

The FARMER'S ADVOCATE

AND HOME MAGAZINE

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THE FARMER'S ADVOCATE & HOME MAGAZINE

WILLIAM WELD, 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, is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical and reliable information for farmers, dairymen, gardeners and stockmen, of any publication in Canada.

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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. First prize essayists may choose books or money, or part of both. Selections of 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.

Our prize of \$5 has been awarded to R. Gibson, Delaware, for the best essay on *Soiling Cattle, Partial Soiling or Grazing*.

A prize of \$5 will be given for the best essay on *The Cheapest and Most Profitable Manner of Keeping Cattle during the Summer Months on High-priced Land*. Essay to be in this office by the 10th of June.

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.

Editorial.

Toronto Industrial Fair.

The prize lists for the Toronto Industrial Fair, which will be held from the 9th to the 21st September next, have been issued, and can be procured by any one desiring them, by sending a postal card to the Secretary, Mr. H. J. Hill, Toronto. Changes have been made in several of the clauses, in the way of increasing the premiums, and in special prizes. The Association expect to erect new stables and enlarge their grounds during the summer, particulars of which will be given later.

Our North-west Excursions.

To those having a desire to see something of our country whether with the idea of emigration or otherwise, the excursion rates advertised in this issue give all a rare opportunity to view our North-west for themselves. One learns so much more by actual observation than by merely hearing or reading; and knowledge is power. Those that can afford it will be profited by the trip. We intend to go personally, or send a representative to that part of our Dominion about that time, and hope to furnish you with information that will be of benefit to you whether you go or stay. The rates are so low that it will enable many to take advantage of these excursions. It will pay all to go who can.

On the Wing.

Ottawa, or Bye-Town, as it was called when we first came to Canada, was then celebrated for its locks—at that time the main communication to the west. Railroads and the improvement of the St. Lawrence have now diverted the traffic from it. It was, and still is, the great lumbering centre of Canada. No one could imagine the immense quantities to be seen there, from a written description, or hardly from statistics. The magnificent parliament buildings, and the large amounts expended necessary to maintain an army of officials, is sufficient to maintain a city alone. The immense saw-mills are worthy of a special visit. The rafting of logs, sawing and handling of lumber, gives employment to thousands. We went through the establishment of one of our lumber kings, namely, that of Mr. E. B. Eddy, who employs about 3,500 hands. Many are in the shanties getting out timber, others rafting, others sawing; but the most interesting part to the ladies is the match-factory. When the machinery accomplishes its work, hundreds of girls and young women are employed to pack the matches into

boxes. Our guide stopped at one place and pointed out a neat, active young woman: "That," said he, "is the best hand in our employ; she is a deaf mute." While we were there, new machinery was started to make pulp. The spruce logs are, by great power, ground to powder, and then manufactured into household utensils, which for many purposes surpass metal and crockery. For dairy purposes it appears destined to surpass anything now in use for resisting taints, as the pulp when finished is impregnable, even to the soilage of grease or coal oil. Butter-makers, who really make a first-rate article and wish to place it in the hands of the consumer at gilt-edge prices, should write to Mr. Eddy and obtain circulars and prices, and have packages made of such a size and pattern as the market demands, and have their own name or trade mark on each of the packages. There will be money in it for the enterprising dairymen.

Our Cousins.

Having briefly furnished you with some general accounts of our journeys at various times—when we have ascended above the clouds—descended to the lowest depths of our gold and coal mines—having caught fish in both the Atlantic and Pacific oceans, and gathered raisins and oranges in the sunny climes,—we will hereafter write more minutely of important points. We find that there are immense numbers dissatisfied with their lots, whether in the north or south, and that there is an immense migration going on from both—some going north, some going south, the majority going west, and many returning to the east. The object of many agents is the profit they can make on railroad fares; others have made it an object to boom localities for lawyer's fees or hotel pickings. We find large numbers of Canadians and British subjects in the United States, although possessed with an inborn patriotism and a strong admiration for the British laws and constitution; we by no means despise the free, open and frank spirit that prevails among the most intelligent of our American neighbors. We have always found them friendly and courteous, and always exhibiting a kindly feeling towards Canadians. It is also our opinion that there are as many loyal British subjects in the United States as there are in Canada. Believing that it will be of interest and importance to our readers, we purpose giving a little information about our cousins. Necessarily with this object in view, we sent one of our staff for a short trip into Michigan. (See account in another part of this publication.) We hope, by friendly overtures, to be able to awaken a more friendly and harmonious feeling than can be done by cannon balls.

Our Jerseys.

It has always been the aim of the FARMER'S ADVOCATE to give all industries connected with agriculture, and all the various breeds of stock proper space in our columns. A breed which suits the conditions, surroundings and purposes of one man may not suit another. Every farmer should keep those breeds which are best suited to his land and his market facilities. Yet the natural bent of the mind should not be ignored. If you are a lover of horses, and despise sheep, you should find what breed of horses will pay you best, and endeavor to breed the best of the kind. Or if you love the bovine, and care nothing for the horse, select the breed most suitable to your requirements, and study how to make them pay the greatest profit for food consumed. In doing this, do not neglect any portion of the farm, but make a careful study of each department. In this issue will be found articles from several Jersey breeders. Mr. Reburn has long been famous for his finely-bred cattle. Mr. Reesor is also a firm believer in his favorites. Mr. John McClure is one of the rank and file of our Canadian yeomanry, and keeps Jerseys on his farm of 96 acres, because they pay him. He and his family do all their work and make a handsome profit off their little farm, as some of our western land owners would be disposed to call it.

Parliament.

Never before since our residence in Canada have the acts of the Dominion Parliament caused such an uprising and turmoil during any session as the one just closed. Sir John has lost the confidence reposed in him by a large number of his supporters. Many members that now appear in parliament will have such a shaking up, that their only chance to make money will be at one more session. Farmers, if you hope to save your farms for your descendants, and them from serfdom—worse than Southern slaves—you must unite on some grand point, and throw the Reform and Conservative cry aside. Thank goodness, there are some farmers in the legislative halls. They did good service, particularly the sixteen that asked for fair play in regard to agricultural publications. Their hands and their numbers must be strengthened. There are far too many legislators elected that know nothing about agriculture, and care less about its interests. The Fertilizer Act, the Corn Act, the Postage Act, all show disregard to the farmers' interests.

The grants of money recently made for agricultural purposes should be charged to election expenses. Mr. McMillan, a practical farmer of Huron county, gave them an eye-opener in regard to the Central Experimental Station. You should read his speech. Sir John replied that he had given them a pretty good toasting, but referred to the management of the Guelph College as being no better. In the last few days of the session, most important financial and land questions were brought into the house, after the majority of the members had been allowed to leave. Millions of dollars were voted to construct a competing railroad in New Brunswick, where the annual loss to the government on the Intercolonial Railroad is said to be about half a million dollars. The grant passed the Commons,

but was thrown out by the Senate. Mr. Reid, a farmer from Belleville, strongly opposed this when we were present in the reporters' seat. Mr. Perly, a farmer from Assiniboia, although a new member and appointed by the government, voted against the grant.

Our Subscription Prizes.

In the early part of last year we determined to give stock animals from some of the best herds and flocks in the province, as subscription prizes. We thought by this means to introduce good male animals into new sections, where they are much needed, and in old sections where the stock has been neglected. Despite our fine livestock displays at the great fairs, there are too many scrub sires in the country. While good, pure-bred animals are sold little above butchers' price, many farmers go on using scrubs, which is not only an individual but a national loss. We awarded, as subscription prizes, a number of hogs, sheep and poultry, and some excellent young bulls and heifers. The first prize awarded among the cattle was a beautiful young Hereford bull, bred by that well-known and justly popular breeder, Robert J. Mackie, Oshawa, Ont. Mr. Mackie wrote of this animal as follows:—"The Hereford bull, Valor, shipped for you to Mr. Samuel Jamieson, was got by Cecil (imp.), the silver medal bull at the Provincial in 1886. His dam was out of Victoria, the winner of silver



MAP No. 1.

medal at the Centennial; and he has been a winner of a number of prizes as a calf and yearling himself. Victoria is nineteen years old, and has a fine young bull calf by Cecil."

