6 sows, four months old, eligible for registration. Southdown Sheep—2 imported ewes, 7 ewes bred from imported stock, 6 ewe lambs bred from imported stock, 3 rams bred from imported stock.

SALEM ECKARDT, JAMES CHERRY,
299 a-OM Auctioneer. Proprietor.

SKREI COD LIVER OIL
PURE, BRILLIANT, AND ALMOST TASTELESS

A SPECIFIC IN BRONCHIAL AFFECTIONS, COUGHS, COLDS, CONSUMPTION, AND A VALUABLE NUTRIENT IN ALL WASTING DISEASES.
KENNETH CAMPBELL & CO., MONTREAL

IMPORTANT AUCTION SALE OF Imported Pure-bred Durham Cattle.

Owing to my advanced years, and wishing to retire from stock-raising and farming generally, I have decided to sell by Public Auction on my Stock Farm, "Elm Grove," Otonabee, four miles from Peterborough, on Thursday, November 29th, my entire Herd of imported pure-bred Shorthorns and their offspring, including animals bred by such breeders as S. Campbell, J. Bruce, and A. Cruikshank, Aberdeen, Scotland; such strains as Imp. Minnies, Imp. Wimples, Imp. Columbinés, Imp. Princesses, Imp. Pansies, and Imp. Maybirds and their daughters. Also imported and home-bred bulls and heifers. A grand lot from Silver Medal Bull, owned by me; and also some from Imp. Goldfinder, bred by J. Bruce. The bull I have been lately using is a well-bred Cruikshank. Also one five-year-old Clyde mare, and a fall colt rising two years old, from the first prize Provincial Exhibition show mare that took three first prizes at Toronto Industrial Exhibition; and other first-class Clyde mares and young horses.

TERMS OF SALE—Twelve months credit on approved notes. A rebate of one half the freight will be allowed on sales of live stock to the extent of 250 miles. Farmers and Stock Breeders of the Dominion should not miss the sale, as no better bred or finer lot of imported cattle and offspring were ever offered for sale in this Province. At the same time and place I will offer my 600 acres of first-class land and out-buildings, situated from one to four miles of the town of Peterborough. The lands will be so divided as to meet the wishes of intending purchasers. Catalogues and other information supplied on application to

JOSEPH REDMOND, Peterborough.
Carriages will meet parties wishing to attend sale at the station on day of sale. 299-a-OM

Coughing

IS Nature's effort to expel foreign substances from the bronchial passages. Frequently, this causes inflammation and the need of an anodyne. No other expectorant or anodyne is equal to **Ayer's Cherry Pectoral**. It assists Nature in ejecting the mucus, allays irritation, induces repose, and is the most popular of all cough cures.

"Of the many preparations before the public for the cure of colds, coughs, bronchitis, and kindred diseases, there is none, within the range of my experience, so reliable as Ayer's Cherry Pectoral. For years I was subject to colds, followed by terrible coughs. About four years ago, when so afflicted, I was advised to try Ayer's Cherry Pectoral and to lay all other remedies aside. I did so, and within a week was well of my cold and cough. Since then I have always kept this preparation in the house, and feel comparatively secure."
—Mrs. L. L. Brown, Deunark, Miss.

"A few years ago I took a severe cold which affected my lungs. I had a terrible cough, and passed night after night without sleep. The doctors gave me up. I tried Ayer's Cherry Pectoral, which relieved my lungs, induced sleep, and afforded the rest necessary for the recovery of my strength. By the continual use of the Pectoral, a permanent cure was effected."
—Horace Fairbrother, Rockingham, Vt.

Ayer's Cherry Pectoral,

PREPARED BY
Dr. J. C. Ayer & Co., Lowell, Mass.
Sold by all Druggists. Price \$1; six bottles, \$5.

292 y-O



THE MORNING GLORY CREAMERY CHURN.

The cheapest, quickest and best in the market, having a hot and cold water tank conveniently arranged for tempering the cream, which enables the operator to produce the best quality of butter. County rights for sale. Testimonials free. Apply to **Jarvis Churn Company, Jarvis, Ont.** 299-c-O

COUNTY OF PEEL Poultry and Pet Stock Association.

SECOND ANNUAL SHOW AT BRAMPTON, ON DECEMBER 16th, 17th AND 18th, 1890.
JUDGES — J. Y. Bicknell and Sharp Butterfield.
Members' tickets, prize lists and all particulars.
HENRY ROBERTS, Sec.-Treas.
299 a-O BRAMPTON.

Ladies, do you Love Vines and Flowers?

KIND FRIENDS:—I have a very large stock of beautiful CINNAMON VINES—all nicely rooted and growing [ready to transplant], and will mail you five vines packed in wet moss and securely boxed, for only 30 cents, cash or stamps. When first introduced from Japan these vines sold for \$10.00 each; they make charming basket or window plants. Get a friend to send with you and I will add four varieties of choice Flower Seeds to EACH order. Don't delay. Address,

A. T. COOK, Seedsman,
299-a-O-M HYDE PARK, DUTCHESS CO., N. Y.

HELLO! How to make a TELEPHONE, 10c. cheap half-mile 25c. sheet of Foreign Stamps, 10c.; Rapid Mental Arithmetic Book, 10c.; your name on Pen and Pencil Rubber Stamp, and bottle of Indelible Ink, 25c.; all post paid, 50c. First order from each county FREE. Sender's choice of two extra (any name) P. & P. Stamps, with Ink, etc., or 50c. cash. We also offer **TWO \$2 PREMIUMS** to the sender of: 1st, longest sentence, spelling same backwards; 2nd, shortest sentence containing every letter in alphabet. Try your skill. Don't hesitate. You get 50c. worth, win or lose. First best answer wins in case of a tie. For winners names and answers, also county winners, see December "Advocate." Address, **LONDON STAMP CO., Box 184, London, Ont., Can.** 299-a-OM

Herdsmen Wanted

in Minnesota to take charge of a herd of Shorthorns. Must understand his business and be willing to work. Good wages and steady employment to a suitable man. Single man preferred. Address,

FRANCIS DAVIS & SON,

Goodhue, Goodhue Co., Minnesota.
299-a-OM



FAT STOCK SHOW,

Under the auspices of the Agriculture and Arts Association and Fat Stock Club of Guelph, on **Guelph, on December 10th & 11th.**
OVER \$500 IN PREMIUMS.

Cattle to be in building by 12 o'clock on the 10th.
J. C. SNELL, Pres., Edmonton.
WALTER WEST, Vice-Pres., Guelph.
299-a-OM **HENRY WADE, Secretary, Toronto.**

DRS. ANDERSON & BATES, Surgeons of the Eye, Ear, Throat and Nose, 34 North James St., Hamilton, and 17 Grange Road, Toronto. Sole agents for Prof. North's Earphone for the incurable deaf. 284-y

JOHN SMITH,
Live Stock Auctioneer, Brampton, Ont. Sales conducted in all parts of Canada and the United States. Pedigree stock a specialty. Write for terms. References: J. C. Snell, Brampton, Ont.; M. H. Cochrane, Compton, P. Quebec; T. C. Patterson, Eastwood, Ont. 297-y-O



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FOR SALE,

At a very low figure, a grand young Cleveland Bay Stallion - W. C. BROWN, Cleveland Bay Stock Farm, Meadowvale, Ont. 297-g-OM

Pure-Bred Registered Clydesdales & Jerseys Bred from pure imported stock. Young stock for sale at farmers' prices. 293-y-OM

JOHN PULFER, Springvalley Farm, Brampton, Ont.

A. B. SCOTT & SON, VANNECK, - - - ONTARIO,

IMPORTERS AND BREEDERS OF

REGISTERED CLYDESDALES

The get of McGregor, Belted Knight, Good Hope, etc. Colts and fillies, winners at all the large shows, for sale at moderate prices. 293-y-OM



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A. K. TEGART, Importer and Breeder, offers for sale choice stallions and mares of the above breeds. Address - Tottenham, Ont. 298-y-OM

IMPORTED -- CLYDESDALES

I have just returned from Scotland with my last importation, all good, hard-shanked, heavy-boned colts, including prize-winners at several leading shows. I can sell a first-class horse as low as any importer in America. Do not buy till you see my stock. Also a few choice fillies, imported and Canadian bred. 297-g-OM NEIL SMITH, Brampton, Ont.

