

FARMER'S ADVOCATE

AND HOME MAGAZINE

FOUNDED 1866.

VOL. XXIV.

LONDON, ONT., JULY, 1889.

Whole No. 283.

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

THE FARMER'S ADVOCATE & HOME MAGAZINE

WILLIAM WILD, EDITOR AND PROPRIETOR

THE LEADING AGRICULTURAL JOURNAL PUBLISHED IN THE DOMINION.

The FARMER'S ADVOCATE is published on or about the 1st 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.

Terms of Subscription—\$1.00 per year in advance; \$1.25 if in arrears; single copies, 10c. each. New subscriptions can commence with any month.

The Advocate is sent to subscribers until an explicit order is received for its discontinuance, and all payment of arrears are made as required by law.

Remittances should be made direct to this office, either by Registered Letter or Money Order, which will be at our risk. When made otherwise we cannot be responsible.

Always give the Name of the Post Office to which your paper is sent. Your name cannot be found on our books unless this is done.

Discontinuances—Remember that the publisher must be notified by letter when a subscriber wishes his paper stopped. All arrears must be paid. Returning your paper will not enable us to discontinue it, as we cannot find your name on our books unless your Post Office address is given.

The Law is, that all subscribers to newspapers are held responsible until all arrears are paid, and their paper ordered to be discontinued.

The Date on your Label shows to what time your subscription is paid.

Advertising Rates—Single insertion, 25 cents per line. Contract rates furnished on application.

Address—THE FARMER'S ADVOCATE, 300 Richmond Street, LONDON ONT., CANADA.

Our Monthly Prize Essays.

CONDITIONS OF COMPETITION.

- 1.—No award will be made unless one essay at least comes up to the standard for publication.
- 2.—The essays will be judged by the ideas, arguments, conciseness and conformity with the subject, and not by the grammar, punctuation or spelling, our object being to encourage farmers who have enjoyed few educational advantages.
- 3.—Should one or more essays, in addition to the one receiving the first prize, present a different view of the question, a second prize will be awarded, but the payment will be in agricultural books, or money, or prize essayists may choose books from our advertised list must be sent in not later than the 15th of the month in which the essays appear. Second prize essayists may order books for any amount not exceeding \$3.00, but no balance will be remitted in cash. When first prize essayists mention nothing about books, we will remit the money.

We have not awarded a prize on any of the essays on "The Cheapest and Most Profitable Manner of Keeping Cattle During the Summer Months on High Priced Land," as none of them came up to the standard for publication.

A prize of \$5 will be given for the best essay on *Summer and Fall Care of Pastures, giving the results of useful experiments with pasture lands.* Essay to be in this office by the 10th of July.

A prize of \$5 will be given for the best essay on *How Shall we Best Protect our Flocks from the Ravages of the Dog.* Essay to be in this office by the 10th of August.

I am much pleased with your valuable paper; it is worth many hundred cents on the dollar to me.—J. W. BESSEY, Mt. Forest, Ont.

Editorial.

To Our Readers.

Two of our assistants are now in the North-west, and their reports will be read with interest, as they can be relied on, and will describe things as they are, which appear very encouraging. There is, at the present time, a superfluity of laborers and mechanics in some of our cities and towns on the Pacific slope; some who can be returning to Ontario and some to our prairie province.

Persons desiring a visit from our assistants in the North-west should write us at an early date.

The sheep industry of our Dominion must receive greater attention. We devote considerable space to it in this issue, and hope it will have the desired effect.

Never for the past seven years has the circulation of the FARMER'S ADVOCATE been so rapidly increasing as it has been and is doing this year. We look on this as the best indication of improvement in the times, indicative of a coming boom. At the present time we claim, without fear of contradiction, that we have a larger paid list of voluntary subscribers than all other agricultural publications issued in the Dominion combined.

Our friends who have applied to us from the Maritime Provinces will be attended to as soon as an opportunity occurs.

We trust those of our correspondents, whose articles we are obliged to hold over, will not feel aggrieved. From the great pressure of matter and advertisements we are obliged to withhold many valuable articles from this issue.

Crops in Manitoba.

We append the following from a letter from our Manitoba correspondent, and which is unavoidably crowded out:—

Crops, generally speaking, want rain—in fact, we have not had a good rain this spring. Considering how long it has been sown, wheat is by no means as far ahead as last year, and I am afraid that without copious showers soon fall, much wheat will be seriously injured. Manitoba has this spring been visited by worse wind-storms than I have seen in seven years, and while some crops on light, loose soils, have been damaged, we have not suffered to anything like the extent our neighbors in Dakota have. If farmers would only be wise in time and plant trees, much of the discomfort and loss arising from these storms might be averted. Sharp frosts last month have kept the cereal crops back, but no real damage has been done from this

cause, except to early potatoes and garden truck. Just a word to your nurserymen. I believe if they would make known in Manitoba and the North-west their special lines in forest tree seedlings, they would confer a benefit on the country and increase their sales. I am of opinion that much of the tree-planting that goes on in the Western States is due to the assiduous and energetic efforts of the nurserymen in making known their special lines.

Observations in Manitoba.

(Special to the FARMER'S ADVOCATE.)

(BY ONE OF OUR STAFF.)

On Wednesday, May 29th, we left the Union station, Toronto, for Owen Sound, via the Toronto, Orangeville & Owen Sound division of the C. P. R. Here we took one of the company's boats, the Alberta, a beautiful steel vessel, 270 feet long, elegantly fitted up. All first-class passengers were furnished meals, which were in keeping with the magnificence of the berths and drawing rooms. Our course up the Georgian Bay and across the great lakes, can be traced by any of our readers on the maps furnished free by any agent of the C. P. R. We would advise all interested to get one, which will enable them to follow our wanderings during the next two months. After leaving Owen Sound, we passed up the west side of the Indian peninsula, across Lake Huron and through the Sault Ste. Marie canal into Lake Superior. The scenery all along is grandly beautiful. The Indian peninsula and adjoining islands are densely wooded, though rugged and rocky generally. Here and there, all along, settlements may be seen. The Manitoulin Islands, and other land, as we approach Sault Ste. Marie, has much the same appearance, though the timber is generally smaller and the country more mountainous and rocky. The scenery is grand beyond description, and the timber seems limitless, and is doubtless much more valuable on the Canadian side. This is especially noticeable as we leave "the Soo" and pass into Superior. We soon leave the land behind and cross this, the greatest lake in the world, to Port Arthur, which has a population of 3,500, and is beautifully and romantically situated on the west shores of Thunder Bay. The C. P. R. fleet, as well as many others, are constantly plying between here and Owen Sound. The town has a large elevator, extensive docks and a well-established trade. It has substantial buildings and a number of hotels—one of them a very handsome structure. From the beauty of its situation, its accessibility, and the opportunities for sport in the neighborhood, Port Arthur has become a favorite resort for tourists. A

long promontory of basaltic rock on the opposite side of the bay, called the "Sleeping Giant," terminates in Thunder Cape, behind which lies the famous Silver Islet, which has yielded almost fabulous wealth. Pie Island, another mountain of columnar basalt, divides the entrance to the bay, which is flanked on the west by Mackay Mountain, overlooking Fort William. Watches should be set back one hour, in conformity with "Central" standard time.

Four miles distant is Fort William; population, 1,400; a Hudson's Bay Company's post of one hundred years or more standing, but now given up to the requirements of modern commerce. The fur house of the old fort is now used as an engine house for the great coal decks, and one of the largest grain elevators in the world overshadows all. The Kaministiquia river, a broad, deep stream with firm banks, affords extraordinary advantages for lake traffic, and immense quantities of coal, lumber and grain are handled here. There are railway workshops and the usual buildings and sidings incident to a divisional point.

From Fort William to Winnipeg the railway traverses a wild, broken region, with rapid rivers and many lakes, but containing valuable forests and mineral deposits. Murillo is the railway station for the Rabbit Mountain silver district, and four miles from the station are the Kakabeka Falls, where the Kaministiquia leaps from a height exceeding that of Niagara. The railway follows up this river to Kaministiquia, and then ascends the Mattawan and the Wabigoon rivers; and there is excellent trout fishing near all the stations as far as Finmark. Wolsey led an army from Fort William to Fort Garry (now Winnipeg) in 1870, using the more or less connected rivers and lakes much of the way; two of his boats may be seen just beyond the station, at Savanne. Ignace is a divisional point, but otherwise is of little consequence as yet. At Eagle River two beautiful falls are seen, one above and the other below the railway. From here, to and beyond Rat Portage, the country is excessively broken, and the railway passes through numerous rocky uplifts. The scenery is of the wildest description, and deep, rock-bound lakes are always in sight. Rat Portage, population 700, at the principal outlet of the Lake of the Woods, is an important town, with several large saw-mills, the product from which is shipped westward to the prairies. The Lake of the Woods is the largest body of water touched by the railway between Lake Superior and the Pacific, and is famed for its scenery. It is studded with islands, and a favorite resort for sportsmen and pleasure seekers. Its waters break through a narrow rocky rim at Rat Portage and Keewatin, and fall into the Winnipeg River. The cascades are most picturesque; they have been utilized for water-power for a number of large sawmills at both places. At Keewatin is a mammoth flouring mill, built of granite quarried on the spot. At Whitemouth, saw-mills again occur, and beyond to Red River the country flattens out and gradually assumes the characteristics of the prairie. At East Selkirk the line turns southward, following Red River towards Winnipeg, and at St. Boniface the river is crossed by a long iron bridge, and Winnipeg is reached.

Much of the timber seen from the car, after leaving Fort William, is small; principally, birch, spruce and tamarack. The land along

this line is not all rough and stony, as some have described it; at places, large stretches, free from stones are seen; some is high and rolling, some level and dry; others are swampy here and there. There are settlements, which become larger and more frequent as we near the Manitoba border. From Selkirk to Winnipeg there is an abundance of fine grass land. Most of this belongs to the river farms, which are four miles long, fronting on the river and extending back, and are from four or five to ten or twelve chains wide. The houses and farm buildings are all on the river banks; the nearer fields are cropped; those farthest away are used for hay and pasture, and are unfenced, the cattle roaming at will, each owner cutting hay according to the usage of the country, which will be explained hereafter. The railroad between the two last-named points passes through the unfenced parts of these peculiar farms. This gives the traveller a false impression of the country; as no houses are in sight, it seems unoccupied and desolate, while such is not the case.

Just seventy-two hours after leaving Toronto, we arrived at Winnipeg. There were over two hundred persons aboard the train. All were loud in their praise of the accommodation afforded them by our great national highway, the C. P. R. The accommodation aboard the train, like that on the boat, was perfect; the officials were courtesy itself, and most obliging in all particulars. The time passed so quickly and pleasantly that not a few of those aboard expressed surprise that they had arrived at their destination so quickly. All were delighted with the passage. The writer has travelled all over America, but never before enjoyed such perfect accommodation, or witnessed so much natural grandeur, as during this trip.

Near and around Winnipeg there is a very large amount of land unoccupied and untilled. This gives a wrong impression to the new-comer, who naturally thinks something must be wrong, that it is thus neglected. The truth is, it is owned by that troublesome class, known as speculators; and for this reason it has not gone into the hands of farmers.

Before describing the country, we will give a word of advice to those who intend to locate here, or even come to spy out the land. Go straight to a good hotel. Do not tell them you are a new comer, and want to see land. Simply get their best rates, and settle down. Many of the hotel keepers are said to be in league with land agents, and will advise you to go to Mr. So-and-so, if you tell them your business. Do not be in a hurry; it will pay you well to go slow, and keep your own counsel. Apply to the following gentlemen, and you will get sound and reliable information, and be dealt honorably with:—H. H. Smith, Dominion Land Commissioner; office in Post-office building. L. A. Hamilton, C. P. R. Land Commissioner; office in C. P. R. station house. A. F. Eden, Commissioner, Manitoba & North-western RR., 622 Main street. S. B. Scarth, Manager North-western Land Company, 624 Main street. Hudson Bay Company's office, Main street. Hon. Mr. Greenway, Parliament Buildings. Messrs. Russell & Cooper, Managers Freehold Loan & Saving Co., Main street. The Secretary of the Board of Trade, City Hall, and Alderman D. A. Ross, 2 William street; all in the city of Winnipeg.

Most of these gentlemen we will refer to hereafter, and may be found or addressed at above offices. Do not be content with seeing one of them, but see them all if you can. Get all the maps, books, etc., that are procurable; any of these gentlemen will furnish you with such free; hear and learn all you can. "Locating" is a very important task. Do not buy land because it is cheap, but be sure to get a good farm in a good locality. There are millions of acres of such to be had, and will be for many years to come. Do not buy beyond your means, nor try to do too much. Go slow, and quietly get into the ways of the country, and you are sure to succeed, if you locate properly. Many men have come here with considerable money who, by rashly spending their capital, soon lost all they possessed; while hundreds of others have come without capital and in a few years became independent, and, often, wealthy men. To succeed, a man must be willing to work, and grow into business rather than rush into it—to which there is a tendency here, as in all new prairie countries.

Fatal to Oleomargarine.

New Hampshire has a law compelling the manufacturers of oleomargarine to color their product pink. Of course to do so is to kill the sale of it. The law has been violated, and one man indicted. The manufacturers made a stubborn fight, claiming that it was impossible to do so. The jury, however, decided that such coloring is possible. The New Hampshire Legislature seem to have dealt Oleo. a fatal blow, so far as that State is concerned, and doubtless other States will move in the same direction. This is as it should be. It is sometimes argued that if bogus butter can be made to resemble the genuine article to such an extent that the consumer can not tell the difference, and can be sold at a less price, that it is to the advantage of the poor man that it should be made. This is not the case, however, as it is not nearly as digestible as good butter. Butter fat differs from all other fats in this respect; and there is probably as much nourishment in half a pound of good butter as one and a half pounds of bogus stuff.

Orthodoxy.

(From Preface to Griffith's Treatise on Manures.)

Orthodoxy is an institution of a past generation, and no more adapted to the present times than her contemporaries, the flail and the spinning-wheel. She cannot even be defended on the ground of continuing to supply a required need in the absence of something better. She stands proven a complete failure, and as such should be blotted out; she impedes progress; she insists on the cultivation of crops that of foreknowledge will result in loss; and she admits of no departure to suit existing circumstances. * * * Can nothing be said in favor of *Orthodoxy*? is there no favorable aspect? No; not one. She is neither the friend of the landlord, tenant, nor laborer. * * * We cannot retrograde to the blissful past; therefore, the farmer must alter his system of sowing, manuring, &c., to suit the changed condition of things. What is the use of continuing a system that does not pay? Self-interest, therefore, should lead farmers to throw away their old prejudices, and listen more attentively to the teachings of science, rather than look for help to politicians.

Rape.

We have frequently alluded to rape as a soiling crop, or for late pastures. It is not cultivated in America to any extent; a little is grown here and there in Ontario. Several of the larger sheepbreeders sow a few acres every year. When sown as a regular crop, the land should have the same treatment as that intended for turnip. Some sow in drills, as turnips, the drills being from 15 to 26 inches apart. In such cases from two to three pounds of seed will be required per acre. When sown in drills, the land can be cultivated and kept clean. We have found that when we ridged the land, as for turnips, the sheep feeding on the field were very apt to become lost, much more so than when sown broadcast; this is a great objection. Some sow in drills, without ridging; this can be done by an ordinary grain drill. By closing up every other spout, the drills will be 14 inches apart, and 21 inches if two successive spouts are closed; cultivation can then be practised with little more trouble than when sown in ridges. When a field is specially prepared for this crop, the seed should be sown from the 15th to the 25th of June. It has been the writer's practice to well work the field intended for rape the fall previous, then in the spring to cultivate very thoroughly up to about the 20th of June. To obtain good results, the land must be made very fine and smooth. We then drilled in with an ordinary grain drill, using every spout, about 5 pounds per acre, or else broadcast about 6 pounds per acre. In either case, as soon as sown, if the land was dry enough on top, we rolled carefully. Either of the latter methods will give good results. We preferred to sow with the grain drill, using every spout it can be set to sow the right quantities per acre. By placing the machine on the barn floor and adjusting the feed until it sows as desired, by this means one man will sow from 10 to 12 acres per day. By thoroughly working the land beforehand, sowing late and thick, we have never had any trouble with weeds. Soil that will grow turnips will grow rape. It does best on what is known as good grass land, moist, but not wet. A field of rape properly put in will sustain at least three times as much stock as the same field in grass. Stephens, in his excellent farm book, says:—"It has been used in England and the Continent for fallowing sheep from time immemorial. The leaves as food for sheep are scarcely surpassed by any other vegetable in nutritious qualities. In England, that intended for sheep is sown broadcast and very thick, in which state it is very suitable for them. In Scotland it is grown in drills as turnips; this enables the land to be thoroughly cleansed during the summer." Sheldon, another excellent English authority, says:—"Rape is valuable both as a green fodder and for plowing in as a green manure." We have always found that a field on which a crop of rape had been grown and fed off by sheep, gave us excellent crops for some time after. It should not be turned on when too young. That sown about the 20th of June or before will be fit for feed by the 1st of August. A field that has been in grass, fall wheat or barley, may be plowed, the last two with a gang, and well harrowed down and sowed to rape, this will afford excellent and abundant fall feed, or if plowed down will greatly benefit the land. If sown on suitable land as soon as early crops are taken off, it will make an enormous growth before frost comes, which affects it but little; we have found fields thus treated to give splendid returns.

The Toronto Industrial Fair.

The arrangement between the Industrial Exhibition Association of Toronto and the Toronto City Council, for the use of the Exhibition Park and buildings in which the Industrial Fair has been carried on for the past ten years, having been renewed for another term of ten years, the directors of the Exhibition Association have entered with renewed energy upon the preparations for the holding of their eleventh annual exhibition, from the 9th to the 21st of September next. The Association feels, as it were, that it is just starting out on a new lease of life, and is determined to make many improvements and alterations in the grounds during the present year.

The Toronto Exhibition has grown to such immense proportions that the present sixty-two acres of ground is far too small for the purposes, and the Association has been endeavoring for the past two or three years to secure additional grounds from the Ontario Rifle Association, from the common to the east of the present exhibition grounds, which is at present used as a rifle range. An arrangement is just about come to whereby their object will be attained, and it is proposed to erect some new stables on the most modern plans during the summer, and to replace all the old stables with new ones immediately after the exhibition closes. The horse ring will be enlarged, and many other improvements made. The Association hope to erect, before the next exhibition, a new poultry building, and to enlarge the machinery hall, also to enlarge the present natural history building for the purpose of establishing a fernery, and extending the already extensive and interesting aquarium for the exhibit of live fish. The Toronto City Council have also decided to erect a handsome conservatory on the fair grounds during the present summer, in which all sub-tropical and other plants will be raised for the inspection of visitors at the time of the exhibition. A new gate house will be erected at the eastern entrance of the grounds, similar to that constructed last year at the western entrance.

The prize list has been issued and distributed around the country to those intending to exhibit. The total amount of prizes offered for the coming fair is \$25,000.00, and nearly the whole amount of this is offered for live stock, dairy, agricultural, and horticultural products and ladies' work. No prizes are offered for manufactures, so that as far as the prize money goes, the farmers receive the lion's share. Many of the prizes in the horse department have been increased over those of last year, and among the special prizes offered are \$400.00 by the American Holstein-Friesian Association for Holsteins; \$100.00 by the American Shropshire Sheep Association for that breed of sheep; and \$65.00 by the FARMER'S ADVOCATE for the best three draught mares of any age or breed. A large number of sweep-stake prizes are offered, especially in the horse department. The prizes in the poultry department have been increased by the addition of many new varieties, and by making all the sections for single birds instead of pairs.

Entries in all the departments have to be made before the 17th of August, and we are informed that this rule will be strictly adhered to, as a catalogue will be published containing a list of all the entries in the live stock department, and to enable the Secretary to do this, it is positively

necessary that all entries should be in by the time named. This rule was pretty rigidly carried out last year, and many entries were refused after the time named in the prize list, much to the disappointment of intending exhibitors; but as it was their own fault for not sending them in by the proper time, they had no just cause for complaint.

Special efforts will be made to make every department this year more attractive and interesting than during any previous year, by the introduction of new features. Among the special exhibits already spoken of, will be a display of products from Spain, in which the residents of Canada will most directly be interested. Vancouver, B. C. has appointed an influential commission who are already actively at work securing a large exhibit from that Province.

The amusement-seeking portion of the public will be well provided for in the way of new and interesting special attractions, and cheap rates will prevail throughout the full term of the exhibition, and special excursions will also be run on different days, covering several sections of the Dominion.

Those who may require prize lists, or any other information connected with this exhibition, will be promptly furnished with the same by dropping a post card to Mr. H. J. Hill, the Manager and Secretary, at Toronto.

The City of Winnipeg and Surrounding Country—Also, the Experience of Settlers in the Vicinity.

Winnipeg may be justly said to be the most wonderful city in British North America. In 1871 the population was 100; it is now 25,000. The streets are wide, clean, and the principal ones well paved. The buildings are very substantial, many of them massive and handsome. There are fewer small, mean houses here than in any other city of its size on the continent. The stock carried by the merchants is good; some very fine. Goods are not so high as one would naturally expect. Agricultural implements are higher than in Ontario, but the variety and the number of makers represented by large, heavily-stocked branch houses is greater than in any other Canadian city. It has a good university, and a number of excellent colleges. It ranks next to Montreal and Toronto as an educational centre. It is lighted by electric lights, and has street railways, a fine hospital, great flouring mills and grain elevators, and many notable public buildings; also, the chief workshops of the C. P. R., between Montreal and the Pacific are here, and the train-yard contains more than twenty miles of sidings. The principal land offices of the Canadian Pacific Railway Co. are here, as also is the chief land office of the government in the west. Railway lines radiate in all directions. The C. P. R. has two branches leading southward on either side of Red River, connecting at Emerson and Gretna, respectively, on the U. S. boundary, with two lines of the St. Paul, Minneapolis & Manitoba Railway for St. Paul, Minneapolis, Chicago, etc. Two branch lines of the C. P. R. go south-west to Glenboro' and Deloraine in Southern Manitoba, 105 and 203 miles distant; and two other branches run north and north-west, one to the old town of Selkirk and the other to Stony Mountain and Stonewall. The Hudson Bay Railway also begins here. This city commands the trade of the vast region to the north and west. The requirement of the present is the establishment of

such factories as the city can maintain; such as a stove foundry, soap works, woollen mills, &c., &c. The land surrounding the city is a fertile, black mould, somewhat heavier and perhaps harder to work than the western land, but it will doubtless wear well. An excellent tract lies to the north-east, of which Springfield is the centre. West, along the "Portage Road," good farms and comfortable homes are to be seen; to the north-west the country is not so good. Why settlers do not buy the cheap and good land surrounding the city, is something astonishing. Land within a radius of twenty miles of the city can be bought for \$3 to \$10 per acre; many good farms can be bought within ten miles of the city for \$10 per acre. Fuel is abundant; timber always in sight. The advantages of being near a large and growing city, with its grand school privileges, and by far the best market in the Canadian North-west, must be evident to every thinking man. Doubtless, the west possesses some advantages. One peculiarity of the people here is, every man believes he lives in the best locality, and is thoroughly contented with his farm. We suppose there are some dissatisfied ones, but have not met one yet. Out of 600 reports received by the Agricultural Department of the province, only one expressed dissatisfaction. All classes seem to be doing well; but it is generally conceded that the farmers are doing better than any others. Many of the leading men in the province are farmers. All stock does very well here, as in other parts of Manitoba. The dray, buss, and street horses are generally a fine lot, especially noticeable for their sleek and healthy appearance. The majority of the farmers stable their young stock; yet others allow them to run out all winter. We saw a fine herd of horses belonging to the Hon. John Taylor, Headingly, that had never been inside of a stable, having grazed on the prairie and sheltered bluffs, winter and summer. When we saw them, about June 1st, they were in excellent health and condition, and showed no signs of having suffered hardships during the winter. When cattle are not stabled they are generally afforded the shelter of an open shed, which is enclosed on both ends and one side. Prairie hay, which can be procured in abundance in most sections, generally forms their only feed. The only expense incurred is the cost of saving, about \$1 per ton. Persons may own large herds of cattle or horses, who do not own any land. Men with small capital can do exceedingly well here. Land throughout the province has increased in value at least \$2 per acre during the last year, and, without something unforeseen occurs, the increase will be more rapid in the near future.

There is a large amount of free-grant land still in the province, but settlers who have even a little money will find it to their advantage to buy land in settled districts, which are improving in a surprising manner, and even now offer nearly all the social advantages of the older countries. Roadways, or "trails," as they are called here, run in every direction, and at this season of the year afford most delightful highways.

The following are the reports of interviews which we have had with prominent and reliable men:—

MR JOHN RUSSELL,
Manager of the Freehold Loan & Saving Company's branch here, is an educated man, of very wide experience in this country, and is very highly esteemed for his honor, good judgment

and business ability. He is a brother of Messrs. James, William and Andrew Russell, the well-known stock men of Richmond Hill, Ont. He says:—"For ten miles north of the main line of the C. P. R., west of the Red River and south as far as the boundary, the land is nearly all good. Of this, the best sections are the Mennonite reserve, the Portage La Prairie district, and that around Carbury, Brandon and the Turtle Mountain country. There is also much good country on the Manitoba & North-western RR., the chief of which are the districts surrounding Neepawa, Minnedosa and Birtle. The farmers are doing better here than in Ontario, or any of the older states or provinces. A farmer with \$1,000 here can accomplish more than one with \$5,000 in any of the above places. All practical working farmers do well. Those from Ontario are by far the best settlers. To start comfortably here, a man should have \$1,000 and upwards. He should never buy implements or other goods until he really needs them, and must have them; and be careful not to overreach himself by buying too much land, or trying to cultivate too much. When a young man can homestead and pre-empt, he should do so; but a man with a family should buy in a settlement where he will have school and church privileges. Such land can be bought in good districts, always within twelve miles of a railway, for from \$5 to \$15 per acre; the terms are usually one-third down, the remainder on easy terms. For the past few years the average yield in the sections above mentioned have been:—Wheat, 28 bushels per acre; barley, 35, but a little dark in color, though heavy; oats, 50; some fields are known to yield 110 bushels per acre. The soil is more productive than that in Ontario, but occasional frosty years may be expected. Flax does very well, and will average 18 bushels per acre on suitable land. Peas are not a standard crop; nor clover. Timothy does fairly in some sections, and in such will produce from one ton to one and one-half tons per acre. The native grass is very nutritious. Potatoes, field roots, vegetables, and small fruits do exceedingly well; but apples and other large fruits do not succeed. Stock of all kinds does very well, but needs the same care as in Ontario. Some sections are especially suitable for horses and sheep. The pasturage is thinner than that in Ontario, and will not support more than one-half as much stock per acre as Ontario land; more land per head will, therefore, be required, both for summer and winter keep. The land varies greatly; any quality can be obtained—light or heavy, flat or rolling—to suit the views of the settler."

JOHN SUTHERLAND,
ex-M. P. P., of Kildonan, Man., is of Scotch origin, but was born and has lived all his life here in the Selkirk settlement. He has owned his present property of 284 acres since 1870. For the past five years his grain has averaged, per acre:—Wheat, 30; barley, 30; oats, 50; potatoes, 250. He says: "Any man who works will do well. One thousand dollars will give a man a good start. Settlers should buy oxen, not horses. Oxen do farm work as well as horses, keep cheaper and cost less. As an example of the progress made here by settlers, I will instance the case of James Hudson, who came from Petrolia about 1871, without cash, and took up a homestead and pre-emption; his neighbors helped him, and he succeeded well. He has

now a farm worth \$6,600, which is constantly growing in value, and at least \$3,000 worth of stock and implements."

ALEXANDER MORRISON,
Springfield, Man., has 320 acres, on which he settled seven years ago. Since that time his average yield per acre has been:—Wheat, 20 bushels; barley, 35; oats, 45; peas, not a success. He plows once in the fall; then, in the spring, sows broadcast and harrows twice. He keeps about 40 cattle, and finds they do well on straw and prairie hay. He estimates the average yield of nutritious hay on the prairie to be one ton per acre. One of his neighbors,

ALEXANDER M'PHERSON,
came from Ontario in 1871, without capital; he has now 1,000 acres, seven miles east of the city of Winnipeg; 50 cattle, three horses; 100 acres in grain and 100 in timothy. He thinks the native grasses make the best hay.

ALDERMAN D. A. ROSS,
2 William street, is said to be one of the best-posted men in the province concerning the land in the different sections. He is a native of Nairn, Middlesex Co., Ont., and came to Manitoba in 1874. He puts the average crop per acre since that time as follows:—Wheat, 25; barley, 35; oats, 50; and has seen 100 bushels per acre of the last-named. Oats and barley are sure crops. Working men who understand farming (when they have not too big ideas), always do well, if they do not overreach themselves by going too far into debt, or by trying to do too much for their ability or capital. He instanced the case of an Englishman who arrived in 1870, with no capital; he now owns a farm worth \$5,000, 100 head of cattle, four horses and a full line of implements, and has money lent. Hundreds of such examples could be given.

MR. T. H. SMITH, M. P. P.,
Springfield, Man., came to the province in 1865. He says:—"The Springfield section is as good for mixed farming as any in Manitoba, and the advantages are as great for settlers as anywhere. The benefits of the city markets are obvious. During the past five years my grain has averaged per acre, as follows:—Wheat, 35 bushels; oats, 50 bushels, and have sometimes yielded 65; potatoes, 250. The native hay is very nutritious; it might be much improved by manuring and cultivation. The hay lands might also be improved by sowing in grass seed when manuring and cultivating them. Clover might be grown successfully, but it has yet to be extensively tested. An industrious farmer would do well with a capital of \$1,000; but I advise all immigrants to keep out of debt and not overreach themselves. Stock of all kinds does very well. I have bred sheep for twenty years, and have always found them profitable."

We found Mr. Smith a clear-headed, sagacious man, very conversant with the country, and much respected by his countrymen for his sterling qualities. The opinions of such men are always valuable.

After passing some time east and north of the city, we drive west, over the Portage. One of the most attractive and noticeable farms in this section is

SIR DONALD A. SMITH'S.
It is five miles west of the city, at Silver Heights, and comprises about 800 acres, about 300 of which are in grain, which promises exceedingly well. A herd of 20 Herefords and 36 West Highland cattle are kept for breeding pur-

poses, as well as a fine flock of Shropshire sheep. The cattle are very highly bred, and many possess great individual merit, especially the West Highlanders. Besides these, a herd of buffalo are kept, and are breeding regularly. Both the buffalo and Highland cattle are very docile and tractable. All interested parties should visit this farm. Mr. R. M. Traill, the manager, is a genial and hospitable gentleman. A few miles further west, near Headingly, is the residence of

THE HON. JOHN TAYLOR,

ex-Minister of Agriculture. He is a native of the country, and owns a large tract of land. The farm he resides on embraces 960 acres, has a river frontage of 30 chains, and extends back four miles. Two hundred acres are in crop, and is very promising. During the last five years the grain on this farm has averaged, per acre, as follows:—Wheat, 20 bushels; oats, 50; barley, 30; peas, 20; potatoes, 150. Roots and vegetables do remarkably well. He is a firm believer in mixed farming, and keeps 40 horses and 70 cattle. Among his horses is Lisgar, a fine traveller, and the sire of a large number of speedy horses. His sire was an imported thoroughbred; his dam a native mare. He also keeps for his own use, the Clydesdale stallion, Jumbo. At the head of his cattle stands an imported Short-horn bull of good quality. His pigs are a very good lot; a fine boar, bred by J. C. Snell, of Edmonton, is the stock animal. The stabling here will accommodate 60 head, besides open sheds, as before stated. All his young horses winter out on the prairie, and are never stabled until they are broken, at four years old. Two hundred tons of hay are annually stacked, and, judging from the stacks now in the yard, keeps in excellent condition. He considers the native grasses better suited to the country than the cultivated sorts. Speaking of settlers he said, most emphatically: "Those wanted are good, practical farmers. A man having \$2,000 can make a fine start; one having \$1,000 can also do well; and men without capital soon become independent, if industrious. Such persons should hire to a farmer for a year or two. I know many who have come in this way, who are now wealthy. Those who have money should be most careful in locating; they should be sure to get a good farm in a good locality. Deal only with reliable men. Enquire freely and fully of settlers, when you know them to be honest. Do not buy land because it is cheap; any amount of good land can be procured in this vicinity for \$5 to \$15 per acre, according to improvements, &c."