The next animals awarded were two SPLENDID AYRSHIRES, a bull and heifer, bred by Mr. Thomas Guy, Oshawa, and won by Mr. Hugh Gourlay, Lanark, Ont. The bull sent this gentleman was a winner at all the great Canadian shows in 1887, and in 1888 won first at each of the following places: Industrial, Toronto; Western Fair, London; and at the Central, held at Whitby, Ont.; his sire (Stonesley 4th) won first in his class for four years in succession at the Provincial, Toronto Industrial and other large fairs. The dam of the young bull awarded Mr. Gourlay was Oshawa Lass 2nd, which has won more prizes than any other cow in the Dominion. She has been first in her class at all the leading fairs, with few exceptions, for the past ten years. At the Toronto Industrial she won first as best milk cow, any breed, when only four years old. The heifer awarded to the same gentleman is equally as good as the bull, in all particulars. All the live stock and fowls so far awarded have given splendid satisfaction. We intend to continue first-class live stock and implements as subscription prizes. In our next issue we will describe some of the animals which we are now offering, among which are some fine cattle, sheep and swine.

A Semi-Canadian County.

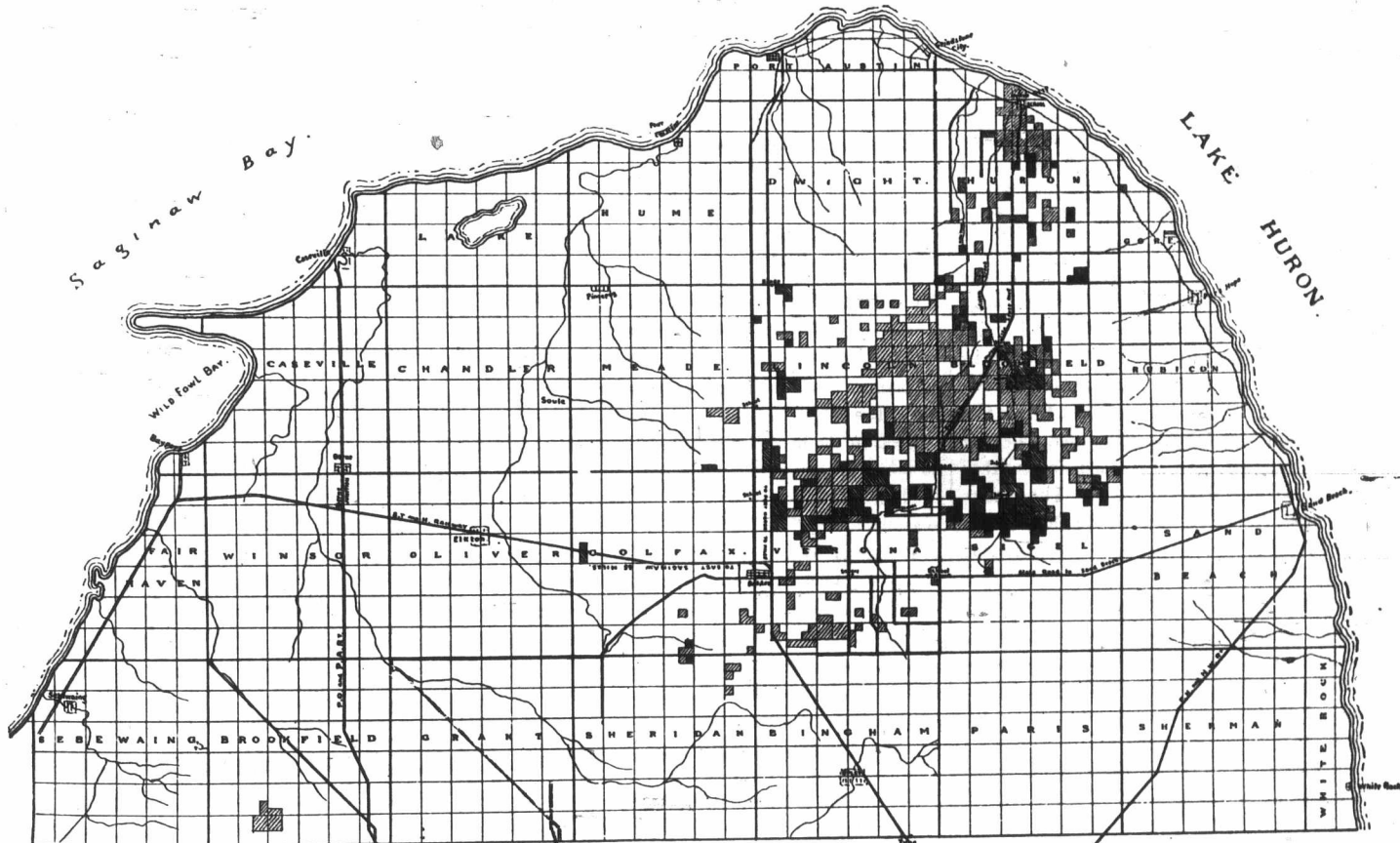
In our last issue we promised to give our readers a review of Messrs. Hubbard & Co.'s estate, which is situated in Huron county, Michigan, therefore sent one of our representatives to this locality, who reports as follows:—"Leaving London by the Great Western division of the Grand Trunk Railroad, May 6th, after a ride of 2½ hours we arrived in Port Huron, which is on the American side, opposite Sarnia. Here we took the Port Huron & North-western Railroad to Bad Axe, distant 70 miles. This is the county seat. It is a neat and promising town, with a population of 1,500, and is six miles from the centre of the land mentioned. As we proceed north from Port Huron, for a short distance the country is sandy, wet and cold; but soon it is more rolling and heavier, much resembling Western Ontario; as we go north it continues to improve. Seeding was finished, except on some badly-farmed, undrained land to be seen occasionally. Good houses, farm buildings and splendid young orchards, in very thrifty condition, are all along the line, especially a short distance east of the railroad track. Around Jeddo and Amadore (see map 1) is a very fine country, which is well farmed. The spring grain was up on many farms, and looked well. Some as fine young orchards, fall wheat and clover, as one could wish to see are here. From Amadore to Deckerville much of the land is good; here and there is a little wet, and sometimes light land; drainage, which in most cases can be easily done, would convert any of these tracts into fine grass land. The country presents a very fine appearance between Deckerville and Palms. Near the last-named place are some of the best fields of clover we ever saw, growing on land bought in 1886 for \$8 per acre. We were shown one field of 160 acres, the first crop on which produced enough wheat to pay all the expense of clearing it up, fencing, and for all labor incurred by the crop. The owner is a business man, and is forced to hire all his work done; he therefore knows exactly what his outlay and income is. Last year he says he sold from this land 240 tons of hay, on which his profits over expenses and interest was \$1,200.

A short distance north of Palms we leave Sanilac county, through which we have been passing since leaving Jeddo. We now enter Huron county, and from here to Bad Axe we pass through a very fine country, much of which is unimproved; but, when improved, it will equal or surpass any we have described. Just south and east of Bad Axe, the unimproved land is somewhat wet, but the area of wet land is small, and, when drained, will make excellent farms, especially for grazing. We now procured a team and drove east to Virona (see map 2); then north, up the Bad Axe & Virona State Road to Huron City, a distance of 25 miles. We frequently left the main road and drove in to visit improved farms, of which there are many. Mr. Hubbard has improved about 4,000 acres, all within ten miles of the county town. This land is divided into several farms, each of which is leased on shares, and are said to pay well. In and around Huron City (as shown on map), the

above firm have another tract of as fine farming land as can be found anywhere. From this place we drove west, through Dwight township into the edge of Hume, then south, down the State road to Bad Axe; thus passing through and around the land advertised, making many detours from the route indicated, and looking over many farms recently sold. There are 27,000 acres in this estate, 25,000 of which are offered for sale. The soil is principally clay loam, unusually free from large stone, but containing more or less limestone gravel mixed with the clay subsoil. Some of it is slightly rolling, and has good natural drainage, such as farmers in Ontario call fine grain land, and is known to produce the best samples. Other portions are more level, though not wet. The clover, fall wheat and orchards now growing proves the land to be fertile and possessing a good, warm subsoil. The best

county is also intersected by State roads, as shown on the map; these are now good country highways; so also are many of the concessions and side-lines. Good roads are easily made here, for, though the country is sufficiently rolling for drainage, we did not see any places where heavy cuts or gradings were necessary. As in the best parts of Ontario, gravel can be obtained at intervals. The school and church privileges are good, as a glance at the map will prove. There are now from five to ten school houses in each township, which can be increased as settlement goes on. Church and Sunday school services are usually held in the school houses. The market facilities are first-rate. A few more energetic and staunch farmers, who will till the land well, and well clean what they raise, is all that is needed to give the market tone. From Bad Axe, the shipping is all done by rail. There are two

contemplated. Ten miles further along the shore is Huron City, a neat and pretty village, with a population of 150. Four miles farther is Grindstone City, where 300 men are employed taking out and manufacturing the finest grindstones sold in America. Port Austin has a harbor, and is the terminus of the railroad. When the quality and area of the land here is considered, its geographical position, and the ease with which the eastern and western markets are reached, we must concede to the region great advantages over the western lands. By coming here the settler loses few of the advantages enjoyed in the older States. The country must develop with great rapidity, and the land increase in value at an equal rate. Money invested here, at the price the land is now being sold, viz., from \$6 to \$20 per acre, the latter for improved land near towns, should double within the