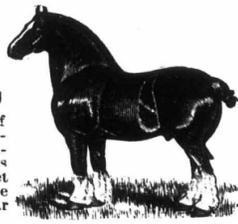


ROSEDALE FARM HIGHFIELD P. O., MALTON, - ONTARIO.

Jas. Cardhouse & Son Importers & Breeders of Shire and Clyde Horses and Shorthorn Cattle. First-class stock at rock-bottom prices. Write or call. 298-y-OM

FOR SALE.

CLYDESDALE Stallions,



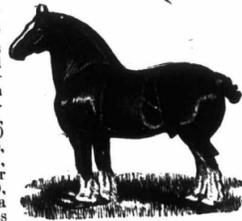
The get of some of the most celebrated prize winners - such as McCammon, Garnet Cross, Bay Prince and other popular sires. 297-c-OM HUGH THOMSON, St Marys.

ROBT. NESS, Woodside Farm

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The eleventh yearly importation consists of some of the best specimens of the several breeds. Clydesdales from such noted sires as McGregor (1487), Crown Royal (4315), Top Gallant (1855), Macfarlane (2988), Macbeth (3917), Sir Hildebrand (4024), Golden Guinea (3990), Old Times (579), Good Hope (1679), Knight of Snowden (2212). The stock is selected by myself with great care. Intending purchasers are invited to inspect. The farm is situated 40 miles south-west of Montreal, on the G. T. R., and 100 miles east of Ottawa, by C. A. R. Howick Station on the farm. ROBERT NESS, HOWICK P.O., Que. Visitors always welcome. 291-y-OM



Imported and Canadian bred CLYDESDALES.

We challenge competition for quality and smoothness in our horses. Imported Stallions and Mares of the most desirable strains. We have been most successful in the show rings with mares, colts and fillies of our breeding. Stock for sale at reasonable prices. PROUSE & WILLIAMSON, Ingersoll, Ont. 297-y-OM

D. & O. SORBY, GUELPH, ONT.,

Breeders and Importers of

FASHIONABLY BRED CLYDESDALES



We always have on hand a large number of imported and home-bred Clydesdales (male and female) of good breeding and quality, which we will sell at honest prices. Our specialties are good and well bred horses and square dealing. Come and see us or write for particulars. 277-y

Prize-Winning Clydesdales

FOR SALE.

We have on hand a large number of imported and home-bred Stallions and Mares which we offer at reasonable prices and easy terms. Visitors always welcome. Catalogue on application. DUNDAS & GRANDY, SPRINGVILLE P. O., Cavanville Station, C. P. R. 299 a-OM

DUNDAS & GRANDY,

SPRINGVILLE P. O., Cavanville Station, C. P. R. 299 a-OM

300 PERCHERONS, 100 FRENCH COACHERS

Comprising my importations for 1889, are now on exhibition at

ELLWOOD'S RANCH, DeKalb, Illinois.

This collection embraces all the FIRST and SECOND PREMIUM STALLIONS (with one exception); the First Premium for best Collection of Stallions; a majority of First and Second Premium Mares; shown at the greatest of all Percheron Shows, held at La Ferte Bernard, from May 29, to June 2, 1889. The quality of this stock is guaranteed superior to any importation that ever crossed the water. In addition to the superior Draft animals which have ever characterized my selections, particular attention has been given to the selection of Coach Stallions, which is the largest ever brought from France by any importer. Conspicuous among this lot is the selection made from the famous stable of Edward de-la-Ville, being the only party that was willing to pay the price that would bring the quality of horses handled by Mr. de-la-Ville to this country, he having been the recipient of more show ring honors than any other owner of Coach horses in Normandy. It will be to the interest of intending purchasers to make a careful examination of quality and prices before buying. I desire to impress upon my customers that, as heretofore, I was the first American buyer in France this season, and my selections are made from the leading Stud, and having the first choice of all of them, I spared no expense to secure the best. All stock fully guaranteed. Favorable prices and terms. For particulars, address, W. L. ELLWOOD, Proprietor, DeKalb, Illinois. DeKalb is situated on C. & N. W. Ry. 58 miles west of Chicago. 288-y

W. L. ELLWOOD, Proprietor, DeKalb, Illinois. DeKalb is situated on C. & N. W. Ry. 58 miles west of Chicago. 288-y

FOR SALE CHEAP. A Jet Black, High Grade

PERCHERON STALLION

Rising three years old. Also Two Young Holstein Bulls. Apply to, JOHN PRINGLE, - Ayr, Ont. 299-c-OM

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80 St. James St., Montreal, Canada.

40 STALLIONS NOW ON HAND - 40 THOROUGHLY ACCLIMATED.

Stable, Outremont near Montreal, Medavy breeding and sale farm, Perche, France. S P L E N D I D PERCHERONS (stallions and mares), French Coach Horses (Normans), all with first-class pedigrees. Our connections in France enable us to import cheaper than anyone else. For terms of sale and for our catalogue apply to the office. HON. L. BEAUBIEN, President, Montreal, Canada. BARON E. DE MANDAT GRANCEY, Vice-President, 5 Av. Friedland, Paris, France. R. AUZIAS-TURENNE, Manager. 289-y



SHIRE HORSES.

We have a choice selection of imported Stallions and Mares always on hand. Having a partner resident in England our expenses are very light, and we are able to sell at figures 25 per cent. lower than any other importers.

Also Pure-bred Shropshires, Imported and Canadian-bred; all registered. - ORMSBY & CHAPMAN, The Grange Farm, Springfield-on-the-Credit, Ont. Stations - Streetsville, on the C. P. R., and Pt. Credit, on G. W. R. 285-y

Improved Yorkshire Pigs.

We were the first importers of pedigreed Yorkshires in Canada. All our stock is registered, and our motto is, "A good pig with a straight pedigree at a fair price." Our terms are, "Satisfaction guaranteed or money refunded."

D. ALEXANDER, Brigden, Lambton Co., Ontario.



My Shorthorn herd now consists chiefly of Imp. Lady Violet Lustre and seven of her daughters, and two daughters of Imp. Beauty 15th, almost all sired by one bull, and of one character, thick, and fine quality. Can furnish a splendid young herd at reasonable prices. Trains twice daily. Station one mile. 284-y

SHORTHORN BULLS

HOME-BRED AND IMPORTED

Shropshire Sheep.

The imported 2-year-old Aberdeen Hero

And a choice lot of young bulls of our own breeding. Some No. 1 imported Ewes & Lambs FOR SALE.

SHORE BEOL., WHITE OAK, ONT. 296

WHITE OAK, ONT. 296

ARTHUR JOHNSTON, Greenwood, Ont.

Greenwood, Ont.



I have for sale by far the best lot of young animals of both sex that I have ever offered. My yearlings are especially good; they are all by imported sires, and mostly out of imported dams. I have a number of excellent imported and home-bred Clydesdales of both sex for sale. New Catalogues for 1890, will be ready by January, 20, 1890. Send for one. My motto is, "No business no harm."

Greenwood P. O. and Telegraph Office, Claremont Station, C. P. R., or Pickering Station on the G. T. R. Parties met at either station on shortest notice. Come and see them. 290-y

FOR SALE 12 head of Shorthorns, bulls and heifers; 20 Leicester and South-down Ham Lambs, and about 30 Berkshire Pigs. All bred with care. Send for prices
294-y-OM **EDWARD JEFFS, Bond Head, Ont.**

Shorthorns for Sale.

Bulls and heifers, sired by Laird of Kinellar, of the Campbell-Buchan Lassie family, from which we have some fine show animals, several prize takers at the Provincial Show, 1889.

JAMES CRERAR,
294-y-OM **SHAKESPEARE, ONT.**

FOR SALE,

A few Shorthorn and high grade heifers and cows, bred to Silver King 4th, a grand son of (imp.) 4th Duke of Clarence, so long in use at Bow Park. Good colors and pedigrees. Also a few choice registered Berkshires, male and female, six months old. Leicester and South-down sheep. Prices to suit the times. Correspondence promptly answered.

R. RIVERS & SON, Springhill Farm,
293-y-OM **Walkerton, Ont.**

SHORTHORNS

-AND-

COTSWOLDS

FOR SALE.