Pea Harvesting.

All our readers know what a tiresome job it is to cut a large field of peas with the scythe. Many farmers pull them with a horseshoe, this will do when the straw is abundant, the peas few, and the field clean. But such conditions are seldom enjoyed. When the straw is heavily podded and grass and tall weeds abundant, the rake or even the scythe will shell a great many peas. We have found the Pea Harvester, manufactured by Talon Bros., Guelph, Ont., a splendid implement when attached to a wide-cut, mower, or self-rake reaper. When attached to a mower of the proper width, two men and team can cut ten acres per day; with a reaper, one man will accomplish as much as two with a mower, and do it easier. Besides the ease and speed with which the work is done, the straw can be cut somewhat green, and will be free from dust and dirt with which it is loaded when harvested with the scythe or rake. When cut with a machine, the crop may be housed sooner than is possible when bunched in any other way.

Stock-breeders and farmers are beginning to realize the value of well-saved pea straw. That from the finer sorts of peas is more valuable than any other kind of straw, and even that

from the common Marrowfat pea is good feed when well-harvested and housed as soon as dry. Some of the largest and most successful breeders chaff and feed this straw to their stock animals. Given this with roots and meal, cattle and sheep do remarkably well. Our advice to all our readers is, cut your peas a little green. Keep the straw clean and do not let it get wet; handle it with as much care as clover hay, both before and after threshing, and you will be surprised at the results when fed. There is no crop so much neglected and abused in harvesting as the pea, and none which will pay better for careful handling.

Our Subscription Prizes.

Wherever we go through the province, we are forcibly impressed with the fact, that Canadian farmers are losing tens of thousands of dollars every year, because they use as stock animals inferior and badly-bred males. It takes as long to rear a colt worth \$70 as it does one worth \$200. The proportionate value is the same in all other stock, even to fowls. The best is not too good. If, where the land is divided into small farms, the yeomen would unite and buy good males, of the breed best suited to their wants, they would double the value of their stock in, at most, ten years; which would mean a great increase in national wealth. To encourage the introduction of good animals everywhere, we will continue to give as subscription prizes first-class stock animals of the various breeds. Every animal given will be selected from the stock of reliable breeders only. See the list of PREMIUMS NOW OFFERED ON PAGE 230. We will guarantee every prize to give satisfaction to the winner. We have a lot of most flattering testimonials from those to whom we have awarded prizes. We give the following as an example of the value of the prizes we are now offering. The following is an extract from a private letter received from Mr. James Graham, Port Perry, a large breeder, and an estimable and honorable man:—

DEAR SIR:—The young bull chosen by you is a rangy, good show beast. On the 22nd of April last he weighed 1,066 lbs. I presume you have the Dominion Herd Book. I will go over a number of his crosses in the front part of his pedigree, and confine myself to their performances in the show-ring, which I think will give a good idea of their merit as a family; and, I may say, they achieved great fame in the hands of George M. Bedford, Kentucky, U. S. They were known as the Bride family. He was got by Prince Victor 5th, a pure Bates bull, by Fourth Duke of Clarence, of Bow Park Farm. Second cross, Minna Duke=2108=. This was a grand show bull, shown often—always 1st and sweepstakes. He was by the Twentieth Duke of Airdrie. General Meredith & Sons paid \$10,000 for him. Grand-dam, Zora=5055=, by Royal Buck=2374=, a low-set, heavy-fleshed, and good show bull, never beaten in the county; he was by Scotsman 2nd, a first-prize bull at the Provincial Fair. Fourth cross, Lothair=801=, a fine show bull, got by imp. Young England, a prize winner. Fifth cross by Loudon Duke=803=, a very successful prize winner in the hands of the Snell Bros.; he won four first prizes at the Provincial fairs, and stood twice at the head of the Prince of Wales' prize herd, and won the sweepstakes as the best bull of any age, at the Ohio State fair in 1872. Sixth cross, by Meade Massie=840=. This was a fine show bull; illustrated in the 7th Vol., A. H. B. Seventh cross, by Grand Duke=673=. This bull won the first prize, and a sweepstakes prize of \$600, given for the best bull of any age, at the St. Louis State fair in 1861. Seventh cross, by Bell Duke of Airdrie=354=; he by imp. Duke of Airdrie, a pure Duchess bull; his dam, Lady Bell, by Second Duke of Athol (11376), running back through pure Bates stock to Fletcher, by Young Wynyard (2859). He won the same prizes at St. Louis in 1860.

Farmers' Clubs.

West Middlesex Farmers' Institute.

The Board of Directors made arrangements for a meeting of this Institute at Strathroy on the 29th, and at Glencoe on the 30th of May. The weather proved very unfavorable, and the Glencoe meeting was postponed. At Strathroy the attendance was small, but those who were present had no reason to regret the effort put forth. One of the best results of Farmers' Institutes is the development of local talent. Of this the Strathroy meeting gave evidence. One of the best practical addresses we ever heard on farming was there given by Mr. D. Leitch, ex-President of the Dominion Farmers' Council, who is a reader and thinker. Mr. Leitch is the first practical farmer we have heard attempt to explain the feeding and manurial value of the different grains. This is of great importance, and in the near future many will realize this fact, who now think it unnecessary to take the trouble to give it a moment's consideration. He was followed by Mr. Charles Simmons, of Ivan, Ont., a thoroughly practical farmer, with a slight tendency to be enthusiastic on the beef question. His address was also of value, and could more of our farmers be persuaded to farm as he does (for he farms as he talks), it would be the means of increasing the wealth of our Dominion in general and Ontario particularly.

Dr. Roome, M. P. and Hon. G. W. Ross, addressed the meeting at some length, and were listened to with attention.

FARMERS' PICNIC.

A very enjoyable picnic was held under the auspices of the East Middlesex Farmers' Institute, at Pond Mills, on Wednesday June 12th. The programme consisted of music by local talent, addresses by Messrs. McMillan, M. P. for East Huron, Armstrong, M. P. for East Middlesex, S. B. Gorwell, London Tp., and W. L. Brown of the London Free Press. All the speakers were listened to with intense interest throughout, by an intelligent and appreciative audience, of between four and five hundred.

Mr. McMillan referred to the too prevalent but fallacious idea, that the bright boy must not stay on the farm, and the stupid one was fit for nothing else, so he must remain. He cited the case of Sir J. B. Lawes as showing the scope for intelligence in agricultural pursuits. He considered the competition so keen between different countries, that intelligence was an absolute prerequisite. He briefly referred to the vigor of body and mind that can only be acquired and sustained by out-door exercise. That the farmer to keep the boys on the farm must take an interest in his work, must be an enthusiast in it, should keep his house well supplied with agricultural literature, and study the same himself, particularly agricultural papers. Have hours of reading as well as hours of labor. He deprecated the fact that many farmers were averse to agricultural papers, applying the term book-farming to the information therein contained. He claimed that two boys with equal opportunities starting farming, one reading agricultural papers and the other not, that the reader will in ninety-nine cases out of a hundred, excel the one who does not read. The speaker claimed that farming paid if followed intelligently and economically, but the man who was always wanting to sell out would not make it pay. And above all

there was no place on earth where there was as much real comfort as in the home of the intelligent, industrious farmer.

Mr. Armstrong referred to the failure to a great extent of the wheat crop, and gave several reasons why we could not expect a good price in the near future, of which we may have more to say in the future.

Mr. S. B. Gorwell gave a short address on combines, consisting chiefly of a regret that they existed to so great an extent.

Mr. W. L. Brown gave a neat little speech on agriculture, recommending a more intensive system of farming, keeping more stock and soiling, and in many cases working less land. We regret our inability to give more than a mere synopsis of these addresses, as they were all of great merit; but space forbids.

Stock.

Chatty Letter from the States.

(From Our Chicago Correspondent.)

Among the recent notable sales were: 960-lb. Hereford steers, at \$4.25, with 1,700-lb. steers, on the same day, at less money. Some 1,491-lb. grade red polled cattle sold at \$4.46. They were raised in Dakota.

One cause of exorbitant railroad rates is the fact that there are so many different "lines," owned by inside directors and officers of roads, and run to make money regardless of public interests. It has been a common thing for railroads to charge more for hauling freight in their own cars than the various "lines" operating over the same road would charge.

The Inter-State Law aims to reach some of these things, but is only partially successful.

Western railroads have adopted a system of shipping all live stock by weight, which is not very satisfactory. They fix the minimum weight so high that it is often impossible to reach it with light cattle, calves and sheep, and so shippers are compelled to pay for what they do not get. One of the big Chicago concerns, the Fairbank Canning Co., in which Nelse Morris is interested, has bought the St. Louis Dressed Beef Company's plant, including 100 refrigerator cars, at \$500,000. For years St. Louis, as a live-stock market, has been on the wane. Perhaps this will wake her up.

Heavy cattle held back for higher prices are now being marketed in floods.

The crop of western corn-fed sheep has been marketed. The closing prices were \$4.35@4.75 for fair to choice 110 @ 140-lb. shorn withers. The thin-grass sheep are now coming from the far-west, and are selling at \$3.50 @ 3.80. Texas is furnishing large numbers of sheep; the fattest of them, weighing 80 @ 98 lbs., have sold at \$4 @ \$4.50, while the 60 @ 75-lb. thin sheep have sold at \$3 @ \$3.65, largely to country feeders.

Texas sheep men have lots of courage this year. The muttons are not bringing as much money as last year, but money is not so scarce, and there are better prospects for the general mutton and wool business than for some years. If it were not for the large offerings of Texas sheep on the markets this spring, the mutton markets would have been scantily supplied.

Have a tight trough behind the cows which saves all the voidings, which are drawn to the field and spread, every day. It saves work and the manure is much more valuable. The main element of success lies in caring for the stock, saving the manure, and avoiding handling it too much.

The Outlook for Herefords.

BY ROBT. J. MACKIE.

Mr. Jas. Lawrence, of Calgary, N. W. T., on the 29th of May shipped from Oshawa, Ont., 33 head of pure Herefords, nearly all cows and heifers, and mostly from the herds of the writer and L. G. Drew, of Oshawa, which makes the largest purchase and shipment of Herefords that has ever been made from here, and I believe it is the largest shipment of any pure breed of cattle from this vicinity at one time. He also purchased 14 head of grades, making in all 47 head. Mr. Lawrence shipped from here two years ago four carloads of cattle, some of which were Herefords and Hereford grades, and he says he can do much better with them on the range than with any others, as the Herefords carry their flesh well through the winter, while the others get very thin. He speaks very favorably of the Herefords; and says there is a much greater demand for them where he is than any other breed. While we are not getting the booming prices of five years ago, they are such that we can make a reasonable profit, and at the same time ranchmen can afford to purchase for the purpose of improving their stock. If there had never been a boom in Herefords it would have been much better for the breed. The extremely high prices at which they at one time sold were almost prohibiting, and caused a great demand for grades, which was carried to such an extent that bulls from the very worst scrubs of cows brought from fifty to one hundred dollars, and such bulls were used very largely upon the ranges. It is very easy to foresee what the result would naturally be. They might almost as well use the much-talked about scrub bull, as one single cross from the scrub cow could not give satisfactory results. And these being marked with a white face and looking like a pure Hereford, were often sold as such. The result was disastrous to the breed for the time, but will, in the end, I believe, do good, for it has brought the price of the pure article at the present time below the real value, which will induce many to use the bulls who never would have done so while the prices remained so high. And when any breeder once uses a pure Hereford bull in his herd—I care not what his herd may be—the improvement will be so marked, and so great, that he cannot help but be satisfied with the result. The time is not far distant when the Hereford breeders who pay the proper attention to their breeding will be able to dispose of all they can raise at profitable prices, if not fancy ones. I have been told that a certain M. P. for some constituency west of here, when the good milking qualities of some of them were being discussed, said he never saw a Hereford cow that would feed her own calf. Now, that gentleman has either not seen many Herefords, or he did not tell the truth. If he will come to my place, I would soon take him where he would see fifty cows or more that will not only feed their own calves, but feed them well; and some of them do considerably more, and with less exceptions to that rule than any of the beef breeds. While I do not for the Hereford lay claim to the title of the general-purpose cow that we read so much about (and which I consider like the man that is jack-of-all-trades, and master of none), I contend they are good, fair milkers; and I do claim that, if not the finest, they are one of the finest of the breeds of the present

time, and they are bound to find a place in every county in Canada, in spite of all the opposition that can be brought against them. I believe there is room for all the improved breeds of cattle, whether for the dairy or for beef, and let us all join in fighting our common enemy the scrub, which by rooting out will not only be a benefit to the breeders but to the country generally.

Against the Dog.

It is seldom your neighbor's horse injures your property, for convenience requires that he be kept under immediate control; and if at rare intervals he enters your cornfield, he will probably remain long enough not only to do appraisable damage, but to enable a reasonably diligent husbandman to secure him as a witness in support of a claim for damages. But with the dog it is entirely different. His immunity from work of any kind, his rapid movements, indifference to walls, brooks or barriers, enable him to ravage a whole township in a single night, and yet be lying in his kennel when the mischief is discovered. Again, A. rides out into the country and his dog goes with him. The horse jogs quietly along, but the dog makes forays through grainfields, gardens and flowerbeds. He frightens the cows and worries the sheep, chases the hens and cats, just as A. knew he would do if he took him along. The individual damage may be trifling, but at the end of a ten-mile trip the aggregate amount would be five times the value of the dog. Now, the law no more sanctions trespass by dogs than by horses, but as the individual damage is small, the difficulty of identification great, and in a large proportion of instances impossible, it happens that only in a few aggravated cases, where the dog is known, is any recompense recovered from the owner.

The reason why I should be allowed to kill a trespassing dog, and not be allowed to kill a trespassing horse, is simply that in the one case it is a necessity, and in the other case not a necessity; against the latter I am amply protected by existing laws, while against the former I am very imperfectly protected. It is certainly anomalous that a man who owns not a rod of land in the world should think himself entitled to keep one or more dogs, knowing perfectly well that three-quarters of the time they will be trespassing on someone's premises, and knowing when he goes to his business in the morning, that he is leaving, without the least attempt or pretence at confinement, an animal whose roving nature will lead him all over the township before night and probably all over it again before morning. Is there any reason why the least useful (generally utterly useless) of our domestic animals should be allowed a license which would not be tolerated an instant in case of animals really useful? Surely no candid person will deny that some relief can fairly be asked for. "Put the dog upon the same ground as the horse and the difficulty will be solved," it is said, but he is already hedged about with far more stringent provisions and the difficulty is by no means solved. The nuisance exists—the present law does not abate it.—[N. E. Farmer.

DEAR SIR,—I am pleased to note continued improvement in various departments of the Farmers' Advocate. I am sure your many readers must appreciate so valuable a monthly visitor. After careful perusal of the May number I must congratulate yourself, the gentlemen composing your editorial staff and its contributors, for its many excellencies. Several of the articles were exceptionally good, and I could not help wishing that typographical condensation would have made space for more. Faithfully yours,
WM. THOMPSON, JR.,
Derwent, Ont.

Mr. Dryden's Shropshires.

During last year the officers of the English Shropshire Association acquainted the directors of the Toronto Industrial Exhibition of their intention to give, through them, a silver cup valued at £10, as a prize for the best Shropshire ram, and seven of his get—five ewe lambs and two rams. This splendid prize was keenly competed for by the more prominent breeders of the country, but was easily won by Mr. Dryden's two-shear ram, Prince of Wales 6,590, (3,825).

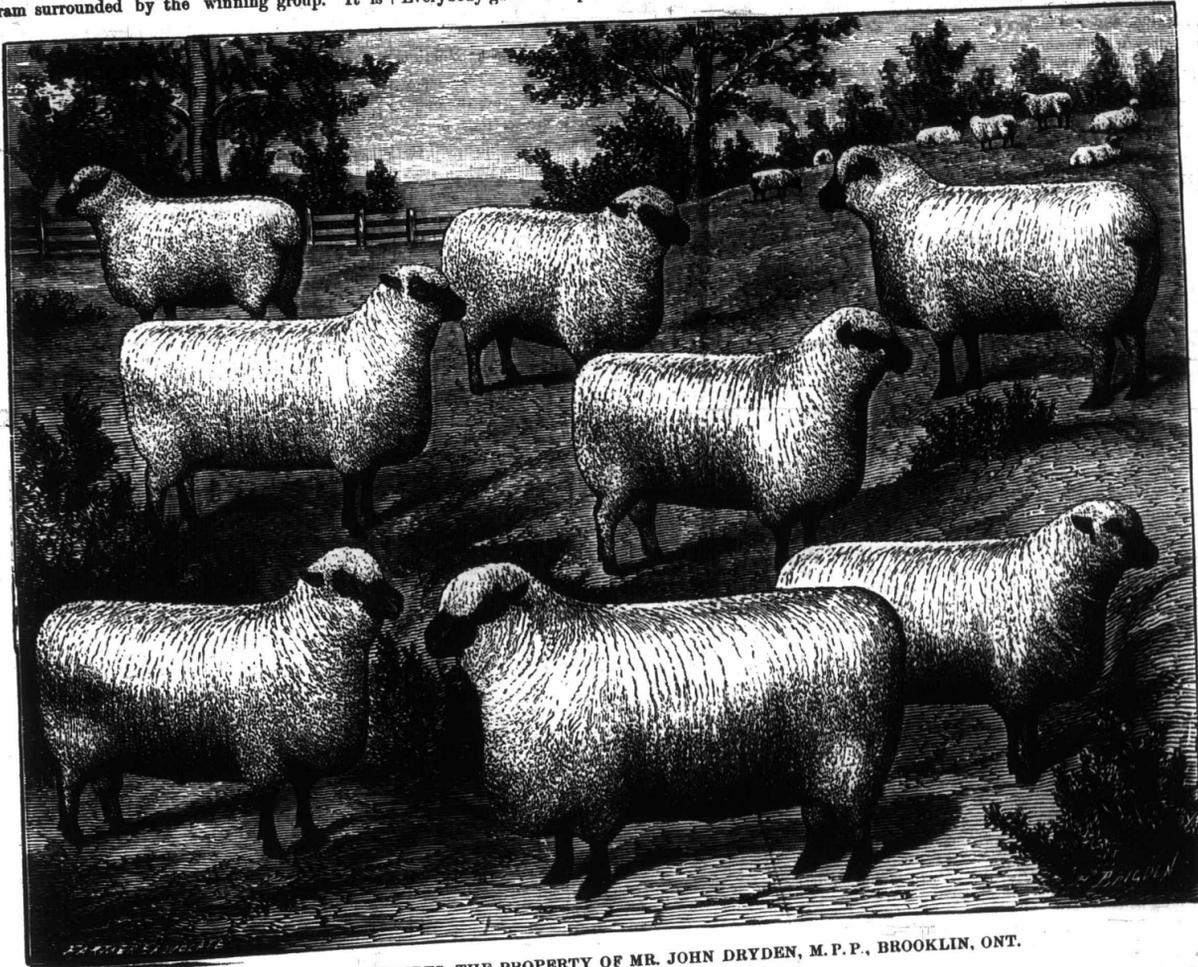
We present in this issue a spirited cut of the ram surrounded by the winning group. It is

in 1877 at Bath and West of England show, as well as at other minor exhibitions.

From this record of his ancestors, it is no wonder his progeny manifest a tendency to take a winning place. Some critics would think him a little under size, but he has great length of body, is very symmetrical, with exceptionally well-developed front and hind quarters, and stands on very short legs. His remarkable vitality and constitutional vigor were severely tested at Kingston Exhibition, where, through exposure and heat, he was seized with acute indigestion, leading to other complications. Everybody gave him up for dead, but through

The Dominion Sheep Breeders' Association.

Ever since the meeting of this Association we have been desired to publish as many of the papers in one issue as space would allow, but only recently have we been in a position to do this. In this number will be found a synopsis of six of them. They were an excellent lot of essays, and well discussed. All of them will be printed in full in the annual report. Though one of the youngest of the Canadian associations, it has a strong membership, and promises to be a useful body. For many years some of our sheep breeders have been desirous of forming an asso-



A GROUP OF SHROPSHIRE, THE PROPERTY OF MR. JOHN DRYDEN, M. P. P., BROOKLIN, ONT.

needless to say, that both ram and lambs were winners in their classes as well.

Prince of Wales is full of royal show blood, his sire being P. R. C. (2,249), having for sire the Patriot Lord (1,199), winner of the first prize at the Royal show held at York, and sold for \$525; for grandsire Royal Reserve (159), winner of second prize at Royal show held at Derby, and first at Manchester, Oswestry, Shropshire and Leicester shows. For g. g. sire, Claudius (103), twice winner of first place at the great Royal show, and let in 1873 for \$600.

The dam of Prince of Wales was sired by J. C. B. (693), got by that renowned ram Marquis of Bath, bred by Mr. Mansell, hired in 1877 for one year for \$400, and sold the following year by Mr. Minton for the same sum; and winner

the efforts of Mr. Jackson, who, for some time, had no hopes of his recovery, he rallied, and two days after was led in the ring, and although very weak, took second place in a large entry.

Mr. Dryden informs us that his lambs last year were scattered over Canada; and several States of the Union, and the invariable statement from purchasers was the same: "Perfectly satisfied." "He is a perfect beauty, and well worth the money." "Arrived all right, much pleased with him."

We are glad to learn that a younger lot, equally good, will be ready for dispersion after August next. We understand that an additional importation from England will be added about that time. (See advertisement).

The horse will lick salt every day if it has a chance, and this tends to promote digestion.

ciation. Early in the last decade a number of gentlemen met in Toronto for the purpose of founding an association. Among those present were:—J. C. Snell, Edmonton; James Russell, Richmond Hill; Arthur Johnston, Greenwood; John Miller, Brougham; Wm. M. Miller, Claremont; John R. Craig; F. W. Hodson; and several others. An association was then formed, but, through an unfortunate circumstance, never again convened. Most of the movers in the matter uniting with American Associations. In September last a meeting of sheep breeders was called by the authorities of the Ontario Agricultural College, to discuss the advisability of founding Canadian sheep records. This was opposed by some of the leading breeders. Several gentlemen were appointed a committee to

again bring the matter up, but in reality it was dropped, and we are safe in saying that it would not again have been heard of, had not the present secretary interested himself in the matter, with and by the aid of Messrs. Russell, Campbell, Jackson, Snell, Dryden, Mills and Hallam. This association, as separate and distinct from all others, was brought into existence, and all expenses connected with its formation were entirely borne by one man, but without the aid of the above-mentioned gentlemen he could not have established the association. To the above belong the honor and credit. Let it be fully understood this is a Sheep Breeder's Association, formed for their mutual benefit and protection; and not a Record Association, as was proposed in Toronto last September. A meeting of this body will be held in the City of London, Thursday, September 12th, the programme of which will be given in our next issue. Several very important subjects will be discussed. Hon. Mr. Drury, with several other distinguished Canadians, and Mr. Mortimer Levering, Secretary American Shropshire Record, are expected to be present and address the meeting.

Railway Tariff on Sheep.

BY ROBERT MILLAR, BROUGHAM, ONT.

In undertaking to address you on the subject of railway tariff on sheep, I must say, in the first place, that I have not given the subject very much consideration lately. I have been from home so much, and have been so busy when at home, that I have not had time to prepare any paper. But it seems to me that our grievances in the matter of railway charges on small lots of sheep are so well known to all shippers, that it is hardly worth while to say much on the subject. I think that we all feel that our business is as prosperous as any in the country; that we feel that, in distributing well-bred sheep or well-bred animals of any kind throughout the land, we are benefiting the public as much or more than those engaged in any other pursuit. And I say, that when any railway company hinders any person from purchasing well-bred stock, by the excessive charges which they in many cases make, they are doing harm that cannot be computed. I cannot use any more forcible argument to make this fact clear than to take, as an example, the Clydesdale stallion, Grey Clyde, imported about half a century ago, and so extensively used in the counties of York and Ontario. We have all known something of him; we have, I may say, all received a benefit from his being brought here. To put it stronger, I will say that he has been a source of untold wealth to this country; and we will be benefited by the Clyde cross in the pedigrees of Clydesdale horses as long as they are valuable. While Grey Clyde was benefiting breeders to such an extent, he was also preparing a source from which the railroad companies were to receive great benefit. Who can have any idea how many horses have been sold and sent out of this country on account of having the Clyde cross? And the railroad companies have been receiving, and will continue to receive, a great revenue from their transportation. While we claim that the good done by the liberal use of a good male cannot be counted, and lasts for all time, we also claim that the harm done by the use of a bad one is just as extensive, and lasts just as long. I believe that all of you have heard of Mr. J. J. Hill, of Minneapolis, who had such faith in well-bred animals being shipped to any district being a great source of revenue to railways in the future, that he imported, at great expense, a large number of bulls from Scotland, and distributed them free of charge amongst the settlers along his extensive railway system. I believe I speak the opinion of this meeting when I say that we do not ask that our animals be shipped free of charge; that we do not ask anything unusual. As I said before, I think the sheep-breeding in-

dustry is in as prosperous a condition, and promises for the future as much, as any industry in the country. Yet we do not wish, and cannot stand, to be discriminated against; and we ask that our goods, which are no more trouble, shall be carried at the same rates as groceries, or any other goods for consumption, the usefulness of which is there and then ended.

The Flocks of Ontario—Can they be Profitably Increased?

BY JOHN DRYDEN, M. P. P., BROOKLIN, ONT.

The business of raising sheep is as old as the history of man, for we read of the sons of Adam, that Cain was a tiller of the ground, and Abel was a keeper or feeder of sheep. There are large areas of our country which by common consent are altogether unsuited for the production of sheep. The land lies too low, and the country is too flat; but while this is true, the opposite is also true, that there are sections of the country admirably suited for these purposes, capable of producing better returns from the rearing of sheep than any other way.

I was impressed with this thought when, a few weeks ago, I attended a number of Farmers' Institutes to the north and east of Kingston. There are large tracts of country on limestone foundation, only portions being covered by soil, but much of this of great richness and fertility, yet so irregular as to prevent proper cultivation. On enquiry, I found sheep grew admirably here, and were always healthy. Yet, strange to say, scarcely any could be found. Why is it that our farmers thus refuse to keep sheep? Why is it that, not merely in this locality to which reference is made, but elsewhere, large tracts are found practically without sheep? If sheep raising could be made profitable anywhere, it surely would be in such sections as these. Several reasons suggest themselves. First, our farmers are inclined to be conservative in the management of their farms. If they have not been accustomed in their earlier days to the care of sheep, they will very likely refuse to embark in the enterprise now. If they have tried, at some time in the past, the business, and because of lack of facilities, or because of wrong breed for the locality, or for other reasons, it has proved a failure, they conclude that all sheep-raising must fail in the same way. Some have the erroneous opinion that sheep are hard on their pastures. Sheep do bite close to the ground, but they will often find their living where no other animal can exist. In my own opinion, where any considerable number are kept, they should always be pastured by themselves. Again, another reason is found in the fact that, originally, almost our entire flocks were composed of one sort or another of the long-wool breeds. This class of wool, having gone so much out of use as to be almost worthless, has discouraged many from keeping sheep at all. Having discarded these, they are slow to believe any others will be better. Some go out of the business because their sheep, left to shift for themselves on the road side in summer, and in winter jostled and knocked about the straw-stalk by cattle and horses, do not make their owners rich and prosperous. Undoubtedly, a little extra care and expense would add largely to the profit of many of our flocks. The erection of a suitable building, the provision of a separate yard, food at regular intervals, would itself bring many a useless flock of sheep into paying proportions.

2. The use of better sires would add a large percentage to the profit of the flock. So many neglect this important matter when prices are low and dullness pervades the market. Anything will do them; whereas, the opposite course is the only one likely to bring any profit. In dull times a good article alone sells readily, and at paying prices. The inferior article cannot be got rid of at any price or on any terms. Again, such sires should be used as would produce whatever is needed in wool or mutton, to supply present demands. There are some so conservative that they refuse to change at all

their course, though their variety is not in demand anywhere. They insist that soon a change will come; that certain breeds are being boomed, and that presently these will be discarded and men again will return to the old sort. My own profit in sheep raising in past years might easily have been doubled, had I earlier consented to lay aside the Leicester and take up the Cotswold instead. With that experience, I did not long keep the Cotswold when I found they were not wanted.

In a few years the essential qualities of any breed of sheep may be impressed on the common sort if persistent effort be put forth in a judicious selection of pure-bred sires. Just now, when a better demand is springing up for mutton, I think greater profit will be realized by the use of such sires as will form a supply to meet this demand. Let not our prejudice prevent the use of the best sires from the best mutton breeds. Besides, it is quite possible to create an increased demand by producing a better article in supply of that demand. As an illustration, it has been the wonder of many how the production of cheese in the United States and Canada could go on increasing year by year, and still the demand be just the same, or even better. It is accounted for by the fact that a superior article placed on the market has in itself increased the demand. If the father brings home a piece of cheese that suits the family, he will soon hear expressions like this: "Oh, what good cheese; you must bring some more like it when you go to town." So the excellence of that article produces in that family a demand for more. If, on the other hand, it had proved an inferior article, the exclamation would be: "Oh, what nasty stuff; we don't want any more of that;" and so the demand would be diminished.

The same is true in regard to mutton. If a superior article is placed on the market, those who buy it will want more. So I confidently expect that if these better mutton breeds are cultivated in Canada and the United States, that as the supply is increased the demand for them will continue to increase in the same proportion. It is possible to boom any class of domestic animals for a short time by united effort and organization; but when any breed spreads from one county to another, and from one nation to another, until every civilized country is reached, it is safe to assume that it spreads, not because it is boomed, but because of real and intrinsic merit. Is it not wise, then, to acknowledge the merit, and govern ourselves so as to share in the profit of their growth?

I know one flock of ten pure-bred sheep which produced in one season 23 lambs, the proceeds of which, when sold, netted \$33.00 for each ewe. The profits on the land used to produce these lambs would be very large. Everyone could not do as well, perhaps; but my argument is, that it is wiser to produce that which gives the best returns, even though we must change our methods and destroy some sentiment. Then, I am sorry to say it, but it is nevertheless true, that in some parts of the country those who would like to be keepers of sheep cannot do so, because of the prevalence of dogs in the neighborhood. I think in the days of the early church, dogs must have been considered emblems of evil because of the illustration used in giving the warning, "Beware of Dogs." Whether this be so or not, I am bold to say, the accumulation of a number of dogs in any community is only evil, and that continually.

I venture the assertion, that if you commence on any given concession and start through, taking special account of every dog which is kept, you will not find more than one to fifty which can be proven to be of any use, except it may be to eat the scraps from the table three times a day. So strongly have I felt about this matter, that I have refused for many years to allow a dog to exist on my farm. If all the legislators were of my view, we should very soon have some legislation which would tend to lessen their number, and so, in a measure, remove one obstacle in keeping a large number of sheep. I think it is a shame that after our fathers have driven out the wolves which originally infested this country, so that they might be keepers of sheep, that we in this day have to submit to the pest of dogs, which are often quite as destructive as wolves

have been in the past. This is a crying evil. Men everywhere say, "I would keep sheep, but dare not." Others say, "I must confine them by night," always greatly to their detriment.

If any legislation is secured, it will only be by a pressing demand from those interested in this industry. The present bill is bringing into direct conflict dog and sheep breeders. I find we have in this province such a thing as dog husbandry, backed up by a powerful "Kennel Club." These persons are alarmed lest this important industry be disturbed; and the question must be decided as to the predominant importance of dogs or sheep. With these obstacles removed, and fuller information given as to sheep husbandry, our flocks ought to increase largely in numbers and value, and form an additional factor in the wealth-producing power of our province.

How to Grow Large and Well-matured Lambs.

BY JOHN CAMPBELL, JR., WOODVILLE, ONT.

As lambs, during the first few weeks of their lives, usually depend altogether on the mothers for the nourishment necessary to sustain life and produce growth, it is of much importance that the ewes should, previous to lambing, be so cared for as to promote a thriving, healthy condition; but avoid having them too fleshy. Those loaded with fat rarely drop strong, well-doing lambs; nor will the pampered ones, which come to the lambing season in a failing condition, prove at all satisfactory, as a rule. On the other hand, those ewes too poorly fed give a scanty supply of milk, prove indifferent nurses, and frequently disown their offspring.

I am of the opinion that the sire and his condition has even still greater influence in giving us the early-maturing lambs. While it is well to select a ram possessing a good constitution, which is a good feeder, and, with liberal feeding, fleshes quickly, yet it is not advantageous to use one when in, what is usually termed "show fit," more particularly if older than a shearing, when the aim is to get vigorous progeny.