LANDS SHADED THUS ▨ BELONG TO Messrs. Hubbard & Co. LANDS SHADED THUS ■ HAVE BEEN SOLD TO Various Settlers.
MAP No. 2.—HURON COUNTY MICHIGAN.

fall wheat and clover fields, and the finest orchards seen on this trip, are here. The healthy, smooth, green bark, and the vigorous appearance of the trees, are such as will arouse the interest of any observant traveller. At Huron City, Mr. Hubbard has a fine orchard, containing 200 apple trees, 500 quince trees, 1,200 plums and a number of fine, vigorous peach trees. The land throughout the county is of very even quality, there being an exceedingly small quantity broken or rough. There are, here and there, small sandy and wet tracts, but the total amount is small. Seldom have we seen so large an area of as fine quality; when improved it will be one of the most desirable parts of the U. S. A. Huron contains, perhaps, the most good land of any county in the State, but the entire "thumb" and most of the southern counties are good. Each of the townships in Huron, except those broken by the lake shore, are six miles square, and are divided into sections one mile square; a road allowance surrounds each section. The

competing lines (though only one is shown on map 1), by means of which the town is connected with all the eastern and western cities. The line going west passes through the Saginaw Valley to East Saginaw, distant 65 miles, opening up a market for all farm produce, which is consumed in large quantities by the great lumbering districts of North Michigan. Over the Southern Line, which goes to Port Huron, grain can be sent to Detroit for three cents per bushel, or sold at the elevator near the station. Live stock and grain can be sent to Buffalo for \$25 per car, and hay shipped to New York for \$4.50 per ton. Sand Beach, with a population of 1,500, is 17 miles east. Here there is a large elevator, and a grist mill with a capacity of 300 barrels per day. The harbor cost \$1,000,000, and is the best on the lake. The freight rates are the same as those from Bad Axe. Port Hope, on the shore eight miles north, is a market town with a population of 1,000. It has an elevator and harbor, but no railroad, though the building of one is

next three years. Stock of all kinds do well, especially sheep, for which there is a good market.

But the question naturally arises, why has this land not been settled long ago? For upwards of thirty years it has been owned by a firm (principally by Mr. Hubbard's father), who would not sell, but wanted their property to increase in value, as settlement went on in the adjoining counties and townships; all of which are now improved to a greater or less extent, though not so shown on map 2. The estate has just passed into the hands of Mr. F. W. Hubbard, Bad Axe, who is a banker and lumberman on a large scale. He dislikes farming, and has determined to dispose of the land as rapidly as possible, in order to use the money in the other branches of his business. Splendid advantages are offered to buyers. In 1871 a great fire swept over the county, and most of Sanilac, killing nearly all the timber. In 1881 another disastrous fire again occurred, burning up that killed by the

first conflagration. So completely did this fire do its work, that three men and a team could go almost anywhere and clear up and stump from one acre to an acre and a-half a day. People at a distance who wished to buy new land were afraid to come here for fear of a recurrence of the terrible fires; but, now this danger is past—they cannot again occur. Many men with but little means bought farms; when industrious and did not go too far into debt, they have done well. Others, with more means, have made themselves beautiful homes, surrounded by fine farms, orchards and buildings. In some parts nearly all the settlers are Canadians, and by the Michiganders this section is called Canada. Old residents of New York who have settled here declare the land better and the climate healthier than in their native State. The railroad from Port Huron to Palms runs about eight miles from the lake shore, most of the distance following the valley of the Black river, which is about a mile wide. Judging the country by this, the traveller would think it flat and wet. Outside of this narrow strip it assumes a vastly better appearance."

Sheep in Australia—More Attention Needed in Canada.

Though wool has been for several years unusually cheap the world over, the size of the Australian flocks is steadily increasing. The gain has not been so marked since 1881 as it was in the preceding decade, but yet has been considerable. Australasia now contains about twice as many sheep as any other region save the Argentine Republic, being credited with 86,352,020 last year, as against 75,000,000 in the Argentine Republic in 1885, 47,508,960 in European Russia in 1882, 44,759,314 in the United States in 1887, and 28,955,240 in the United Kingdom in 1886. The sheep of the Australasian colonies have increased in number 73 per cent. within sixteen years. The flocks aggregated 49,773,584 in 1871; 78,063,426 in 1881; 82,169,364 in 1886, and 86,352,020, as above, in 1887. The gain last year was 5 per cent.

The colony of New South Wales has a long lead in the industry, its sheep numbering over 39,000,000, or toward one-half of the aggregate in Australasia. New Zealand comes second with about 16,700,000, and Victoria third with 10,700,000. Almost all of the flocks of New South Wales are Merino sheep, and 27,915,000 out of the total of 38,067,000 of this breed are set down as producers of the combing wool.

The Standard (England) says:—From information supplied by one of the most extensive of New Zealand landowners and farmers, we learn that there is great rejoicing among his class at the improved prospect for the sale of frozen meat in England, owing to the reduction of expenses and the rise in prices. If the meat sells in London at 4½d. to 5½d. per lb. throughout the year, he says the price of land in New Zealand will be restored from its depreciated value to the extent of 20 to 30 per cent. Already he has sold three farms at £10 10s., £15, and £16 an acre respectively, after having failed to obtain a satisfactory offer during seven years. So strong is the faith in the future of the frozen mutton trade, that he has 14,000 sheep on turnips, while a neighbor has 36,000 so being fed, 15,000 of them being fat wethers. Our informant has reason for exultation, for since the beginning of year he has shipped 34,000 carcasses of sheep and lambs, and he will get the advantage of the rise in price on a considerable proportion of that great number. Beef, of which he has shipped about 200 carcasses, appears to have paid him

well, as he has realized 19s. 6d. to 20s. 10d. per 100 lbs. on what he has sent, and dealers have been buying numbers of cattle in the North Island at 12s. 6d. per 100 lbs.

The large shipments of frozen meat from these colonies will doubtless affect the price received by Canadian farmers for the animals sent over to England alive. Yet the conditions of our country are such, that with intelligent farming and breeding, we can successfully compete with any other country in the world. One drawback is, so few of our farmers make a specialty in producing any one class, only a few of them make a special study of an individual department in agriculture or stock raising. This must be done before our separate departments will be developed as they should be. In Europe and Australia, generally speaking, men who breed sheep make every department of their farms contribute toward the success of the flock. The producers of other classes of stock treat their specialties in the same way. It is by this course that our dairymen have been able to place Canadian cheese where it is to-day—among the best in the world. Many of our farmers say sheep do not pay. They would pay abundantly if properly handled. There is no profit in anything that is neglected, and everybody knows that Canadian sheep are neglected. It is time a change was made in this matter.

Changes Made in Provincial Prize List for 1889.

At a meeting of the Agriculture and Arts Association, held in London on Thursday, 2nd of May, the following changes were made:—

Section for brood mares, in all classes changed to read: brood mare, with foal by her side, or evidence produced that she has had a foal this season.

Prince of Wales' prize of \$50.00 is to be given this year as a sweepstake, to the best stallion of any age, either Clydesdale, Shire or Canadian Draught, registered in any one of the three Herd Books of the Association.

The Clydesdale Horse Association also give a special prize of \$40.00 for the best mare and one of her progeny, both to be recorded in the Clydesdale Stud Book of Canada.