My Shorthorns are well bred, good colors, and have been fine milkers for generations. I have over 100 females and a large number of bulls, from which buyers may select. Prices to suit the times. Satisfaction guaranteed. Correspondence promptly answered. Visitors welcome.

JAMES GRAHAM,
290-v **PORT PERRY, ONT.**

EASTWOOD HERD AND FLOCK

-SOME EXCELLENT-

Shorthorn Heifers,
BOW PARK STOCK.

IMPORTED SHROPSHIRE SHEEP

-REGISTERED-

RAMS AND BULLS, CHEAP.

Address **T. C. PATTESON, P.M., Toronto.**

N. B.—Eastwood is next station east of Woodstock, on G. W. R. 297-c-OM

ENGLISH PEDIGREE LIVE STOCK.

SHIRES, SHORTHORNS, HEREFORDS,
JERSEYS, AYRSHIRES, KERRIES,
SHROPSHIRE, OXFORDS, HAMPSHIRE,
DORSETS, LEICESTERS, LINCOLNS,
BERKSHIRES AND YORKSHIRES.

Choice registered stock of the best strains and highest merit for sale at moderate prices. Foreign buyers assisted in purchase and shipment at one per cent. Stock purchased and shipped under experienced herdsman for two-and-a-half percent. Special low freights. Highest references from foreign breeders. All importers should apply to—

E. GOODWIN PRICECE,
296-j-OM **SHREWSBURY, ENG.**
Exporter and Live Stock Agent.

JOHN MILLER & SONS
Brougham, Ont.

Extensive breeders and importers of **Clydesdales, Shorthorns and Shropshires.** Business established in 1848. We always have on hand and for sale a large number of imported, and home-bred animals. A visit, or correspondence solicited
282-y



HOLSTEIN-FRIESIANS

Special inducements for the next thirty days,

Before we put our stock into winter quarters. Remember we have a choice lot to select from. We are somewhat crowded for room, and rather than enlarge our stables we will drop in price. This is a rare chance to secure such noted strains as the Aaggie, Netherland, Johanna, Billy Bulyn, Artis, and other noted strains, at reduced prices. Remember, only thirty days. After that we will stick to our old prices. Don't wait for correspondence. Come at once and save time and money. Notify us when coming.

SEND FOR CATALOGUE.

SHIPPING STATION: PETERSBURG, G. T. R.

A. C. HALLMAN & CO.,

New Dundee, Waterloo County, Ontario.

299-a

HAVING more stock than we care to carry over winter, we are prepared to make exceptional inducements to those wanting Percheron Stallions or Mares, or Jersey Cattle. We have a fine lot of these animals whose breeding would seem to be guaranteed by the best of the breed, and are of the best quality. In breeding we have followed strictly the best lines, and are confident that an inspection of our stud will convince you that the high standard we have used, and can now show an accumulation of first class animals unexcelled by any in proportion of GOOD ones to total number. We have stallions for sale ranging from one to seven years old, but would call special attention to those from five to seven years. A portion of them have been bred and raised in the Island of Jersey, and their breeding is as good as the best, and a guarantee of the best results from their use. This is measurably true of the mare. We have a half dozen bulls and a number of cows of fashionable strain that we wish to dispose of. We will make prices on these animals that will secure speedy sale. The good ones at reasonable figures, much lower than we think the same quality can be bought elsewhere, and those of lesser merit, but whose breeding is all right, at prices very low. We also have a few good work horses, and so low that any one having a few sales to breed and wishing to improve their stock can afford to purchase. Terms will be ready to suit. The prices ought to insure cash sales but we will extend any reasonable credit to responsible parties. Address LOG CABIN STOCK FARM, 1664 Woodward Avenue, Detroit, Mich.; City Office, 4 Merrill Block,

SIMMONS & QUIRIE

IVAN, ONT.

Shorthorns, Berkshires.

Representatives of the Scotch families are MINA'S & STRATHALLEN'S. The sires in use are the Sweepstakes Silver Medal Bull

SIR CHRISTOPHER and RED KNIGHT,
winner of 1st prize at Toronto and London in 1888; also, prize-winning Berkshires. 297-y-OM

Imported Shorthorn Bull

WARRIOR

FOR SALE

Very reasonable, as we have no further use for him.

R. & S. NICHOLSON,
Sylvan, P. O. 299-a-OM

BOW PARK HERD

PURE-BRED SHORTHORNS.

We have on hand Eighteen Young Bulls, fit for service, that we offer at reasonable prices and easy terms. They are good individuals, and well bred.

ADDRESS—
JOHN HOPE, Manager,
290-y **Bow Park, Brantford, Ont.**

W. J. RUDD,
Eden Mills P. O., Ont.,

-BREEDER OF-
Choice Devon Cattle.

During the past five years, at the leading Exhibitions in Canada, my herd has stood first whenever shown, winning five Diplomas, one Gold, thirteen Silver and one Bronze Medal.

Stock for Sale, including
Berkshire Pigs, Cotswold Sheep, & Plymouth Rock Fowls
298-y-OM



HOLSTEINS, CLYDESDALES AND CARRIAGE HORSES.
I have one of the oldest herds of Holsteins in Canada, founded on the best blood in America; also registered Clydesdales and Carriage horses.
297-y-OM **W.M. SHUNK, Sherwood, Ont.**

PURE-BRED REGISTERED HOLSTEIN-FRIESIANS
All imported or bred from imported stock. "Sir Mac," of the famous Aaggie tribe, heads the herd.
HUGH MCCAUGHERTY & SON,
297-y-OM Walnut Hill Farm, STREETSVILLE, ONT.

CHOICE HOLSTEINS FOR SALE.

I have a few very nice pure-bred registered Holsteins, bulls and heifers, for sale at very reasonable figures. Write or come and see me. Also one or two high grades.—**JNO. A. LINE, Sherwood, Ont.,** Richmond Hill Station. 291-y-OM

PURE-BRED REGISTERED HOLSTEIN CATTLE.

The sweepstakes herd at the Toronto Industrial Fair, where my stock bull Woodbine Prince (6712) also took the first prize and sweepstakes silver medal. I keep no cattle that are not of the highest standard.

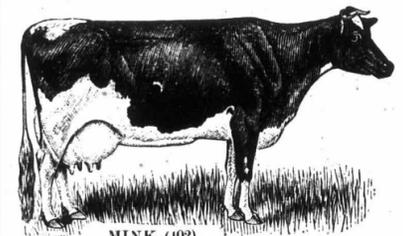
A. KENNEDY,
298-y-OM **Woodbine Farm, Ayr, Ont.**

H. & W. F. BOLLERT,
Cassel, Ont.,

HOLSTEIN-FRIESIANS,

Comprising Aaggie Barrington, Boupie Queen, Jennie B. Trijntj, Glenburine and Geldertje families. Stock for sale at reasonable rates. Railroad station, Tavistock, on G. T. R. 294-y-OM

Credit Valley Stock Farm,
SMITH BROS.,
CHURCHVILLE, PEEL COUNTY, ONT.



MINK (102).
The great butter and milk herd of pure-bred, registered **HOLSTEIN-FRIESIAN CATTLE.** Most first prizes at Provincial and Industrial Exhibitions, 1888, 1889. Best strains; 75 head in herd; prices low for quality of stock. Send for catalogue. 291-y-OM

BROCKHOLME STOCK FARM.

Holstein-Friesian Cattle.

ADVANCED REGISTRY STOCK.
Netherland Romulus, a grandson of Netherland Prince and Albino the second, heads the herd. Young stock for sale.

R. S. STEVENSON, Proprietor,
295-y-OM ANCASTER P. O., ONT.

Riverside Farm.

PURE-BRED A. J. C. G. JERSEYS
—AND—
ESSEX PIGS.

Prince of Oaklawns (imp.) 12851, heads the herd. Young stock for sale. Also a few choice un-registered and high grade cows.
Farm one mile from Streetsville Junction. J. H. SCARLETT, Streetsville, Ont. 297-y-OM

Clair House Vineyards, Cooksville, Ont.

B. W. MURRAY,

BREEDER OF
THOROUGHBRED JERSEY CATTLE

—AND MANUFACTURER OF—
Pure Native Wine.
Write for prices. 298-y-OM

CHOICE
Jerseys for Sale.