A medium state, but slowly improving in flesh, of rams when at service, and of ewes when carrying their young, as well as when suckling them, are some of the first steps towards securing growth and early maturity. It is profitable to feed the ewe so as to cause a plentiful supply of milk, and that of good nourishing quality. I believe frequent mistakes are made from too great a haste to push on the young things, by so overfeeding the dams with grain, oil-cake, etc., causing a heavy flow of milk unsuitable to the lambs' tender digestive organs, which hinders growth and endangers the health, if not the life, of both. Too high feeding at first produces a feverish condition of the ewes' system; and it will be fortunate if the udder does not become inflamed, followed by caking, and so rendered useless.

Bran should form a considerable portion of at least the first month's food, irrespective of cost, as it, with clover hay, an abundant supply of roots, and sufficient crushed grain, will promote the secretion of milk, fitted to hasten the early maturing of young animals.

We find fully as many degrees of milking qualities in the flock as in the herd. While one ewe will, year after year, raise a large, fleshy lamb, another, with the best of management, will at weaning time present the owner with one by no means in keeping with the dam's full fleshy form. From that we learn the fact of some ewes, naturally or by breeding, being better adapted to raise lambs wanted for the early market; therefore, by careful selection, we can gain time, and advance another step towards early maturity.

It does not by any means follow, that large lambs when full grown are always the largest or best sheep. In fact, I think the opposite is a usual result, as the fleshy, well-formed ewe, but deficient in milk production, will probably beget "her own like." To secure the best growth of lambs, it is necessary to begin feeding artificial food, whenever they will nibble it. By

placing a trough in an enclosure, with a small opening through which the ewes cannot pass, they will, when two or three weeks old, eat some hay and grain. Sweet clover hay, crushed oats and bran, at first, with oil-cake later, will be relished by them. There are those who force growth by means of cow's milk given from a bottle; and, undoubtedly, surprising results are to be seen. But the thoughts will cross our minds: Is the gain worth the trouble; and the benefit a lasting one?

Of course, these modes of treatment apply more fully to early lambs, and during the winter months, though the separate feeding of grain to the lambs can be continued, with good success, after being turned to grass. Abundance of good fresh water, within easy reach at all times, is an absolute necessity, in order to secure satisfactory returns. It is hardly necessary to state that the quantity and quality of pasturage is also a very important item; so are other little matters, apparently unimportant singly, as shade in the hot season, regular salting, destroying ticks; yet, taken altogether, if neglected cannot fail to hinder that which it is the aim to hasten.

The weaning is rather a critical part of the business, as at that time growth may be not only checked altogether, but actual loss of weight may follow, taking weeks to recover. It is not always easy to detect the cause, for, with all precaution, the bloom may be gone in a few days without any apparent reason. Having fresh, sweet grass ready, at such a distance from the mothers as to prevent their hearing each other's bleat, with the little attentions already described, will lessen the danger of failure at this period. What is called the German method of weaning, might enable shepherds to avoid much of the vexatious want of progress at this stage. It is begun by separating the lambs from their dams for an hour twice a day, as soon as they will eat, feeding them grain, etc., while parted. Every week the time of their separation is lengthened, until eight weeks have passed, when they are allowed with the ewes but twice a day, for an hour each time. When twelve weeks old, strong, vigorous lambs are fitted to pass the weaning without any check, as the change has been so gradually brought about, the final separation is unnoted. Breeders who have practised turning the weaned lambs on a plot of rape, recommend it highly, as that succulent food seems to provide an excellent substitute for the mother's milk.

Soil and locality have so much influence in the growing of sheep, that that alone may often account for one breeder's failure and the other's success. I have no doubt the time will come when the bounds of sections adapted to the wants of certain breeds of sheep will be more or less clearly defined, somewhat similar to what is found in Britain at present.

Therefore, when we have discovered what particular kind of sheep our farm is most suitable for, followed by securing the best of that kind, then, with those little details of management practised which only practical experience can thoroughly teach, larger lambs, larger sheep and better quality will be the outcome.

In the meantime, much good should proceed from such meetings as we have here to-day—good to each other, by an interchange of plans, practices and experiences; and good to the country, by stimulating the exertions of farmers in general to grow better sheep and more of them.

Mr Burnett is a believer in hornless cattle. The head of his herd is a bull, half Holstein and half Jamestown (polled), all of whose calves are hornless. The bull has horns, which were loose and movable up to six months ago, when they hardened and became fixed. One of the curiosities of the place is a cow with large, protruding eyes and straight spreading horns. "What breed is she?" asked Mr. Burnett. The professor thought she was Swiss, after carefully looking her over. The other members of the club did not dare to venture an opinion. The animal greatly increased in its attractiveness for us when we were told that she was three-quarters Jersey and one-quarter deer. Her mother was a cross between a Jersey cow and a buck deer. She is a very large milker, with a remarkably gentle disposition, but very timid and easily disturbed at the presence of strangers.

Merino Sheep.

BY ROCK BAILEY, OAK GROVE FARM, UNION, ONTARIO.

In compliance with the request to prepare a paper on sheep-raising or breeding, for this meeting, I have chosen the subject, "Merinos" or Merino Sheep.

Of the value of these sheep, as combining in an unequalled degree both wool and mutton above all other breeds, too much cannot be said. What the Shorthorn cattle are to the general farmer in the production of beef and milk, so is the Merino sheep in the production of wool and mutton; for both must be present to make up a profitable animal. Their longevity is not equalled by any breed, it being not an uncommon thing to find ewes breeding at 14 to 16 years of age, and shearing fleeces from 10 to 12. As to early maturity, while it will be generally thought that they do not mature as early as some of the mutton breeds, yet an experiment in feeding fine wool lambs will prove to the most skeptical that they are fully as easily fattened as the heavier weights, and it is not an uncommon thing to find bunches of March lambs weighing 80 to 90 pounds when fat.

Yearlings do not feed as well as lambs, but this is true, I think, of all breeds. So far as the value of mutton is concerned, fine-wool mutton is coming into favor, and is pretty generally conceded to possess more lean or marbled meat than any of the down breeds, not excepting the Southdown.

While all breeds will find favor, and justly so (for all are needed) to supply the different grades of wool, yet where large flocks are to be kept, the Merino, for herding, far excels any other breed in the extra weight of fleece produced when held for breeding purposes, as the ewe flock must be.

Their ability to exist on scanty herbage, and adaptation to close housing in winter quarters, make them always a desirable kind where large numbers are kept.

I think it safe to say that the wool product could be doubled on the same amount of feed, and not lose more than one-fifth in the mutton product, and I am well satisfied that the condition of the flock can be kept up on scanty pasture very much easier than with the long and middle wools. A 100-acre farm, with wood lot of from 15 to 25 acres, ought to at least keep 50 fine-wool sheep, and 60 to 75 could be kept, leaving room for 4 horses and say 4 to 6 cows, with 15 to 20 head of swine, if the flock is handled properly and the surplus stock turned off yearly at from 9 to 12 months old.

John McCafferty, of McComb Co., Mich., this season raised and fed 39 fine-wool lambs that were dropped in March, and weighed, in Buffalo, the 9th day of January, 90 pounds average, and brought 7c per lb.

Of course where small flocks are kept better results can be expected. The mothers of these lambs would average of fine wool 8 to 10 pounds at least, washed; but washing I would not approve of, as much better results from the flocks can be obtained without washing.

A better plan seems to be, and is practiced in the States, of shearing early as last of April or first of May. A flock of breeding ewes, well bred up, should shear from 12 to 14 pounds per head and raise a lamb. When sheared early, there is no danger of maggots, and the fleece being removed early gives the lambs access to the ewes when young, and the former will grow faster and do much better than when the ewe is burdened with her fleece.

Another advantage is in preventing ticks, one which is not likely to occur with heavily-fleeced fine-wools; but if shorn early before the lambs' fleeces become long enough for the ticks to find a hiding-place, the sheep will rid themselves.

Docking, trimming and shearing and care of young lambs is all out of the way then before the rush of spring work comes on, and the trouble of washing, and risk attending it, is avoided. The sheep will then get sufficient length of staple to protect them from the scalding rays of a July sun, and the fleece when short will make more rapid growth in the cooler days of spring. This method is now being practiced by all thorough

bred flock-masters in the States, and by many of the more-advanced and prosperous wool-growers, and is, to some extent, practised by the long and middled wool-breeders.

Some housing will be necessary, but this comes along in looking after the young lambs, and necessitates the association of the flock-master with his flock, which gives him a better knowledge of the value of the different individuals and insures success in the business. As to feed and general management of the flock, much might be said; but to sum up the system of general feeding and management, I would say, feed liberally of almost any kind of food. Water is essential both winter and summer, and good nutritious food must be supplied when ewes are suckling their lambs.

If lambs are weaned early, the ewes will, if reasonable good pasture is furnished, be in condition for breeding early.

Sheep should be labelled, that the records of the flock may be correctly kept, and those discarded that from any cause do not prove profitable.

This can be determined by revising the records when culling is done, weight of fleece, quality, kind of lamb produced, and all the little details of importance deemed of value in a superior wool-producing flock.

I will close with a hope that some points may be gained by those who may be interested in the future of sheep husbandry.

Can the Systems of Judging at Fairs be Improved?

BY JNO. JACKSON, ABINGDON, ONT.

To secure competent judges at fairs has often baffled the best efforts of Fair Managers. They, as a rule, aim to get competent judges, for it is of the utmost importance to the success of every exhibition, large or small, to have the awards made as correctly as possible in every department.

It is much easier to get efficient judges for grains, roots, fruits, arts, and manufactures, than for any of the live-stock classes, and especially sheep. The trouble seems to be that Fair Managers have but little reliable information to guide them. The selection is often made in a haphazard sort of a way, one is chosen, perhaps, because he is a "good fellow," another because he is "honest," or a "stranger" and doesn't know exhibitors, or that he has good sheep himself, this last reason being the most likely indication of efficiency. A man may be a good fellow in almost everything else, and a very bad one when he tries to judge sheep. A stranger, if ignorant of the points that go to make a good animal, is likely to make greater errors than if familiar with exhibitors. Honesty, although much to be admired in a judge, is of itself of no use without knowledge. Some of the greatest blunders are made without any dishonest intentions. A man may have excellent stock himself, and be but a poor judge of the same; or he may win honors at large shows, and not be at all fit to act as judge even at the smallest township show, his own success being due, perhaps, to money, or to the judgment of others.

We will not attempt to trace the current of evils that follow erroneous awards; every exhibitor of experience has tasted the fruit thereof. It doesn't end in the amount of prizes misplaced, but flows on, and widens out like a river toward the sea. Some purchaser relying on the award as a guide, makes a purchase that ends in a serious loss. On the other hand, to give an animal or flock a bad name, may result in loss not to be counted in a life-time. The question is, how can we best improve this state of things? I believe the expert, or the single judge system preferable to the old plan of three. One good judge will certainly make fewer errors than three poor ones. The one judge feels that the responsibility rests on him alone. He knows that the exhibitors are qualified to criticise his awards. It places him in a position with no chance to shirk—he has no colleagues to charge the errors to; he will therefore exercise more care in his decisions. It should also be less expensive, at least at the larger

shows. But the trouble is, where are the expert judges to come from, and how are "Fair Managers" to know them without, as it were, some mark set upon them. If judging at fairs were made a sort of profession, and some system of standard and qualification adopted, I have no doubt like other professions, the supply would soon be equal to the demand. I believe it is within the province of this Association to deal with the matter so far as sheep judges are concerned. In fact, there is no other body so well qualified to make it at once a success as the sheep breeders themselves. My idea would be to constitute a board of examiners to test by written, oral and practical tests, the efficiency of those making application, and give certificates of qualification. This board should be composed of the best known judges from each of the leading recognized breeds, and we might reasonably look for better and more satisfactory results in judging at our fairs. It would be cheaper to pay for work well done, than to have such as we too frequently get done for nothing.

Address Delivered Before the Dominion Sheep Breeders' Association.

BY ALD. JNO. HALLAM, TORONTO, ONT.

Gentlemen:—I am pleased to be with you today, to assist in the formation of a Sheep Breeders' Association for the Dominion of Canada. Though not a sheep breeder, and knowing little about sheep, except a savory leg of mutton, or a good fleece of wool, I am largely interested in the products of the sheep. Here we meet on common ground, and our interests should be mutual, as I stand between the producer and the manufacturer. An organization of this kind will materially develop the interests of sheep breeders, with a lively president and members working to that end.

I want it to be distinctly understood that I did not come here to speak in favor of any particular breed of sheep, or to come in conflict with any member of the Society who may have pet ideas on fancy breeding; but to give you my experience from a wool-dealer's stand point, on the kinds of wool that will produce the best results to the farmer and the manufacturer. In doing this, I may be treading on dangerous ground, and clash with some ideas as to the merits of the various classes of wools grown in this country.

Those farmers who have been complaining of the low price of wool, must remember that all lustre wools have been low for a long time. Some ten or twelve years ago fashion changed, and demoralized the lustre dress goods business, in which our long lustrous combing wool was used. There is every reason to believe that in the near future this class of goods will come into favor again; there will then be a better demand for this class of wool, at a higher figure. There are other reasons why the coarse and medium wools are low priced in Canada, which largely depend on the sheep breeders themselves. Fully one-fourth of the clip from the sheep grown in Ontario is offered in an unmarketable condition. The wool is cotted, chaffy, mixed with seeds and burs, which lessens the value from four to five cents to the manufacturer. If a little more care were taken by the farmers to prevent their sheep from running at large, feeding round straw stacks and amongst thistles, to choose clean places for washing and shearing, so as to keep the wool free from these impurities, I am sure the value of the entire clip would be increased from one to two cents per pound.

In 1887 we imported principally from Great Britain and her colonies, 12,038,693 pounds of wool, valued at \$1,875,651, and exported to the United States, 1,297,667 pounds of combing wools, valued at \$288,256. Our exports of wool are getting less year by year. The reason for this is, in my opinion, that the breeders of thoroughbred stock in Ontario have been doing a large and profitable business in selling their stock to the farmers of the United States, and

that they are now growing more combing wools, thus supplying their own market.

Many farmers ask why we do not grow more fine wools in Canada, and import less. My reply to this is, that we cannot grow the finer grades in Canada to pay and compete with Cape, Australia, Buenos Ayres and Monte Video wools; hence we have to import them, as they are necessary to the success of our manufacturers. We can grow long and medium wools, and find a ready and profitable market for both the mutton and the wool.

Farmers often ask the question why from forty to fifty per cent. is taken off unwashed wools, and think there is not that difference between unwashed and washed wool. In bygone days the usual reduction was one third; but our manufacturers complained that it was not enough, owing to the unsatisfactory condition of the wool, and insisted that it should be at least forty per cent. From my own experience in handling unwashed wools, I think they are about right. If our manufacturers were better off, and could afford to use washing machines, which are very expensive, I would advise them to use unwashed wools, not that it would come lower in price to them, but because it is better for all practical purposes. The long, coarse wools when clipped unwashed from thoroughbred sheep, when well fed and taken care of, will lose fully from forty to fifty per cent. The grade sheep do not carry so much grease, and do not shrink so much in washing.

We would have a demand for all our unwashed wools in the United States, (combers prefer it in that condition,) if it were not for the absurdity of their government placing the same duty per pound on unwashed as they do on washed wools. For instance, the present price of washed wool is twenty-two cents per pound, and the duty ten cents, which is about forty-five per cent.; the present price of unwashed wool to our manufacturer here is twelve cents, and if we had to send it to the United States, there would be a duty of ten cents, or about eighty-three per cent. This practically prohibits the shipping of this class of wool to the United States, hence we have only a local market, with the disadvantages above named. This is one of the beauties of taxing raw material. Under these circumstances, I would not advise the farmers to clip their wool unwashed.

The opening up of the great North-west of Canada is developing a new feature in sheep industry of this country. The broad prairies east of the Rocky Mountains, and skirting the Bow river are highly suitable for sheep raising. There are now to be seen large flocks of Montana sheep grazing on the luxuriant grasses of these plains. This sheep is of the Merino type, close wooled, hardy, and seems well adapted to the country. The wool is fine, medium and desirable, but I think it might be greatly improved by judicious crossing with some of the English thoroughbreds, which would produce wools, if not finer, of a stronger staple, and better suited for flannels, hosiery and knitted goods, and would in the near future replace considerable wool that we now import. The pelt is not so valuable as that of the Leicester, Cotswold, or other breeds of this type, owing to it being wrinkled on the neck, and if anything more tender, it is of less value for leather purposes.

Flock-masters of the North-west are endeavoring to improve this breed of sheep, by crossing the Montana ewes with thoroughbred rams, such as the Leicester, Merino, Shropshire and South-down. No doubt they will succeed in producing a type of sheep superior to the Montana Merino, if they are only careful to breed on the line of selection best suited for wool and mutton, and not interbreed, as is too often the case, with feeders of grade sheep to the detriment of both wool and mutton.

Sheep husbandry is meeting with keen competition, not only with regard to the production of wool, but of mutton. The question now is, which is the best sheep that will give the greatest amount of profit and pay for the labor expended on its care? This, in my opinion, depends very much on the climate and soil where the sheep are to be kept, and the readiness to a market for the sale of mutton and wool. The sheep-masters of Alberta are at a disadvantage

here, as the C. P. R. subjects them to outrageous rates for conveying sheep and wool from Calgary and stations east, in some instances charging as high as three cents on unwashed wool to Toronto.

This brings me to a very curious question. What effect has climate and soils on wools? I find on the north shore of Lake Erie, the district of St. Thomas, all through the County of Middlesex, down the main line of the Grand Trunk from Point Edward to St. Mary's, also in the Bay of Quinte district, including Kingston, that wools clipped from Leicester, Cotswold and Shropshire are finer and more lustrous than wools clipped from the same classes of sheep in the districts round Stratford, Berlin, Guelph, Toronto, Pickering, Newmarket and Markham, and are worth fully two cents per pound more for exportation. I am not prepared to say whether it is the climate or soil that causes this difference; but such is the case. In my opinion, the best classes of sheep for the farmers of Ontario for both mutton and wool, are Leicester, Shropshire, Cotswold and Southdown. If the wool is low, they have a fine carcass of mutton, which always commands a high price, both for home consumption and for exportation to Great Britain. Merinoes may do very well for crossing with some of the more robust kind; but as grade sheep, they would not be so profitable. In conclusion, I wish the Society every success in its aims and achievements.

Raising and Caring for Colts.

As long as horses are bred, farmers will be the leading breeders so far as numbers are concerned. The number of colts raised by professional breeders, or those who make horse-breeding a speciality, is very small indeed in comparison to that raised by the general farmer. In all rural districts we find from two to six or even more young horses on most of the farms. But, unfortunately for themselves, the farmers are too careless in selecting sires. Too often the horse whose services can be secured for the least money, is the one selected; and while a high price is not always proof of superior merit, it is quite safe to assume that a low price is proof positive of inferior quality. Persistency of purpose is almost unknown in this respect to the average farmer. If perchance a very fine colt is bred, no care is taken to follow on the same line; and thus few of the young mares are safe breeders, as there is on telling which ancestor the colt may resemble. In view of these facts there will, in all probability, always be sale for all the A 1 horses the breeder may raise, or at least for many years to come. Breeding heavy horses is almost always most profitable, as at two and a-half years they may be put at light work, and at three years of age will do all farm work, and by the time they are of marketable age (five or six years), they have paid for themselves. There is no better market for oats than the stomach of the young draft horse. Much more is gained than the improved appearance while young. Take two colts of equal value, keep one in good, thrifty condition—fat if you will—during the period of growth, and his digestive organs are developed so that he will keep in good condition on a moderate amount of food. Let the other go hungry and poor the first three years, and it is extremely difficult to keep him in condition in after life, even though the feeding be liberal, as the digestive organs are not able to make use of all the nutriment in it.

The presence of better stock on a man's farm is an incentive to do better, to keep the barn yards and farm in better order.

The study of the science of manures is one of the most important branches of the practical education of the farmer. The loss of manure is a subject which demands most serious attention. Until within comparatively few years, little was known of the true character of manures, and consequently of the importance of protecting them against loss. The chief causes of waste are leaching and evaporation.

Hogs in Denmark and Ireland.

In our last we expressed the intention of writing you regarding hog-raising and feeding in Denmark and Ireland, but instead of so doing prefer to send you a letter received from the party who is agent for the sale of our bacon in London. He also sells largely for curers in Denmark and Ireland, and was for years extensively engaged in bacon-curing in the latter country, so that he thoroughly understands what he writes about.

Hoping that our efforts to place the subject in its true light before Canadian farmers, by your kindness in giving it space, will prove advantageous to all concerned,

We are, yours truly,
WM. DAVIES & Co.
33 Tooley St., London, S. E.,
25th April, 1889.

Mr. Wm. Davies, Toronto, Canada.

Dear Sir:—We have been greatly interested in reading your clear and forcible letters to the farmers of Canada upon hog-raising. You have struck the key-note of the situation, and it does seem strange indeed to us that your farmers cannot see where their best interests lie. Canadians are held to be proverbial for keenness, but in the matter of hog-raising they have terribly missed their mark. I have just returned from a trip to Denmark, and I only wish some of your intelligent farmers of Canada could have accompanied me. Denmark teaches most countries a wonderful lesson in pastoral pursuits. To see what these people have done in five years is astounding. First of all they dived deep into the mysteries of successful butter-making, grasped all the difficulties, which have been almost reduced to a science, till they have "licked all creation," and to-day they have absolutely no competitors in London or the Northern markets of England. Their butter (finest Danish), in hundredweight white-wooded casks, with white hoops, fetched this winter 144 to 146 shillings per cwt. of 112 lbs. say 32 cents per pound from first hands on our market. They learned how to feed the cattle, and their secret is all dry food.

Having conquered this butter difficulty, they soon began to see that hog-raising was four to five times more profitable than raising horned stock, and much more profitable than raising anything else. Their breed of hog was all wrong for bacon purposes for the London market (the most critical market in England). They imported at once the very finest strains of the improved large Yorkshire breed, the best bacon hog the world has ever produced. By the way, I am sending you a herd of sows and boars, the finest I can buy in England. The price is high, but the quality will gain you much praise and satisfaction in your own country.

But to return to the Danes. Having got the right class of hogs, they began to learn how to feed them, and here again they scored a big success. You know a farmer may feed his hogs well and yet waste a quantity of food, besides creating an animal, through ignorance or kindness of heart, which has to be sold at the lowest market price. The Danes, by judicious feeding, raise a long, lean, bacon hog, which commands the highest price and gives the greatest satisfaction. In Denmark, hogs are sold by live weight in three classes, lean, medium, and fat, at an average of two and three shillings per 112 lbs. difference in value. Since the Danes have thoroughly understood that there is nothing in the world pays so well on a farm as breeding and feeding hogs for bacon purposes (you have always buyers for bacon hogs), it is a certainty they have advanced in this industry by leaps and bounds; 10,000 to 12,000 bales of Danish bacon arrive in London every week. The product is appreciated and is seriously handicapping all Canadian and American meats, because they send what London wants—long, lean bacon.

Again, the Danish farmers take immense care of their swine. A great feature, which they hold to be of the greatest benefit, is to keep their piggeries very clean, very dry, and warm, especially in cold weather. I was up there when the thermometer stood at 18 degrees below

zero, and I could not help thinking it was the counterpart of your country in winter. They have the same difficulties of weather and cold that you have to encounter, but they battle with the elements successfully, and the cow-houses and piggeries are pleasant to see, all the animals clean, dry and warm, and, of course, thriving and doing well.

Now, what Denmark has done, with a very poor country and only two millions of people, Canada can do, and do easily. Only let the farmer see, that to raise all the hogs he can will pay him better than anything else, just as clearly as the Danes see it, and a big future is in store for Canada. The Danes are punishing the Irish bacon curers, and pressing them very closely in market values to-day in England, and I feel certain they will outstrip the Irish farmer in the race. In Ireland they do not understand pig feeding and rearing nearly as well as the Danes do. They (in Ireland) overfeed, keep the hog wet and dirty under foot, and pay little attention to the state of their piggeries. All this is most detrimental to hogs thriving fast and well.

If you can induce the farmers of Canada to supply you with a suitable hog, we can find an outlet for any quantity; because, Canadian bacon, as prepared by you, is in good favor, and treads close upon the heels of Danish bacon in value; but you want a steady supply all the year round to keep the article always upon the market, and in front of buyers.

I may here say, that a large quantity of improved large Yorkshire hogs are being sent to Sweden to stiffen their breed, which is at present too soft to make bacon of the first quality. Let Canada arise to her privileges at once, or she will certainly be beaten out of the field, and that very soon.

I hope your hogs, Improved large Yorkshire breed, will arrive safely.

Yours, very truly,
J. WHEELER BENNETT.

Since the above was written, we have received a pamphlet urging the Russian farmers to go largely into the swine industry, and adopt approved methods; and, as an argument, giving statistics showing hogs to have increased in Denmark fivefold in five years. J. W. B.

Dehorning.

The press, agricultural and general, is almost unanimous in approving Lord Coleridge's emphatic condemnation of the practice of dishorning. For our own part, we have always held and repeatedly argued that to saw off the horns of an adult animal close to the skull, thereby causing excruciating pain, is quite unnecessary; (1) cattle may be bred without horns by using naturally polled bulls; (2) the budding horn may be removed from a calf with little or no pain by the use of a proper instrument, or even (as we have heard) a chemical; (3) if neither of these plans have been adopted, the removal of two or three inches from the top of the horns will effectually prevent the animals from goring one another.—Farmers' Gazette, (Eng.)

Caustic potash is probably the chemical referred to, as it is said to destroy all trace of a horn, if used when the calf is a few days old. Our Chicago correspondent, tells of a calf with one horn normally developed, and no trace of one on the other side, and the proprietor claimed to have done it with chemicals.

The English courts have decided that dehorning cattle is cruelty, and comes within the act for the prevention of cruelty to animals. Lord Chief Justice Coleridge, in giving judgment, gave an exhaustive review of the case, and also referred to the Scotch and Irish cases. Justice Hawkins concurred.

A Sullivan County, N. Y., man reports to "The Western Rural" that, having dehorned his cattle, he was prosecuted for cruelty to animals, found guilty and fined \$25.

The wooden silo is now almost exclusively preferred, and needs to have air-proof walls and be so grounded that air can not get under the sills or floor.

The Dairy.

The Special or General-Purpose Cow.

BY JOHN MCLURE, BRAMPTON.

All cows are reared and handled with an object in view, and that object is profit. The question, then, naturally arises: Which cows are most profitable, the special, or the general-purpose cow? The different sources from which profit is derived from cows are, milk, butter, cheese, and beef. The cow that is bred to excel in any one of these lines is what is known as a special cow. The cow that is bred so as to possess an average of all these qualifications is what is known as a general cow; hence the name general-purpose, and I must admit that it is a high-sounding title. And, because the general purpose horse is the best horse for a farmer supporting only one team, the conclusion is general that a general-purpose cow will also suit him best. This may or may not be so; generally it is not so. It is not necessary for me in this paper to enumerate the different breeds of cattle, and in what they excel; their names are well known. All thoroughbred dairy cattle are, or should be, special-purpose cattle. We are aware that it is claimed for some thoroughbred cattle, that they fill the bill as general-purpose cattle. We think it is saying very little for a breed of cattle to claim for them general-purpose; because, if they are true general-purpose, they cannot excel as special—milk, butter, cheese or beef, all in one—for the reason that she has a proportion of those qualifications all blended in one cow, which entitles her to the name general, and at the same time excludes her from any one class as a special. We have often been asked the question: How is it that one cow can make more butter from a given quantity of food than another? Why is it one man can split more wood in a day than another? Why is it one horse can trot further in a day than another? We answer, because they are built that way. Well, that is why one cow can make more butter than another. In other words, she is a special-purpose cow, and concentrates all her energies in that particular line. The general-purpose cow divides her energies in different lines. My readers will doubtless notice that the question asked at the beginning remains unanswered: Which cow is most profitable; special or general? Another question would first need to be answered: Which business is most profitable; special or general?—which means, selling some milk; making and selling some butter; fattening some cattle, and vealing some calves. At first sight, some might think, Surely, the last is most profitable, as a little cash would constantly be coming in all round. But we never yet knew one man who could get the highest price for so many different kinds of produce; and, as it is the high prices which pay best, we must come to the conclusion that, to run one line, and run it well, is better than to try all and excel in none. Another advantage in running one special line is less expense, as we do not need to get a complete outfit for two or three things, all of which costs money. It may be claimed that a special business may be run with a general-purpose cow. We admit that it may, but not with so much profit. One particular objection we have against the general-purpose cow is that she will not hold to her milk as well as a special dairy cow. This is important, as our aim is to supply 100 lbs. of butter per week the year round; and we find we can do this better with special cows, as they will milk ten or eleven months in the year, whereas, the general-

purpose cow will dry in from seven to eight months, putting on fat, instead of giving the fat in the milk pail. A great advantage claimed for a general-purpose cow is that when her milking days are over she will make more beef than a special cow. I call this a penny wise and pound foolish policy for a dairyman to keep a cow all her life, which does not suit his business, for the sake of about 300 lbs. more beef in the end, worth, say, from \$15 to \$18; when a special cow will outstrip her that much every year in her life. Say an ordinary special cow will give 60 lbs. more butter per year than a general purpose (and many will make 100 lbs. more; and I do not know any person near Brampton who runs a special business, getting less than 25 cents per lb. by the year)—60 lbs., at 25 cents, which would be, with special cows, \$15; multiplying this by twelve, the length of time a cow may be kept at work, would be just \$180; against \$18 for 300 lbs. of beef. And I do not think that 60 lbs. is too much to count, taking the regular run of special, and the regular run of general-purpose cows. Now for the veal business. It is claimed that a general-purpose cow makes better veal calves than a special dairy cow. We admit the claim, and say that \$8 is a good price for a calf four to five weeks old. A special butter cow will give 50 lbs. of butter in that time, worth, at 25 cents per lb., \$12.50; just \$4.50 in favor of the special cow, and the milk to the good. Another thing we claim for a special cow is that their calves are worth more money to sell for breeding purposes. This applies to milk, butter and beef breeds. We have sold, ourselves, heifer calves as high as \$25 a-piece, under six months old. We consider this a long way ahead of the veal calf business. We never veal a calf now; it does not pay us. The fact is, we have long ago come to the conclusion that there is more money in a special business; consequently, more money in a special cow. And it must be remembered that our cows are not registered stock, but high-grade Jerseys, bred with an single eye to butter-making.

Quality of Milk.

A correspondent of the Farmer's Review asks: "Is a cow's milk any richer when she does not get all the water she wants to drink? I know it makes a difference in the quantity, as when they do not have all the water they want I can see quite a difference." John Gould in substance says in answer: "The idea seems to be that in less fluids there will be the same amount of butter, cheese and sugar in the milk * * * and investigation has shown that whether the cow gives much or little, the percentage of sugar and cheese is constant, or varies little in different pounds of milk from the same cow; but that a less yield of milk would have its influence in producing a shortened supply of solids in the fats."

This matter is one of great interest to farmers and dairymen, and yet it is one on which it is difficult to acquire much light without more elaborate apparatus than most farmers care to procure. It is surprising how much more effect feed has on the quantity than the quality of milk. A cow whose milk showed 4.25 per cent. butter fat on grass and bran, was fed on white turnips all she would eat in addition to the grass and the bran ration continued. At the end of one week the lactoscope showed 4.15 per cent. butter fat, a decrease of one tenth of one per cent. and an increase of fully 25 per cent. in quantity. At the end of two weeks 4.10, and at the end of four weeks 3.90, while the increase in quantity remained about as at first. At the end of six weeks there was no perceptible change, and no more tests were made. The cow was then fed on corn fodder, bran and cottonseed meal, and the increase of fat was almost as slow as the decrease had been, while the decrease in the quantity of milk was as great and as rapid as the increase had been. Thus showing conclusively, so far as one experiment goes, that the increase or decrease of quantity is much more rapid than that of quality.

The Farm.

Crop Prospects.

In answer to a circular sent to 500 different farmers, we have received the following report:—

	Good.	Average.	Poor.	Failure.	No report
Fall Wheat	52	37	6	1	4
Spring Wheat	67	23	9	1	...
Barley	61	36	3	...	...
Oats	67	30	3	...	...
Peas	55	41	4	...	...
Corn	3	20	41	11	26
Hay Crop	41	37	22	...	...
Potatoes	39	25	33	6	18
New varieties sent from this office	90	9	1	...	...