In Suffolk Punch class, the list has been enlarged to admit a brood mare, yearling filly, and colt of 1889.

Cattle classes have not been materially changed until you come to the milch cows. Here a special prize of a service of plate is being offered by W. Weld, Esq., of the FARMER'S ADVOCATE, for the best three milch cows of any breed, to be tested by Prof. Robertson, for three days, under a set of rules drawn up (see rules in another column).

Also, additional prizes are to be given for fat cattle, viz.:—Fat steer, three years and under four; fat steer, two years old and under three; fat cow, three years and over; heifer, under three years; pure bred steer calf; grade steer calf.

SHEEP.—No changes, with the exception of making the prizes for single sheep instead of two, in the fat class; and a sweepstake, through the Sheep Breeders' Association, given by Mr. John S. Pearce, seedsman, London.

PIGS.—No change, with the exception of dropping off the Prince of Wales' prize.

POULTRY.—White Plymouth Rocks, White and Black Wyandottes, Black and White Minorcas, are added to the list.

In the dairy list, a sweepstake prize of a gold medal is added; also a special prize for creamery butter is to be given by Mr. Pearce.

Garden vegetables, and plants and cut flowers have been largely added to, by request of the Forest City Garden Club.

FINE CUTS.—Mr. W. Weld offers \$35 in prizes for the best original pencil drawings of rural Canadian life.

The Council have also concluded to carry out the scheme inaugurated by the Western Board, in giving prizes for Indian work.

Plants for Naming.

Correspondents in sending us weeds, honey-plants, grasses, or other native plants to be named and described, should, if they send more than one, number each with a different number and retain a duplicate of each bearing the same number, as the counterpart sent to us. Those who wish a personal answer should enclose a stamp for reply.

Specimens should, if possible, be taken when in flower; and it is desirable to have the whole plant, or, when that would be too large, representative parts of leaf, stem and root, and always the flower.

Specimens of economic plants or weeds affected with parasitic fungi, will always be welcome; of such, mark correctly the place and date of collection.

Farmers' Clubs.

Dominion Farmers' Council.

The Dominion Farmers' Council meets in the city of London, Ont., on the second Thursday of every month, at 1 o'clock, p. m. All communications should be addressed to the Secretary, F. W. HODSON, LONDON, ONT. This Council has now on hand pamphlets containing its Constitution and By-laws, with an account of its origin, objects, etc.; Constitution and By-laws suitable for Farmers' Clubs, and notes on how to organize a club. These will, on application to the Secretary, be sent free to all parties having in contemplation the organization of clubs.

Office of the FARMER'S ADVOCATE,
London, Ontario, May 16, 1889.

Council met, according to notice, Vice President Little in the Chair. Minutes of previous meeting read and approved.

The committee appointed to revise the Constitution, recommended that the following changes be made:—The name to be "Dominion Farmers' Council and London Live Stock Association." To be added to the constitution:—"To hold spring fairs, auction sales, &c. &c., when deemed wise and for the general good, by the executive. All such decisions of the executive must be sanctioned by a two-thirds vote of the members present, before the said objects shall be supported by the funds of the Council."

To be added to clause I., section III.:—"or stock raising."

To the Rules of Membership, and numbered IV. and V. (IV.):—"Each of the Provincial Live Stock Associations, the Agricultural and Arts Association, and the Western Fair Board, are hereby allowed and requested to each year elect one of their Board as a delegate to this Council; said delegates shall be honorary members, and shall have all the privileges and powers enjoyed by other members, and may be elected to any office in this association; and that the following names be accepted as delegates from the various associations:—Francis Green, Jr., Innerkip, President Shire Horse Association; E. W. Charlton, from the Clydesdale Association; F. T. Coleman, Arthur, President Dominion Draft Horse Association; H. Wade, Toronto, Secretary Agricultural and Arts Association; George McBroom, Western Fair Board; Prof. J. W. Robertson, Ontario Agricultural College; and that the Secretary notify them of their appointment."

The report of the committee was adopted. Moved by Robert McEwan, seconded by F. W. Hodson, that the following be a committee to further the holding of a spring stallion show in the month of March, 1890, in London, Ont., and whose duty shall be to raise funds, procure estimates of costs, &c., and report at our next meeting, to be held on the 10th of October next; said date may be changed to any other in October, if deemed advisable by the committee:—President O'Brien, Vice-president Little, and all other regular and honorary members of the Council; also, Messrs. George Moore, Waterloo; T. D. Hodgins, D. Ferguson, Samuel Grigg, Col. Leys, and Andrew McCormick, London, with power to add to their number. Carried.

Moved by Henry Anderson, and seconded, that we now adjourn. Carried.

The Dairy.

Our Dairy Sweepstake Prize.

As will be seen in other columns, 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 Breeders' and Dairymen'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. All are to be judged by Prof. James Robertson: rules drawn up by him governing the test are published in this number. Any of the Dairy or Breeders' Associations may appoint persons to watch this test. Our Ayrshire, Holstein, Jersey and Shorthorn breeders each claim to have the most profitable breed. We hope they will all embrace this opportunity to prove the correctness of their claims.

Rules Governing our Prize to be Awarded to the Three Best Dairy Cows.

1. Competition for a comparison of the economy in the production of milk, by cows of different breeds, to be awarded at the Provincial Fair to be held in London, September, 1889.
2. Cows of any breed or age may be entered for competition. The cows of each lot entered may be the property of one or more persons. No lot shall contain animals of different breeds. No lot shall contain pure bred and grade cows. Grade or native cows forming a lot will be admitted upon equal terms with the pure breeds, but each lot must be the grades of one breed.
3. Each competing lot shall be composed of three cows. The competition shall be between the lots, and not between the several cows. The person in whose name the entry is made shall declare the age of each cow, the date of her last calving and the time of service, if pregnant.
4. Each entry shall be made to Mr. H. Wade, Toronto, Secretary Agriculture and Arts Association, on or before the 25th day of August, 1889.
5. The tests for the competition shall extend over three days. The milking of each cow shall be performed twice a day, at a time to be appointed by the person in charge of the competition.
6. All the cows entered for competition shall be milked clean to the satisfaction of the person in charge of the tests, on the morning and evening of the day previous to the beginning of the tests.
7. There will be no restriction as to the quantity or temperature of pure water that may be given to the cows, or as to the quantity of salt that may be fed. The feed shall be provided by the persons in charge of the several cows or lots. The several kinds of feed shall be valued at current market prices by the person in charge of the tests. Representative samples of the feed shall be open to the inspection of all persons interested.
8. The milk from the several lots shall be valued at sixteen (16) cents per pound of total butter fat contained in it, together with two and a-half cents (2½) per pound of total solids other than fat contained in it.
9. Counting from sixty days after the date of

last calving, eight (8) per cent. additional value shall be added for every 30 days thereafter (and proportionally for every part thereof), up to the end of eleven months after calving. Counting from ninety days after the date of the last service (if pregnant), two (2) per cent. additional value shall be added for every 30 days thereafter (and proportionally for every part thereof), up to the end of two hundred and thirty (230) days after service.

10. Milk of unpalatable flavor, or abnormal as to the nature of its constitution and quality for human food, or for manufacture into fine dairy products shall be rejected.

11. The lot of cows whose milk shows the largest profit for the food consumed, according to the forementioned scales, will be awarded the prize of a silver service, value, \$65.00, given by the editor of the *FARMER'S ADVOCATE AND HOME MAGAZINE*, London, Ont.

12. The decision of Prof. James Robertson, who has kindly consented to take charge of the tests, shall in every case be final, and the animals and premises where they and their feed are kept shall be under his supervision. No feed shall be fed during the time of the test without being weighed or measured by himself or assistant.

The Jersey as a Dairy Cow.

BY JOHN M. CLURE, BRAMPTON, ONT.

The Jersey cow is the product of the Jersey Isle, which is an island lying about fifteen miles off the north-west coast of France. The island is eleven miles long by five and one-half wide, and has a mild climate, with a remarkably fertile soil, densely populated, with no market for milk and every demand for butter, the city of London readily consuming the surplus product. Is it any wonder, then, that the cattle should adapt themselves to the wants of their owners? for it is especially as a butter cow that the Jersey has distinguished herself. She is, in every sense of the word, a thorough-bred butter cow. We find, as far back as 1789, very stringent penal laws were passed to prevent the importation of other cattle to the island.