All ages and sex, of best milk and butter strains. St. Lambert blood prevailing. This herd has won sixteen medals (gold, silver and bronze), one hundred and forty prizes in money, several diplomas, many discretionary prizes, solid silver cup at Kellogg's New York sale for best prices on five head, silver tea set donated by FARMER'S ADVOCATE at London, 1889, for three best dairy cows of any breed.

MRS. E. M. JONES,
Brockville, Ontario, Canada.
291-y-OM

PARK HILL HERD OF AYRSHIRES.

This herd took all the first prizes in Quebec in 1887 and 1888, and in Ontario in 1889, in competition with all the leading herds. Young stock for sale, all of which is from the celebrated bull ROB ROY (3971), which is at the head of the herd.

JAMES DRUMMOND,
291-y-OM PETITE COTE, MONTREAL, P. Q.

PRIZE-WINNING
-AYRSHIRES-
FOR SALE.

I have at present one of the largest and best herds in Ontario, which has been very successful in the prize ring. They are deep milkers and of a large size.

Bulls, Cows and Heifers for Sale,
always on hand.

JAS. McCORMICK,
299-y-OM ROCKTON, ONT.



Imported and Canadian-Bred
AYRSHIRES AND GLYDESDALES
FOR SALE.

I have on hand a large herd of finely-bred Ayrshires of splendid quality.

My Glydesdales are also first-class. Stock for sale. Prices and terms liberal.

THOS. BROWN,
298-y-OM Petite Cote, P. Q., near Montreal.

Ayrshire Cattle & Poland China Hogs,
MERINO SHEEP AND FANCY FOWLS.

We have the largest herd of Poland Chinas in Ontario. At the last Industrial Fair we carried off 17 prizes out of 26, including both prizes for pens. We breed from none but the best, and our aim is to supply first-class stock at living prices. We mean business. Write, or come and see us.

W. M. & J. C. SMITH,
298-y O M. Fairfield P. O., Ont.

Prize Winning Ayrshires for Sale.



GURTA 4th
(1181)
Mine is one of the largest and most successful show herds in Canada. They are finely bred and of great individual merit. Bulls, heifers and cows always on hand for sale; also a few good Leicester sheep. Correspondence solicited. Visitors well come. Address

THOS. GUY,
290-y Sydenham Farm, Oshawa, Ont.

HILLHURST HERDS

ABERDEEN, ANGUS, HEREFORD,

—AND—
A. J. C. C. JERSEY CATTLE.

Choice Young Bulls and Heifers of the above breeds for sale at moderate prices at all times. A few fine, young Hereford Bulls, by Cassio, at low prices if taken at once.

M. H. COCHRANE,
298-y HILLHURST P. O., Compton Co., Q.

Green Grove Stock Farm

Jersey Cattle of the very best butter strains. Choice South-down Sheep. Berkshire Pigs and Fancy Poultry. Young Stock for sale.
J. W. BUSSELL & SON, LISGAR P. O., ONT.
Stations—Streetsville and Lisgar, on C. P. R. 297-f-OM

PURE-BRED SOUTHDOWN SHEEP.

My flock was founded in 1870, and has been bred with the greatest care since, none but rams of the choicest strains of imported blood having been used. "Halton Hero," winner of 8 1st prizes, now heads the flock. I have some grand ram lambs that I will sell at farmers' prices.

JOHN. W. ALTON,
297-f-OM Cedar Grove Farm, OAKVILLE, ONT.

SOUTHDOWNS.

To make room for my fresh importation, lately landed, I will sell the whole of my flock, consisting of

Sixty Southdown Ewes and Lambs

of my own breeding. These sheep are large and first-class quality. Prices very reasonable.

DAVID H. DALE,
Glendale, Ont.

SHROPSHIRE -- SHEEP.

This flock has won numerous prizes in England for the last twenty years, besides America, France and Africa. Has been established over seventy years. Several of the best flocks in England started from this flock thirty years back. Sheep always for sale.

F. BACH & SON,
299-y Onbury, Shropshire, ENGLAND.



PRIZE-WINNING
SHORTHORNS

—AND—
Shropshire Sheep

Now ready for shipment. Imported and Canadian bred Rams, Ram and Ewe Lambs, the get of the choicest imported sires. Good heads, good carcasses and good fleeces. None better in the Dominion.

Write for prices. Address—
288-tf **JOHN DRYDEN, Brooklin, Ont.**

SHROPSHIRE

MY SPECIALTY.

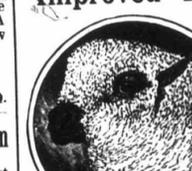


I beg to lay before intending purchasers that my recent importation have proved themselves to be very prolific, fully realizing my expectations, as I have had a very heavy crop of lambs, all of which are by the most noted sires of recent years. Purchasers should inspect this stock before buying elsewhere.

W. S. HAWKSHAW,
GLANWORTH, ONTARIO.
Seven miles south of London. 291-tf-OM

SHROPSHIRE

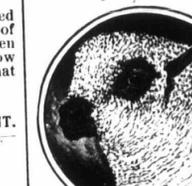
—AND—
Improved Yorkshire Pigs.



A choice lot, imported by ourselves. Sheep from the flocks of H. J. Sheldon, F. Bach, R. Mansell, J. Thonger. Yorkshire pigs from last years prize winners.

W. MEDCRAFT & SON,
SPARTA, P. O. and Telegraph Station 297-y-OM

IMPORTED
Shropshire Ewes and Rams



I have again secured the pick of the Bulwell Flock and offer the same at prices that cannot be duplicated. Amongst the importation are a very select lot of rams good enough to put at the head of any flock, and there are also ten very choice show shearing ewes.

297 Come and see them.
RICHARD GIBSON,
296-a-OM DELAWARE, ONT.

SHROPSHIRE SHEEP



DAVID BUTTAR,
Corston, Couper-Angus, N.B., Scotland
Has taken all the principal prizes in Scotland for several years. His sheep are of the purest blood, and carefully bred; every sheep eligible for registration. Pedigrees and prices on application. 294-y-OM

PURE-BRED LEICESTERS FOR SALE.

16 Pure-Bred Ram and Ewe Lambs, \$10 each;
1 3-year-old Ram, \$20.
Lambs bred from prize ram at Hamilton show last year.
298-b-OM **J. M. VANKEURAN, Byng, Ont.**

SHROPSHIRE



I have on hand a splendid lot of
IMPORTED EWES
from the best English flocks, and are now being bred to a first prize imported ram.

S. C. MILLSON,
GLANWORTH, ONT.
295-y-OM

DORSET HORN SHEEP



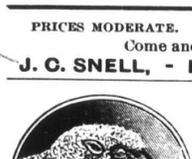
MY SPECIALTY.
These sheep drop their lambs at all seasons of the year; are good mothers and most prolific. Devon Dairy Cattle, good milkers and grazers. Flock and Herd established nearly one hundred years. Also Shire Horses and Berkshire Pigs. Sheep, Horses and Pigs exported to America have given every satisfaction.

THOMAS CHICK,
Stratton, Dorchester, Dorset, England.
295-y-OM



TAZEWELL & HECTOR,
Importers and breeders of Dorset Horned Sheep and Improved Yorkshire Pigs. JOHN TAZEWELL, Indian Village farm, Port Credit, Ont. THOS. HECTOR, The Cottage, Springfield-on-the-Credit, Ont. Stations - Pt. Credit, on G. W. R., Streetsville, on C. P. R.
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COTSWOLD RAMS



Thirty Ram Lambs, bred straight from Imported Stock. Ten Yearling Ewes, bred to Imported Rams. Fifteen Ewe Lambs.
PRICES MODERATE.
Come and see, or write.
J. C. SNELL, - EDMONTON, ONT.
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J. T. HARCOURT & SONS,
Maplewood Farm,
ST. ANNS P.O., ONT.
Breeders and Importers of
OXFORD DOWN SHEEP
279-c-OM

Improved Yorkshire Hogs and Shropshire Sheep, All bred from imported stock and registered.
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IMPROVED -- LARGE -- YORKSHIRES!

All bred from imported stock and registered. Imported boar "Holywell Wonder II." heads the herd.
JAMES FIELDS,
293-y-OM Castle Hill Farm, ANCASTER, ONT.