The figures represent the percentage of good, average, poor, and entire failure of the different crops in the left-hand column. Sixty-four per cent. of the reports say much damage has been done by frost; thirty-six per cent. report slight damage, and in some places none. Fruit of various kind seems to have been affected most, but in many places the corn and potatoes were killed. Almost all our correspondents report considerable damage to crops from the recent rains, where the land is not underdrained. The reports came from all sections of Ontario, and some parts of Quebec. Of the new varieties sent from this office one only reports an entire failure, and thinks the worms cut it off. And most of those in the average column are accounted for by unfavorable circumstances.

Bad Hay.

W. F. C. in the Rural Canadian, referring to the all too prevalent practice of allowing the hay to stand in the field until it loses much of its nutritive value, says:—"What a shame it is that after nature has presented man with a valuable fruit of the ground, that it should be spoiled for want of proper management. I have seen hundreds of loads of what ought to have been, and might have been, first-class hay offered for sale, that really were unfit to be eaten by any kind of stock. The great fault is not cutting it sufficiently early. As a matter of fact, many farmers do not grow any hay at all. It is all straw that they feed to their stock or sell to the public. There is all the difference in the world between dried grass and dead stalks, which are in reality only the straw that is left after growing a crop of hay seed. If a grass plant matures its seed, it is the same as with grain; what is left is only the straw." This is eminently correct. There is absolutely nothing gained in weight, and much lost in feeding value, by allowing the least amount of woodiness to develop before cutting.

The Strawsonizer.

Such is the name given to the machine invented and patented by Mr. G. F. Strawson, of Newbury, Bucks, England, for the purpose of distributing manures, liquid or solid, sowing grain, grass seed or insecticides. Liquids can be distributed equally on the crop as low as one gallon per acre. Salt can be applied in large or small quantities. In fact it seems capable of distributing any and all substances equally well in large or small quantities. The Agricultural Gazette of May 20th says:—"We have not stinted our praise of the Strawsonizer, because we have been struck by its remarkable efficiency and its great value to agriculturists, gardeners, fruit-growers and others. It is a great acquisition, and we do not hesitate to characterize it as one of the most important of modern inventions in agricultural mechanism."

The Bath and West of England Show.

From our own Correspondent.

The Bath and West of England Society has a history of over one hundred years, having been established in 1777. Two years ago its centennial anniversary was celebrated by a special exhibition, which was a grand success. The annual shows of this society are regarded as second in importance only to those of the Royal Agricultural Society, which, with a history of only fifty years, takes rank as the leading society of the kind in Britain, and its shows carry with them the greatest prestige. The fact of this being the semi-centennial year of the Royal Society, and its exhibition this year being located at Windsor, has evidently had the effect of weakening the show of the Bath and West of England Society, which was this year held at the city of Exeter, and which, though it was an excellent show, was generally considered to be below the average of the society's exhibitions. It is understood to be the usual practice of many of the breeders of fine stock, to withhold their choicest animals from the earlier shows of the season, in order that they may appear in the pink of condition at the great Royal show, as it is well known the travel and knocking about takes off much of the bloom and freshness of the stock as it appears under its home training, and at the outset. On account of the special importance of the Royal this year, the custom of holding back for the higher honors has been more generally adopted than is usual.

Another feature which has long been noticeable in the exhibitions of this society, is that the breeds of stock which predominate in, and are peculiar to, the district in which the show happens to be located for the year, are generally out in large numbers, while many of the breeds which are peculiar to other districts are very sparsely represented; while some do not put in an appearance at all. This fact no doubt accounts for the presence at the show of this year (the exhibition being held in Devonshire) of a very large entry of Devon cattle, and of Devon Long-wool sheep, both of which classes were full in every section of the list, with animals of extraordinary merit and excellence.

In the management and arrangement of an exhibition, our English friends set us an example which we in Canada would do well to copy in many respects, one of the most important of which is the preparation of a reliable catalogue of the entries, the systematic arrangement of the animals in the order of the catalogue, and the placing of numbers upon or over the animals to correspond with their number in the catalogue; a system, the complete success of which is here demonstrated.

Of course, to make a success of the catalogue, the rule fixing the date at which the entry books are to be closed must be rigidly enforced, and ample time given for the preparation of the catalogue. The date of the show under consideration was June 5th; the date for closing the entries, on payment of the usual fees, was April 18th. After that date, and up to April 25th, entries only to be received on payment of double fees, after which no entries will be received; leaving a space of six weeks' time in which to correspond with exhibitors, if necessary, in order to have all the facts supplied, all errors corrected, and the printer's proof carefully read before the publication of the official catalogue.

No one who has not experienced the satisfaction of viewing a stock show under such conditions, can duly appreciate the luxury of such an arrangement. The first thing a visitor seeking information does on entering an English show-yard, is to purchase the catalogue of entries, which usually contains a map or plan of the grounds, by which he can, without enquiry, find the department he is most interested in. Here he finds all the animals in a class, of a given age, ranged side by side, and by turning to his catalogue, finds the number of the entry corresponding with the number upon the animal, and reads the age, owner's name and address, breeder's name, name and herd-book number of sire and dam; so that if the owner is absent, or the attendant engaged, the visitor can get nearly all the information he requires without delay, and without the trouble of making enquiries; and, besides this, he carries away with him a repository of information which he can refer to at his leisure, and which gives him the address of a large number of breeders.

The judging, weather permitting, is invariably done on the opening day of the show. Exhibitors know it is their interest to have their stock placed and prepared before that day. The prize tickets are put on at once, as soon as the awards are made. The list of awards is printed in pamphlet form by the society on the evening of the first day; and on the morning of the second day a copy is given free to all who have purchased or may purchase a catalogue. This list gives only the number of the entry in each class to which prizes are awarded, and the grade of prize awarded; but here, again, the numbers correspond with the catalogue, and the connection is complete. At this show only two judges were appointed for each class, and where they disagreed, a third was called in from among the spectators by the attending steward, to decide.

With regard to the vexed question of judges and judging, it may be of interest to Canadians to know that even in England, the home of most of the pure breeds, where there is no scarcity of men acknowledged to be competent judges, to a by-stander there seems to be quite as many mistakes made as there are at our shows, quite as much grumbling done by exhibitors, and quite as sharp criticism indulged in by breeders around the ring. Moreover, to prove, if it is necessary to prove it, that men, even Englishmen, are not infallible, we need only refer to the well-known fact that at nearly every show in this country this year, decisions have been reversed by different judges where the same animals have come in competition; and it is so every year.

Another feature about this show that has impressed the mind of the writer is that, in this country at least, "a purely agricultural exhibition" can be made a success. At this show, prizes are offered only for "live stock, cheese, butter, cream, butter-making and horse shoeing." The prize list includes six classes of horses, seven of cattle, ten of sheep and five of pigs. The prizes are large. For horses, \$100, \$50 and \$25. For cattle, \$75, \$50 and \$20. For sheep, \$50 and \$20. For pigs, \$35 and \$15. The admission fee for the first two days is sixty cents; for the last two days, twenty-five cents. There are no special attractions; no side-shows, and no humbugs of any sort; yet the attendance for the first two days has been large, and the crowds are said to be very large on the cheap

days. The display of machinery and implements is immense, but this is all made by the manufacturers as an advertisement, and not for prizes.

The opinion which appears to be growing in Canada, that in order to be successful, an agricultural exhibition must be permanently located, and have permanent buildings, is here met by the unqualified success of this and the Royal Show, which are held in a different town or city every year, and always in temporary buildings. The sheds for stock are of the simplest kind, made with scantling posts and plates, and covered with strong canvass roofs, of uniform size and form, the implement sheds are of the same description, and the whole presents a neat and picturesque appearance, and furnishes ample and comfortable accommodation, even in a country far more liable to wet weather than ours.

THE STOCK.

It is not our purpose to enter into a detailed description of the stock exhibited at Exeter, as we shall certainly see a more full and representative collection of England's best stock at Windsor, and will endeavor to give in a later paper a description of that great competition.

The classes of Devon and Sussex cattle were remarkably strong, and included a large number of wonderfully grand animals. These two breeds so closely resemble each other, that a casual observer would hardly distinguish the difference, and one who has never seen them in their native home would be surprised and gratified with their size and smoothness.

Herefords were a very strong class, and presented a magnificent showing.

The Jerseys and Guernseys being near home, also made a splendid muster.

In all these classes we have never seen anything in America to compare with the show here, for real merit as well as numbers.

Shorthorns made a decidedly weak show, a show which would have been considered weak in Canada; but it is only fair to say that the friends of the breed claim that they are being held back for the Royal, and that a grand rally will be made at Windsor. Here there were only two in the class of bulls three years and over, both good ones, it is true, both bred in Scotland, and both having been prize-winners at several shows this year. Yet, it is doubtful, if either could win at the leading shows in Canada. Mr. Handley's McBeth was our favorite, and the favorite generally with those outside the ring; but the judges decided in favor of Mr. Willis's Rising Star, bred by Mr. Marr, of Upper Hill. The younger bulls were a very middling lot, without a single strong card, though several of them have been winning at many of the local shows on the circuit. In the class of cows, Mr. Brierly carried off first and second prizes with the roan Victoria, bred by Earl Spencer, and Waterloo Cherry 13th, bred by Mr. Grey, of Eastham, Cheshire. The first prize cow would be called a good show cow anywhere, but could not be placed in such company as Lady Isabel and Havering Nonpareil of the Bow Park Herd. The heifers were a fairly good lot all through, with no extraordinary cards, and the whole class was in a less blooming condition than we expected to see, none of them being overfed, or too fat for breeding purposes.

The sheep classes were not strongly filled, with the exception of that of the Devon long wools, a strong useful class, much of the same type as the Lincolns, though not so large; and while there were many very meritorious animals in all the

classes, it was generally conceded that the best were not here, and that there was more and better to follow at the coming contest at Windsor. The same remarks generally may apply to the show of pigs at Exeter. Mr. Benjafields young Berkshire boar "Rising Star," winner of the championship over all breeds at the Oxfordshire show the previous week, being the only really shining mark in his class. The Essex or small black breed made a very creditable showing, and there were a few very good white pigs.

The owners of sheep and pigs were asking very high prices for their stock, the price of mutton having advanced considerably in the last few months, and the stock of both sheep and pigs in the country being very much lower in number than in the average of years at this season.

There were no prizes offered for heavy draught horses at this show. Agricultural horses, hacks and hunters were out in goodly numbers, and generally of very fine quality.

Notes on Pasture Land.

BY JOHN DRYDEN, M. P. P., BROOKLIN, ONT.

After a visit to England, there is one thing which I do not think it is sinful to covet, and that is the thick, closely-grown grasses which abound in that country, and upon which their animals are permitted to graze. I do not suppose that we shall ever attain the degree of excellence in Canada which is known there. Our climate and soil are so different, that it seems to be impossible; and yet it has often occurred to me that some improvement on what is generally found in this country might be easily obtained. I do not think the system of permanent pasturage would succeed in many districts in this country. We are therefore driven to a system more generally adopted in the north of Scotland, where the land is alternately cultivated, and laid down for grass. It may be that precisely the same kinds of grass will not answer for us which succeed so well for them. But if the same preparation of soil, and the same care afterwards were given to this matter, I apprehend we might occupy a much advanced position even here. No grass will grow successfully without moisture, and during seasons such as the last two now passed, it is almost impossible to lay down a field of grass successfully. But in ordinary seasons this will not be the case. Success in this matter depends somewhat on the kind of grain chosen, with which to seed the field to grass. My own choice is decidedly in favor of spring or fall wheat. Timothy, if sown with the fall wheat in the early autumn, will be almost certain to grow successfully. The clover may be added early in the spring, after the harrow has been passed over it. I have strong objections to seeding with barley, for the reason that it is extremely inclined to lodge badly, having the tendency to smother the grass and compelling the reaping machine, if the grain is well cut, to be set very near the ground. The roots of the clover are thus laid bare, and if dry weather sets in, sometimes are destroyed. In any case, it will be left in poor condition for hard weather, throughout the winter. Spring wheat is more likely to stand; and if the stubble be cut fairly high, it will remain during the winter, preventing the snow from blowing off, and thus forming a protection to the young plants. These young plants ought not to be eaten off during the autumn, for the same reason suggested in the cutting. They are weakened, and less liable

to stand the winter. The second year the grass may be used as pasture, but it ought not to be eaten off too close. How often have I heard the expression, "What an amount of grass is going to waste in this field." To me, it is not waste at all. There is no surer way of enriching the land than to have a thick after-math and plenty of long grass fall down for the winter. If the field is to remain in grass for a number of years, then I think the plan adopted in Scotland might be carried out, at least partially, in this country with excellent results. It is a mistake to suppose that grass will continue to grow luxuriantly in the same field year after year without some stimulant in the way of manure. Ordinary barn-yard manure will, no doubt, accomplish excellent results. But where this cannot be had in sufficient quantities, it may be supplemented by a preparation easily accessible to all who are willing to put upon it the necessary labor. Large quantities of earth are piled adjacent to the stables. This earth is usually mixed with a greater or less quantity of lime. The urine of the cattle from the stables is then conducted from the stables into a tank or other receptacle. Out of this it is pumped upon the earth thus prepared, until it becomes thoroughly saturated. In this condition it is spread upon the grass, accomplishing the very best results. No one in that country, laying claim at all to first-class farming would think of leaving grass to grow year after year without manuring in this way. The earth is gathered by cleaning up the ditches on the road-side, through ravines and elsewhere.

I have found excellent results from harrowing old pasture-land in the spring. The droppings from the cattle and horses become thus thoroughly scattered over the land, and the marks which the teeth make, only seem to give new life and vigor to the plants. What is needed in the start is to have the ground thoroughly covered with grass. To accomplish this, too much economy in seed must not be allowed. A thick seeding is in every way better for land intended for pasture. Then let it be protected as far as possible; first, by the stubble, and afterwards by avoiding too close cropping. The grasses upon which it is safest to depend are Timothy, orchard-grass and clover, red-white and alsyke. Others may be added, but these could be the main stay.

Land well manured will be most likely to produce healthy and vigorous plants. Grass seeds, soon after turnips, are less liable to be successful; the soil being excessively pulverized is inclined to cement or bake. Land-plaster should be sown early in the season, if early vigorous growth is required. Some suppose it must be scattered on the leaves, but it is of no service until it is washed into the soil. Good grass is the foundation of successful farming. Give me good luxuriant grass, and I can get anything afterwards.

In the cordial union of the chemist and the farmer there is a great store of strength to agriculture—a fertile source of benefit to the entire community. But it must be a union in the real sense of the term. We do not mean that the chemist is to step in and supplant the practical farmer in the management of his farm. That would be no union, and we would have little faith in the result. Neither do we mean that by enlisting the aid of the chemist the farmer will at once turn a loss into a profit. The chemist can not regulate the prices of farm produce.

How to Build a Silo.

BY JOHN S. PEARCE, LONDON.

Within the past few years ensilage has passed the experimental stage, and has been adopted by so many stock-raisers and intelligent dairymen, that it may now be considered an established method among many who devote themselves to stock-raising and dairying. The facts concerning silos are few and simple, and in no way difficult to understand. We already know that any kind of a green crop can be preserved in a silo. But why does it keep? Is it because of heavy pressure? No; because it keeps without any pressure. Is it because it has been tramped? No. Is it because the silo is air tight? Not that alone; although that is essential. But is simply because the silage has been allowed to heat up to the temperature of 125 degrees, and then after remains in an air-tight non-conductive enclosure.

Success in preservation of the ensilage depends very much on its compactness, and the exclusion of the air. When the mass of ensilage in a silo has been allowed to reach the limit of temperature desirable, say to a temperature of 150 degrees, the silo is covered tightly to exclude the air.

At the ensilage congress held in New York City, Dr. M. Miles, Professor of Agriculture in the Massachusetts Agricultural College, stated that the fermentation was caused by the minute organisms known as bacteria. These organisms rapidly develop in the presence of air, but their functions as ferments are greatest in the absence of free oxygen, and as the air is excluded the bacteria take their necessary oxygen from organic substances, which results in fermentation. They are killed by a temperature ranging between 122° and 140°, though the minute germs from which they develop stand a higher temperature. There may be as many fermentations brought about as there are kinds of fermentable substances, just as the excrement of the animal will vary with the character of the food and other conditions. If the bacteria can be killed when the silo is weighted, the ensilage will be practically preserved under the same conditions as the fruit in the jar during the process of canning. An extended series of experiments at the college indicate that the bacteria cannot bear a temperature above 115° to 122°, maintained for several hours. In the ordinary filling of a silo, when the end aimed at is to prevent fermentation, by tramping the mass the temperature frequently rises to 105°. With less tramping and a longer time in filling, the temperature may rise still higher. This may account for the ensilage being kept sweet when hurry of other business sometimes delays the filling, and it may be found best to fill the silo without any packing, and allow it to remain until the desired temperature is reached, when the cover may be adjusted; but it is best for farmers to use thermometers in order to notice the heat and give the method a trial.

The temperature falls rather gradually, and as the mass settles and the bin is forced out, the heat disappears and the ensilage becomes quite cool. It will be found to be cooler near the bottom than it is near the top, because the greater pressure there expels the air to a greater degree. Ensilage will be ready to feed any time after it becomes cool, but the period required for cooling varies under different conditions, varying usually from six to ten weeks. Remember, although ensilage may have been cooled off, that it is still liable to become heated again if exposed to the air, or if water gets into the silo.

Whenever ensilage is laid bare by the removal of the daily rations and exposed to the air, it will be in nice condition to feed at night, and the same again in the morning.

[TO BE CONTINUED.]

Forty-Fourth Provincial Exhibition.

We are going to have this Pioneer Association in London, in September, for the ninth time. The first Provincial held here was in 1854, just thirty-five years ago; the next held here was in 1861, seven years after the first; since then it has been here regularly every four years, in 1865—in 1869, in 1873, in 1877, in 1881, in 1885—and now it is coming again in 1889, as some say to be buried; but who knows, but what in 1893 it may be revived, as it is quite possible that before that time the farming element will be asking for it again, it being the only show controlled by them.

It may truly be said of the Provincial, that it has been the cradle of agriculture in Canada, and that to it nearly all of our present advanced position as an agricultural province is due. During the forty-four years of its existence, one of its prominent features is, that it has steadily endeavored to impress farmers with a true conception of the dignity and nobility of their calling. It may not be uninteresting to many at the present moment to give a brief outline of the size and progress of this Association, an institution around which clusters the history of the agricultural as well as mechanical development of the province, if indeed, it may not be said of the whole country. It is also gratifying to find that those whose names are found associated with the founding and progress of the Provincial, also stand forth prominently in the industrial and commercial history of the country; and thus we see that those three great interests in the advancement of a nation have from the first been linked closely together in Canada.

The first show was held in the City of Toronto in 1846. The first annual address was given by the Hon. Adam Ferguson; and in stating the purpose of the Association, he said that agriculture, so called, would form the object of attention with the Board, but, assuredly, neither Flora nor Pomona would be overlooked, while the ingenious manufacturer and mechanic would

receive that encouragement and support which they so well deserve. The speech throughout was one of high order, and foreshadowed in an almost prophetic manner the grand services which the Association has rendered agriculture and arts in this province. The first show in Toronto was a success for those days; the next in Hamilton was even more marked. Below is a comparative table, which gives an idea of the progress of the Association, growing larger from year to year; also a list of the different gentlemen who have been presidents from conception to date.

Presidents of the Association:—1846-7, E. W. Thompson, Toronto; 1848, Hon. Adam Ferguson, Waterdown; 1849, Sheriff Ruttan, Cobourg; 1850, Hon. John Wetenhall, Velloire; 1851, G. B. Clarke, Kingston; 1852, J. C. Street, Niagara Falls; 1853, Wm. Markey, Brockville; 1854, Sheriff Neadwell, L'Original; 1855, Hon. David Christie, Paris; 1856, Baron de Longueuil, Kingston; 1857, Hon. Geo. Alexander, Woodstock; 1858, D. V. Stevenson, Picton; 1859, Sheriff Wm. Ferguson, Kingston; 1860, John Wade, Port Hope; 1861, John Barwick, Woodstock; 1862, F. W. Stone, Guelph; 1863, Hon. A. A. Burnham, Cobourg; 1864, James Johnson, London; 1865, J. C. Rykert, M. P., St. Catharines; 1866, Neil J. McGillivray, Glangarry; 1867, J. P. Wheeler, Scarboro; 1868, Thos. Stock, Waterdown; 1869, E. Mallory, Napanee; 1870, Hon. D. Christie, Paris; 1871, Hon. Jas. Skead, Ottawa; 1872, Stephen White, Charing Cross; 1873, Andrew Wilson, Maitland; 1874, Sheriff Gibbons, Goderich; 1875, A. Wihatt, M. P., Lochiel; 1876, Ira Morgan, Metcalfe; 1877, L. E. Shipley, Greystead; 1879, S. Wilmott, Newcastle; 1880, J. C. Rykert, M. P., St. Catharines; 1881, J. B. Aylesworth, Newburgh; 1882, Hon. C. Drury, Crown Hill; 1883, D. P. W. W. Kinnon, South Finch; 1884, Joshua Legge, Gananoque; 1885, Geo. Moore, Waterloo; 1886, Henry Parker, Woodstock; 1887, J. C. Snell, Edmonton; 1888, Ira Morgan, Metcalfe; 1889, J. C. Rykert, M. P., St. Catharines.

A glance at this list of well-known gentlemen convinces you that this Board has always been provincial in its character, being presided over by gentlemen from all parts of the Province, in contradistinction to the present local shows, where the same officers nearly always preside; that prizes and medals have always been of more value awarded at the Provincial than at other shows. Many industries which are not agricultural, pure and simple, but which are its natural concomitants, have been brought into existence by its fostering care. It may not be out of place to take a passing glance at some of these:—1. Plowing matches and the testing of agricultural implements; in the early days of the Association these were fostered. 2. The various Herd Books to record live stock were all started by this Association, and are still carried on by it, some with great success; also the Stud Books for heavy horses. 3. The Veterinary College, that was commenced and fostered by this Association. They now grant over 200 certificates a year to students of this College. 4. Dairymen's Associations. 5. Fruit-growers' Associations. 6. The Agricultural College at Guelph derived a great deal of assistance; also a grant of money from this Association. 7. Prize farms. This scheme has also given good satisfaction, and medals are being awarded this year in group No. 3. 8. Educational Scheme. This is also being carried on by the Agriculture and Arts Association, and is doing a great deal of good. So, even if the Provincial Exhibition is temporarily dropped, there is plenty of work for this Association to go on with for the future, and it can retire with dignity, knowing that nearly all the success attained by farmers in the Province of Ontario has been fostered and aided by the Old Provincial.

Friends of the Farmer.

It may be an advantage to point out some of the friends of the farmer, which, consequently, no farmer should destroy or allow to be destroyed. Among these are toads, which are, under all circumstances, the farmer's friend; moles and field mice, probably, do a vast deal more of good than harm; all birds, especially robins, wrens, thrushes, orioles, cuckoos, phebes, blue birds, woodpeckers, swallows and cat birds. The destruction of all these and many others, except for scientific purposes, should be made, under very heavy penalties, illegal everywhere. The house sparrow, known better as the English sparrow, is to be rated an exception. This bird is now universally regarded as a nuisance, first, because of its grain and vegetable destroying propensities; secondly, because it drives away insect-destroying birds.

Among insects, many wasps are friends, especially those with a more or less protruding horn or sting at the end of the abdomen. Lady-bugs and lace-wing flies live entirely upon destructive insects, especially plant lice and Scale insects, and should never be destroyed. Dragon flies, or devil's darning-needles, are also useful as well as harmless.—*Bulletin 46, New Jersey A. C. E. S.*

Mr. E. Moody, a western New York orchardist, says of the Northern Spy, so often defective on crowded trees, that it will become a very profitable variety when fruit-raisers make up their minds to thin thoroughly. "If we would take off from three-fourths to seven-eighths, in time we would get nearly as much in measure and twice the price of any other apple we grow."

Year.	Places of Exhibition.	Date of Opening.	Total amount offered in Prizes.	Total number of Entries.	Total amount awarded.
			\$ c.		\$ c.
1846	Toronto		1600 00	1150	1100 00
1847	Hamilton		3000 00	1600	2400 00
1848	Cobourg		3100 00	1500	2300 00
1849	Kingston		5600 00	1429	2900 00
1850	Niagara		6106 00	1638	3400 00
1851	Brockville		5017 85	1498	3223 75
1852	Toronto		5916 95	4048	4913 00
1853	Hamilton		6410 15	2820	5293 25
1854	London		7176 10	2933	5427 50
1855	Cobourg		9216 50	3077	6941 70
1856	Kingston		9238 00	3791	6790 50
1857	Brantford		10071 40	4357	8136 00
1858	Toronto		10700 59	5572	9215 00
1859	Kingston		10513 00	4430	8067 50
1860	Hamilton		15015 50	7532	12900 00
1861	London		12051 00	6242	10188 00
1862	Toronto		12236 00	6319	10722 00
1863	Kingston		12486 00	4756	9196 00
1864	Hamilton	September 22nd	12559 50	6392	10304 25
1865	London		13434 00	7221	11036 75
1866	Toronto		12712 00	6279	10228 50
1867	Kingston		12731 00	4825	9311 50
1868	Hamilton		13304 50	6620	11120 00
1869	London		13428 00	7649	11459 50
1870	Toronto	September 21st	14110 00	6847	12441 70
1871	Kingston	October 3rd	15724 50	6682	12951 00
1872	Hamilton	September 25th	16092 00	7714	13142 00
1873	London	September 23rd	16016 00	7440	13797 00
1874	Toronto	September 22nd	16640 00	8162	14070 00
1875	Kingston	September 21st	16906 50	7318	14651 00
1876	Hamilton	September 20th	18237 00	10011	15631 50
1877	London	September 18th	18320 50	10618	14387 00
1878	Toronto	September 24th	17947 40	10292	13980 00
1879	Kingston	September 23rd	18525 00	9698	14957 50
1880	Hamilton	September 22nd	16994 00	11252	13147 50
1881	London	September 21st	17154 50	9486	13456 50
1882	Toronto	September 20th	19927 00	7916	14912 00
1883	Kingston	September 19th	18494 50	10315	14819 50
1884	Hamilton	September 18th	20290 50	7980	15281 50
1885	London	September 24th	23236 00	11662	20235 50
1886	Toronto	September 22nd	17168 00	9637	14478 50
1887	Kingston	September 20th	16529 00	5967	12729 50
1888	Hamilton	September 19th	14603 00	7504	11616 50
1889	London	September 10th			

Agricultural Journals.

The thought has often occurred to the writer, What would rural life be without agricultural journals and their influence. We maintain that no one can continue to read them intelligently but will be greatly benefited thereby; the benefit may not be directly felt, but the continual coming in contact with other people's thoughts and ideas will, in time, have its effect, and he will begin to imbibe new ideas and new inspirations that, perhaps, he never dreamed of; and, as almost all branches of rural economy are treated of in these papers, they are sure to touch upon subjects that we are interested in. For instance, one man is a lover of horses; another of cattle, sheep, pigs, poultry, fruit-growing, etc.; the moment he takes up the *ADVOCATE* he looks up the department that he is most interested in and finds an article, no doubt, from the pen of some one who is thoroughly conversant with that particular subject; he reads it and becomes interested, and says to himself "I can do that," and he goes to work, and whilst he is at work, at whatever the undertaking may be, he is thinking, (and here we might remark that when you get an individual to think and act you have accomplished more than half the task,) and he is not likely to turn back but continue to read, and think, and act. Thus it is, that through reading the *ADVOCATE* the farmers of Ontario are learning that the mongrel and the "ne'er-do-weel," which have hitherto prevailed; yes, they are beginning to understand that their unthrifty and ungainly cattle, sheep and pigs are not adapted to the new systems of agriculture and improved modes of feeding, and are opening their purses for the purchase of better farm animals of all descriptions. Many years since, a nobleman who was distinguished as being at the same time one of the most far-seeing statesman and one of the most eminent and scientific breeders—the late Earl Spencer—declared, that the breeding of fine stock was then only in its infancy, and that an enormous field at home and abroad, would, in the course of time, open to reward the science of the English breeders. To a very considerable extent this prediction has since been realized; but, there are not wanting abundant indications to show that the future is pregnant with yet more abundant promise.

The increased intercourse of nations and the desire in all lands for new and improved breeds of farm stock are everywhere most marked, and yet, on the whole, are only just commencing, so far as we can see; and here we would like to remark, that just now is the time to invest in the best specimens of farm stock of all descriptions, for it is more than probable that they will never be so low in price again in this generation.

The *ADVOCATE* (and other farm journals whose existence is probably due to the *ADVOCATE*), are doing a noble work among the farming community by giving them all kinds of useful information with regard to farm economy—the best kind of wheat to grow in different sections of the country, and all other cereals; the best kinds of stock to raise for their several different purposes, and by showing the enterprising and progressive farmer that there is plenty of room yet at the top of the ladder, whilst there is always a crowd at the bottom.

There are so many who put off the day of grace, that they find themselves so far behind that they cannot afford, so they say, to take a farm journal at the small sum of one dollar per year.

The want of inclination to change and adopt

new and better ways of farming has been the ruin of thousands.

The man who does not take a farm journal is not a success generally; he takes little or no interest in beautifying his home and surroundings, or other progressive work.

The Editor and Proprietor of the *ADVOCATE*, like the rest of mankind, will undoubtedly pass away and be forgotten, but the good he has done through his journal never will.

W. L., Aurora.

Increasing the Value of the Farm.

At a recent meeting of what its originators term a branch of the E. M. Farmers Institute, an elderly gentleman of considerable education and thoughtful originality, made the statement that "the man who increased the fertility of his soil twenty-five per cent., doubled the value of his farm." After considerable thought, we must admit this was quite within the mark. And yet, how rarely is this realized, or, if realized, how rarely acted upon. It can be done, however, quite easily without reducing the income from the farm. A careful study of the feeding and manurial value of foods, and an intelligent application of the same will enable almost any farmer to begin at once, and in time increase the fertility of his soil not only twenty-five per cent. but, in very many—yes, in a great majority of instances, fifty per cent. or even more. And still we have yet to meet the Ontario farmer who takes the manurial value of food into consideration when selling grain or purchasing food. The many bulletins issued by our Agricultural College and Experimental Stations, touch but lightly indeed on this matter. The tables of feeding value of most varieties of grain and roots were given in the December number of the *ADVOCATE*, 1887, and, if our readers so desire, will be reproduced at any time. The tables of manurial value of foods, compiled by that eminent authority Sir John Bennett Lawes, have been repeatedly given to the world, and are, we have every reason to believe, quite reliable at the English valuation, which is somewhat above ours, however. Artificial fertilizers are very uncertain in their action, which is largely due to the fact that they are in most instances special fertilizers, and should be applied where the special element of which they are composed is lacking, and this the farmer can only determine by actual experiment on the soil and crop on which it is desirable to use them. Barnyard manure is a general fertilizer, and if only one element is lacking it furnishes it, let it be what it may. While on the other hand, if but one element is specially needed, it may be supplied much more cheaply by using a special fertilizer when we have ascertained what it is.

There is, however, considerable difference between productiveness and fertility. Thorough tillage, while it increases the crop by making the soil friable, and thus enables the forces of nature to act on it and render the plant food therein contained soluble, so the crop can take it up, renders the soil productive, and thus takes from its fertility; hence many a man is credited with increasing the fertility of his farm, while in reality he is only increasing the productiveness at the expense of the fertility. Some soils are very rich in the latent stores of plant food, and with a very slight application of fertilizer occasionally, will continue to produce good crops for generations, others not so long; but the ultimatum will in time in any case be barrenness, though in some instances much sooner than in others, all owing to the amount of fertility in the virgin soil. In the near future, we hope to find space for a chapter from "Harris's Talks on Manures" by Sir J. B. Lawes on restoring fertility to the soil.

Garden and Orchard.

Manuring Orchards.

There is no part of the farm that gives better returns for the manure expenditure than the orchard. Thorough work must be done in this matter for best results. Do not pile a little around the body of the tree and think you have done your duty, give the whole surface a good coat, and if you can secure a supply of ashes at event ten or twelve cents per bushel, put them on, too. Sixty to eighty bushels to the acre is a fair dressing, but half as much more will not be too much. No good farmer will starve his animals and expect them to give him good returns; but very many otherwise good farmers starve their fruit trees, and, because they do not yield heavy crops, say, "The Orchard Don't Pay."