A breed of cattle possessing such admirable qualities could not long remain a stranger in adjacent countries. Youatt, writing in 1834, says of the Alderney, as they were then called:—"They are found mainly in gentlemen's parks and pleasure grounds, and they maintain their occupancy there partly on account of the richness of their milk and the great amount of butter which it yields; also from their diminutive size and deer-like form." Since then the Channel Island cattle have been gradually growing in favor in England until, in 1860, their importations were counted by thousands.

Among the first importations of Alderneys to America was one spoken of by Colonel Warring in his prize essay on the Jersey cow, in 1817, imported by a Mr. Wurts. As in England, so in America, the Jersey cow has grown in favor until in our own day no breed of cattle are held in greater esteem or are more popular than they.

As a cow earns her living and the profits of her owner with her digestive apparatus, it is of the utmost importance that she should be in good health, and of good capacity for assimilating food; and while the Jersey, on account of her small size, has not always been able to make more butter than any other cow that has been pitted against her, I think it has been proved beyond question that the Jersey can give more butter from the food consumed than any other

breed of cattle. Although the Jersey is a native of a temperate climate, she has abundantly proved that she is equally and admirably adapted to the extreme heat of the Southern States or the rigors of a Canadian winter. At the same time, it is not claimed that she can *rustle* with the native cow. Profitable dairying does not mean a test of endurance.

It is not so much the quantity of milk that a Jersey cow will give, but the quality, and also the persistency with which she will hold to her milking. Although she will not give as large a flow as some others, the extra quality of her milk is beginning to be appreciated in cities; consequently a higher price can be realized. This fact, taken in connection with the persistent milking, makes her profitable even as a cow to sell milk from. There is another characteristic of Jersey milk which we must not lose sight of: the cream globules are larger than in any other. Prof. L. B. Arnold, an American dairyman, says "the large, fat globules in Jersey milk, with an almost uniform size, so that the cream rises quickly and perfectly and churns easily, enhances their value." Even as a cheese maker she excels, making a very extra quality of cheese. I saw the statement last summer that some factories were keeping what is called a Jersey vat, in order to secure the milk from grade Jersey cows, paying more for it than any other, thus making her profitable as a cheese producer.

But it is as a butter maker that she especially excels. The Jersey cow is not only noted for the quantity of butter she will make, but its superlative excellence is a never-ending theme of praise to those who are familiar with it. Its high aromatic flavor, firm texture and deep orange color, make it a luxury, and a luxury, too, that those who get into the habit of enjoying are willing to pay a good round price for. Yes; Jersey butter is a luxury; but unfortunately for the dairyman with small means, the Jersey cow, also, is a luxury which he cannot afford to indulge in; and as I am one of them, I will give my experience of how I worked into a good, useful herd of butter-making cows. We began fifteen years ago by breeding our best native cows to a Jersey bull. The first crop gave us some excellent cows. I would say to all desirous of possessing a good herd, test the capacity of your cows, select the best, breed them to a bull from some of the best butter families, and you will be surprised how soon they will grow into a good herd.

Feeding.—On this point we would say to all, feed well; even a Jersey cow will not give good butter and plenty of it without good food and plenty of it. Soiling I consider indispensable, or at least partial soiling during dry summers, if butter-making is going to be made profitable. Some experience is required in order to keep a good rotation of green food. Rye comes in first. Lucerne comes early. A mixture of oats, peas and vetches, sowed early: more later on. Millet or Hungarian will come after this. Next, fodder corn. My experience is, that a little meal does no harm, even with plenty of green food. I have had no experience with either ensilage or dried corn fodder; have had no roots for the past three years; have not even had hay. The past winter; depended altogether on cut straw and meal—oat straw mostly. We gave them this cut feed three times per day, with meal, six-eighths part oats, one eighth wild goose wheat,

one-eighth peas; each cow receives 15 lbs. of this meal on all the cut straw she will eat up clean. The meal costs about 18 cents per day. We are now milking ten cows and two heifers (two-year-olds),—twelve in all. They have been in milk on an average of three months and ten days; and are giving now, in seven days, 2,380 lbs. milk, from which we churn 114 lbs. of butter, or an average of 9½ lbs. of butter from each in seven days. Cost of production, without counting straw (as I think straw is worth more to be fed on the farm than it is to sell), each cow consumes 18 cents meal per day, making \$1.26 per seven days for each; 12 times that is \$15.12; 114 lbs. butter, for which we get 33 cents per lb., comes to \$37.62—leaving a profit of \$22.50 on the 12 cows.

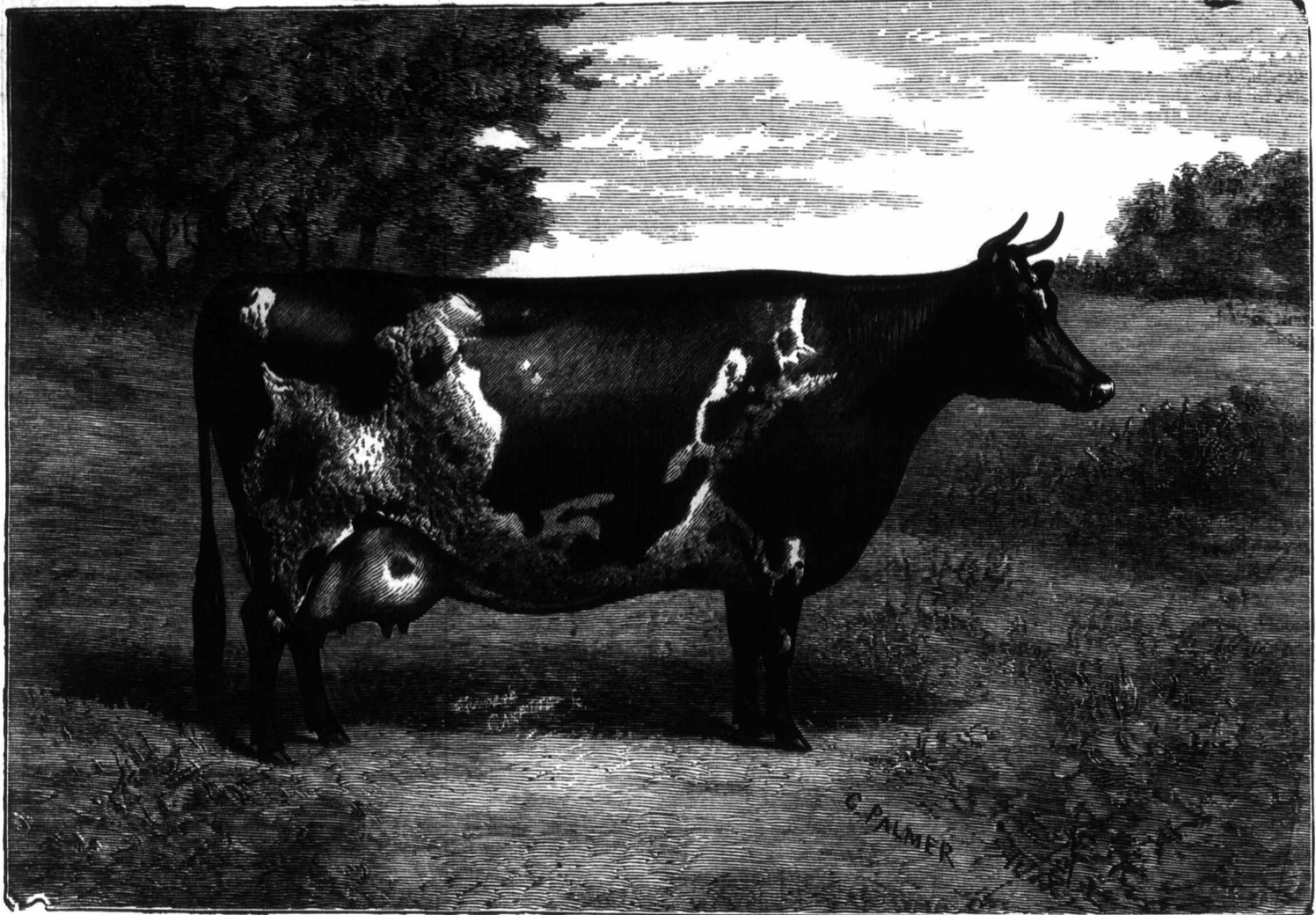
herd for butter alone, \$1,433. In 1888: milked 16 in all, part heifers; sold 4,188 lbs. butter; sold, from each cow, \$74 for butter alone; from herd, \$1,184 for butter alone.