Improved Large Yorkshire Pigs

From the strains of Sanders Spencer and F. Walker Jones, England. Registered young pigs for sale. Apply to
WILLIAM GOODGER,
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THE - GLEN - STOCK - FARM

SCOTCH SHORTHORNS,
SHIRE HORSES,
Improved Large (White) Yorkshire Pigs.
Our pigs are specially selected from the prize-winning herds of Sanders Spencer, Ashforth, Clarnock and F. Walker-Jones, who won upwards of \$1000 in prizes in three years. Orders now booked for young registered pigs. Shorthorns and Shire Horses for sale.

GREEN BROS.,
157-159, Oxford Co., Ont.
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Improved Large (White) Yorkshire Pigs and Scotch Shorthorns.

Entire breeding stock of Yorkshires are imported; specially selected from stock of F. Walker-Jones and Sanders Spencer, Eng. Registered sows and boars supplied not akin. Shipped to order and guaranteed to be as described.
J. E. BRETHOUR, Burford, Brant Co., Ont.
293-f-OM



Write At Once!
If you want something extra good in the line of
LARGE IMPROVED YORKSHIRE PIGS.

E. M. JARVIS,
ONTARIO LODGE,
291-y-OM **CLARKSONS, or OAKVILLE.**

E. D. GEORGE

PUTNAM, - - ONT.
Importer and Breeder of
Ohio Improved Chester White Swine
I have a choice lot of YOUNG PIGS varying in age from five weeks to five months; bred by imported stock; pairs not akin; N. C. record. Prices right. Special rates by express.
293-y



H. GEORGE & SONS, CRAMPTON, ONT.,

Importers and Breeders of
Ohio Improved Chester White SWINE.
ALSO REGISTERED POLAND CHINA SWINE
Our herd of Chesters won the sweepstake herd prize at the Toronto fair this fall.
Young Stock for Sale.
Single rate by express.
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CHESTER WHITE PIGS

FROM PRIZE IMPORTED STOCK FOR SALE.
Special Rates by Express.
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DANIEL DeCOURCEY

BORNHOLM, ONT.,
Importer and Breeder of
OHIO IMPROVED CHESTER (WHITE) SWINE.



I have twenty choice sows to farrow this spring; have used six imported boars, so I am now ready to book orders for pairs or trios not akin. Pedigrees furnished; prices moderate; single rates by express. Mitchell Station and Telegraph Office.
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R. H. HARDING,

Mapleview Farm,
THORNDALE, ONT.,
Importer and Breeder of
Ohio Improved Chester White Swine. First-class stock, eligible for registry, always on hand. Prices Right. Correspondence Solicited.
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POLAND CHINAS

All pure-bred and registered. From the very best strains in America. First come first served. Write for prices. I mean business.
298-y-OM **W. S. HARRIS, Homer, Michigan, U.S.**

The Great AMERICAN HOG

Two-thirds more raised than all breeds in the United States. Rapid growth. Most Pork for food consumed by actual test. Pedigreed. 200 FOR SALE.
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G. M. ANDERSON, - - Tyneside, Ont.

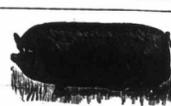
BERKSHIRE BOARS

Three Imported Boars, 6 to 13 months old. Young Boars & Sows, from Imported Stock.
PRICES REASONABLE. Write now.
J. C. SNELL, - EDMONTON, ONT.
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SUFFOLK AND BERKSHIRE PIGS
From imported stock, \$6 each, \$10 pair. Address
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IMPROVED BERKSHIRES.

Imported and home-bred; from the best strains
-YOUNG STOCK FOR SALE-
at Right Prices. Apply to
Richard Delbridge,
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BERKSHIRES

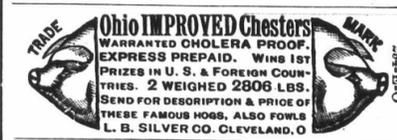
-AND-
COTSWOLDS.
J. G. SNELL & BRO.
EDMONTON P. O.,
Brampton and Edmonton Railroad Stations.



For forty years we have led all others in these lines, both in the show yards and breeding pens. We now have a choice lot of young pigs, varying in age from six weeks to six months; all are descended from fashionable bred, prize winning English stock. We also have a grand lot of Cotswolds, a large number of which are yearlings. Good stock always for sale. Visitors welcome. Write for particulars.
298-y-OM

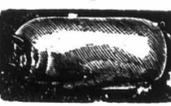
CHESHIRE - SWINE.

This favorite breed is pushing to the front every day. Canadian farmers, give them a trial; it will pay you. All our stock is registered. Circulars free.
FREEMAN & BUTTON, Cottons, Madison Co., N. Y.
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A. FRANK & SONS, The Grange P. O.,

Ont., Cheltenham Station, C. P. and G. T. Railways.
The Centennial - Sweepstakes herd of
SUFFOLK PIGS,
being the oldest, largest, and most successful prize winners in America. The boar Lam-First, at the head of this herd, is 17 months old and weighs 440 lbs.



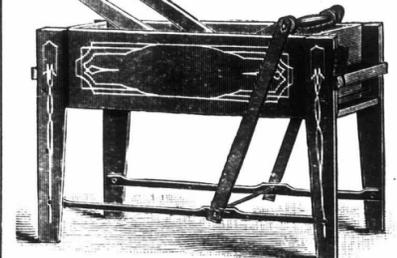
Thoroughbred Horses.

Shorthorn Cattle
of the Cruickshank blood. Young bulls for sale, got by Baron Camperdown = 1218 =, imp., (47389) and Baron of the Grange = 10654 =. Also

Southdown Sheep

from Webb's and Coleman's stock. Young stock of all the above for sale. All orders promptly attended to.
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The superiority of this Washer over all others can only be fully appreciated by those who have used the best. It being so much more easily operated and with less wear on the goods, together with the ease in applying the machine to the particularly soiled parts, with its many excellencies, render it the best, which fact is fully substantiated by the testimonies of those using it, which will be furnished on application. Township and County Rights and Machines for sale.
H. H. BELLAMY, Aumont.
299-c-0

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THRESHING MACHINES & HORSE POWERS

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Guaranteed to be "the best" Tread Horse-power Threshing Machines made, and takes the lead wherever introduced. Agents wanted.

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CONDITIONS:

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- 2nd. In all cases to secure these prizes the names sent in must be new subscribers. *Renewals will not count.*
- 3rd. Competitors may send in their lists weekly if they so desire. The party who first sends in the full number of names will secure the prize.
- 4th. A Cash Commission will be allowed to all who are not prize winners: From 10 to 20 names, 25cts. each; 20 to 50 names, 35cts. each; 50 to 100 names and upwards, 40cts. each.

STOCK.

- For 150 new names we will give a Hereford Bull (fit for service), valued at \$150, bred by R. J. Mackie, Oshawa.
- For 150 new names, a Shorthorn Bull (fit for service), bred by James Graham, Port Perry, Ont.
- For 150 new names, an Ayrshire Bull (fit for service), bred by Thomas Guy, Oshawa, Ont.
- A Heifer of any of the above breeds will be given for from 100 to 150 names, according to quality of animal.
- For 35 new names we will give a pair (or single animal) for 20 of Improved Large Yorkshires, from 8 to 8 weeks old, bred from imported English stock by Ormsby & Chapman, Springfield-on-the-Credit, Ont.
- For 30 new names, a Shropshire Ram or Ewe Lamb, bred by John Miller & Sons, Brougham, Ont., or Jno. Dryden, M. P. L. Brooklin, Ont.
- For 30 new names we will give a Cotswold Ram or Ewe Lamb, bred by Joseph Ward, Marsh Hill, Ont., or David Birrell, Greenwood, Ont.
- For 30 new names we will give a Leicester Ram or Ewe Lamb, bred by Jeffrey Bros., Whitby, Ont.
- For 25 new names we will give a Berkshire Sow or Boar 6 months old, bred by J. C. Snell, Edmonton, or J. G. Snell & Bro., Aurora, Ont.
- For 10 new names we will give a pair, or for 5 a single bird, of any of the following breeds: Light Brahmas, Dark Brahmas, Langshans, Black Red Games, any variety of Leghorns, Wyandottes, Dorkings, Spanish, Bantams, Ducks, etc. Eggs will be given as prizes when desired from the yards of Wm. Hodgson, Brooklin, Ont.
- We will give as subscription prizes young animals either male or female, of any of the following breeds: - Shorthorns, Herefords, Galloways, Ayrshires, Jerseys, a bull or heifer (of fair quality), purely bred, for 100 new subscribers, accompanied by \$100. We can also supply home-bred or imported stock of any desired breed, age or quality. In all cases we will guarantee satisfaction as to the quality, breeding and value of the animal. We will give very liberal terms to agricultural and other societies and farmers in new sections, special inducements in sheep and poultry. Write for particulars.