Bark Louse.

D. Young furnishes his remedy for the oyster-shell bark louse, which he says completely cleared his 8,000 trees. A mixture is made of two pounds of copperas, and half a pound of blue vitrol, a fourth of a pound of saltpetre, and four pounds of common salt, all well pulverized, and mixed thoroughly with four pounds of hard soap. Cotton bags about two by four inches are filled with this mixture, and fastened with a carpet tack in the forks of the trees or upper sides of main branches. The rains dissolve it, carry it down, and it kills the lice. The old shells often remain two or three years, but there are no living insects in them. A separate orchard containing old trees was profusely covered with lice even to the fruit spurs; these were cut down as incurable, and burnt, branches and all. The ingredients given may of course be varied somewhat in quantities.

Pruning for Fruit.

Undersize fruit of any variety is not worth raising, either for market or home use. Fruit overcrowded is never of highest quality. The larger the number of specimens, the larger the proportion of seeds, core and skin to pulp or eatable portion. As the growing of seed makes the heaviest draft on the vitality of a tree, we should endeavor to have no more fruit mature than the tree can grow full size and perfect. A part of my Sheldon pear trees last season were pruned to thin the fruit. The unpruned trees produced four pears where the pruned ones produced one, but the one was as heavy as the four, and when sold brought four times as high a price. Pears have sold better this season than for several years, but there has been no profit except from those large and smooth. Extra choice fruit will pay for shipping considerable distance, but small stuff is only fit to feed to hogs or other animals. Judicious pruning now will encourage growth of fine large fruit. Cut back slim wood at this season, or before the buds start, as a means of thinning the next crop.—[N. E. Farmer.]

The peach crop this season in the Niagara district promises to be fairly good, and this will be a great boon to many fruit growers who have felt much discouragement during the last few years, in which not only has the peach crop failed, but the prices of small fruits have been so low as to leave little profit, and the apple orchard has been, in some cases, only a bill of expense. The peach buds are now swelling, and it is easily seen which are the live buds, even without cutting, from their bright, healthy appearance. Of the hardier kinds, such as the Alexander, Hale's Early, etc., there will be more than the trees should bear, while of the tender varieties such as the Early Crawford, there will be a fair crop, unless, of course, some disaster yet befalls them.

Poultry.

The Penciled Breeds.

BY I. K. FLECH.

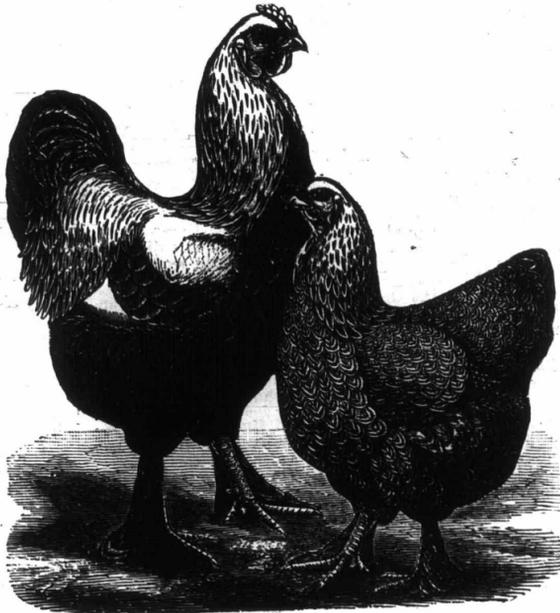
In contemplating the different classes of fowls, I am surprised to find that in the black breeds, the white breeds, or the penciled breeds, we have in each merit of such quality that a breeder can become identified with any one and have his stock commendable. In the penciled breeds we have really the most beautiful and exquisite birds; for pleasure of the eye they gratify and satisfy even the most exacting taste.

Those who have noticed carefully the past season's exhibitions will confess the Partridge Cochins have made such improvement that old-time beauties have become scullions in the kitchens of these high-born dames that now are taking the prizes and monopolizing the admiration of all. The questions now come in: With all this beauty, are they as useful as of old? Are their eggs of good size and of uniform color? Do they hatch well? Are the chickens hardy? Are they practical? If so, they should be the highest selling and there should be the largest call for them. We are led to believe there is a somewhat increased demand; that all they want to increase their popularity is to establish the fact by experiment that they lay as many eggs and as large ones as do the Light Brahmas, Langshans and Black Cochins.

The Dark Brahmas, in a steel gray ground color finely penciled with a dark blue stone color, are nearly as beautiful, and to many their subdued shade is far more pleasing to the eye. The early importations which had the true Brahma shape as seen in the cut of Black Prince and Joan were productive of nice, large, dark-shelled eggs. Now, why cannot the American fancier breed them back to a wide crown, overhanging eyebrows, and oblong bodies, yet retain the modern outline pencilings, and thus secure practical worth with beauty in plumage? One has only to read English poultry literature to see that the English acknowledge that they have impaired their usefulness by bringing head and tail too near together, by fostering a superabundance and length of plumage, and excessive leg feathering that has become a burden. It is a fact that the long-bodied specimens of any breed lay the largest and largest number of eggs in a year; that the long-bodied are the heaviest average weight and that the closest feathered specimens are the best layers. Now the present English type of these birds are foreign to all this. Why does this not teach our American breeders a lesson? I assert that no breeder can show any real gain or improvements of his stock derived from importations in the past five years; that I can show him wherein he has lost far more by the introduction of such blood. At least it is a question worthy of consideration whether it is not best for breeders to set their faces square against these extreme English types, and with zeal and work breed back to the real Brahma type to that

extent possible that lower thigh and hock may retrieve their old-time smooth surface, the bodies become oblong, and prolific layers again be the rule. They have been abused; they have been forced by extreme breeding into almost purely a fancy breed, when they are in their original and true type a hardy, practical, estimable breed. Breeders, awake to the situation, and let us see the old-time long line of specimens at our leading exhibitions.

Silver Dorkings are the pets of the English show. In their native land they are esteemed the best poultry and most prolific as layers. Why? They are oblong in body, close feathered birds. This seems to be one fowl the English people have not thought advisable to breed into Cochin shape. Why is it that our English cousins can conceive of but four types for fowl culture—Games, Dorkings, Hamburgs and Cochins? Every new breed they bring to the country they breed into Cochin shape. They



DARK BRAHMAS.

have only the four types. Send a Leghorn to England, and in a few years it is a Black Spanish in type. But we are getting off the track.

Brown Leghorns, with their rich brown coats penciled with a dark brown, bear a delicate and beautiful color; are great layers; they are the hewers of wood and drawers of water in that they give us an abundance of eggs in summer when the foregoing three associate breeds are hatching and rearing their chickens; while the Bantam of this class, the Black-red Game Bantam, is a very prolific layer of eggs, that produces a larger weight of eggs for the size of the specimen than any other breed or race.

Thus we have a group of four, which we may term the penciled combination, and of which any breeder may well be proud and identify himself with for pleasure or for money.

We believe the secret of success is, that we make any set of breeds we choose to push to the front the most practical possible, and that when we adhere to their natural true types we make no mistake in securing their most prolific types.

The Apiary.

Wired Frames.

Many bee-keepers wire their frames to keep the foundation from sagging, and the combs from breaking after being filled with honey or brood. The only objection is, the great labor given to the bee-keeper. Of course, the work may be done in winter evenings; and when once done it is a very excellent and thorough job.

How I Began the Business of Bee-Keeping.

In the first part of July, 1885, I bought a couple swarms of black bees in box-hives, and moved them home, about two miles, in a spring buggy, before they brought in enough honey to cause any danger of breaking down the new, tender combs. They went right to work, and in spite of

"A swarm of bees in July
Is not worth a fly,"

as I had been told, they filled up their hives, and were in good condition to go into winter quarters.

I hardly knew the very first thing about bees. I had found a swarm on a bush four or five years before, when I was a small boy, and my father had given an old man a dollar for an old box in which he had put the bees when we took them home, and let them stand until they perished the following winter. We had never heard of such a thing as wintering bees in the cellar. I do not think that before I found that cluster I could have distinguished a honey-bee from a bumble-bee, but when I made up my mind to buy a couple colonies, I also decided to find out all I could about bee-keeping, and handle them in an intelligent manner, or not at all.

I talked with all the old bee-keepers that I met, and got all the information possible; most of them told me that I had better get movable-frame hives, if I had

really decided to keep bees; but that I would be sorry I had ever turned my attention toward that industry. One man with whom I talked the most, and who supplied most of the market round about, told me that he had been keeping bees for a number of years, and during all that time he had kept a strict account, and that the bees were in debt to him after all that time. I must confess that that discouraged me some, but I decided that I would not back out until I found out for myself if there was any profit in them.

In the winter of 1885-86, I put two colonies in box-hives in one corner of the cellar, which I had divided off with building paper. I turned the hives upside down, and removed the bottom board, which left them without a top, but with plenty of air. There I left them until spring, when I took them out of the cellar and placed them on the summer stands; but may be I did not have an interesting time of it, placing back the bottom-boards on those old box-hives with the tops of the combs all covered with bees,

which acted in a very hostile manner, I thought, toward one who was trying to work for their own good; but I got them out, just the same, even if the folks did hardly recognize me for the next few days.

The bees went to work with all their little "nights," bringing in pollen, and by May 1, both swarmed, the two large swarms going together, making about three pecks of bees. Then I was in a pretty mess. I had ordered some new hives to put the swarms into, but they had swarmed long before I expected it, and the hives had not yet come. Then, what an idea for them to go together in that way! I had never heard of such a thing.

I nailed together two box-hives, put them on a table which I put under the limb on which the bees clustered; then I shook the bees off the limb in front of the hives, and with a wing I guided about half the bees into each hive, in hopes that there was a queen in each hive, for I wanted to increase my number of colonies, and I thought that it would be a great detriment to have them go together in that way; but it did no good, for although I had them divided quite equally, it was but a short time before they were all in one hive again. I think that was the largest swarm I have ever seen, and they made good use of the time, for in a few days they had the hive full of comb, and swarmed, and they and the old ones kept on swarming, so that in the fall I had three colonies in box-hives, and seven in Simplicity hives. I had increased the two colonies to ten, and had taken some comb honey.

During this time I made pretty good use of bee-books, and decided to rear some queens the next summer, if my bees should again winter nicely in the cellar. They were in good condition when I put them in, and in the spring I took out all the ten colonies with (as it seemed to me) very little less honey than they had in the fall.

I bought another colony in a box-hive, and one in a Simplicity hive which had a very nice Italian queen, so that in the spring of 1887 I began with twelve colonies, and put thirty-eight colonies into the cellar in the fall, besides about half a dozen that absconded, and one which I sold. I thought that was pretty good for two years, and although I did not get much honey, I had increased my apiary, which I cared more for than honey, and had also given most of my colonies young queens that I reared myself, and brought them up from blacks to hybrids.

I now thought that I had better begin to work for honey, and not quite so much for increase, for although I take the American Bee Journal, and, as a general thing, read every word in it, together with other bee literature, I began to fear that my colonies would increase faster in number if I should let them go on, than I would increase my knowledge of bee-keeping.—[E. C. Erkel, in the American Bee Journal.

MR. WELD, FARMER'S ADVOCATE.—Your favor to hand. The writer was the editor of the Southern Planter at Richmond, Va., and also Southern Industries at Nashville, Tenn., and a constant reader of the FARMER'S ADVOCATE, hence his appreciation of it and the necessity for it now in editing the agricultural department of the Age Herald. I regard the FARMER'S ADVOCATE as one of the very best agricultural journals published. If you give me club rates I will see what we can do in extending your circulation in the States. I would gladly see it in every household in the South. Rolfe S. Saunders, Birmingham, Ala., June 8, 1889.

One method of breaking up setting hens is to confine them in an outside coop on the ground, where they are fed and watered, but where there is no nest. In two or three days let them out at night, when, if they persist in setting, they return to the nests, or they can go on to the perches. After dark look over the nests and carry out the setters again, till they finally give it up and return to the business of laying. It requires a little care and work, but it is a legitimate charge upon the business, unless provided against by keeping non-setters only.

Sints and Selps

Cut worms do not like buckwheat.
The poor farmer hates an agricultural paper.
Why not breed for eggs from poultry as cows are bred for milk?

Sawdust, if properly cared for, makes an excellent bedding for cows.

Agriculture fills the farmer's pocket at the expense of no other man.

The all-above ground silo is far preferable to one sunk wholly, or in part.

Look over the fruit trees and see if there are any caterpillars' eggs on the limbs.

There will, for the next ten years at least, be a good demand in America for grade draft horses.

When you have hatched as many chicks as you can feed and care for properly, you have enough.

The progressive farmer knows he can get more ideas from a good farm paper than any other way.

On the farm much time is lost for the want of system about work and convenient arrangements for work.

A live farmer will make his hogs their own doctor by giving them grass, sulphur and charcoal to eat at will.

Land designed for alfalfa should be brought to the condition of good tilth by thorough ploughing and harrowing.

Many a drunkard began his slavery to strong drink by going to the cider barrel in the cellar of the old farmhouse.

Farmers must breed and feed much better than they have been doing, in order to make a success of dairying.

Mr. D. S. Willard names high feeding and thorough cultivation as the main requisites for success with plums.

The Orange County Farmer hears "nothing but good words for the Emerald Gem muskmelon" from those who raised it.

Fowls that are kept supplied with gravel, charcoal and green food are not often troubled with indigestion or diarrhoea.

A poultryman near Boston reports an average of 129 eggs from thirty-six Light Brahma hens last year. All were pullets but four.

The ration of Mary Anne of St. Lambert, in her great butter test, was given as 25 lbs. of oats, 6 of oil meal, 17 of pea meal, and 2 of bran.

All buttermakers do not know that salt to some degree absorbs odors as well as milk; consequently dairy salt should be stored where this cannot occur.

Mr. E. H. Libby tried the hen and young chicken remedy for onion maggots, and says it works; one brood is declared to be enough to rid an acre of the insects.

The American Poultry Yard would like to annex Canada since it saw the exhibit of Canadian birds at the show of the Buffalo International Poultry Society.

Denmark is a great dairy country, the cows averaging about one to every two people. Although a small country, there are 200 co-operative dairies. Milk is paid for by the quantity of cream contained in it.

This is the first year for me taking the ADVOCATE, and I must say I am much pleased with it. I do not think it will be the last, in fact, one copy is worth the money.—JAMES L. FRAME, South Branch, Midd., Stewiack, N. S.

Spavins in horses may sometimes be removed, or rather checked in growth, when coming on. A quack will often cause permanent injury. There will always be a blemish, but perhaps not permanent lameness. An old established spavin, bone or bog, is not curable.

The hen is an egg-machine the same as a cow is a milk-machine, and the food that goes in at the mouth gives character to the products. Starved hens lay starved eggs, or stop business, just the same as starved and half-frozen cows give starved milk or "dry up,"—largely the latter.

Each pound of poor cheese and butter put upon the market injures the price and prevents the sale of five pounds of good cheese and butter.

Poultry manure is nearly equal in value to Peruvian guano (except that it contains more water), and it deserves to be carefully preserved and judiciously used. It is as well worth one dollar per bushel as guano is worth seventy-five dollars a ton.

How would it do for us all to settle down to a little consideration of business, and think a little, and figure a little, and think everybody else knows a little? All this might lead to a little improvement upon our farms, and bring a little more profit to all.

A correspondent of the Country Gentleman advises dusting the poultry house well with air slaked lime instead of whitewashing. There is little doubt this is wisdom. When lime wash is applied it at once hardens, and instead of being death to insects, makes more hiding places for them, while the lime dust is certainly death to them.

When hens learn to eat eggs they never forget the trick, and should be killed before they could teach others the habit. Eggs should be gathered twice a day during cold weather, and only glass or porcelain nest eggs should be left in at night. By noticing which hens try to break these imitation eggs the guilty fowls can sometimes be discovered.

A California correspondent of the Poultry Monthly writes to that paper thus:—"I have hens that clear two dollars and a-half a year each with eggs at fifteen cents a dozen, and full grown chicks at thirty-five cents each. I set two or three hens at one time, and then consolidate the broods. I have had hens that would care for twenty-five chicks at once. I don't do it for pleasure though. I work at it, and work hard, and get just what I aim for, namely, profit." The foregoing shows that there is money in the poultry business where labor and brains combine, and we have yet to learn of any industry in which money can be made without these requisites.

A correspondent in Hoard's Dairyman says: "I was troubled with abortion in my herd, until it looked as though every cow and heifer I had would lose their calves. In my anxiety, I wrote to several papers. I read of a Frenchman who had stopped the plague by buying a common billy goat and tying him up in the stable. I first made trenches with slat floors for the cows to stand on and catch the urine; put in new troughs well smeared with coal tar, and then let a 25-cent billy goat run with the cows. From that day to this I have not had any abortion in my herd, now numbering over 80 head. I was laughed at by the editor of this paper when I related my success, but 'he who laughs last laughs best,' and the experiment does not cost much."

Speaking of lime wash for poultry houses, O. S. Bliss says: "In a few hours the wash becomes dried and as harmless as sand, every destructive agent in it being effectually locked up. But the habitable retreats of the insects have been increased in number a hundred or a thousand fold. Cracks and other places without number which before were uninhabitable by them have had the dust wiped out, or wet down, and a protecting scale of whitewash hung up before them, thus creating many a new nidus where none existed before. If a house is really infested and it becomes desirable to clean it out to get rid of the vermin, it is easier, cheaper and far more effective to apply strong soapsuds with or without the addition of kerosene, spirits of turpentine, or any other of the agents employed to render it more effective. Such a wash not only kills the vermin, but detaches the accretions which protect them and leaves a free open space, which is greatly preferable to one partly filled with anything, except it be fine, dry dust in which insects cannot live. If the cracks and other open spaces in a poultry house are to be filled at all it should be with mortar containing sufficient plaster of paris, raw or calcined, or other similar substance, to make the filling solid. But I repeat what I have often said, that there is no occasion for any of these things when the supply of dust is what it should be in every case."

Family Circle.

On the Stairway.

Alone on the stairway we sat that night,
While the music throbb'd and died,
And the hum of voices and laughter light
Floated round us on every side.

The strains of that waltz were bewitchingly sweet
As they rose and fell on the air;
In a dreamy fashion the time she beat
With her slipp'd foot on the stair.

She played with her fan, she lifted her eyes,
She pulled her red roses apart,
She looked up amazed in a sweet surprise
When I laid at her feet my heart.

'Twas a bold and a daring thing to do,
But she seem'd to like it well,
And, besides, 'twas rare good fortune to woo
The ballroom's reigning belle.

I can see those eyes so dark and bright,
I can feel that self same thrill
That shook me from head to foot that night
When two lips said softly, "I will."

Ah, there she goes now in that shimmering gown
And the silky, yellow hair,
Yes she fitted me for a man in town
Who is three times a millionaire.
—Nona P. Brown in Philadelphia Times.

WINNING A WIDOW.

BY HELEN FORREST GRAVES.

Jotham!" quoth Mr. Wiggleton, to his chief
farmhand.

"Well, what's wantin'?" lazily responded Jotham
Hardcastle, with a half-masticated straw between
his teeth, as he looked up from the bit of harness he
was mending.

"The Widow Palmleaf has taken that cottage at
the foot of the lane."

"Tell me something I didn't know afore," said
Jotham, with more freedom than reverence in his
manner.

"And if she sends up to borrow the rake, or the
hoe or the spade—"

"Well, what then?"

"Tell her she can't have 'em. Women are always
borrowing. I knew Hobart Palmleaf when he was
alive; he was a chronic borrower. I don't want
anything to do with his widow."

"All right," observed Jotham, philosophically;
and his master resumed the perusal of his news-
paper once more.

"Jotham!" said Mr. Wiggleton, about ten days
afterward, as he came in, heated and out of breath
from a walk. (Mr. Wiggleton wasn't as spry as he
had been before his five-and-fortieth birthday, and
the Louest Hill was a pretty steep ascent.)

"Well, what now?"

"I wonder if that was the Widow Palmleaf I saw
gathering blackberries in a basket by the south wall
of the cottage garden?"

"Kind o' slim and tall?"

"Yes."

"Blue eyes and hair as shiny as satin?"

"Yes."

"And a little white parasol lined with pink?"

"Yes."

"Reckon likely it was," said Jotham.

"But," persisted the puzzled landowner, "she
doesn't look at all like a widow."

"There's as much difference in widows as there
is in other folks," observed Jotham, dryly.

Mr. Wiggleton was silent for a minute or two.

"Jotham!" he finally said.

"Well?"

"Has she sent to borrow anything?"

"Sent yesterday forenoon—asked if we had a
screwdriver to lend—the hinge was comin' loose on
the garden gate."

"And what did you tell her?"

"Said my order was contrarywise to lendin' or
borrowin'."

"Jotham you are a fool!"

"Tain't the first time you've said so, and tain't
the first time you've been wrong," said Jotham,
with a calmness of demeanor that was beautiful to
behold. "Hard words is considered in the wages,
and I ain't the man to find fault; I only did as you
told me."

"Yes, but, Jotham—never mind—the next time
she sends, let her have whatever she wants."

"Said somethin' about wantin' a man to come
and hoe them early potatoes. Be I to go?"

"Certainly—of course. Neighbors should act like
neighbors, especially in the country."

And Mr. Wiggleton sighed and wished that he
was not too corpulent and unused to labor to hoe
the Widow Palmleaf's early potatoes himself.

But he did the next best thing; he went over to
look at the field after Jotham had hoed it, and gave
the widow good advice concerning a certain rocky
uphill bit of sheep-pasture that belonged to the
cottage farm.

"I'd lay that down in winter rye, if I were you,
ma'am," said Mr. Wiggleton.

"I am so much obliged to you," said the widow,
sweetly. "Since poor dear Hobart was taken away
I have no one to advise me on these subjects."

And Mr. Wiggleton thought how soft and pretty
her blue eyes looked as she spoke.

"Oh, pshaw!" said Jotham, leaning on the handle
of his hoe, "winter rye ain't the sort o' crop for
that spot. Spring wheat's the only thing to grow
there."

"Hold your tongue, Jotham!" cried his employer,
testily.

"Yes, sir, I will," said Jotham, with a broad grin
over Mr. Wiggleton's shining bald head.

"And about these hyacinth beds, ma'am," said
the latter, recovering his equanimity, "I'll come
over this evening if you will allow me—"

"I shall be delighted," interposed the widow,
with a smile that showed a set of teeth as white
and regular as pearls.

"This evening ma'am," repeated Mr. Wiggleton,
with a bow, "and we'll sketch out a diagram.
Hyacinths have to be humored, Mrs. Palmleaf."

"So I have always heard," said the widow.

That evening after Mr. Wiggleton had returned
from discussing the momentous questions of the
sandy soil, bulbous roots, and crescents and circles,
he found Jotham on the front porch contentedly
breathing the flower-scented air.

"A very pretty woman that Mrs. Palmleaf, Joth-
am," said the employer; not because there was
any special congeniality of soul between himself
and his farm-hand, but because he could have talked
to the gate-post if Jotham hadn't happened to be
there.

"Well, nobody doubts that, as ever I heard on,"
said Jotham, with his elbows on his knees, and his
face complacently turned toward the full moon.

"And she can't be over thirty?"

"So I should a said myself," assented Jotham.

"I'm glad she has taker the cottage on a long
lease, Jotham," pursued Mr. Wiggleton, "I like
good neighbors."

"Most folks do," observed Jotham.

And he got up, shaking himself like a great new-
foundland dog, and went into the house leaving Mr.
Wiggleton to the companionship of his own cogi-
tations. There are times in which solitude is said
to be the best company; perhaps this was one of
these special occasions, in the estimation of Mr.
Jotham Hardcastle.

The summer went by; the great maple in front
of the Wiggleton mansion began to glow as if its
leaves had been dipped in blood and melted gold;
the asters reared their purple torches along the
stone wall by the cottage under the hill, and any
acute observer might have perceived that Mrs. Palm-
leaf had laid down the rocky bit of up-hill ground
in spring wheat instead of winter rye.

"Jotham!" said Mr. Wiggleton to his farm-hand
one evening; it was the first time they had had
fire on the wide, old-fashioned hearth.

"Well?"

"I have concluded it isn't best for you to live
here at the house any longer."

"What's goin' to happen?" said Jotham.

"You ain't goin' to hire another hand, be you?"

"No; to be sure not. You suit me admirably,
Jotham, only—and Mr. Wiggleton shot the words
out with an effort, "I am thinking of being
married."

"Oh!" said Jotham.

"It's rather late in life, to be sure," said Mr.
Wiggleton, conscious of looking sheep-
ish; "but you know, Jotham, it's never too late to
do a good thing."

"Certainly not," said Jotham dryly.

"You ought to get married, Jotham," added his
employer, speaking in rather a rapid and embar-
rassed manner.

"Think so?"

"Certainly. You might live in the little house
beyond the peach orchard; it wouldn't take much
to fit it up nicely, now that paint and paper are so
cheap."

Jotham stared reflectively at the fire.

"And your wife could take care of the cream and
butter and all that sort of thing for us. It isn't
likely Mrs. P.—Ahem!—It isn't likely, I mean, that
my wife will care for such things."

"Humph!" remarked Jotham.

"I'd advise you to turn the thing all over in your
mind, Jotham," said Mr. Wiggleton.

"Yes, I will," said Jotham, with a little cough.

The next morning Mr. Wiggleton attired himself
in his best suit, and went to the cottage.

Mrs. Palmleaf received him in a charming crim-
son cashmere wrapper, with ribbons to match.

Mr. Wiggleton wasted no time in useless pre-
liminary chit-chat.

"Mrs. Palmleaf—ma'am," he began a little ner-
vously, "I have concluded to change my condi-
tion."

"Indeed!" said the widow, smiling like an open-
ing rose; "I am glad to hear it."

"And I am here this morning to ask you to be my
wife!" pursued our hero, boldly.

"You are very kind, sir," said Mrs. Palmleaf
blushing and looking prettier than ever; but I—
I really couldn't."

"And why not?" demanded Mr. Wiggleton, fairly
taken aback by this unexpected answer.

"I am engaged," said the charming widow,
playing with the crimson ribbons at her belt.

"Might I dare to ask—that is—"

"Oh, certainly. It's Jotham Hardcastle."

Mr. Wiggleton stammered out a sentence or two
of congratulation, and took his leave.

And when the "spring win" reared its green
tassels on the hill-side, Jotham married the pretty
young widow—and Mr. Wiggleton is single yet. He
always felt as if he had been ill-treated, but he
never could tell exactly how.—New York Weekly.

The man who is suspicious lives in a constant
state of unhappiness. It would be better for his
peace of mind to be too trustful than too guarded.

"THAT GOOD-FOR-NOTHIN' CITY GIRL."

BY FRANCES BURTIN CLARE.

"I don't care Susannah. I aint a goin' to have
him a flyin' round with her—silly little upstart as
she is!" and Farmer Blank turned away from the
open door and sat in the old arm chair by the win-
dow.

The kitchen was large and cheery, the wood
fire was burning lazily, the doors were open, and
through the western window the sinking sun was
sending bright beams which danced on the polished
tins and lit up the whitewashed walls. The twitter
of birds came softly through the open window, and
everything looked peaceful and happy except Mr.
Blank. His face was not the index of a mind at
ease. His forehead was wrinkled, his blue eyes
glittered with anger, and the curve of his thin lips
denoted peevishness.

"Taint as if she meant anything by it ever," he
broke out again. "She wants some one to drive
her round and take her places, and that goose of a
George is fool enough to do it,—drivin' her all
round the country when he ought to be 'tendin' to
the work and tryin' to git along—usin' up all the
horses and his time with nonsense, and then comin'
home and actin' as if he was clean gone foolish,—
singin' about love and such trash, and readin' them
po'try books she lends him. George'll have to quit
this nonsense or leave the farm—one or t'other. I
aint a goin' to have it no more."

"Oh, Pa, don't say that!" exclaimed little Mrs.
Blank, who all this time had been sitting quietly
paring apples, and apparently taking little notice of
the words "leave the farm" caught her attention.
The bad temper George has always been a good boy to
work, and he'll get over bein' in love when she goes
back to town; and I aint sure he likes her much
anyway; leastways it aint likely."

The innocent subject of a few moments before comfort-
ably seated in a "buggy" with Farmer Blank's son
by her side, looking very contented and happy.

The old man had no patience with his son's
"foolin'," and he could see no beauty in the fair,
bright face and the trim little figure of his neigh-
bor's cousin.

She had been ill in the winter and the doctor said
that country air would do her more good than the
medicine he could give her; so her father made
speedy arrangements for her to visit his old home.

Thus it happened that Bella Wright was spending
the spring months on the farm. Supremely happy
in the pleasures it afforded,—searching for eggs,
making excursions to the woods, and without know-
ing it, entangling George Blank's feet more each
day in Cupid's net, till now it was quite customary
to see the stalwart young farmer drive into town
with the daintily dressed girl by his side.

They were going to town on this particular after-
noon when Farmer Blank saw them passing along
the road. He knew the horse and rig, and also
recognized the gray hat with its bright scarlet
wing. He was silent for a little time, and then as a
turn of the road brought them into view again he
exclaimed, "I'm going to tell Cook that he's not
to have George hangin' round there. Taint likely
a wife would she make him anyway. What kind of
that she can make bread, or churn, or even pare
apples," he added, glancing at his wife. "All she
ever does is read and make daisies on silk and knit
ever a hook, and—"

Farmer Blank's ideas were becoming mixed, and
he paused for a moment, so Mrs. Blank took the
conversation with, "Do you think George'll ask her
to have him?"

"Shouldn't wonder if she'd ask him. It's leap
year, aint it?" she answered.

Time passed quickly. May gave place to June, and
Bella went driving and riding and walking, until
Mrs. Cook, Bella's cousin, sagely remarked to her
husband that she "wouldn't be surprised if George
and Bella made a match."

One week Mr. and Mrs. Wright came out from the
city to see how their daughter was improving, and
George, anxious to be honest in love, as well as in
business, besought Mr. Wright for permission to ask
Bella to be his wife.

The young farmer's request surprised Mr. Wright
not a little, but after enquiring and finding the
young man was sensible, temperate, well educated,
and with good prospects, he gave his consent to the
request, stipulating at the same time that marriage
was not to be thought of for two years at least, for
Bella was barely nineteen.

George took an opportunity to speak to Bella,
who frankly admitted her preference for him, and
also expressed her belief that Papa knew best about
waiting.

Some days after this, as the lovers were driving
home from town, Mr. Blank met them when they
were almost opposite the house, and said, "I saw
you a comin', and you must go right after the doc-
tor. Your Ma's cut her arm and it's bleedin' awful,
and the girl's away."

"Let me go to the house with you, Mr. Blank,"
said Bella, as George assisted her from the high
buggy, "perhaps I can be of some use."

"Well, mebbe you can," he answered rather un-
graciously.

Without another word to her, and a parting in-
junction to George to "hurry up, or like or not Ma'll
bleed to death if you don't," he turned and began
walking up the hill to the house.

Bella followed him, half wishing she had not
asked to go, and wondering why he treated her so
roughly. But then she said to herself, "He is
anxious to get back, for he left Mrs. Blank all
alone."

They entered the house, and Bella saw poor Mrs. Blank lying on the sofa, moaning a little, with white lips and a frightened look in her pale brown eyes. Bella stepped quickly to her side, and said, "Mr. Blank sent your son for the doctor, and I came up to see if I could be of any use."

"Oh, I don't know, I'm sure," said the sufferer faintly. "I was just down the cellar cuttin' some pork to fry for dinner, and something fell up stairs and kind of startled me, and the knife slipped and cut my arm, and it's bleedin' fearful and makes me awful kind of sinky; and my bread is all to be kneaded, and Mehitable away to see her sick sister, and wont be back till night. Oh, dear! Oh, dear!" and the poor little woman's voice broke down into a sob.

Bella listened, with pity in her face, and then said, "It is bleeding very much, and you must have a bandage put on at once." A large handkerchief was knotted, and taking off the clumsy bundle the farmer had wrapped round the cut, she skillfully twisted it, with the help of a piece of stick, around the wounded member, above the cut. The flow of blood was arrested at once, and then bringing pillows from the room near by, she made the sufferer more comfortable.