In a paper which I read before the Peel Farmers' Institute last winter, entitled, "Conditions of Success in Butter Making," I mentioned three conditions as necessary: 1, good cows; 2, good price; 3, cheap fodder. I showed that without one or more of the conditions being good, there could be no success; if a cow would give one pound of butter per day, and we could get only 20 cents per pound, food costing 20 cents, there would be no profit; but if a cow would give two pounds per day, at 20 cents per pound, food 20 cents, there would be 20 cents profit, with only one of the conditions good. Again,

Economic Merits of the Jersey.

BY W. A. REBURN, ST. ANNE'S DE BELLEVUE, QUE.

That the Jersey is one of the best breeds of dairy, cattle known no one can deny, for she has proved herself as such in public competition. I do not intend to repeat here the wonderful tests, weekly, monthly and yearly, that have been made by some of our noted Jerseys; what I want to prove to my fellow breeders and farmers is that the "Little Jersey" is just as profitable for the ordinary farmer and stock-raiser as it is for the wealthy breeder and gentleman farmer. To do this, I will give you my experience with the Jersey for twenty years, also facts that have come under my own observation. In the latter end of 1870, getting tired of a commercial life in



AYRSHIRE COW, GURTA 4TH [1181], BRED BY MR. THOMAS GUY, OSHAWA, ONT.

I do not intend in this paper to give a lecture on butter-making; suffice it to say that any person who really wishes to make good butter may easily do so by giving strict attention to every detail of their business; also reading good dairy literature, to be found in the FARMER'S ADVOCATE and other papers. We make our butter into one-pound rolls and ship it once a week in winter and twice in summer. We can ship in the hottest weather without ice—another advantage of the Jersey cow.

I cannot give the profits for 1887-'88, but I can give the total money received for each cow after a family of eight were supplied with butter and cream, and after all express charges had been taken off. Milked in 1887: 9 cows; five 3-year-olds, five 2-year-olds,—19 in all. Sold 5,261 lbs. butter; cash received for each cow, \$75.42 for butter alone; cash received from

with two of the conditions good: Two pounds per day, at 30 cents per pound, food 20 cents, as before, there would be 40 cents profit, with two of the conditions good; and just in proportion as the capacity of the cow could be improved, the price of the butter raised and the food cheapened, in that proportion would the profit be. The reason I write this here, is to show that, although we can feed our cows 18 cents' worth of meal per day, all may not be able to do that and make it pay; as the price and, possibly, their cows, would not warrant such expensive feeding.

One cow, properly sheltered and fed, will give better return in milk and butter than three or four unprotected and uncared for.

In our next issue we will give several interesting articles concerning sheep, written by some of the leading breeders of this Province; and the August number will be found very interesting to Holstein breeders.

the city, I purchased a farm at St. Anne's, resolving to try and combine profit with pleasure. The Jersey was then unknown to the dairy farmer in Canada. Ayrshires headed the list of the dairy breeds, so I bought some of the very best to start with.

It was just about this time that Mr. Sheldon Stephens imported the first Jerseys into Canada, and noticing shortly afterwards in the newspapers that some of them were to be sold at Mr. Stephens' farm, for curiosity I thought I would attend this sale and see for myself what they were like. After a thorough examination of them I bought a six-months-old calf (Lady Fawn of St. Anne's) for \$102. The surprised looks of some of my friends, who bred Ayrshires, were awful, several remarking that Reburn had gone daft, and a "fool and his money," &c., &c. However, that six-months-old daughter of the fam-

ous Victor Hugo was bought and paid for, also the bull calf, Lord Melbourne. Lady Fawn dropped a calf when a little over two years old. I noticed her milk was very much richer than that given by my Ayrshires. She was milking then on winter feed nearly 30 lbs. per day, and with the same feed as the others were getting she gave two lbs. of butter to their one. So thick was her cream that the neighbors would come when the milk was being skimmed to see it. I was then convinced that the Jersey was the true dairy cow.

In a few years after I sold out all my Ayrshires and Jersey grades to gentlemen in Montreal for family cows, and bought several young Jersey heifers from Mr. Stephens, which, with what I had raised myself, formed the foundation of the largest herd of pure St. Lambert Jerseys in the world.

In 1883 I decided to test one of the cows and see what she would give feeding her as an ordinary cow would be fed on a dairy farm, viz.:—Oat straw, a. m.; hay, noon; corn fodder, night; 4 gals. ground oats and shorts with one pint linseed per day. She had calved five weeks previous to her test. During her best week, May 2nd to 8th inclusive, she gave 298 lbs. milk, 58 lbs. $\frac{1}{2}$ oz. cream and 15 lbs. $13\frac{1}{2}$ oz. butter. The last three days she averaged 2 lbs. 7



LADY FAWN OF ST. ANNE'S, THE PROPERTY OF W. A. REBURN, ST. ANNE'S DE BELLEVUE, QUE.

oz. butter per day, equal to 17 lbs. 1 oz. per week. From April 1st to May 31st, 61 days, her milk record was 2,126 lbs. 12 oz.—an average of 34 lbs. $13\frac{1}{2}$ oz. per day. This was on dry feed—no grass. The above cow was Jolie, of St. Lambert, 5126, who also, in the face of fierce competition, captured the first prize for the best milk, butter and cheese cow at the Toronto Exhibition, 1885, and again at Kingston, 1888, took first as best Jersey milk cow, and carried off the sweepstakes silver medal as best milk cow of any breed. The same season for over three months on grass alone, and poor pasture at that, the entire herd of milking cows, 10 in number, averaged 10 $\frac{1}{2}$ lbs. butter each per week. When I speak to the average farmer about the Jersey as a dairy cow, invariably the question is put, what can you do with your cows when they get old? You cannot make beef of them. In the first place, I ask, did you ever count the cost of making beef from a cow too old for the dairy? I am sure if

you ever do this you will find that you have been feeding that animal one dollar's worth of feed to get back 50 cents' worth of beef. And again take the average Jersey: she will make on the same feed and care at least one-half more butter than any other cow, so you can afford to knock her on the head when she is too old for the dairy. A cow is supposed to be past profit after she has reached 10 or 12 years. I have in my herd two cows that are in their nineteenth year: one, Lady Fawn, of Ste. Anne's, 10920, was never tested until she was 15 years old and on pasture with from 10 to 20 lbs. of ground oats and peas (mixed at the rate of 2 to 1.) She gave as follows:—Aug. 9th to 15th, 15 lbs. $4\frac{1}{2}$ oz.; 16th to 22nd, 15 lbs. $14\frac{1}{2}$ oz.; 23rd to 29th, 16 lbs. $8\frac{1}{2}$ oz.; Sept. 8th to 14th, 16 lbs. $12\frac{1}{2}$ oz.; a total of 64 lbs. 8 oz. butter and 1,037 lbs. 12 oz. of milk in 28 days. For 88 days she gave 2,715 lbs. 6 oz.

cows. We are now getting thirty cents per lb. for our butter, and thirty-five in winter; yet good butter can be had in Montreal for twenty cents per lb. Jersey butter can and always does demand ten to fifteen cents per lb. more than other first-class butter on account of its flavor, texture and keeping qualities. Dairying will be in the near future the principal branch in farming. We cannot grow wheat at a profit, as the North-west has run us out; feeding for beef pays no better, as last season's prices will prove: so our only way is to turn to dairying. To make this pay we must find out what breed will suit us best. If you intend to sell milk, and quantity alone is considered, by all means get a cow that gives a large flow of milk, no matter if it is over fifty per cent. water; but remember that the time will come when you will have to supply milk that will give a certain percentage of solids as

they are now doing in the principal cities in the United States. If butter is what you want, then get a Jersey as there is no other dairy breed that can give the same amount of butter from the same amount of feed. What is the use of keeping a cow weighing 1200 to 1500 lbs., when a Jersey of 750 to 1000 pounds will give more butter than the big cow you are wasting time and feed on. When you buy a cow, get a good one. It pays best in the long run. A poor cow will eat just as much as a good one. There are scrubs in every breed of

cattle, so if you should happen to buy a poor Jersey, don't think they are all bad, for judging from my own experience and that of several of my fellow breeders, there are fewer poor milkers among the Jerseys than any other breed known.

of milk, an average of 30 lbs. $13\frac{1}{2}$ oz. per day; and during that time she was kept in the stable for 15 days, being fed on nothing but dry hay, as she had sprained her ankle. She calved 23rd May, 1885, and has not been fresh since, but has been milking regularly twice every day for nearly four years. She is due to calve again in June. We are now trying to dry her off and it is no easy task. Do you not think this proves that the Jersey is one of the most persistent milkers of all the dairy breeds? I do not own a cow that goes dry herself before calving, some of them cannot be dried off; more than half the cows (we are milking 28) have not been dry since they dropped their first calf. Our cream we sell at \$1 per gallon on board cars here; it goes to Montreal. In summer, when the cows are in the flush of milking, it takes not quite three gallons of milk to make one gallon of cream, and towards the fall it runs up to one and a-half gallons or fifty per cent. cream. This is from the entire milking herd—not a few of the best

Ayrshire Cow, Gurta 4th (1181).