IMPLEMENTES, ETC.

- For 110 new names a Bain Farm Truck, value \$75, manufactured by Bain Wagon Co., Woodstock, Ont.
- For 65 new names a Patent Iron Frame Section Spring Tooth Cultivator, value \$30, manufactured by J. O. Wisner & Son, Brantford.
- For 110 new names we will give a first class wagon, value \$75, manufactured by the Chatham Manufacturing Co., Chatham, Ont.
- For 75 new names we will give one of the celebrated Westward Ho Sulky Plows, value \$40, manufactured by Copp Bros., Hamilton, Ont.
- For 125 new names we will give one of Halliday's Standard Wind Mills, value \$75, manufactured by the Ontario Pump Co., Toronto, Ont.
- For 140 new names we will give a Hay Loader, value \$75, manufactured by Matthew Wilson & Co., Hamilton, Ont.
- For 100 new names we will give a large Straw Cutter with Carriers attached, value \$55, manufactured by B. Bell & Son, St. George, Ont.
- For 40 new names we will give a large Agricultural Furnace, value \$22, made by the Gowdy Manufacturing Co., Guelph.
- For 65 new names we will give a new Fanning Mill, value \$35, manufactured by Manson Campbell, Chatham, Ont.
- For 90 new names we will give one of Osborne & Co.'s large Stock Scales, value \$50, capacity 4,000 lbs., manufactured by Osborne & Co., Hamilton, Ont.
- For 40 new names we will give a Winchester Repeating Rifle or a Breech-loading English Shot Gun of latest design and good quality, or 10 new names we will send an imported Breech-loading German Rifle.
- For 40 new names we will give the Model Harness, valued at \$20, manufactured by the Farmers' Supply Co., 178 King St. East, Toronto.
- All stock or goods shipped free on board the cars.

STOCK GOSSIP.

In writing advertisers please say that you saw their advertisement in the Farmer's Advocate.

We are in receipt of Messrs. Ormsby & Chapman's catalogue of Yorkshire swine. Those of our readers who contemplate purchasing should send for it, as by referring to it they can easily see how they can order pairs not related. These gentlemen claim that they were the first to introduce this sort in Canada.

Mr. J. K. Macmichael, Watford, Ont., who places a card with us this month, informs us that he now has a herd of nineteen head of full-bred Hereford cattle, all registered in American Hereford H. B. He purchased the promising young bull Corporal 2nd, at Ontario Agricultural College sale, to place at the head of his herd.

Mr. W. H. Beattie, Wilton Grove, called at our office and informed us that his last importation, which arrived on Saturday, 27th September, consisting of thirty shearling Shropshire ewes from the Earl of Strathmore's flock, were all sold within two weeks of their arrival, the majority of them being sold to Mr. John Lamiman, Glanworth, Ont.

Mr. John Dunkin, breeder and importer of Shropshires, Brucefield, Ont., sends us the following report of sales from his flock: - To Mr. McRobert, who was purchasing to supply orders in Illinois, two imported rams and fifteen ewes and rams of his own breeding; to Mr. Rowe, Michigan, one imported ram and two ewes; Mr. Wm. McPherson, Forest, Ont., one imported ram and four ewes; to Mr. W. H. Beattie, Wilton Grove, one imported ram.

Mr. E. Goodwin Preece, live stock agent and exporter, of Shrewsbury, England, informs us that he shipped per SS. Toronto, on Friday, Oct. 3rd, 120 head of very choice Shropshire shearling ewes and twelve Welsh ponies for Mr. Robt. Miller, Jr., of Messrs. Miller & Sons, Brougham, Ont. The ewes were all selected, purchased and shipped by Mr. Goodwin Preece himself, and were a remarkably fine lot. As so many ewes had been sold previously Mr. Preece had to prevail upon several eminent breeders to spare a few of the ewes which had been reserved for home breeding, and, in consequence of the great foreign demand this year, had considerable difficulty in obtaining so large a number of first-class sheep. This shipment makes the seventh of Shropshires to Canada and the States this season, and brings the total number exported by Mr. Goodwin Preece to 85 Shropshire rams, ewes and lambs. We understand that already Mr. Preece has bespoke several of the choicest lots of ewes for next year, when the demand is likely to be unusually great.

NOTICE.

Campanini, the famous tenor, has written a striking article on "How to Train the Voice" for The Ladies' Home Journal, and it will appear in the November number of that periodical.

FRUIT AND ORNAMENTAL TREES

Largest Stock in Canada of Strictly Graded GRAPE VINES.

Norway Spruce at unrivalled rates. A general line of nursery stock, guaranteed true to name by the undersigned who is responsible; has a reputation at stake and is a practical commercial fruit and plant grower. Buy direct, fellow farmers, if you would save money, risk and annoyance. Send a list of your wants for next season at once and get my prices.

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Graduated Prices. Recently Furnished.
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PLAYS

Dialogues, Tableaux, Speakers, for School, Club & Parlor. Best out. Catalogue free. T. S. Danson, Chicago, Ill.
J. F. QUIN, V. S., BRAMPTON, ONT.
Ridgling horses successfully operated upon; write for particulars.

STOCK GOSSIP.

In writing to advertisers please mention the Farmer's Advocate.

A meeting of the American Southdown Association will be held on Tuesday, Nov 18th, 1890, at 7.30 p. m., in the Sherman House, Chicago, Ill.

The neatly gotten up catalogue of Shropshire sheep, recently issued by Mr. A. O. Fox, Oregon, Dane Co., Wis., contains, beside the pedigrees of over three hundred and fifty pure-bred Shropshire masters, a great deal of useful information to book-keepers. Those of our readers who choose to send for it should also send for this gentleman's catalogue of French Coachers, which breed are also largely bred and imported by him. Being a keen judge himself, intending purchasers will find his stock of a very high order.

Richard Delbridge, of Winchelsea, writes us that he has been very successful at the exhibitions this season. He has won 27 first and 24 second prizes with his Berkshires. In four years he has made 160 entries, and won 83 first and 50 second prizes with Berkshire pigs, having made the following sales of late:—One sow to J. Kerslake, Exeter; one sow to J. Esery, Exeter; one sow to S. Hix, Exeter; one sow to A. Fuller, Woodham; one boar to D. R. McLennan, Lancaster; one boar and one sow to W. McAllister, Varna; one boar to Mr. Sparlin, Anderson.

Mr. Thos. Good writes us to say that he has been fairly successful with his stock at the exhibitions this year. At the C. C. Exhibition, Ottawa, Little Jock Elliott proved himself king of the ring with his family of three colts under one year. Two of these colts (a horse and a filly) were particularly noticeable and admired by all. It is a question if Ontario can produce their equal. They are both out of Sir Wm. Wallace Da w. One took first as a foal and with her dam first in the Canadian Draught class, the other taking equal honors in the Agricultural class, and it may be in place here to say that they held the same honors at the County of Carleton Exhibition, the filly winning also the sweepstakes with the colt second place. Little Jock Elliott is evidently one of the foremost sires in the Dominion. A get of his, Sir Walter, was third in the imported class of two-year-olds, and if in as high condition as the others would evidently have held a higher place. Sir Wm. Wallace 2nd was placed second in the Canadian Draught class and Queen Vic an easy first in the three-year-old imp. class, and is as even as a pony, with a weight of 1,600 lbs. At the County Carleton Exhibition Little Jock was placed first, as was also Sir Walter, Queen Vic and their dam, Bell of Richmond, with foal (Victor Chief) by her side in the imported class, and Sir Wm. Wallace first in the Canadian Draught class. The above was only a contingent from the many good ones on the Shamrock Avenue Stock Farm.