During all this time the farmer had stood, curiously watching the "city girl" as she deftly arranged the bandage, and so gently and tenderly ministered to his suffering wife, and as he turned away to the window there was some thing like shame in his honest blue eyes, and he mentally admitted, "She knows something worth knowin' arter all."

The village was three miles from the blank farm, so it was some little time before George and the doctor returned.

When he had examined the arm he said, briefly and decidedly, "If it had not been for that bandage you must have died from loss of blood. It was skillfully put on, and I assure you the young lady's knowledge of the proper treatment has saved your life."

There was little for him to do except dress the wounded arm and give directions for its further treatment.

George drove him back again, and when he again returned he found the kitchen occupied by a little figure almost covered by one of his mother's large linen aprons and busily moulding loaves of bread on the great bread board.

"Why, Bella, what are you doing?" he cried.

"Taking care of the bread for your mother," she answered. "It was running over the top of the pan."

Mrs. Cook, who had come over in George's absence, now came out into the kitchen.

"Why I did not know you could make bread," she said half laughing.

"I made it at home on a wager with father for six months," returned Bella.

Evening came. Mehitable was back, and Mrs. Cook and Bella were preparing to go home. Mr. Cook had come over to see if Mrs. Blank was any better, and his wife was almost ready to go back with him. Bella was standing in the porch, waiting for George, who had gone in again for a book he wished to return, when the farmer came out and said to her,

"I'm ever so much obliged to you for comin' up and doin' up that bandage on my wife's arm, fur fur—the doctor said it saved her life; and I don't know as you knew I called you a good-fur-nothin' city girl, but I did, and I'm mighty sorry now, fur I be foun' out that I didn't know nothin' at all about you, and I'm real glad that George had got more sense than I had," and the gruff old farmer wrung her hand, while his eyes looked suspiciously moist.

Bella was surprised at the frank apology, and said gently, "I am only glad I knew how to do it, Mr. Blank. I did not know when I read the directions how soon the knowledge would be of use."

George came down just then and said, "Bella, mother would like to speak to you again for a moment."

Bella entered the house once more, and Mrs. Blank said to her, "I didn't know as you had done my bread for me till just now. I'm sure, my dear, I thank you for all the kind things you've done today."

"Please do not mention it, Mrs. Blank. I am only too pleased to know that I was helping you. Good-bye, and I hope that poor arm will soon be well again."

Then the young lovers walked down the green lane and on the country road, quiet, but very happy, for Bella knew now that Mr. Blank was her friend, and George felt that his father would be as eager to help him in the future as he had been to retard him in the past; for while waiting for Bella in the porch his father had said to him, "I aint a goin' to go agin ye any more, George. A girl as can come into a house and bandage up an arm so's to save a person's life, and knead out bread and do every thing without any fluster or flurry, is goin' to make a good wife; and I'm sorry for my hard words, my boy, fur she's a perfect treasure, with her pretty, bright face and willin' hands, and your Ma's as much took with her as I am."

So Mr. Blank's hasty judgment was recalled, and George and Bella had a bright future before them as they walked slowly along the country road that pleasant June evening.

Mental ability and acquirements, physical strength, personal capability, pecuniary possession—whatever it is, we do well to keep something not squandered abroad and strewn on the surface.

Minnie May's Dep't.

Crocheting Lace.

Weaving the white thread in and out
With the shining little hook,
And as I watch you, darling,
With your earnest stedfast look,

I think of your life, my darling,
Which has only just begun,
And while you are crocheting
These thoughts in my mind have been spun.

A space, then a block, my darling—
A block of solid work;
"Twill be so in your life little daughter:
There's many a place to shirk.

But I pray there be more blocks, darling,
For solid work wears the best;
But full and smooth may you finish it, dear,
If so it seemeth best.

But work with a will, my darling,
Keep the thread still pure and white,
And the hand that guides you, my darling,
Will finish the work aright.

HARRIET TREMAINE TERRY.

MY DEAR NIECES:—In this progressive age, when any woman can earn her own living, if so inclined, and no remarks are made about it, she should try and cultivate business instincts, for if we enter the ranks with men, we must expect no quarter on the score of being a woman. Business is business, as we will be quickly reminded, were we to claim any privileges because of our sex. So many women make the fatal mistake of thinking if their employer is a man, he will be paying them all the numerous little attentions observed in social life. The men do not employ you because you are a woman. No; no such chivalrous motive influences him, he might have thought you would be more noiseless than a man, or that you would do the work as well; or more likely he got you for about half the salary he would have to pay a man for doing the same work. So stare the facts in the face before you begin, and not go out into the world with a number of erroneous impressions; and make up your minds to shoulder responsibilities when you take your place amongst the bread-winners. Probably your employer will never notice when you come or when you leave. Be punctual to business, better a little early than late. Dress neatly, and purchase only the most serviceable materials, for you will often be caught in a shower, and besides the making of clothes will cost you considerable. Do not affect cheap jewellery; nothing is in worse taste. Rather a bow of bright ribbon than a gaudy brooch. Wear your hair in some neat and becoming way that will look tidy until after business hours. You must cultivate a habit of reticence, and only speak when spoken to. Be patient and polite. Customers will not endure anything like fretfulness on the part of an employe, and a complaint to your employer will almost surely follow. All these things will be exacted of you when you go out to do battle with the world. It is good and praiseworthy for a woman to earn her own living, if she has it to do; but it is harder than you think, and unless dire necessity compels it, remain in your own homes, where you will be kindly cared for and protected.

MINNIE MAY.

Minnie May offers a prize of \$2.00 for the best and most interesting letter on "How I Spent My Summer Holiday?" Communications to be in our office by the 10th September.

Also, a prize of a beautiful leather purse for the best essay on "Duty of Parents to Children." Communications to be in by the 10th of August.

The use of orange-blossoms at weddings is said to have been derived from the Saracens, or at least from the East.

Fashion Notes.

Full sleeves are so varied in shape that some pattern can be found to suit any figure. The moderately large leg-of-mutton, full above the elbows, are found to be most generally becoming. All such sleeves are worn long, covering the wrist entirely and very simply finished at the ends.

Sailor hats are again in favor; not merely for yachting, but for country wear. As their severe shape is not becoming to all faces, the milliners are trimming them much more elaborately; not with loops up and wings in front, but with broad, dark ribbon made into large, soft loops at the back. Another fancy wears a wreath of small flowers around the crown. Little girls wear very large chip straw, with ribbons of two colors almost covering the crown.

Empire waists are still worn, but to many the short-waisted appearance is not becoming. In fact, anything in the way of dress is fashionable that is becoming.

Some of the dress necks are cut out, and a soft frill of lace or muslin, turned over, leaving the throat and neck bare; but I need not say this style is only becoming to young women who have pretty throats.

A dainty little handkerchief is still worn tucked into the corsage.

Bonnets never were prettier or more generally becoming. Anything that suits the face may be worn; and flowers, flowers everywhere; but never wear them in the corsage, unless they are natural blooms.

Pretty, dressy little capes of every material are seen, but in warm weather will be discarded. Those made of jet are decidedly stylish, but very heavy and warm.

Recipes.

Raspberry Vinegar.—Take three quarts of red raspberries and pour over them a pint of vinegar; let it stand twenty-four hours, then strain, and add one pound of sugar to one pint of juice. Scald twenty minutes and bottle tight.

Sweet Strawberry Cake.—Beat together to a cream, one cup of butter and two of sugar; add by degrees, five well-beaten eggs; sift three cups of flour with two teaspoonfuls of baking powder; add this gradually, with one cup of milk, and bake in a slow oven on jelly-cake tins. When cool put layers of sugared berries between; ice the top.

Strawberry Shortcake.—To one quart of flour add a level teaspoonful of salt and three heaped teaspoonfuls of baking powder; sift three times or stir with a spoon. Work a level tablespoonful of butter into the flour, and make into a dough with one pint of sweet milk. Roll the dough one eighth of an inch thick; spread half of it thickly with butter; double over and cut into cakes about four inches in diameter; bake in a hot oven. They will come apart when cooked. Cover with berries and sugar, place on the tops, and eat with cream.

Strawberry Pyramid.—One pound rice, two quarts ripe, sweet strawberries, to four quarts of boiling water; sprinkle gradually in the rice after being washed. Do this so slowly that it will not stop the boiling, or, if it does stop, stir now and then until the boiling is resumed. Let it boil rapidly thirty or forty minutes; then skim out and place a thin layer of the rice upon a plate, having the edges smooth. Upon this place a layer of strawberries, then another layer of rice, and so on, making each smaller in the form of a pyramid. Then finish off with a spray of berries at the top, and set it upon a larger plate decorated with strawberry leaves.

PRIZE ESSAY.

Picnics.

BY MISS E. JANE AYLMER, BELLEVUE, MELBOURNE, P. Q.

"Picnics—Bah! A cramp in the legs! Wet feet! Flies in the tea! Sour cream! Everything hot that ought to be cold, and everything cold that ought to be hot!" So talks the irascible old gentleman, as he surveys his gouty foot, tucked up on the comfortable lounge.

"Picnics!" cries sweet sixteen, with clasped hands and parted lips, as she gazes eagerly at the face before her. "Oh, nothing more delightful," and bright visions of dancing waters, shady groves, with pretty dresses showing to advantage underneath, and beautiful drives, flit quickly before her mental vision. And so it is, I think, that the definition of picnics is apt to depend a good deal upon our points of view; and it is useless to make any sweeping assertions, such as: "Picnics are horrid!" or, "Picnics are charming!" The same entertainment may prove all that fancy painted it to the man who, with good digestion, enjoys his lunch, laughs at the jokes, and gets the society that he most delights in; while to his dyspeptic brother or unsuccessful rival the whole thing may seem an unmitigated bore. But still, I think that most people with the usual capacity for ordinary pleasures will agree with me, that a well-arranged picnic may be a very pleasant way of spending a day. By a well-arranged picnic I do not mean the carrying out of any particular code, for I think nearly every place has its own peculiar fashion for such an entertainment. I have been at picnics where one person arranged the programme and provided everything, and at others where everyone brought a basket, and the only extras the hosts provided were a table-cloth and kettle. No; by a well-arranged picnic I mean that due thought has been given to the place, and the way of getting there, the people invited to meet each other, and the care of the host and hostess that congenial spirits should be allowed to enjoy the river or woods together, and that there should be some amusement provided, something to do, or some place to visit, so that people with small conversational powers should not tax each other too much. Shall I ever forget my flatness of soul at finding myself, a stranger, embarked for a distant island, the third in a boat with a spooney couple! There was thoughtlessness on the part of our entertainers! I have been at some very tiresome picnics, where everything seemed flat, stale and unprofitable; and at some where the days, looking back upon them, seem almost poems in their wealth of beauty. I recall one of the latter now. A lovely little island, carpeted with the soft, green grass of May, and the early, fresh spring flowers. Stately trees with their branches meeting overhead, and teeming with chattering squirrels, and singing birds, darting into the sun for a look at the world, then back to their cool retreat beneath the leafy shade, gay and busy with the season's responsibilities, and wondering at the laughter and talk from the gay throng below; and when at length, lunch over, those mortals vanished, some in the fairy-like birch canoe, some in the more sober punts, up the glinting, sun-flecked stream, then the merry foresters ventured out to gather up the fragments, and, with the crumbs from the feast, they, too, made a gala day. Then, later on, bright faces gathered

about the fire on the rocks below, or watched the shadows lengthen on the deep, still water all about us. Then came a rest after tea, with a gradual hush of nature, as the sun sank lower and lower; and the moon stole up in her pale glory, and, touching the trees and waters with her soft witchery, set us dreaming of long ago, as she always does. The mists began to rise, as if to veil, and to enhance the beauty that fair Luna showed. The last bird's note died away; nothing was heard but the steady dip of our oars, as we rowed slowly homewards, or the ripple of the water on our bows as we drifted along; not a word till we had all taken a satisfying draught of this beautiful world. Then we woke to each other, and the songs began to echo.

"Row, brothers, row—the stream runs fast! The rapids are near, and the daylight is past,"—and so home. That was one pretty picnic in Canada, where a dozen of us, all intimate friends, met with our baskets and enjoyed the day together in a free, unceremonious way.

Last year I experienced a few Irish picnics, and one out to Killaloe was particularly enjoyable. From Limerick, where I was staying, to Killaloe it is about fifteen miles. Some of the gentlemen of our party, who could not get away early, had to go by train; but we fortunate idlers were to drive, some with the ponies in the crogden, some in the wagonette, and some on real outside jaunting cars, which in themselves always had an elevating effect upon my spirits; and so we flourished away down George street, a merry party; and then on through the greenest of green fields, through dirty villages, past fine trees, quaint, ivy-covered churches, bare, square stone barracks for the constabulary; dilapidated cabins, with a view of the chickens hobnobbing with the family inside; and the pig, rooting up his pleasure grounds in front of Paddy's domicile; past the iron gates and the picturesque lodge guarding the imposing mansion, standing out from its background of oak; past the fair equestrienne, with her liveried attendants; past the wayside beggar, holding his rags together while he tramped his weary way; lights and shadows in quick succession, until we found ourselves depositing our wraps in the neat little inn at Killaloe.

"What shall we do first—have dinner or climb the mountain?" As the train is not yet in, the voting is for the mountain. All men do not care for scenery, but all men do care for dinner.

"We will drive to the foot," said our host. At this picnic our host provided everything. So drive we did, on "cars" with native "jarveys," who amused us not a little by their Irishries. What a climb it was!—up, up, up!—and the higher we got the more the summit seemed to recede. A long time before we were allowed to turn and look at the view below; but we were well repaid when at last we saw the panorama spread out for our delectation. For miles to our left, and to our right, and before us, the Shannon spread itself in lakelike expanse, its surface rippling and sparkling in the sun, which shone with uncommon brightness for rain-deluged Ireland, and many boats spread their white wings to the gentle breeze. We looked, and looked, and said: "Surely, this must be the St. Lawrence!" No; the grass is too green, and the gorse too yellow—and behold! the Doubrey.

Down again to the inn for dinner. And was not the salmon, fresh from the Shannon, some-

thing to dream about? and the trout, in speckled beauty, greatly to be commended? and the chickens! none the worse for their early and intimate association with Pat. After dinner we wandered about in orthodox picnic fashion, and visited the ancient oratory of Saint Kilda, 600 years old, and the grave of Brien Borru's son. In the evening we did an unusual thing, for picnics; we went to a circus; and great fun it was, too, in that queer little country place, with the brogue thick around us. After supper at the inn, we had songs, speeches and recitations; and we were a merry party driving home, barring two maids, one a young one, and the other—well, not so young. They shared a common fate; they had, by some mismanagement, been separated from their affinities; and, consequently, Dismal's cloak had fallen upon them, and the sound of their voice was not heard in the land, as the rest of us made night hideous with our comic songs, as we retraced our fifteen miles to Limerick, where we said good night, with three rousing cheers for our jolly host.

"Gentlemen."

BY SNOWDROP.

Snowdrop is sorry to have annoyed anyone. Our disputant owns only to being amused; but the tone of his letter seems to express a deeper emotion; though, possibly, we may be giving that tone an "extreme interpretation." It must, indeed, be a rash judgment that condemns the terms in which Snowdrop referred to the subject of the letter from the North-west, as an "extreme interpretation." And Snowdrop, herself, spoke distinctly of "a certain class of farmers." How could the expression, "an utter lack of refinement, etc., among the farmers," mean that the general farmers lacked these qualities? When we hear that small-pox is raging among the inhabitants of a certain place, we do not suppose that those not attacked by the malady are in the minority. "Talking shop" is simply "an expression," and has not necessarily anything to do with "shop-keepers."

Those who have never met with farmers who live more as the lower creation—to work, eat, and sleep—who treat ordinary politeness in the family as superfluous—who do not recognize man's nobility—have no right to say, because they have not met them, that many such do not exist. And Snowdrop wrote of these, suggesting that if all children were educated in Christian courtesy, the future might have none such.

It is pleasant to find a farmer proud of being one. We have generally found them strangely lacking in this respect; those acquiring an education—thinking, we supposed, that a farmer did not need one—becoming teachers, doctors, etc.; those not having an education, going to the States rather than work manfully and honorably at home upon the farm.

We do not defend the girl who disdains a farmer as such, but rather pity her lack of common sense. We are also delighted to know, as a positive fact, though it is what we never questioned, that there are very many farmers in our vast Dominion worthy of the name; and none, not even "Young Farmer" himself, is more proud of them than Snowdrop.

The Rural New Yorker assures its readers that one heaping tablespoonful of pyrethrum, or Bubach powder in two gallons of water will rid a rosebush of every rose bug in half an hour. The remedy must be repeated every day, however, for several days.

Uncle Tom's Department.

MY DEAR NIECES AND NEPHEWS:—

If I could write you one by one, or better still, grasp each of you by the hand and look into your eyes, how much I would have to say. But this idea of writing to a whole family, and such a family, at once, makes your Uncle Tom feel as if some boy might say: That isn't for me—that just suits Jack or Annie, or somebody else; when it is an arrow sent straight for himself. That is the way older people do, sometimes, in church. Of course, when I write my little nieces about their dolls, or their skipping ropes, or their last Kindergarten song, and tell them just how to get their fingers right in "Thumbkin says I'll dance," or ask them how they like Pansy books, and if Christy's Christmas didn't show the best kind of a little girl, I can't expect to get my elder nephews to think that's for them. Oh, no! they who are looking forward to the results of their last examination; who are reading with interest The Wild Man of the West, or Jules Verne's, From the Earth to the Moon; who are looking forward to young manhood, and feel the power of the man there is to be stirring there, mentally and physically reaching out and forward to the unseen and the unknown—Oh, no! these require meat, and not milk to satisfy the cravings of their minds; and how willingly would we give them of that which will build them up to the full stature of manliness, of kingliness, of Christlikeness; for He was the only perfect man who ever trod this earth of ours. Should we travel the world over, on snow-capped mountain peaks, or by lone river-side, through tropical jungle, or Arctic icebergs lit up by crimson-tinted aurora borealis, we should find no footmark of His now, yet here at home, "in His Word and His Work," we find Him, in the dew-drop, and the flower, the gracefully waving branches of the elm beside us, and in the sunlight over all. You have all read of that direful calamity of the Conemaugh Valley flood, on May 31st, where happy homes, nestled amid scented orchards, and the growing crops gave promise of a joyous harvest home, how sad the change when but a few hours had passed. The grain deluged with debris and flood, apple trees uprooted, house gone, and, sadder than all, the inmates dying—yea, dead—floating corpses in that strife of waters.

Why have we been spared, and those thousands thus suddenly overwhelmed? I cannot answer. But the words of one, who learned his lessons while minding his sheep in eastern fields, which have been kept in an old book, come to mind. They are: "Surely in the floods of great waters they shall not come nigh unto Him," and also, "The Angel of the Lord encampeth round about them that fear Him and delivereth them." In my next I wish to write specially to my elder nieces, in their vacation time.

Your affectionate

UNCLE TOM.

P. S.—This month I insert a letter from Ada Armand, which I hope you will all read. Like her, I wonder sometimes what has become of you all, and why you have so neglected the puzzles and answers to puzzles; have they got to be too hard for you to decipher? If that is the reason, why do you not send in some simpler ones.

UNCLE TOM.

"Venus's fly trap," which is said to bait its prickles with something which attracts the flies, upon whom it then closes and whose decay is supposed to afford food for the plant.

DEAR UNCLE AND COUSINS.—Full many a time I've intended to write you a letter in rhyme. I never wrote but one before, and it caused so much fun I will try one more. I have not written since long ago, but you have all been well, I know. I read, dear Uncle, your words of cheer, and trust I may do so for many a year. The puzzles, I think, were better never (some of my cousins are very clever). I wish I had time to contribute still, the first leisure I have I'll compose some, I will. Some of the old friends are coming back, and Harry Albro's on the track. Glad to hear from you, cousin mine; where were you hiding so long a time? In Sackville College I would not wonder? (don't blame if I make a blunder.) But, girls, I note with clouded brow, you never send any puzzles now. What are you doing? Where have you flown, that the boys are doing the work alone? To arms! to arms! and fight a bit, or they will think you are not fit; while if their example you would follow, you'd match, and beat them, yes, all hollow. Mabel, Cecelia, Eulalie too, and Helen Connell, where are you? Amy, Elinor, Anna and Jess, why you do not start I cannot guess. Do without a flounce on your dress this once; spend the time making puzzles to send next month. But fearing I might weary you, I bid you all a fond adieu, and if any of you ever to Pakenham come, drive out to see me at my home. More pleased I'd be than words can say. Good-bye, from your Cousin A-d-a.

Puzzles.

1—UNCLE TOM'S CABIN.

Diagram for puzzle 1:
o o o
o o o
o o o
1 o o o o o o o o o o 2
o o
o o
o o
o o o o o o o o o o 4
o o o o o o o o o o o
o o o o o o o o o o o
o o o o o o o o o o o
o o o o o o o o o o o
o o o o o o o o o o o
o o o o o o o o o o o
6 o h o j o 7 o o o o o o o o o 8

Uncle Tom! here is a Cabin
In which you can safely Stow
All your nephews and your nieces
When they visit you, you know.

Chimney.—1, a mother; 2, a number; 3, ditto; 4, a nickname. Down, a river in Scotland, a girl's name, proper. 1 to 2, what all scholars dread; 2 to 4, a metal; 1 to 3, a symbol; 3 to 4, a crime; 1 to 5, a mission; 5 to 6, what boys and girls shouldn't be; 3 to 7, a city in the United States; 6 to 7, what this department does; 7 to 8, to verify; 4 to 8, to resound. Side Window.—A, part of a house; A to B, a journal; A to C, a cover; B to D, a metal; C to E, a car; D to E, an animal. Door.—F to G, a period of time; F to H, a shrub; G to J, sufficient; H to J, a German exclamation. The front windows are word-squares—a weapon, benefit, clear. A bird, attitude, to distort. An animal, a poem, to obtain. A boy, a town, what this puzzle is.

HARRY A. WOODWORTH.

2—A NEW KIND OF DIAMOND.
1
o o o
o o o
2 o o o o 4
o o o o
o o o
3
From 1 to 2, ventured; 2 to 3, the surname of one of Dicken's characters; 1 to 4, a nymph; 4 to 3, distributed. Second line, a tune; second from bottom, a number. Centrals, a puzzle.

HARRY A. WOODWORTH.

3—TRANSPPOSITION.
Het ngio memrs ysad vaeh moce,
Dan twih mteh elmyt fo lmar:
Ot erehe eht mfraer hwti ish ocpr,
Nad veig lhm olst fo argin.

FRANK RIDDLE.

4—CHARADE.
We notice by the "Advocate,"
In Puzzledom first June,
That "Uncle Tom," that grand old man,
Is invited out—a boon.
Perhaps that "Uncle Tom" will go,
And visit Cousin HARRY.
We hope a pleasant time he'll have,
While at Sackville he doth tarrv.
Now, "Uncle Tom," do not complete,
That other puzzlers "true,"
Would like to have you visit them,
(And at Copenhagen too.)
There's one that I will answer for,
And that one is myself;
(Perhaps you cannot find the time;
Or what is more, the "pelf.")
Now, if you should to Sackville go,
As cousin Harry wishes,
I'll bet a cent his sister will
Make you help wash the dishes.
You'd better come and stay with us,
At least a little while;
We would have a fine old time you bet
We'd last there in grand style.

FAIR BROTHER.

5—CHARADE.
"To disfigure" is my FIRST, Sir;
You'll find it defined in Webster.
My SECOND might "a pronoun" be—
Personal too, as you will see.
My THIRD (and last) is "age, duration;"
And began before creation.
My WHOLE is neither bank or quay;
Although, I'm "bordering on the sea."

FAIR BROTHER.

6—ILLUSTRATED REBUS.



7—CHARADE.
One solitary man, I sit complete,
Beside my last and slowly dying fire;
Not e'en a dog lies crouching at my feet,
No cat comes purring near at my desire;
Amid a city's strife I am complete,
As much as if a desert held me fast,
Oh, for a friendly face, a home voice sweet,
But never mine again while life shall last.

AMOS HOWKINS.

8—DROP-VOWEL.
-s w-l l th-m-m-nt wh-t th- h-r,
Br-ngs l-r th- -s- -s-n th-p-w-r,
-nd wh-t th- -b-st c-nst-nd-rst-nd,
-s wh-t l- -s-n- -r-st l- th- h-nd- G- -th-

A. T. REEVE.

9—TRIANGLE.
1—In FARMERS ADVOCATE.
2—To exist.
3—A relation.
4—A part in music.
5—A thin slab of stone used for covering buildings.
6—A bundle of hay.
7—Indicated.

FAIR BROTHER.

10—CHARADE.
Your firmness of will and ardent desire,
Are shown as in resolute youth,—
" I noted a merit"—for pluck and admire,
When guided by duty and truth.

A. HOWKINS.

11—NUMERICAL ENIGMA.
My 1, 2, 3, 4, 5, 6, you will find,
Is a bird of a very small kind;
For 1, 2, 3, the answer will be,
To spoil or to injure.
My 4, 5, 6, if you aright begin,
You will see it is to cover with tin.
My 2, 3, 4, you all must know,
Is best done by clever hands.
My 1, 3, 2, 1, is an animal
All my cousins have seen on the farm.

HENRY REEVE.

12.—GEOGRAPHICAL STORY.

My (island east of Maine), (bay in Newfoundland), (hills in Newfoundland) eyed sister (town in New Jersey), (cape east of United States), and her (town in Oregon), (island friend (river in Australia), (island north of Australia), (river in Australia) gave a picnic. They invited a (river in France) of female friends, and (heads south of Ireland) fellows. They went (creek in Western Ontario) to the park, and (river in England) the sun went down they stayed, (a county in Ontario) 's fellow was called (river in Nova Scotia), (Town in England) gentleman, and was a (town in France), (island west of England) (island west of England). But the favorite was (island in Nova Scotia) (city in United States) a (cape south of Ireland) headed (cape in Nova Scotia) (lake made a (river in Ireland) of fun. They had a (river in Nova Scotia) for which they all made a (river in Labrador) (port north of Ireland). For the first course they had (head south of Ireland) and (river in West Virginia) and (river in Kentucky) (river in Texas). One of the ladies who was delicate ate (cape east of United States) and (sea in Europe) (Bay in Australia), and for a side dish (river in England) with (town in England) sauce. They all drank (sea in Europe) tea, and (river in Montana) sweetened with (sea in Asia) (river in Indiana). They had a (Mountain in New Brunswick) time; but on returning (Bay in Baffin Land), three got stuck in the (river in Cape Breton), where they all got covered with (island south of Nova Scotia), which rather spoiled the day's outing. The result of the picnic was a wedding with (city in Vancouver Island) for the (river in Ireland), three (island east of China) later. And there is (town in Nova Scotia) of another, so that the event came out (island east of New Brunswick).

HENRY REEVE.

Answers to June Puzzles.

1.—(Depart-meant)—Department.

2.—
 F O R L O P S O
 C A R R D I E T
 F A G O T E I E I
 R O T N O S A Y
 T I S H O T O
 E M R L H R
 A T T E S S
 N O R L L
 I S P O G Y
 E P E

3.—Dominion of Canada

5.—Truth, crushed to earth, shall rise again.
 The eternal years of God are hers;
 But error, wounded, writhes in pain,
 And dies among his worshippers.—Bryant.

6.—Chest-nut, wal(l)-nut, ground-nut, beech-nut,
 brazil-nut, hazel-nut, butter-nut, pea-nut, cocco-
 nut, gull-nut.

7.—'Tis better to be lowly born and range with
 humble givers in content,
 Than to be nestled upon a glistening grief and
 wear a golden sorrow.—Shakespeare.

8.—Happy the man, and happy he alone,
 He who can call to-day his own;
 He who, secure within, can say:
 "To-morrow, do thy worst, for I have lived
 to-day."—Dryden.

9.—The more links in the chain, the greater the
 risk of flaws.

10.—Though wrong may sway the world to-day,
 You hold the hand of fate;
 Your good seed grows beneath the snows:
 Right can afford to wait.

11.—Our birds of song were silent long,
 The treeless groves were dumb;
 But God's time is our summer time,
 And that is sure to come.—Cobb.

12.—While in Paris, my friends, Henry Robinson and Big Solomon Chester, went to the art department. The first thing they saw was a fine monument. On one side of the base was carved a salmon and a silver, grim-looking moosehead with a big horn; and on the opposite, an organ, and a hog; and on the other, representing a long, bald-headed, crooked man, holdin' a white swan in one hand and a black Minorea hen in the other. The whole was surmounted by a broad statue of a negro, selling black tobacco and white sugar. They said it was a grand pyramid, worthy of notice. But the best piece of art was a figure piece. The principal figures were a skeleton of a lady and gentleman in the foreground. The lady stood on a green table, her right arm resting on an ivy-covered round Yellowstone. She wore an amber-colored hood, and in her right hand she held a canary, and with the other she was presenting the gentleman with a gold grindstone. Her mouth looked like a pit, and her nose resembled a head light. The gentleman had in his mouth a prime cigar, and for a cane he carried a battle axe. On the whole they had a pleasant time, and made a resolution to go again.

Answers to 4 and 8 puzzles in the May number omitted in June.—4—Man's vanity tells him what is honour; 8—119.

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

Willie A. Redner, Hubert Chisholm, Ed. A. Fairbrother, Amos Howkins, Robert Wilson, Mabel G. Clazie, A. L. Shaver, Frank Riddle, Henry Reeve, A. T. Reeve, Elinor Moore, Frank Porter, Edward McKenzie, Jessie Morley, E. F. Garrett, Willie Howell, Mary Morrison, George D. Ross, Annie Smythe, Harold Hardy, A. Russell Boss, Anna K. Fox, Morley T. Boss.

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.

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

Agricultural & Arts Association.

—THE FORTY-FOURTH—

PROVINCIAL EXHIBITION

—WILL BE HELD IN THE—

CITY OF LONDON

—FROM—

SEPT. 9TH TO 14TH, 1889.

Entries Will be Closed Aug. 24. Prize lists, containing blank forms for entries, can be obtained of the secretaries of all agricultural societies, or by applying by post card to HENRY WADE, Secretary, Toronto.

283-b

CANADA'S GREAT INDUSTRIAL FAIR

—AND—

AGRICULTURAL EXPOSITION

1889

TORONTO

SEPTEMBER 9th TO 21st.

Increased Prizes, Greater Attractions and Lower Railway Fares than ever before.

Newest & Best Special Features that money can procure.

Over 250,000 visitors attended this exhibition last year. Entries close August 17th. For Prize Lists and Forms drop a post card to H. J. HILL.

J. J. WITHEROW, Pres. Man. and Sec., Toronto 282-c

FOR SALE.

BEST STOCK FARM IN MICHIGAN.

Fine large farm of 900 acres; 500 acres cleared and under cultivation; 400 acres nearly cleared. All well fenced and well watered. Best land for large Stock Farm, for which it is used at present. Capable of raising all sorts of crops, and in large quantities. Fine Barns (large one, 66 x 150 feet). All sorts of Farm Implements necessary to the raising of large crops. Adjoins village of Forest, Sanilac Co., Mich., which is the best shipping point on Lake Huron. Daily Boats. Ready cash market for all kinds of produce and stock. Railroad within 8 miles. Plenty of Dwelling Houses cheap or at low rent. This can be run as one farm or can be cut up to suit purchasers. PERFECT. Everything in Complete Running Order. GREATEST BARGAIN for some one with moderate capital. Terms Easy. Long Time given on the larger part of purchase price Address

EDWARD SMITH, 45 Newberry Building, Detroit, Mich. 273-a

Every Young Man and Young Woman

in the Dominion who contemplates taking a commercial course this fall is requested to send to the

ST. CATHARINE'S

Business College

for the NEW CATALOGUE which will be sent free to any address.

W. H. ANGER, B. A., PRINCIPAL.

274-y

FERTILIZERS! FERTILIZERS!

THE HAMILTON FERTILIZER & CASING WORKS

Manufacturers of the following celebrated brands:—

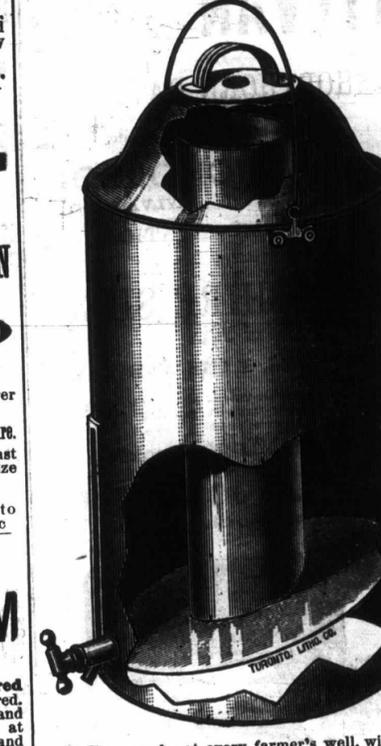
Farmers' Pride, Pure Bone Meal, Pure Animal Fertilizer, Sure Growth and Grape Food.