This splendid specimen of an Ayrshire cow was bred by Mr. Thomas Guy, of Sydenham Farm, Oshawa, Ont., who has bred so many of Canada's prize-winning Ayrshires. She was got by Cyrus [601], also bred at Sydenham Farm, from Bismarck [500], imported by Mr. Guy, and a great prize winner. Her dam was Gurta [64], also winner of first honors at Provincial and other fairs. Gurta retains in a remarkable degree the picturesque color of her ancestry as well as their deep and rich milk-giving qualities. This remarkable cow weighs, when in good condition, nearly 1,200 lbs., and has a record of 50 lbs. of milk per day. Her descendants, as well as herself, are noted milkers and prize winners, she having taken as many as sixteen first

prizes at the leading exhibitions, as well as several diplomas and two silver medals, as the best female of any age in her class. She also won the \$20 offered at the Toronto Industrial for the best milch cow of any breed, milk tested as to quantity and quality, and was one of the herd of five cows that won the prize of \$100 given by the editor of the FARMER'S ADVOCATE, for the best five cows of any breed for general purposes and profit.

These cows were all raised by the exhibitor, who has also won the Herd prize, with animals of his own breeding, at all the principal exhibitions for the last eight years. We continue to offer first class stock animals from this herd as subscription prizes.

Elm Park Jerseys.

Mr. Reesor, Elm Park Farm, Markham, Ont., says:—We have not a large herd, but have, and have had, a few of the best Jerseys of the St. Lambert family. Among the cows owned by us and tested, I may mention Sweet Brier, of St. Lambert, who made 22 lbs. 14 ozs. of butter in seven days; also, her daughter, Coquette, of Glen Rouge, who made, at second calf, 15 lbs. 1½ ozs., and a later test of 18 lbs. in seven days; Diana of St. Lambert, eight months after calving, 16 lbs.; Princess Minette, 17 lbs.; and several others of from 12 to 14 lbs. These cows were not forced, that is, drugged and fed up, for long periods; but were fed, of course, liberally, of good, wholesome food; and, although of actual value of feed fed, I have no figures, as we did not weigh, but simply fed well. The Jersey, as an all-year-round, and a cow that, well fed, will show the most profitable results in the pail, anyone who has had them can verify. All Jerseys will not make extraordinary yields, but, cow for cow, I am satisfied the Jersey is worth fully double of any other breed for cream and butter; and the butter will be firmer, and, for quality, cannot be beaten by any breed.

Veterinary.

Accidental Poisoning of Stock.

BY C. H. SWEETAPPLE.

Instances of accidental poisoning of farm stock not unfrequently occur, from various causes, and at this season of the year, when residences, buildings, fences, &c., often receive a fresh coating of paint, it may be well to draw attention to the dangers that lurk in the paint pot. Cattle especially are apt to lick paint left about in pots or pails, also to drink water that has stood in utensils that have contained paint.

It must be remembered that white lead, the foundation of most paints, is a chemical compound of lead that is of an exceedingly poisonous nature. All the chemical compounds of lead are dangerous. But metallic lead is said to be devoid of medicinal or poisonous action, as quantities of metallic lead have frequently been administered to animals without producing any deleterious effects. Many instances are recorded, however, of animals being poisoned by eating sheet lead that has been used as lining for tea chests, and been carelessly left about; also, animals have died from grazing in pastures on which bullet spray from rifle butts has fallen, as small quantities taken are liable to form chemical combinations with the gastric secretions, rendered soluble, and thus taken up into the system, when they will exert their characteristic poisonous action. In Great Britain, where leaden water pipes and leaden cisterns are much used, many cases of lead poisoning have occurred, both in man and the lower animals, from drinking water contaminated with lead. It has been

claimed that water containing any amount of lead beyond one grain in fifteen gallons, is not safe to use for household purposes. Painters are well aware of the dangers that often result from the absorption of white lead, even through the skin of the hands; therefore, it is easy to comprehend the disastrous results that may ensue from an animal taking even a small quantity of paint into the stomach.

In treating cases of accidental poisoning in the lower animals, we are under many disadvantages. In the first place there has been, of course, something observed to be the matter with the animal before the veterinary surgeon is called in, proving that absorption of the poison has already taken place, its effects being apparent. The astute practitioner may recognize symptoms that would indicate lead poisoning, and on enquiry there is often a doubt whether the animal could have had access to paint or not. Then again, it is usually impossible to discover, except by the results, the amount of the poison imbibed. Then with regard to the treatment of cases of this nature, we are still under disadvantages. The effects of the poison are usually apparent before professional assistance is called in, and as vomiting in the horse and the ox tribe is not readily produced, matters taken into the stomach have, as a rule, to pass through the system.

Chemical antidotes to neutralize poisons taken into the system are too often ineffectual in attaining the object in view, especially as the effects being observed are, of course, evidences that absorption of the poison has already taken place. The symptoms of poisoning by white lead are very different from those produced by the irritant poisons. There will usually be an excessive general weakness, a paleness of the mouth, and visible mucous membranes—the appetite capricious, or entirely gone, digestion impaired and the bowels torpid. In some cases the symptoms in cattle may be very similar to impaction of the third stomach. The poison appears to have an especial depressing and paralyzing effect on the whole system. Fits and partial paralysis come on at intervals, and death may ensue from a paralyzed state of the organs of respiration. The symptoms will of course vary much, according to the quantity of the poison taken—those described, I have observed from a single dose sufficient to cause death. In small and repeated doses, such as would probably occur from the drinking water being impregnated with a very minute quantity of lead, weakness, emaciation, swellings of the joints and paralysis would probably be produced; and it may also prove a cause of abortion in the cow.

With regard to the treatment of lead poisoning: If any quantity of white lead has been taken, and its effects are apparent, the case may be almost considered hopeless. One of the best chemical antidotes, according to Findlay Dunn, is diluted sulphuric acid, which converts the lead salt into the insoluble sulphate of lead; or any soluble sulphate may be used. And, as the torpid bowels should be acted upon by saline purgatives, perhaps nothing is better, chemically, as an antidote, than Epsom salts (the sulphate of magnesia). As a nervous stimulant, to antagonize the paralysis, nux vomica, or its alkaloid, strychnia, may be given. And for the excessive arterial tension of chronic cases, pilocarpine and amyl nitrate is recommended.

My object in writing is to call the attention of your readers to the danger to be avoided, rather than to the treatment to be adopted should the danger be incurred. In all cases of this nature, the old maxim, "prevention is better than cure," cannot be too strongly insisted on.

Stock.

Our Sweepstake Prize in the Horse Department.

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.

Sweepstake Prize in the Sheep Department.

Through the efforts of the Secretary of the Dominion Sheep-Breeders' Association, Messrs. John S. Pearce & Co., London's well-known seedsmen, offer at the next Provincial Show a silver water pitcher and goblet, worth \$25, as a sweepstake for the best flock of sheep, any breed, to consist of four yearling ewes, four ewe lambs, a yearling ram and ram lamb. The following gentlemen are appointed as judges:—John Hallam, Toronto; Frank Shore, White Oak, and Jos. Ward, Marsh Hill. The prize to be awarded to the flock best suited to the wants of the Canadian farmer, the exporter and the butcher.