H. George & Sons, Crampton P.O., Ont., writes us they have been very successful at the large fairs with their herd of Ohio Improved Chester White swine. Their imported boar (Royal 1251) has taken seven first prizes at the fall fairs, including first at Toronto and first in London where he had to show against Improved Yorkshires. We also won at Toronto the herd prize for the best boar and two sows with Royal and two sows of his get. One of these sows took first prize at Toronto in a large class as sow under one year, and at London she won first in her class and sweepstakes for the best fat pig of any of the large breeds. We have made the following sales within the last few weeks:—To Duncan Campbell, Norwood P.O., one boar; to Geo. W. Buchanan, Hillier P.O., one boar; to Theo. Madill, Armadale P.O., one boar; to Gid on Snyder, Jarvis P.O., one boar; to C. D. Moore, Peterboro P.O., one boar; to John W. Hutchinson, Aurora P.O., one boar; to W. H. Mookman, Castlederg P.O., one boar; to A. B. Howard, Bondhead P.O., one boar; to Richard Prouse, Cannington P.O., one sow and boar; to Thos. Prestt, Tottenham P.O., one boar; to J. W. Russell, Brampton P.O., one sow; to W. H. Reed, Locklin P.O., one sow; to P. G. Walker, Westwood P.O., two sows. We have still on hand some fine young boars fit for service and some young sows; also a number of good fall pigs sired by Royal.

Messrs. R. & S. Nicholson, Sylvan, writes as follows:—We have sold during the fall fairs, to as many different parties, four Shorthorn calves. The first prize bull calf, both at Toronto and London, goes to Mr. John Brand, Forest, Ont., who last year purchased from us the Toronto 2nd prize bull calf. But, unfortunately, he, along with a fine barn, which cost over \$2,000, was consumed by fire last August. We wish him better luck this time. The above were all sired by our prince of stock bulls imp. Warrior. I might here state that five entries of his stock was made at the late Industrial Result—three first prizes. At the same time this was going on in Toronto, at the Southern Counties Show, held at St. Thomas, his stock actually swept the board. More than this his calves have performed the before unaccomplished feat of winning, for two years in succession, first prize for four calves, bred and owned by exhibitor. We part with him with great regret, but as two-thirds of the females in our herd are his get, a change has to be made. On the 1st ult. we had shipped to us from the Greenwood herd the beautiful Nonpareil bull calf Nonpareil Chief, dam imp. Nonpareil 30th, sire imp. Indian Chief. A few days before the above date we wrote to Mr. A. Johnston asking if he thought he would suit us. He replied, 'He is a good calf. I believe he will suit.' The order was, 'Send him up.' He is more than a good calf. He is an extraordinary good one, and we are highly pleased with him.

DR. CARVER 7369, Rideau Stock Farm PALM LEAF 7634, KINGSTON, ONT.

two-year-old record 2.40. Foaled 1887, BY PANCOAST 1439. Sire of Patron, 2.14 1/4, Dam—Augusta, 2.20 1/4, Dam of Chauter, 2.20 1/4, Dam of Shalerooss, (trial) 2.23, 2nd dam—Dolly Mills, Dam of Orange Girl, 2.30, Walkill Chief, etc.

By New York Dictator, (trial) 2.25 1/4. Dam—Kitty Morgan. Dam of Nannie Talbot, 2.29 1/4. 293-v-OM

Standard-bred Trotting Horses, Registered Holstein (H.F.H.B.) and Jersey Cattle (A.J.C.C.) YOUNG STOCK FOR SALE. F. A. Folger, Box 579. Send for catalogue.

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Highest Prize Winners in the Leading Shows of Scotland and Canada,

AND THE GET OF FAMOUS SIRES

Such as Lord Erskine, Darnley, Old Times, McCammon, Prince Lawrence, Lord Hopton, Bold Magee, Sir Wyndham, Good Hope and Fireaway.

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IMPORTED AND REGISTERED

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STALLIONS AND MARES

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Our last importations comprise a large number of one, two, three and four-year-old registered stallions and mares, the gets of such sires as Macgregor (1487), Darnley (222), and Prince of Wales (673). Also a few choice SHETLAND PONIES. Correspondence solicited, and visitors always welcome.

GRAHAM BROTHERS

Twenty-five miles east of Toronto, on the C. P. R. 289-y CLAREMONT, ONT.

SHROPSHIRE SHEEP

—AND— COLLIE DOGS.

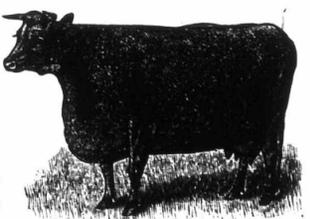
A choice lot of Ewes bred by Mr. David Buttar, Couper, Angus, Scotland; two Shear Ewes, imported last season, and their produce. Also Collie Dogs just imported. 296-y-O-M W. H. BEATTIE, Wilton Grove, Ont.



H. CARGILL & SON, CARGILL, ONT., BREEDERS OF SCOTCH-BRED

Shorthorn Cattle!

With Campbell, of Kinellar, bull, imp. Albert Victor, at the head of the herd; also several imp. Cows, also bred at Kinellar, and a daughter, and grand daughters of the sweepstakes cow Rose of Strathallan 2nd, and other useful sorts. A nice lot now on hand for sale. 293-y-OM



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We make a specialty of

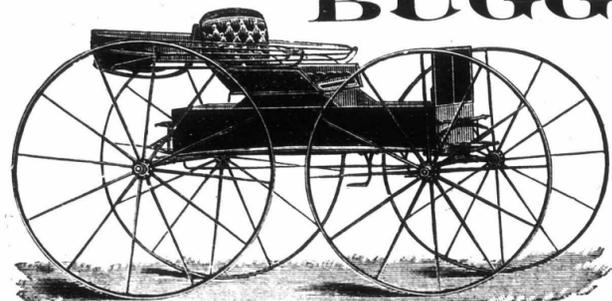
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Our output for 1888 was over 1000.

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STARK NURSERIES. Stark Bros. Nursery Co., Louisiana, Mo. Founded 1835. Oldest in the West. Largest in the World. BEST of everything. Nearly 600 salesmen sell our stock in almost every State and Territory; volume of annual sales now exceeds that of any other Nursery. We sell direct through our own salesmen, without the aid of tree dealers or middlemen, and deliver stock, freight and all charges paid.

NO TREES Last and bear like whole root trees; or like plumprunes and spruce-trees on *Marians*, the best plum stock grown. Idaho and other New & Old Fruits (by mail); ornamentals, root grafts—everything. No larger stock in U. S. No better. No cheaper.

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STOCK GOSSIP.

In writing to advertisers please mention the *Farmer's Advocate*.

From a letter written by Secretary Henry Roberts, of the County of Peel Poultry Association, we learn they purpose holding their next show, which is to occupy three days, viz., on 16th, 17th and 18th December. Exhibitors will be guided accordingly. Send for prize list.

In a business letter from Mr. Thos. Chick, Dorset, England, who is an enthusiastic breeder of Devon cattle and Dorset sheep, he writes that he has been working to start a Flock Book for "Dorset Horns," and further says that many of their largest flock masters are in accord in the matter, and hope to make a start at an early date.

As announced in our October issue, on Wednesday the beautiful herd of Hereford cattle owned by Mr. R. J. Mackie was offered by public auction, and sold at very fair prices. Two very fine specimens, one male and one female, were sold to be taken to the Model Farm for \$400. The celebrated bull Commodore, goes to Mr. Fleming, of Weston, at \$275. Several cows sold for over \$100, and the balance from \$30 to \$100, according to the age and pedigree. It is only fair to Mr. S. C. Hunking, the now popular auctioneer, to say that it was generally considered by all present that he distinguished himself on the occasion, as he never did before.

In a sale catalogue of Berkshire pigs, lately issued by Mr. Nathaniel Benjafield, Motcombe, Shaftesbury, Dorset, England, and sent to this office by that gentleman, he illustrates the same by a capital likeness of three of his prize-winning Berkshires that he had sold to Messrs. John Snell's Sons, Edmonton, Ont., and for whom the illustration was engraved by our artists, and appeared in the November (1889) issue of the *ADVOCATE*. We cannot but take it as complimentary of English breeders to thus appreciate our illustrations. We are also happy to state that our circulation among English breeders is fast increasing.