Send for circular containing analysis of above, Address

HAMILTON FERTILIZER & CASING WORKS, HAMILTON, ONT.

288-y

L'ORIGINAL CREAMER.



This Can works at every farmer's well, with or without ice, by changing the water once after the heat of the milk is off. It will be perceived that in this Can there is a central tube that admits the water to ascend until it reaches the head of the exterior body of water, and thus we avail ourselves of the cooling and purifying influence of water on the inside and outside of the can. With this can we guarantee one-sixth cream during hot or cold weather, and better results generally than with any other process. We build these double creamers to suit all sizes of dairies. Send for price list. Agents wanted.

W. G. BAIN & Co PETERBOROUGH, ONT. 283

STOCK FOR SALE.

H. GEORGE & SONS,
CRAMPTON, ONTARIO,

Importers and Breeders of

OHIO IMPROVED CHESTER WHITE SWINE,
also Berkshire and Suffolk Swine. Orders booked for spring pigs in pairs, and trios not akin. All breeding stock recorded. Correspondence solicited.

E. D. GEORGE

PUTNAM, - - ONT.

Importers and Breeders of
Improved Chester White Swine

Stock recorded in the National C. W. Record. Orders booked for spring pigs, in pairs and trios not akin. Prices right.

GUERNSEYS

—FOR SALE—

3 CHOICE BRED BULL CALVES

About four, five and six months old. A capital opportunity for buttermakers to grade up their herds. For sale cheap.

WM. DAVIES & SON,
Kinross Farm, Markham, Ont.
Importers and Breeders of Guernsey Cattle and Improved Yorkshire Pigs.

SYLVAN HERD

—OF—

SHORTHORN CATTLE.

Animals of both sexes for sale.

R. & S. NICHOLSON,
283-y
SYLVAN, ONT.

NEW IMPORTATION

—OF—

SHROPSHIRE SHEEP

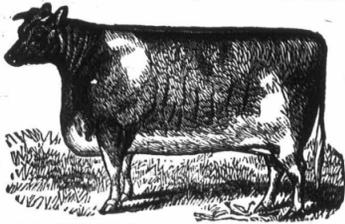
—IN JULY—

SHOW EWES, RAMS AND LAMBS

Offered at reasonable rates; also a limited number of store ewes of the choicest breeding. First come, first served. Call or address

JOHN DRYDEN, Brooklin, Ont.
277-1f

ARTHUR JOHNSTON,
Greenwood, Ontario.



A LARGE SELECTION OF HOME-BRED

SHORTHORN BULLS FOR SALE.

All by imported sires, and mostly out of imported dams, besides imported and home-bred cows and heifers. I have also a number of exceedingly good imported

CLYDESDALE STALLIONS AND MARES FOR SALE.

New Catalogue for 1889, will be ready about the 20th January, 1889. Send for one.

Claremont Station, C. P. R., or Pickering Station, G. T. R. Parties met at either station on shortest notice. Come and see them.

265-1f

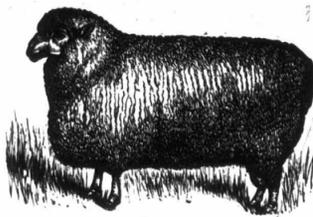
BOW PARK HERD

—OF—

PURE-BRED SHORTHORNS.

Have at all times a number of both sexes for sale. Catalogue of young bulls recently issued. Address:

JOHN HOPE, Manager
266-y
Bow Park, Brantford, Ont.

COTSWOLDS AND SHORTHORNS FOR SALE

For many years my flock has been the largest and best in Ontario County. A number of sheep and cattle always on hand for sale. Come and see me, or write for particulars.

JOSEPH WARD,
279-y
MARSH HILL, ONTARIO.

Prize Winning Ayrshires for Sale.

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 welcome. Address

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

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 fashionably 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.

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,
279-y
PORT PERRY, 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,
275-y
HILLHURST P. O., Compton Co., Q.

FRANK R. SHORE & BROS.

White Oak, Ont.

Breeders of

SCOTCH SHORTHORNS

—AND—

SHROPSHIRE.

Young bulls and heifers for sale from imported Cruickshank sires and from dams of the most approved Scotch breeding.



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

My Shorthorn herd now consists chiefly of Imp. Lady Violet Lustre and seven of her daughter's, 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, including an imported bull. Trains twice daily. Station one mile.

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.

St. Anne's Herd Jerseys

The Largest and Oldest Pure St. Lambert Herd in the World.

75 HEAD OF THE WORLD-RENOWN VICTOR HUGO & STOKE POGIS (VICTOR HUGO STRAIN.)

HOME OF THE CHAMPION MILCH COWS
Jolie of St. Lambert 5126, and Jolie of St. Lambert 3rd, Winners of the Silver Medals and Diploma Sweep-stake Prizes at Toronto, 1885; Quebec, 1887, and Kingston, 1888, scoring the highest number of points (113.28) ever made by any breed in a public test.

Victor Hugo 197
Has now seventy descendants that have tested 14 to 36 lbs. of butter in seven days. His best daughter, Lady Fawn of St. Anne's, with her wonderful record of 16 lbs., 12 1/2 ozs. of butter in seven days; 64 lbs., 8 ozs. in twenty-eight days, and 40 lbs. milk per day. All, when fifteen years-old, is in this herd.

JERSEY BREEDERS, FARMERS AND DAIRYMEN,
Do you want a pure St. Lambert Bull to head your herd—bulls having from 21 1/2 to 31 1/4 per cent. Victor, and 18 1/4 to 37 1/4 per cent. Stoke Pogis 3rd, combined with as high as 90 per cent. of Mary Anne of St. Lambert's blood? For sale from \$100 to \$250. We don't keep bulls to sell for less than \$100, nor will it pay you to buy a poor one. A bull is half the herd; therefore, buy a good one.

W. A. REBURN,
282-c
St. Anne de Bellevue, P. Q., Can.

FOR SALE.

Three very choice young Shorthorn Bulls, fit for service. Fifteen young Cows and Heifers, and a lot of Berkshire Pigs. Send for prices.
EDWARD JEFFS, BOND HEAD, ONT.
 282-6

THE LOWLANDS STUD!

CLYDESDALES FOR SALE AT REASONABLE TERMS.



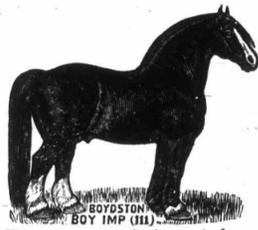
Our importations of 1888 comprises a large number of carefully selected stallions and mares, gets of the noted sires, Darnley (222), Macgregor (1487), St Lawrence (3220), Lord Hopton (2965), Sir Hildebrand (4224), and Old Times (579).
 Visitors always welcome. Catalogues on application.

DUNDAS & GRANDY,
 SPRINGVILLE P. O.
 Cavanville Station on the C. P. R. 78-y

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

COLDSTREAM STOCK FARM, WHITBY, ONTARIO.



We have on hand and for sale a superior lot of imported and home bred Clydesdale Stallions and mares. Several of them were prize winners at the leading shows in Scotland and Canada. Also a few choice Shetlands. Prices to suit the times.

Address, **JEFFREY BROS., Whitby, Ont.**
 279-y

COMFORT AT LAST.

PATTERSON'S TICK & VERMIN DESTROYER

Sure death to ticks, vermin on cattle, horses and poultry. A powder easily applied and perfectly harmless. Wm. Linton, Stock-breeder, Aurora, says of it: "The best article in the market." Endorsed by the leading farmers.

G. D. PATTERSON, Chemist Aurora.
 Trial package sent by mail. Price, 70c. 280-y

DOUGLAS H. GRAND, AUCTIONEER.

Pedigreed Live Stock a specialty.
 Sales held any part of the country.
 Terms reasonable. **150 Dundas St., London.**
 273-ff



CROSS EYES STRAIGHTENED

DRS. ANDERSON AND BATES—Eye and Ear Surgeons, 34 James Street, Hamilton, Ont. Exclusive attention given to the treatment of the various diseases of the EYE and EAR.
 268-y



SPRAY YOUR TREES

—WITH—

LONDON PURPLE.

No other preparation will take its place; best Paris Green is useless compared to it, this I have found out from experience on my own immense orchards. Every information and London Purple can be had from

JOSEPH STRATFORD, Brantford P.O., Ont.,
 283-a Sole Agent for Western Canada.

GRATEFUL—COMFORTING

EPPS'S COCOA BREAKFAST.

"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected Cocoa, Mr. Epps has provided our breakfast tables with a delicately flavored beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—Civil Service Gazette.
 Made simply with boiling water or milk. Sold only in packages by Grocers, labelled thus:
JAMES EPPS & CO., Homeopathic Chemists,
 London, England.
 278-y

THRASHING MACHINES & HORSE-POWERS (ONE, TWO AND THREE-HORSE)



Guaranteed to be "the best" Tread Horse-power Threshing Machines made, and takes the lead wherever introduced. Agents wanted.
JOHN LARMONTH & CO., Manufacturers,
 Point St. Charles, Montreal, Que.
TIPPET, BURDITT & CO., Agents, St. John, N. B.;
E. G. PRIOR, Agent, Victoria, B. C. 281-f

HALLADAY STANDARD WINDMILLS

For supplying constantly pure and fresh water for the following purposes, viz.:

- Pumping Water For Stock,
- Farm Buildings
- Mansions,
- Villa Residences,
- Public Institutions,
- Gardens,
- Green Houses,
- Town & Village Water-works,
- Hotels, Colleges
- Pumping for Railway Stations,
- Fire Protection,
- Irrigation,
- Tanneries,
- Breweries,
- Sewage, Mines,
- Draining
- Low Lands.



These celebrated Windmills are made from one man to forty horse-power. They are perfectly controllable in gates, and uniform in speed. Catalogue and Price Lists with references mailed free on application to
ONTARIO PUMP CO'Y,
TORONTO, ONTARIO. 279-y

Business Directory.

Cards up to six line space inserted under the heading at \$3.00 per line per annum (including AD-VO-CATE).

- DR. W. E. WAUGH,** Office, the late Dr. Anderson's, Ridout St., London, Ont.
- DR. CHAS. S. MOORE & DR. F. P. DRAKE, N. E.** corner Wellington & King Sts., London, Ont.
- MEREDITH, FISHER & BEATTIE,** London, Ont. Barristers, Solicitors, &c.
- GRAYDON & McCANN,** 78 1/2 Dundas St., London, Ont., Barristers, Solicitors, &c. Money to lend.
- E. ADAMS & CO.,** London, Ont., Wholesale Grocers.
- REID BROS. & CO.,** 389 to 395 Clarence St., Paper.
- STERLING BROS.,** Wholesale Boots and Shoes. Granite Block, York-st., opp. G. T. R. Station
- R. LEWIS,** 434 Richmond St., Wall Paper, Paints and Window Glass. Stained Glass to order.
- ELLIOTT BROS.,** 155 Dundas St., London, Ont., Grocers, and dealers in Wines and Spirits.
- WILSON BROS.,** Grocers and Wine Merchants, 388 Richmond street, London, Ont. 268-y
- NEW YORK STORE,** London, for the last 25 years has been known as the reliable house for Teas.
- E. BELTZ,** Dundas St., London, Ont., Hatter and Furrier.

THOS. GREEN & CO., Cor. Clarence & Bathurst Sts., London, Ont., Builders and Contractors, Planing Mill, Sash & Door Factory.

CHAS. CHAPMAN, London, Ont., Book Binding in all its branches; dealer in Artists' Materials.

FRANK COOPER, ARTISTIC PHOTOGRAPHER, over 109, 171 & 173 Dundas St., London, Ont

E. BURKE, 521 Richmond St., London, Ont., dealer in Photographic Goods, Amateur Outfits, &c.

FARMERS,—W. D. Buckle, Land & Loan Agent, Albion Block, Richmond St., London, sells the cheapest and best City Property.

T. F. KINGSMILL, the Largest Distributor of Silks, Dry Goods, Carpets, Cloths, etc.

J. M. DENTON, 372 Richmond St., London, Ont., Merchant Tailor and importer of Woollens.

JOHN M. MOORE, P. L. S., Architect, Civil Engineer, Albion Buildings, London, Ont. 283-y

PETHICK & McDONALD, 238 Richmond St., Merchant Tailors and Importers of French, English, Irish & Scotch Cloths, Tweeds & Gents' Furnishings

GRIGG HOUSE, corner York & Richmond Sts., London, Ont., **SAMUEL GRIGG, Prop.**

CITY HOTEL, London, Ont., cor. Dundas and Talbot Sts. Board \$1 per day. **McMARTIN BROS.**

A. D. CAMERON, 316 Burwell St., London, Ont., Coal Merchant.

W. STEVELY, 381 Rich. St., manufacturer Dairy Utensils, general Tinsmiths, Stoves, &c.

WINLOW BROS., 118 Dundas St., London, Ont., dealers in Boots, Shoes and Rubbers.

HODGENS BROS., London, Ont., American House Livery.

JAMES REID & CO., Cheapest and Best Stock of Hardware. No. 118 Dundas St., north side.

JOHN T. STEPHENSON, Furniture Dealer and Undertaker, London, Ont.

LONDON CARRIAGE FACTORY,—Hacks, Phaetons, Sleighs, etc. **JOHN CAMPBELL, Prop.**

W. M. WYATT, manufacturer and dealer in Stoves, Tinware, Furnaces and House Furnishings, London.

JOHN STEVENSON, opp. City Hall, London, Harness, Saddles, Trunks, Valises, Satchels, Etc.

PALMER HOUSE, corner of York and King Sts., Toronto. Rates, \$2 per day. **J. C. Palmer,** Proprietor, Toronto. Also Kirby House, Brantford, 280-y

FARMERS Supplied with Laborers, Pupils and other labor. Address, Colonial Agency, 2 Billiter Street, London, E. C. 280-f

ST. LAWRENCE HALL, Montreal. This hotel is conveniently situated in the heart of the business centre; 250 Rooms. **S. Montgomery, Manager.** Henry Hogan, Proprietor. 268-y

FOR SALE,

Valuable and highly improved farm in the Township of Flos; 150 acres; brick house, good out buildings; rich clay loam. Apply for further particulars to **WM. REHILL,** Hillsdale, Ont. 273-a

DRUNKENNESS

is a DISEASE and can be cured, by administering **Dr. Haines' Golden Specific.** It can be given without the knowledge of the patient, if desired, by placing it in coffee, tea or articles of food. Cures guaranteed. Send for free circulars. **GOLDEN SPECIFIC Co., 185 Race St., Cincinnati, O.**

\$1,500.00
— WORTH OF —
STOCK, IMPLEMENTS, ETC
GIVEN AWAY!

For Procuring New Subscribers to
the FARMER'S ADVOCATE.

CONDITIONS:

- 1st. Cash must accompany all lists of names.
- 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, 45cts. each; 100 to 200 names, 50cts. 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 80 new names, a Shropshire Ram or Ewe Lamb, bred by John Miller & Sons, Brougham, Ont., or Jno. Dryden, M. P. P., Brooklyn, 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 20 new names will give a Leicester Ram or Ewe Lamb, bred by Jeffrey Bros., Whitby, Ont.
- For 20 new names we will give a Dorset Horned Ram Lamb, bred by Capt. Wm. Rolph, Markham, Ont.
- For 30 new names we will give a Hampshire Ram Lamb, bred by John Adams, Esq., Port Perry.
- For 40 new names we will give a Berkshire Sow or Boar 6 months old, bred by J. C. Snell, Edmonton, or J. G. Snell & Bro., Edmonton, Ont., or by Wm. Linton, 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, Brooklyn, 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.

IMPLEMENTS, 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 \$36, 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., 176 King St. East, Toronto.
- All stock or goods shipped free on board the cars.

M. WILSON & CO.,
Hamilton, Ont.,
Manufacturers of all kinds of
HAY TOOLS



Foust's Patent Hay Loader, Anderson's Patent Rake Attachment, Grand Rapids Hay Tedder, Wisconsin Dead Lock Hay Carrier and Fork.

The above mentioned implements are the most popular Haying Tools in the market. Send for descriptions and prices. Good, responsible agents wanted.

"RIVERSIDE," Woodburn, Oct. 28th, 1888
MESSRS. M. WILSON & CO., Hamilton.

Dear Sirs:—We used your Hay Loader during the entire season while haying lasted, and were well pleased with it—so much so that the work hands were unwilling to draw in hay without using it, even in limited quantities. There is no surer evidence that an implement does its work well than to find the work hands anxious to use it. We consider it a great saving in time and work when hay is loaded in this way. By cutting but a limited portion at once, and using the Tedder and Hay Loader judiciously, hay can be fairly well saved almost any season. We would not think of doing without either of those implements in future.

Yours, etc.,

THOMAS SHAW, 280-g
Prof. of Agriculture, Agricultural College, Guelph.



For circular, etc., address
271-y C. O'DEA, Secretary.

CANADA BUSINESS COLLEGE
HAMILTON, ONT.

— TWENTY-SEVENTH YEAR. —

BEST equipped and most successful Business College in the Dominion. Over 300 students past year. Offers unequalled advantages to farmers' sons and others desiring a business education. For handsome illustrated catalogue write.

271-y R. E. GALLAGHER, Principal.

LAND THAT MUST BE SOLD!

HUBBARD'S GREAT TRACT OF

25,000 ACRES OF CHOICE FARMING LAND,

SITUATED IN HURON CO., MICH.,

must be sold in the next fifteen months. This county is intersected by four different railroads, giving the best facilities possible for the shipment of farm produce. We have good roads, good markets and good schools. This land is now selling from

FIVE TO TWELVE DOLLARS PER ACRE.

Now is the time to buy; this land cannot remain long at the present prices, and must double in value in the next three years. The man who invests now is the one who will reap the benefits of the increase in value. \$100 cash on 40 acres, and \$200 on 80 acres. The balance can run for five years time, by prompt payment of taxes and interest.

Address all inquiries to

FRANK W. HUBBARD,
BAD AXE, MICHIGAN. 281-c

FREE SEND 20c. TO PAY FOR PACKING AND POSTAGE for a sample colored Rug Pattern, stamped on the cloth itself. Also, our colored plates of fifty different designs of rugs free. Agents wanted to sell the Jewel Rug Machine, Colored Rug Patterns, and other goods. **W. & F. BUSH, St. Thomas, Ont.** 283-f

THE CELEBRATED **ROSS** Special **ENSILAGE** and **FODDER** CUTTERS, CARRIERS and **POWERS.**
THE FINEST AND LARGEST LINE OF **FODDER CUTTING MACHINERY IN THE WORLD.**

Better made. Stronger, more Durable, and will cut faster with less power than any other Cutter manufactured. Send for our Illustrated Catalogue and Treatise on Ensilage and Silos. Address **E. W. ROSS & CO., MANUFACTURERS, SPRINGFIELD, OHIO, U. S. A.** FROST & WOOD, Gen'l Agts., SMITH FALLS, ONT., & 30 St. Paul St., QUEBEC, CAN.

BINDER TWINE!

HOBBS HARDWARE CO., LONDON.

AT WHOLESALE. NOT IN COMBINATION.

LOW PRICES FOR QUANTITY. QUALITY GUARANTEED.

282-b

Chicago, Rock Island & Pacific Railway,
Car Department.

CHICAGO, ILL., U. S. A., Jan. 17th, 1889.

This is to certify that I have used a few barrels of the JOHNSON MAGNETIC IRON PAINT, and can say that it is the finest and most perfect mineral paint I have ever used.

(Sgd.) JOHN RATTENBURY.

Master Painter, R. W.

DETROIT, MICH., 10/30, '88.

Messrs. WILLIAM JOHNSON CO.,

Montreal.

Dear Sirs,—I have used your paint and find it covers much better than any other paint I have used, and it looks as though it would last longer.

Yours very truly,

(Sgd.) A. DAY.

Dictated.

Peterborough Foundry and Machine Shop.

PETERBOROUGH, Ont., Feb. 5th, 1889.

Messrs. THE WILLIAM JOHNSON CO.,

Montreal, Que.

Gentlemen,—We have always made our own paint with lead, oil and colors, but we find that your MAGNETIC IRON PAINT covers the surface a great deal better and makes a nice, smooth ground.

Yours truly,

(Sgd.) A. C. LACHLAN.

The William Hamilton Manufacturing Company (Ltd.)

SOREL, June 6th, 1889.

Messrs. THE WILLIAM JOHNSON CO.,

Montreal.

Dear Sirs,—Enclosed you will find \$12.50, amount of your account for MAGNETIC IRON PAINT. We find that this paint is just the article required for roofs, both iron and wood. We covered 6,850 superficial square feet of iron with seven gallons. Some time in the future, if you wish, we can let you know how it has stood the weather.

Yours truly,

JAMES SHEPPARD & SON.

STOCK GOSSIP.

Mr. Robert Stevens, of Delaware, has sixteen Lincoln ewes. They gave him this spring thirty-five lambs.

If "Old Subscriber" will send his name and address, we will send him the information he requires in re concrete walls.

Mr. John Dryden, of Brooklyn, Ont., is now in England, attending the shows and making selections of Shropshires and other stock for importation.

Salt, sprinkled on the backs of cows from the neck to the root of the tail, once a week during summer, will prove effectual in preventing warbles. So says a writer in Colman's Rural World.

Mr. David Birrell, Greenwood, reports a fine lot of young stock coming on; of Clydes, Shorthorns and Cotswolds. His young bulls and lambs are particularly worthy of note, and will no doubt be heard from in the fall.

Jerseys are evidently looking up. Mr. Wm. A. Reburn, of St. Anne de Bellevue, Que., has sold to Hon. Wayne MacVeagh, five females and one male of his St. Lambert Jerseys at a good price. He has also sold six females, all under one year and not in calf, for \$300 each.

We would call special attention to the advt. of Messrs. Wm. Davies & Son, of Kinocroft Farm, Markham, Ont. A representative of the ADVOCATE had the pleasure of visiting Kinocroft Farm last March, and can speak authoritatively as to the superior merits of the stock. The Guernsey bull at the head of the herd is an especially fine representative of the breed, while the cows are equal to any we have seen. Messrs. Davies & Son are also importing a herd of Yorkshire pigs.

Messrs. Nicholson Bros., Sylvan, Ont., write:—Since our last report we have made the following sales of yearling bulls:—To W. G. Sanders, St. Thomas, Valasco 13th; to Stevenson Brothers, Melbourne, 5th Crown Jewel; to S. Fitchett, Theford, War Banner; to J. Gibbons, near Ottawa, 6th Crown Jewel; to J. Johnson, Ravenswood, the four-months-old calf, Valasco 14th; to Eastwood Brothers, Mimico, the four-months-calf, Cromwell; at good paying prices, all sired by Warrior; and a better lot seldom leaves a herd. Notwithstanding the apparent depression, bulls of good substance and quality are in good demand; but there is no money to the breeder of fifty-dollar bulls, and still less to the buyer of them.

SWINE RECORDS IN CANADA. The Agriculture and Arts Association of Ontario, the parent agricultural association of this country, and the leader of everything pertaining to agriculture, as early as 1876 commenced a Berkshire Swine Record. It did not make much progress for some time, but now is well patronized. There are 1,174 sows and 1,008 boars already on record, enough for a good-sized volume. In 1884 this association started a Suffolk Swine Record, which is being well supported. This present year they have commenced an Improved Yorkshire Swine Record. The standard for all three of these records is that: 1. Animals, to be eligible, must be either imported from Great Britain, or satisfactory evidence given that they are directly descended from imported stock, with every cross recorded from the imported animal. 2. Boars and sows may be entered at any age. 3. The date of birth of animals, the number of pigs in the litter, and the name of breeder and owner, must be given. 4. The owner of the sow at the time she is served will be considered the breeder of her pigs. 5. No pedigrees will be received unless made on the printed forms of the association, and must be certified by the breeder or owner. Entries must be accompanied with the necessary fee of 50 cents for each animal.

Mr. James Frier, writing from Shediac, N. B., June 15th, says:—We have such a farmers' paradise here this year, that I thought I would add a few words, in addition to the answers to your circular, to tell you some of our joys. Our mild winter was followed by an equally mild spring, and seeding began earlier than usual. Then, May weather began earlier than usual, and the seed is sown, for it is the month in which the bulk of seed is sown, was all that could be desired—warm and dry, not a single day lost because of rain—consequently, there was a very large acreage put in crop early, with land in good condition. Since May we have had the best of growing weather; warm, with just enough rain at the right time. Crops cannot suffer for at least ten days, and as hay will be ready this year by 10th of July, we can scarcely have less than a fair crop of it. We do not know anything about cyclones, floods and grasshoppers here, so count on no loss from that score. The frost which was so disastrous over such a large area, was very light here, and has harmed nothing unless it be fruit. However, the outlook for that was bad before the frost; so that Jack is unjustly charged with damaging it, I think.

J. Campbell, jr., of Fairview Farm, Woodville, Ont., reports a growing and steady demand for Shropshires of good quality. In May he shipped a good, uniform lot of six shearing ewes and ram, to B. Gates, Mount Lebanon, N. Y.; a first-class imported shearing ram to E. A. Bailey, Winthrop Centre, Maine; booked an order for thirteen rams and six ewes—Canadian breed—for August delivery, to Messrs. Mathews, of Dakota; and one for an imported lot for H. C. Pratt, Canandaigua, N. Y.; besides orders for small lots to Canadian breeders. Some orders for fitted show sheep and choice breeding stock could not at present be filled; hence the necessity of an importation which Mr. Campbell makes this season, personally, leaving for England the latter part of May.

SPECIAL AND ANNUAL MEETING

OF THE

Ontario Mutual Life Assurance Co.

THE ATTENDANCE OF MEMBERS OF THIS Company at its Nineteenth Annual Meeting, in Waterloo, on May 23rd, 1889, though not quite as large as in some former years, was, as usual both influential and representative.

The President, I. E. Bowman, Esq., M. P., having taken the chair, on motion the Secretary of the Company, W. H. Riddell, Esq., acted as Secretary of the Special and of the Annual Meeting.

The provisions of the Act passed at the last session of the Dominion Parliament, to amend the Company's charter, having been explained by the Chairman, on motion it was unanimously approved of, whereupon the Special General Meeting was dissolved.

THE ANNUAL MEETING

of the Company was then held. The Secretary having read the notice calling the meeting, on motion the minutes of last Annual Meeting were taken as read, and confirmed. The President then read the

DIRECTORS' REPORT:

It affords your Directors much pleasure in submitting the following statement of the affairs of our Company, to be able to report to the members that the net result of the business transacted during the year 1888 exceeds that of any previous year. The new assurances issued amount to \$2,518,650, under 1,905 policies and the total amount in force on 31st December is \$12,041,914 under 9,388 policies. The regular progressive increase of the past ten years in our Premium and Interest Income has been fully maintained.

Our total assets as at 31st December last amounted to \$1,333,853 and our surplus over and above all liabilities has reached the handsome sum of \$90,337,09, which is a very satisfactory showing after the liberal annual distributions which have hitherto been made. A portion of this surplus will be held in hand as a provision against future reductions in the rate of interest and other contingencies.

Our expense account for 1888 is about \$2,000 less than that of 1887, while the business transacted is considerably greater; and the ratio of expense has been reduced to 18 1-5 per cent., showing a reduction of 2 1/4 per cent. as compared with the previous year.

The policies in force at the close of the year have been valued by the officers of the Government Insurance Department and the Reserve required to be

held has been certified as correct by the Superintendent of Insurance for the Dominion. After the regular annual Audit, the Executive Committee of the Board again carefully examined in detail all the assets and found them correct and in proper order. The detailed statement prepared and duly certified to by your Auditors is herewith submitted for your examination and disposal.

You will be called on to elect four directors in the place of B. M. Britton, John Marshall, Francis C. Bruce and J. Kerr Fiskien, whose term of office has expired, but who are all eligible for re-election.

On behalf of the Board.

ISAAC E. BOWMAN, Pres.

Printed copies of the Financial Statement and Auditors' Report for 1888 having been distributed among the members, the President moved the adoption of the various reports. He congratulated the policy holders on the favorable results of the year's operations, obtained at a lower ratio of expenditure than in previous years and lower than the expense ratio of any of our Canadian competitors, with one exception only; while the volume of business has been well maintained and its quality improved. The new business of the current year was much in excess of that written during the same period in any previous year, evidencing the continued popularity of the Company and warranting the hope that the next report the Directors may have the privilege of submitting will be the best ever experienced in the history of the Company. He had no hesitation in stating that the Ontario was never more deserving of the support and confidence of its members and of the patronage of the insuring public than it is at the present time. B. M. Britton, Esq., Q. C., James Trow, Esq., M. P., Joseph Ward, Esq., of the wholesale firm of Messrs. Ward, Carter & Co., Montreal, and others, ably supported the motion which was adopted amid applause.

Messrs. Jackson and Scully having been re-appointed by vote of the members present auditors for the current year, the Scrutineers appointed to take up the ballots having reported the re-election of the retiring Directors, and the customary vote of thanks to the Board, the Officers and the Agents having been tendered and responded to, the meeting was brought to a close. The Directors met subsequently and re-elected I. E. Bowman, President, and under the amended charter elected C. M. Taylor 1st Vice and Robert Melvin 2nd Vice-President of the Company for the ensuing year.

283-a

FARMERS, ATTENTION!

Porous Terra Cotta Building Material

—MANUFACTURED BY—

THE RATHBUN CO., DESERONTO, ONT.

—IS JUST THE MATERIAL FOR THE CONSTRUCTION OF—

DWELLINGS, DAIRIES, SILOS, HENNERIES, ETC.

Absolutely fire proof. Cool in summer and warm in winter. It insures freedom from rats, mice and other vermin. One-half the weight of ordinary bricks. Mortar can be applied direct without lath or furring. Applicable for old and new work. Farm Drain Tile of any size. Write for prices and further information.

280-f

—THE—
CHATHAM FANNING MILL.

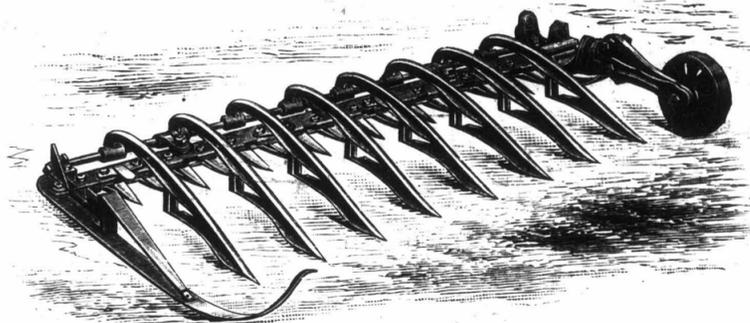


Farmers desiring the best fanning mill manufactured, should order the Chatham Mill, which has all the latest improvements. My sales last season were 2,500. This speaks for its popularity. The Bagging Attachment has been greatly improved, and put in front of the mill, thus saving considerable room. It works very easily, will bag any kind of seed, from beans to timothy. One man less is required by using my bagging attachment. If my mills are not kept by any agent in your locality, send for descriptive circular and prices, and have a mill shipped direct.

MANSON CAMPBELL,
CHATHAM, ONTARIO.

282-e

THE :: GENUINE :: TOLTON :: PEA :: HARVESTER



THE MONARCH OF THE PEA FIELD.

The only successful harvester manufactured, and the greatest labor-saving machine in use—harvesting from eight to ten acres per day in the most complete manner. It is endorsed by all first-class farmers who have this Harvester, to be as useful in the pea field as the mower is in the hay field. It can be attached to any mower bar, and has the only Vertically Acting Lifter, having a practically successful movement to suit the unevenness of the land, of which we are the Sole Manufacturers and Patentees.

Send for circular with prices and instruction, and order early and secure one.

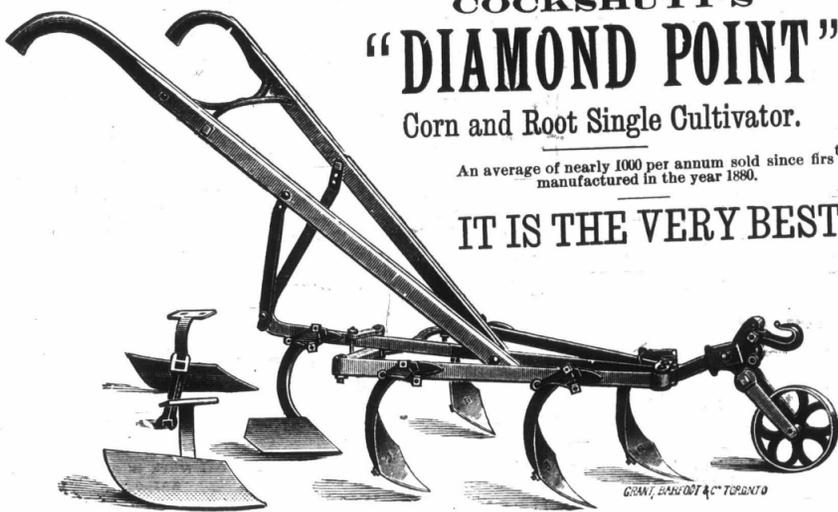
280-b

TOLTON BROS., Guelph, Ont.

COCKSHUTT'S
"DIAMOND POINT"
Corn and Root Single Cultivator.

An average of nearly 1000 per annum sold since first manufactured in the year 1880.

IT IS THE VERY BEST



Descriptive Catalogue Mailed Free on Application.
COCKSHUTT PLOW CO., (Ltd.) BRANTFORD, CANADA.

281

STOCK GOSSIP.

Tisdale's Brantford Iron Stable Fittings. We lose no job we can figure upon. Catalogue sent free. The B. G. Tisdale Co., Brantford, Canada. Advt.

The A. J. C. C., at their last annual meeting, held at the Fifth Avenue Hotel, New York, May 8th, reduced the fee for registering imported animals, from \$100 to \$25. President, Frederic Bronsen; vice, H. M. Howe; treasurer, John J. Holly, and secretary, F. W. Wicks, were all re-elected. One thousand dollars were appropriated to be given in prizes for Jersey cattle at the various fairs throughout the country.

Mr. William Stewart, jr., of Menie, writes:—My stock of Ayrshire cattle are doing splendid. Have some very choice heifer and bull calves from the prize-winning bull, General Middleton, 1762, winner of second prize at Provincial Exhibition, Kingston, last fall; also, nine firsts at other county and township fairs. This bull has also headed the herd that gained the silver medal for two years in succession at the Bay of Quinte district exhibition.

Crop Prospects.—On a former page of this issue will be found a report on the condition of the crops, in answer to circulars sent from this office. These reports are such as would indicate a harvest on the whole considerably above the average. In the locality of the city of London, the prospects were unusually good up to two weeks ago, but the almost incessant rain of the past fortnight has had a serious effect upon all crops on low-lying land, particularly peas; and this is much greater where the land is not underdrained. The hay looks exceedingly well, very much of the clover having lodged, even at this writing (June 20th). Corn and potatoes are not doing well, as the ground is too wet to work on; and in some instances the seed has rotted in the ground. Should the rain now cease, however, we may expect, upon the whole, a bountiful harvest.

The very valuable herd of Bates shorthorn cattle collected by the late Sir Robert Loder, Bart. of Whittlebury, were sold by Mr. John Thornton, London, on Wednesday of last week. There was an enormous number of breeders and others gathered round the ring, and by brisk bidding showed their keen appreciation of the character of the animals brought before them. The prices realized, particularly for members of the Duchess tribe, were very big, varying up to the high figure of £210. We append the higher priced animals. Cows and Heifers.—Duchess of Buckingham, red-roan, 1880—Mr. P. L. Mills, 286 guineas; Duchess of Whittlebury 5th, red, 1883—Mr. Herbert Loney, 150 guineas; Duchess of Whittlebury 9th, red, 1884—M. L. Grollier, 165 guineas; Duchess of Whittlebury 10th, roan, 1884—His Royal Highness Prince of Wales, 160 guineas; Duchess of Whittlebury 11th, red-and-white, 1885—Madame Grollier, 270 guineas; Duchess of Whittlebury 13th, red-roan, 1886—Mr. A. H. Lloyd, 510 guineas; Duchess of Whittlebury 14th, white, 1886—Mr. J. Harris (Carthwaite), 175 guineas; Duchess of Whittlebury 18th, red, 1887—Sir W. H. Salt, 300 guineas; Duchess of Whittlebury 17th, red-and-white, 1888—H. R. H. Prince of Wales, 305 guineas; Duchess of Whittlebury 18th, roan, 1888—Earl of Bective, 375 guineas; Duchess of Whittlebury 19th, roan, 1888—Mr. J. Harris, 330 guineas; Duchess of Whittlebury 23th, white, 1888—Earl of Feversham, 140 guineas. Bull Calves.—Duke of Rosedale 12th 46288—Mr. F. S. Stanley, 130 guineas. Summary.—46 cows and heifers made £5234 6s., averaged £113 15s. 9d.; 16 bulls and calves made £720 6s., averaged £45; a balance of 62 head, £5654 11s., average £96 0s. 10d.—Farming World.

The sale of the remainder of the Oakland herd of Jerseys, the property of Vallancy E. Fuller, Hamilton, Ont., at the American Institute Building, N. Y., by Peter C. Kellog & Co., created considerable interest in Jersey circles, and the prices realized show the interest in these cattle to be alive, and even increasing. Below we note the prices realized, which average \$608 per head:—Marianne Pogis, 7 years, A. B. Darling, Ramsey's, N. J., \$2,300. Mary Anne of St. Lambert, 10 years, T. A. Havemeyer, Mahwah, N. J., \$7,100. Mermaid of St. Lambert, 10 years, T. A. Havemeyer, \$1,000. In-and-in-bred bull, 1 year, A. H. Moore, Philadelphia, Pa., \$1,700. Marianne's John Bull, 1 year, T. A. Havemeyer, \$1,150. Cana Daisy of St. Lambert, 1 year, F. Billings, Woodstock, Vt., \$775. Canada's John Bull, 7 years, T. A. Havemeyer, \$750. Stoke Pogis's John Bull, 7 months, T. A. Havemeyer, \$710. Mermaid of St. Lambert II., 4 years, Frederick Billings, \$650. Marianne Pogis's Son, 3 months, Wm. Whiting, Holyoke, Mass., \$625. Crocus's Stoke Pogis, bull, 4 months, M. Thompson, Bernardville, N. J., \$400. Call Him Bine, 1 year, G. L. Baker, Sand's Point, N. Y., \$400. Brenda's John Bull, 2 years, H. M. Howe, Bristol, R. I., \$370. Pearle Pogis, 3 months, C. I. Hudson, New York, \$380. Nancy of St. Lambert, 9 years, N. P. Berry, Lexington, Ky., \$370. Columbine of St. Lambert, 11 years, F. K. M. Rehn, New York, \$325. Cana Belle Pogis, 1 year, Frederick Billings, \$310. Cora Pogis, 1 year, Ayer & McKinney, Meredith, N. Y., \$300. Belle Pogis, 9 years, F. K. M. Rehn, \$275. Mermaid Stoke Pogis, 2 months, Ayer & McKinney, \$290. St. Lambert of Banstead, bull, 3 years, M. Thompson, \$50. Mountain Berry, 6 years, F. K. M. Rehn, \$250. Crocus of St. Lambert, 12 years, A. H. Moore, \$240. Mida Pogis, 1 year, John T. Foote, Morristown, N. J., \$200. Cana Columbine, 1 month, Ayer & McKinney, \$160. Rose Stoke Pogis, bull calf, 1 month, Edward Howe, Princeton, N. J., \$130. Belle Percenta, 2 months, Wm. B. Wood, New York, \$130. John Bull Barons, 3 months, H. Hoopes, Philadelphia, Pa., \$120. Mountain Berry Pogis, 1 year, Oakleigh Thorne, Millbrook, N. Y., \$80.

STOCK GOSSIP.

Amongst the many Canadians who have gone over to England to attend the shows and make importations of fine stock is Mr. J. C. Snell, of Edmonton, who is making selections of Cotswold sheep, and Berkshire pigs to meet the increasing demand for good things in these lines.

William Davis & Son, Markham, Ontario, write:—The Improved Large Yorkshire Pigs we have sold this spring have given great satisfaction, and we could have sold many more if we had got them. This spring we imported one boar and five sows for Sander Spencer's celebrated herd. They reached us safely, and are greatly admired.

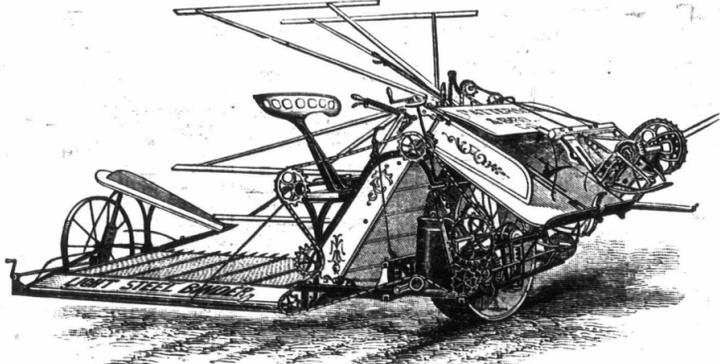
The Holstein-Friesian Association offer a bonus of \$5 per head for every bull sold, killed or castrated. The Hereford and the Aberdeen-Angus Associations exclude from entry in the herd books one out of every ten bull calves dropped the property of any breeder. The object of such rules of course is to improve the standard of the breeds. There is no herd but has in it animals that are greatly deficient in quality and no herd so good that it could not be made better by lopping off at least one in ten.

As stated in a former issue, the Editor of the *Advocate*, offers a splendid Silver Service valued at \$65, as a sweepstake for the three cows which on being tested shall give the greatest value in milk for food consumed. We have made it a test prize between the different breeds, and hope the various Cattle Breeder's and Darymen's Associations, as well as the large breeders, will take the matter up and help us settle this vexed question for at least one year. The object of the prize is to determine which breed will in reality give the greatest profit for food consumed. At the Industrial Exhibition, Toronto, Ont., we will give as a sweepstake prize in the horse department, a silver service, worth \$65, to the three best draught mares, any age or breed. Two of the animals must have been bred in the Dominion, and all the property of one man or firm.

James S. Smith, of Maple Lodge Post-office, Ont., sends us the following:—Since our public sale in March we have made the following private sales of Shorthorns:—The young bull, Royal Barrington 4th = 11642=, to J. W. Murphy, Cass City, Michigan; Mr. Murphy purchased the cow, Rose of Autumn, and calf, in March, at our public sale; to D. McKay, Owen Sound, Ont., we sold a very fine cow, Tulip's Duchess 9th, and the red heifer calf, Tulip's Duchess 13th. The cow was got by Earl of Goodness 5th = 593=, by 4th Duke of Clarence (33597); dam by second Duke of Rutland = 1698=, by 22nd Duke of Airtrie = 500=; grand-dam by 22nd Duke of Airtrie = 500=, &c., and its calf's sire was Sir Arthur Ingram 2nd, of Campbell and Sheriff Hutton stock. To H. Johnson, Lieury, Ont., the bull calf, Elephant Prince of Thale, an extra good calf, short-legged and thick, with a soft, mossy coat; sired by Duke of Colonus = 9232=, to Judson Wells, Ohio, U. S., we sold three Leicester ewes and one shearing ram. To Mr. J. Hall, Wisconsin, U. S., one shearing ram.

In our June number we gave the sales of a part of the Bow Park consignment sold at Dexter Park, Illinois, in May. We append the remainder:—Duchess of Oxford 28th (Oxford), red, calved Jan. 2, 1885—Homer Brooks, Wixom, Mich., \$2,500; Lord Underley Barrington 6th 82012 (Barrington), red, calved July 2, 1885—Seth Fisher, Janesville, Wis., \$500; Imp. Bushbury Countess of Kirklevington 7th (Kirklevington), red, calved May 25, 1884—J. D. & L. B. Smith, Berlin, Ill., \$230; Roan Duchess 44th (Roan Duchess), red, calved April 13, 1887—Homer Brooks, \$255; Waterloo 54th (Waterloo), red-roan, calved Oct. 23rd 1887—F. A. Baker, \$225; Kirklevington Duchess 43rd (Kirklevington), red-roan, calved April 22, 1888—F. A. Baker, \$305; Kirklevington Duchess 40th (Kirklevington), red-and-white, calved July 12, 1887—Dr. T. W. Brown & Son, New Berlin, Ill., \$200; Roan Duchess 23th (Roan Duchess), red, calved March 31, 1881; and c. c.—W. H. Jacobs, \$185; Geraldine 4th (Mary Ann), red, calved March 14, 1886; and b. c.—Homer Brooks, \$170; Waterloo 56th (Waterloo), roan, calved March 24, 1888—F. A. Baker, \$160; Lady's Queen 2nd (English Lady), roan, calved Dec. 30, 1887—W. H. Jacobs, \$155; Duke of Oxford 57th (Oxford), white, calved May 5, 1888—Frank Cole, Spring Grove, Ill., \$145; Lord Woodbine 2nd (Beauty), roan, calved Oct. 30, 1886—John Smith, \$140; Duchess of Clarence 24th (Duchess Nancy), roan, calved Sept. 2, 1883; and c. c.—Judge Sloan, Janesville, Wis., \$130; Duke of Kirklevington 28th (Kirklevington), red-roan, calved Oct. 4, 1888—Frank Merritt, Charlotte, Mich., \$130; Waterloo 55th (Waterloo) red and little white, calved Nov. 21, 1887—W. H. Jacobs, \$125; Earl of Aberdeen (Missie), red and little white, calved Jan. 19, 1887—John Smith, \$125; Mazurka 42nd (Mazurka), roan, calved Sept. 18, 1884—W. H. Jacobs, \$115; Duke of Kirklevington 27th (Kirklevington), roan, calved May 30, 1888—F. S. Andrews, Mukwonago, Wis., \$115; Adeliza 30th (Adeliza), roan, calved March 12, 1887—John Smith, \$110; Flossy Gwynne 9th (Gwynne), roan, calved July 6, 1887—W. H. Jacobs, \$110; Welcome Guest (Welcome), red, calved Nov. 17, 1886—W. H. Jacobs, \$105; Waterloo Duke 25th (Waterloo), red-roan, calved Sept. 10, 1888—F. A. Baker, \$100; Adeliza 20th (Adeliza), red-roan, calved Oct. 15, 1881—Charles Walker, Clinton, Ill., \$100; Earl Verbena 6th (Verbena), red and little white, calved Sept. 30, 1887—A. D. Henshaw, Hudson, Ill., \$100; Lady Fawcley 16th (Fawcley), red-roan, calved Dec. 24, 1886—John Smith, \$100; Roan Duchess 45th (Roan Duchess), red, calved April 24, 1887—W. H. Jacobs, \$100; Duchess Nancy 1st (Duchess Nancy), red and little white, calved Aug. 19, 1879—D. W. Smith, \$100; Duchess of Clarence 31st (Nettle), red and little white, calved Dec. 22, 1887—W. H. Jacobs, \$100; 30 females sold for \$6,230, an average of \$207.33; 18 bulls sold for \$2,000, an average of \$111.44; 48 animals sold for \$8,230, an average of \$172.50.

PATTERSON HARVESTING MACHINES,



Binders, Mowers and Rakes,

Are deservedly popular with Canadian farmers. They are light, simple, durable, and always work satisfactorily in the field. No experts required. No vexatious delays in harvest.

Every machine built by us is completely put together in our factory, power applied and the machine adjusted and thoroughly inspected by an expert mechanic before being shipped. THESE FACTS ARE WORTHY THE ATTENTION OF PURCHASERS.

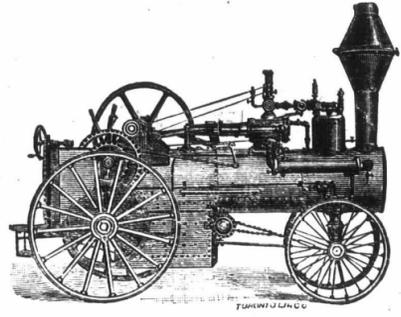
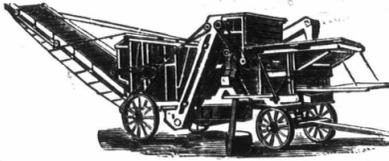
Send us your address and we will mail you two Handsomely Illustrated Catalogues containing full descriptions of our standard implements.

THE PATTERSON & BRO. CO.,

Head Office and Manufactory—Woodstock, Ont. Branch Office and Warerooms—62 Princess St., Winnipeg.

INGLETON & CO.

BRANTFORD, ONT.



Manufacturers of Traction and Portable Engines, Patent Double and Single Blast Thrashing Machines.

We will guarantee our Engines and Machines superior to any others made in Canada, and challenge anyone to produce a Machine that shall equal the work done by our Double Blast Separator. CATALOGUES FREE.

BUGGIES!



We make a specialty of PIANO BOX TOP BUGGIES specially adapted for farmers' use.

Our output for 1888 was over 1,000.

Agricultural Agents will find it to their advantage to send for Catalogue and Price List.

All work is guaranteed.

B. J. NASH & CO.,

We Sell Only to the Trade.

281

111 York St., LONDON, ONT.

KEEP YOUR EYES AND HANDS ON THIS

KNITTING MACHINE

Send for Illustrated Catalogue, and send THIS PAPER with your order for our NEW RIBBER and we will allow \$10 PREMIUM DISCOUNT.

Address—
CREELMAN BROS.,
MANUFACTURERS,
GEORGETOWN, - ONT. 282-y

CHOICE 4 FARMS 4

—IN—
Manitoba and the Northwest

Apply to **FOR SALE,** 268-1f
JOHN WELD, London, Ont.

NOTICES.

The Provincial Exhibition of Prince Edward Island will be held at Charlottetown on the 2nd and 3rd of October, 1889. This annual exhibition for agricultural products and local industry will be largely attended by the people of the Maritime provinces.

The Edwin Alden Co., Advertising Agents, have moved their Cincinnati office to 248 Race street, and added to their already great facilities in conducting the advertising business, a Photo-engraving department, where, in a brief period of time and at a small cost, advertisers may receive illustrations for insertion in the newspapers.

THE ONTARIO MUTUAL LIFE ASSURANCE COMPANY.—Our readers will find in this issue the advt. of the report of their nineteenth annual meeting. We are pleased to note that their business for 1888 exceeded that of any previous year. The new assurances issued amount to \$2,518,650, under 1,905 policies; and the total amount in force on the 31st of December was \$12,041,914, under 9,398 policies.

HARVESTING MACHINERY.—At the present time prospects are good for very heavy crops of spring and fall grain; and, from the abundance of rain and heavy storms, the probability is the harvest will be difficult to take off. We call our readers' attention to the advertisement of the Patterson & Bros.' Co., of Woodstock. From the reports we have received concerning their harvester, we believe you cannot do better than buying this machine.

The programme of the Hamilton Carnival is outlined as follows, but will perhaps be slightly changed in minor details:—Athletic sports of all nations; sailing regatta, rowing regatta; military display and parade; trades procession; uniformed societies' parade; base ball, cricket, tennis; fireworks, bicycle, drill parade and races; convention of merchants under the auspices of Board of Trade, and several illuminations of the city. Reduced rates on all railways.

We have received a neat and elegant pocket map of Manitoba, entitled, "Brownlee's Indexed Railway and Guide Map of Manitoba." It is 16 by 24 inches, is well got up throughout, being well printed on fine, firm paper, and folds in covers of pocket size. It shows, in addition to railways built and projected, the number of grain warehouses and elevators in each town or village; grist mills, school and meeting houses, post offices, Hudson Bay posts, &c., &c. The scale is twelve miles to the inch.

BINDING TWINE.—There is one important matter to be taken into consideration in buying binding twine, viz., the number of feet contained in a pound. The high price of twine is bringing new kinds on the market, which will doubtless be sold at a few cents less per pound; but whether they will be any cheaper per foot is the question that most interests the farmer. Manila is much less liable to be cut by crickets and grasshoppers when standing in the shock than any other substance we have seen.

ONE OF OUR LEADING MANUFACTURERS.—A few weeks ago we had the pleasure of going through the extensive piano and organ works of Messrs W. Bell & Co., of Guelph. It is always a pleasure to go through such extensive works, and find such a large number of skilled workmen, and everything working so systematically. They employ about five hundred workmen. The pay-sheet amounts nearly half a million dollars per annum. They carry in stock about 750,000 feet of walnut lumber, and 1,250,000 feet of other valuable woods, which insures a supply of well-seasoned material at all times. The machinery is driven by engines of 300 times. The buildings are lighted by incandescent horse-power; the installation comprising two cent electric light, the installation comprising two dynamos of over three hundred lights each. Mr. William Bell commenced this business in 1864, the output for the first year being only twenty-five melodeons. Our readers will note the gratifying increase since that date, which is due to the uniform and excellent quality of the work turned out. Their business at the present time extends to almost every portion of the globe. Their shipments to their branch in London, England, will average at least six car-loads per month. They have also recently opened up an agency in South Africa. The trade with Japan is also growing rapidly, that government having purchased a large number for use in the public schools. They also make organs specially adapted for hot climates, without glue. In all they make about ninety different styles of works and about thirty styles of cases, ranging in price from \$30 to \$1,000. The piano cases are all double veneered, inside and out, making them more durable and preventing the wood from splitting. They have all the latest improvements, and many inventions and ideas not to be found in other pianos. Mr. W. J. Bell, the senior member of the firm, and Mr. A. W. Alexander, also of the firm, have supervision of the Guelph factories, and the business in this country; Mr. W. J. Bell, the junior member, having charge of the London agency.

COMBINATION PICKET AND WIRE FENCE.

The Fence best suited for farms, gardens, orchards, town or city lots. No other fence can compete with this for general utility. Prices from 45c per rod (16 1/2 feet). Send for our price list. Address all communications to **Toronto Picket Wire Fence Co.** Office and Factory—151 River St., Toronto, Ont. Fence Machines for sale. 280-f

IMPORTED AND REGISTERED

CLYDESDALE AND HACKNEY

STALLIONS AND MARES

Constantly on hand, and For Sale at Reasonable Terms.

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. 278- CLAREMONT, ONT.

Imported Clydesdales & Hackney Stallions for Sale

Highest Prize Winners in the Leading Shows of the World

AND GETS OF FAMOUS SIRES

Such as Lord Erskine, Darnley, Old Times, McCammon, Garnet Cross Macgregor, Prince Edward, Prince Henry, Sir Wyndham, Good Hope and Fireaway.

Prices Reasonable. Catalogues Furnished on Application.

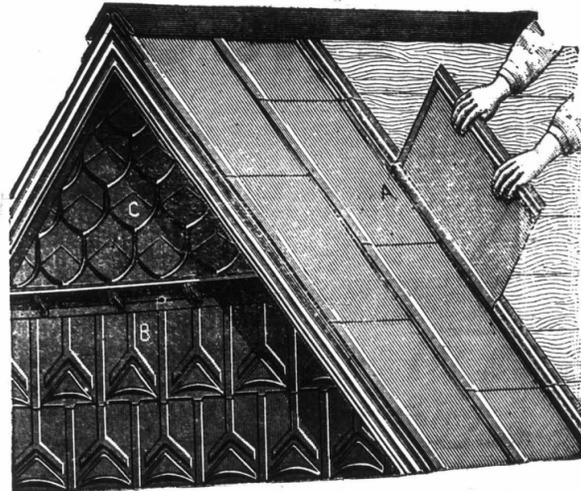


ROBT. BEITH & CO.,
BOWMANVILLE, ONT.

Bowmanville is on the line of the G. T. R., 40 miles east of Toronto and 294 west of Montreal. 278-y

Broad Rib Sheet Steel Roofing

The Cheapest and Best Metal Roofing and Siding in the Market. Can be Laid as Cheap as a Shingle Roof. Specially Designed for Factories, Mills, Elevators, Etc. ANYONE CAN PUT IT ON.



We have recently perfected machinery for manufacturing **Plain Sheet Metal Roofing** under the Walter's patent. This patent possesses advantages of construction not found in any other Metal Roofing. Its use does away with the necessity of

- TOUQUING UP EDGES,
- DOUBLE-SEAMING,
- COPING OF RIBS,
- RIVETING OF RIBS,
- EXPOSED FASTENINGS
- AND CLEATS

No expense will be spared to make **THIS ROOFING**, in quality of metal and perfection in fitting, the very best in America.

A. Cooper's Broad Rib Roofing. B. Walter's Patent Standard Shingles.
C. Cooper's Patent Queen Anne Shingles.
For prices apply to the sole manufacturers in Canada,

T. McDONALD & CO.,

69 to 75 Sherbourne St., TORONTO, ONT

New Agricultural Publications.

Mr. Henry Wade, Toronto, Ont., has sent us the third volume of the Clydesdale Stud Book of Canada. This is the most attractive number yet issued. The first four leaves have illustrations of the four famous imported horses, viz. - St. Gatten [812], Granite City [709], MacQueen [462], and Mac-Been [807]. The Society have now recorded 1,000 stallions and 839 mares.

THE FAMILY HORSE.—We have recently received from Orange, Judd & Co., 751 Broadway, New York, a very interesting and instructive work, entitled THE FAMILY HORSE. The first chapter deals with selection. In this they describe briefly some of the leading families, not omitting the Percheron, but the weakness of this chapter, is the total ignoring of several English and Scotch breeds, among which are the English Hackney, the Clydesdale, &c. If the Norman is to be considered a family horse, so must also the handsome, active, high-stepping, modern Clydesdale. In this chapter the author explains how to tell the age of a horse. The explanation is simplified by the use of cuts. From this topic he passes on to perfections and imperfections in body and limb, which is also made plain by the use of illustrations. The chapter on feeding and watering contains a great deal of useful information, and is well worth the price asked for the book; altogether, it contains ten chapters and four prize essays, all of which are written by well-known authorities. This little work should be in the library of every farmer. We are so favorably impressed with it that we have decided to keep it in stock, and offer it to any of our readers who will send us three new subscribers; or, we will send a copy to any of our subscribers at the publisher's price, \$1.

There are few works of the same size that contain as much actual information for the farmer as A TREATISE ON MANURES, OR, THE PHILOSOPHY OF MANURING, by A. B. Griffiths, P. H. D., F. R. S. (Edin), F. C. S., Principal and Lecturer on Chemistry, the School of Science, Lincoln; Lecturer on Chemistry, Lincoln Grammar School; Member de la Societe Chimique, de Paris, etc., etc. The author, beginning with the agriculture and agricultural literature down to the present time, giving the constituents of plants, their action on the soil, their manner of growing or making use of plant food, the various kinds of manures, and the best methods of saving and applying—giving analysis of the various manures referred to in almost every instance. The work is of great value to the progressive farmer. Published by Whittaker & Co., 2 White Hart St., London, E. C., and Geo. Bell & Sons, York St., Covent Garden.

We have received THE BOOK OF ENSILAGE from the publisher, Hon. T. R. Carskadon, Keyser, W. Va., which is a neatly got-up pamphlet of eighty-four pages. The author is certainly well up in his business. The work compares ensilage and dry feed from an economic point of view, showing ensilage to be the most profitable feed for almost all kinds of stock; also gives elaborate instructions on growing the crop, building and filling the silo, and feeding the ensilage. This work should be in the hands of all interested in feeding stock. Price, 50c.

The American Shropshire Registry Association have sent us their fourth volume. Like all the works issued by Mr. Levering, this is a creditable production, and may be had of the Secretary for \$1.

Mr. George Harding, Waukesha, Wis., Secretary of the American Cotswold Association, has forwarded us the third volume of their Record. This Association have now recorded 1,849 sheep; their records are got up in a concise, substantial, and attractive manner. Every Cotswold breeder should record with them and procure their records.

The best-bound American records which reach our office, are those issued by the American Oxford-Down Record Association, -W. A. Shafer, Middletown, Ohio, Secretary. They have now issued four volumes, containing 2,170 pedigrees, which are very nicely arranged. Besides the pedigrees, the volumes contain a fund of information of value to Oxford breeders. The Secretary is entitled to ten per cent. of all monies handled, but has thus far done the work gratuitously. Volume four will be sent to any one desiring it on receipt of cost of publication, viz., \$4.75.

BOYS FOR FARM HELP!

The managers of DR. BARNARDO'S HOMES desire to obtain good situations with farmers throughout the country for the boys they are sending out from time to time from their London Homes. There are at present nearly 3,000 children in these Homes, receiving an industrial training and education to fit them for positions of usefulness in life; and those who are sent to Canada will be selected with the utmost care, with a view to their moral and physical suitability for Canadian farm life. Farmers requiring such help are invited to apply to

MR. ALFRED B. OWEN,
AGENT, DR. BARNARDO'S HOMES,
204 Farley Avenue, TORONTO.

TO THE DEAF.—A Person cured of Deafness and noises in the head of 23 years' standing by a simple remedy. Will send a description of it FREE to any person who applies to NICHOLSON, 30 John Street, Montreal, P.Q.

ADVERTISE IN THE ADVOCATE

GURNEYS' FARM AND STOCK SCALE

PORTABLE, ON WHEELS. WITH DROP LEVER.

CAPACITY, 3,000 LBS.

Platform, with extensions, 6 ft. x 2 ft 6 in., provided with guards, allowing ample room for any animal.

Designed Especially to Meet the Wants of Farmers and Stock-Raisers.

Made very strong, of the best material and finish. So constructed that extensions and guards can be uncoupled when desired, and scale used without them. See this scale at your nearest hardware, or write direct to makers.



Patented April 25th, 1888.

PRICE MODERATE.
—MANUFACTURED ONLY BY—

GURNEYS & WARE SCALE CO.,

HAMILTON, - - ONTARIO.

MANUFACTURERS OF ALL KINDS OF SCALES.

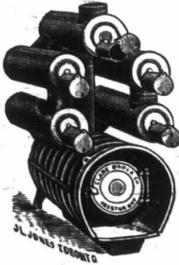
275-y

CLARE BROS. & CO., PRESTON, ONT.,

—MANUFACTURERS OF—

COAL AND WOOD HOT-AIR FURNACES.

10 STYLES. 35 SIZES.

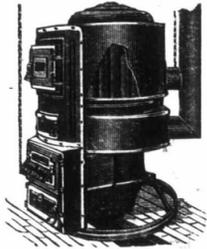


All our Furnaces are so constructed that they can easily be cleaned out at any time, and they are, undoubtedly, the best in the market.

Estimates cheerfully given, and Illustrated Catalogue sent free, on application.

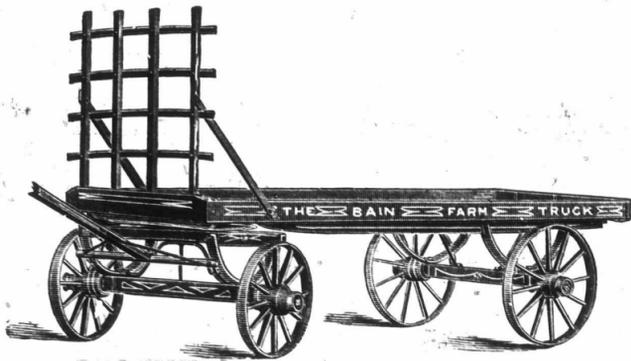
Mention this paper.

280-deom



BAIN WAGON CO.'S

FARM TRUCK.



THIS cut represents the most convenient Wagon ever put on a farm, because it is suitable for all kinds of work, and always ready, no changes being necessary.

THIS WAGON was invented and first introduced in Michigan, U. S., and is now very extensively used by leading farmers in the United States.

AND EVERY WAGON made and sold by us in Canada is giving entire satisfaction. For further particulars and prices.

279-tf

Address **BAIN WAGON CO., Woodstock, Ont.**

F

VO

THE F

THE L

The F
each mo
parties,
furnish
tion for
publicat
Terms
\$1.55
dons

The A
is re
arrog
Recit
Begi
riat.

Alway
gape
unite

Discon
notifi
stopp
page
and ad
addr

The L
respo
order

The B
adv
Cont
Addre

1.—N
least o
2.—T
ments,
and not
our obj
joyed f
3.—Sh
one rec
of the
the pay
prize e
part of
tised li
the mo
prize e
exceed
cash.
about b

A pr
on Ho
the Ra
office b

A pr
on The
Caring
Winter
the Pr
10th of

COR
July iss
from th
feeding
lost," a
cast.