A. C. Hallman & Co., of New Dundee, Ont., write as follows:—We have again returned home from the Toronto and London exhibitions, though somewhat weary; but with good cheer and bright prospects for the future. We met hundreds of enquiring minds who went off satisfied and, we believe, with a lasting impression of the good qualities of the Holstein-Friesians and the quality of stock we handle. If the sales follow the demand, we expect to dispose of our surplus stock early. We hope interested parties will take advantage of our advertisement and secure bargains. We can supply all ages as to sex, not akin, which is a great advantage to intending purchasers.

We have received at this office the prize list of the Seventh Annual Fat Stock Show, to be held at Guelph, Ont., under the auspices of the Agricultural and Arts Association, on December 10th and 11th, 1890. A liberal list of premiums are offered for thoroughbred steers, and cows that have produced a calf, also for grades and crosses. In special sweepstakes the *FARMER'S ADVOCATE* of London offers silver plate to the value of \$40 for the best steer under three years of age, and Mr. Chris. Reinhart, Guelph, offers a cash prize of \$15 for the best female. Another premium, the *McAtter Cup*, valued at \$20, has to be twice won by the same exhibitor and with a different animal.

Messrs. J. T. Harcourt & Sons, St. Anns, Ont., in a business letter to our office enclosed the following:—We have enquiries for Oxford Down sheep almost every mail. We honestly believe the Oxford are the coming sheep. They have had a small beginning, but they have come to stay. Their large, well-shaped bodies, fine flavored mutton, good, large fleeces, and docile natures render them favorable wherever known. The ewes are good breeders and careful mothers. We think them one of the best, if not the best, sheep for Canadian farmers. Our stock is all doing well, and, among other sales, we may mention *Erasmus*, Chief, of Lincoln, shearing ram, to Messrs. Melish & Snyder, of Henry Co., Ill.; *Venango* Chief, ram lamb, to Mr. DeArman, Franklin Co., Penn.; *Black Creek* Champion, ram lamb, to Mr. Beam, of Black Creek, Ont.; *Pelham King*, ram lamb, to Mr. Jno. Davis, Pelham, Union; *Lord Fenwick*, ram lamb, to Mr. Beckett, of Fonthill, Ont.; also one ewe to Mr. Morningstar, of Black Creek, and one ewe to Mr. Beam of the same place.

A. & G. Rice, Curries, Ont., breeders of Holstein-Friesian cattle, introduce themselves to the readers of the *ADVOCATE* by placing a card in our directory. A representative of the *ADVOCATE* visited this herd, and was pleased with the fine appearance and good breeding condition in which the animals are kept. Though not a large herd, it will be seen by those at all familiar with the great performers of the breed that the blood lines of the animals of this herd embrace the very best—a grandson and granddaughter of that world famous cow *Pieterte 2nd*, yearly record the largest ever made. The progeny of her great son *Pieterte 2nd* *Holland King*, whose service was last year \$500, are to be found in this herd, several of the animals being purchased and imported from Dallas B. Whipple, of Cuba, N. Y., after Mr. Rice had inspected a number of other herds. Quality before numbers has been ever kept in view in selections, and here we find a grand bull to head a herd, *Jewel*, bred in Netherland, being a combination of the best producers of the popular Netherland family, and a grandson of that greatest of great cows *Jewel*, who has undoubtedly won more prizes than any cow of the breed. Messrs. Rice have now a few bull calves from this finely bred bull and their excellent cows, and certainly deserve a good patronage for introducing such high-bred Holsteins.

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For wood or straw. Our Straw-burning Engine has given thorough satisfaction. It is the only straw-burner with back water space in boiler. **Light and Heavy Traction Engines, Special 16, 20 and 25 H. P. Semi-Portable Engines,** strong and compact for saw mill purposes, same style as our Threshing Engines. We can supply at any time Engines and Boilers, from 5 to 30 H. P., suitable for brick and tile yards, cheese factories, cider mills, saw mills, planing mills, etc.

SEE OUR NEW IRON SEPARATOR

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SMALLEY GOODS—Including ENSILAGE AND FODDER CUTTERS, SWEEP AND TREAD HORSE POWERS, DRAG AND CIRCULAR SAW MACHINES AND FARM ENGINES

are positively ahead of all others in the country, AND SO WARRANTED. Shipped to any responsible farmer in Canada, subject to 30 DAYS' TRIAL, and to return AT OUR EXPENSE if not proving just as warranted. We are prepared to build Carriers any length, superior to all others. Our 1889 "Way it Pays Pamphlet" should be read by every intelligent farmer interested in dairying or stock raising. It contains the very latest information relative to economical stock feeding. Will be mailed free to responsible farmers only, upon application, providing MENTION IS MADE OF PAPER in which this advertisement was noticed.

SMALLEY MFG. CO. MANITOWOC, WIS.



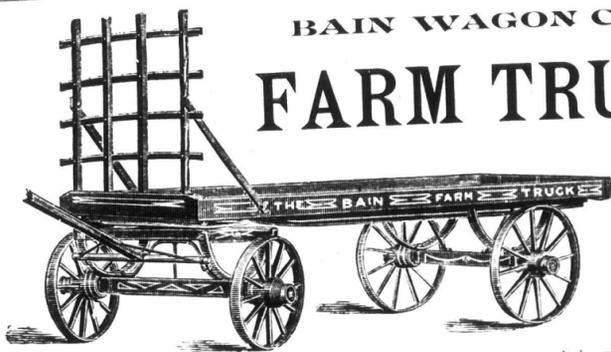
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N.B.—We control original patent for this machine. All others are imitations and infringements.

Ask for Special introduction prices and terms.

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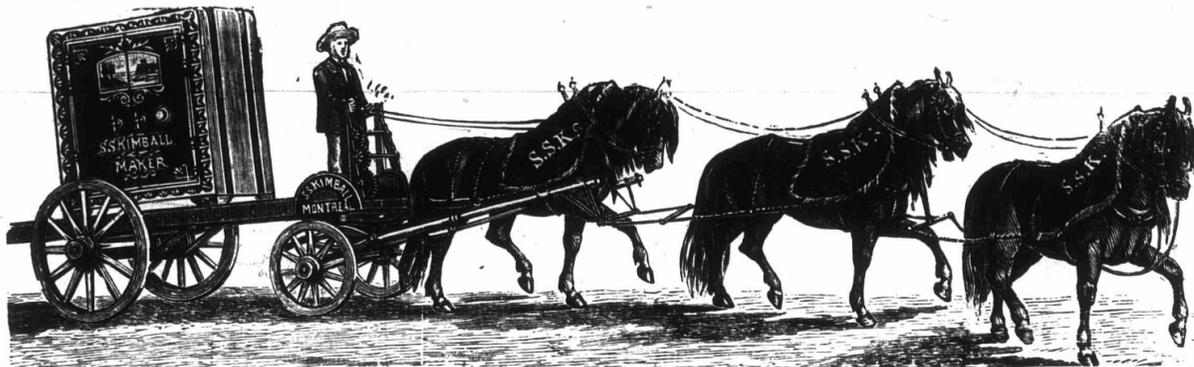
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Thirteen Sizes, from the largest Bankers to a very small House Safe. My Farmer's Safe, 16 in. high, 14 in. wide and 14 in. deep, inside measure, with best Combination Lock of 1,000,000 Changes, is the Cheapest and Best Safe made. Send for Catalogue.

S. S. KIMBALL, P. O. Box 945: Office, 577 Craig-St., Montreal.

P.S.—The Editor of this paper bought one of my medium-sized Safes several years ago, and now I have just placed in his office one of my largest ones.

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—HAS WITHIN ITS BORDERS—

HOMES FOR ALL!

Industrious men and women. Manitoba is making rapid progress as shown by the fact that

In 1887 there were under crop,	663,764—acres.
" 1890 " " " "	1,082,792 "
Increase,	419,028

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HORSES, CATTLE AND SHEEP

Thrive wonderfully on the nutritious grasses of the prairie, and, in fact, MIXED FARMING is now extensively engaged in all over the Province. There are still

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CHEAP RAILROAD LANDS—\$3.00 to \$10.00 per acre. Ten years given to pay for them.

IMPROVED FARMS, from private individuals, at low prices, and on easy terms of payment.

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HON. THOS. GREENWAY,

Minister of Agriculture and Immigration,
WINNIPEG, MANITOBA.

297-1f-O

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