All three of our prizes will be on exhibition in one of the main buildings at London and Toronto during the time of holding the Provincial and Industrial shows. We invite all our friends to come and see them.

Training Colts.

This matter was forced upon our mind by a short conversation we had with a young farmer near this city a few evenings ago. He was describing a young animal a neighbor had been breaking, as he termed it, "She kicked like everything, but Jock just poured the whip into her for two hours, and she gave it up." Surely this is breaking with a vengeance. Now, the best men use the whip judiciously at times, but of all mistakes, that of using it on a colt is the greatest. An older horse knows he has been abused, but the colt associates the whip with the harness and handling, and it takes a long time for him to separate these ideas; and, indeed, with many drivers he never has the opportunity. While some horses have better dispositions than others, and some have so kind a nature that it is difficult to make them balky; the fact remains that all balky horses are the result of ignorant drivers, and nothing will inspire a young animal with a desire to balk quicker than to whip it. When a man undertakes to train a colt he should educate it—not break it. Almost all horses are willing to do what is wanted if they can understand what the driver means; and were the opportunities equal, they would learn as quick as the driver would if in their place. A sound maxim in training colts is, "don't expect them to know more than you do yourself;" and be very careful to consider what you would do in similar circumstances. Many people seem to think the colt knows all about work; and ought to do it at once, and apply the whip if he does not.

The Germans value digestible carbohydrates at nine-tenths of a cent per lb., and digestible albuminoids at four and one-third cents per lb. This price is probably thirty per cent. above American prices, but the proportion is the same. This should be considered in buying food for cattle, as it is often advisable to sell one kind of grain grown on the farm and buy another to feed.

A Successful Breeder.

In a late run to our western frontier, where many of our subscribers reside, we found standing guard for the fine army of Shorthorn breeders of Ontario, a sentinel well worthy of such an army. And so it should be; for why should visitors have to travel right into the middle of the camp before finding a specimen of the noble Shorthorn that will command their attention? And to find a thoroughly practical, "pride-in-his-work" farmer, full of enthusiasm, doing all his own work with intelligence, that oils the wheels of labor, is also pleasing. Such we found in the person of Mr. Donald Alexander, of Bridgen. The foundation of the herd, like the owner, was imported. It is well known that many imported animals drop in value year after year, and never produce their equal. Not so with this herd; for thick, smooth and stylish as Lady Violet Lustre is, she has several daughters bred here that will take no back seat to their dam. This fine cow was bred by the Duke of Gordon and Richmond; her sire is the pure Booth bull, Royal Hope (32392), which is well known to many of our importers. Her dam is Lustre 19th, tracing to Lustres right through. In a previous issue we gave our readers an illustration of the great Sir Arthur Ingram (32490), and it is pleasing to us to come across his offspring doing duty, carrying the grand breeding he had right along, generation after generation, until we see right before us animals with the same, almost fac-simile, features cropping out in every part. Especially is this noticeable in the handsome, saucily set on, aristocratic heads, carried by the animals of this herd; almost all of them being sired by Sir T. C. Booth, bred by Mr. Wm. Linton, of Aurora, and a grandson of Sir Arthur Ingram. One of the finest, and possibly the finest, Shorthorn's head and horns we ever saw, is Buxom Beauty's; she is a very thick-fleshed cow, red, with a very little white, and had calved three weeks before we saw her; we really thought her too fleshy for breeding, which Mr. Alexander would not admit, saying she calved very easily. This is her third calf, she being four years old last August. There are two of the Beauty family breeding here. Their dam was imported Beauty 15th, bred by W. Marr. There are seven breeding Lustres, all thick, heavy cattle, and handle excellently. A two-year-old bull, Lord Linton, bred by Mr. Alexander, is at the head of the herd this season, as far as practicable; and a splendid specimen of a Scotch bull, bred by Mr. Campbell, of Kinnellar, Scotland, will be used to a few of the females. Lord Linton, red and a little white, has two crosses of Sir Arthur Ingram blood in his veins, through his sire and his dam's sire. He shows his breeding unmistakably; we call him a capital bull. He has sired two heifer calves to please his owner (which is saying a great deal). All the young bulls were sold at the time of our visit (April 16th), but others of equally good make-up are coming along for next season; also, several nice yearling heifers, thick and thrifty, which the owner wishes to dispose of.

We were very much pleased with Mr. Alexander's herd, and his system of feeding and farming. He raises his own feed, principally, and "spring poor" has no place here; the herd being, like the politician, "loaded up the other way." Each cow raises her own calf—no nurses; and twins are not unusual, a very nice pair being on hand at present.

Chatty Letter from the States.

(From Our Chicago Correspondent.)

Cattle are selling 50c. to 60c. lower than last year, and sheep show a decline of \$1. Hogs are \$1.10 to \$1.25 lower than last year.

Eastern shippers of cattle are taking nearly one-half of the cattle that arrive at Chicago.

The American Meat Company seems to be getting on its legs again. Warner Miller, of New York, has been elected President instead of Flagler. The moral effect of the preliminary collapse, however, will be hard to overcome.

Three States and one Territory have adopted state or local inspection for cattle, preventing the sale of cattle dressed outside of the State. They are Colorado, Minnesota, Indiana and New Mexico.

Receipts of hogs have been increasing of late, and there are evidences of a pretty good crop for summer markets. Young hogs seem to be rather plentiful; and as there have not been very heavy losses by disease of late, many men seem encouraged to go into the hog business quite extensively.

There are a good many people who are predicting an over-production of horses. The writer recently asked the opinion of one of the largest dealers in the country, who said: "I do not think there is any danger of over-production of horses, unless range horse raising proves a success, which I do not expect. In my opinion they will find that catching, breaking and bringing to market will cost all those horses will bring; and a good many men will bankrupt themselves finding it out." The fact remains, however, that more people than ever before are raising horses. Many cattlemen, who found the business overdone, have gone into horses. There is certainly no over-production of good horses at present; but, from the way money is going into improved horses, there will be a tremendous increase in production within the next few years.

Texas cattle have been coming freely during May, and have been of pretty good quality; sales of corn-fed and mill-fed steers, averaging 850 to 1,200 lbs., \$3.00 to \$3.85; grass-fed steers, 700 to 1,000 lbs., \$2.90 to \$3.40. It is reported that Montana cattle are already fat enough to market, and indications point to a much earlier shipping season than usual. Montana cattle men are stocking up their ranges with Texas and Idaho cattle more freely than at any time since the great boom. During the first half of May, light cattle sold right up with ripe, heavy beefs, and sometimes higher. Since then the tendency has been toward a more natural range of values. Everybody, however, seems to want lighter cattle this year than ever before. Very few buyers care to handle bullocks weighing above 1,400 lbs. This fact, of course, is a spur to early production.

It is now the time of the year when the ranges of the South-west and West begin to furnish an abundance of light and medium-weight cattle, and ripe, heavy corn fed beefs are less plentiful. Exporters have lately been buying beefs at \$3.90 to \$4.25, and bulls at \$3.15 to \$3.30.

Messrs. Gould & Morgan, both well known Canadian exporters, are still operating at Chicago.

Profits to exporters have lately been very moderate, and for a short season recently the balance was on the wrong side.

An Ohio feeder recently bought some 1,033-lb. store cattle at \$3.85, while on the same day 1,400-lb. export cattle sold at the same price. This is one of the very good reasons why farmers and feeders have made so little money lately on cattle. They have good grass, and seem to think they must have the cattle, no matter at what price.

Sylvan Lodge.

The above is the name of the farm and residence of Mr. Robert Nicholson, of Nicholson Bros., Sylvan, Ont., and is beautifully situated on the north side of the 17th concession line of West Williams, in the county of Middlesex. The soil is a fine clay loam and is thoroughly drained; consequently, the crops are almost invariably good. Thirty bushels of wheat per acre is a common yield on this farm, while 50 bushels of oats, 25 of peas, or two tons of hay is by no means uncommon, and from appearances at the time we called there, hungry soil and hungry stock are things unknown. Messrs. Nicholson were awarded a bronze medal on this farm in the competition of 1888. A little to the north and west of the house stands a fine barn, 50 feet square, with stables in the basement capable of accommodating all the stock kept. On the adjoining farm resides Mr. Stephen Nicholson, a younger brother and partner of Robert. He is brim full of enthusiasm on stock matters, especially Shorthorns; and the stables on this farm, although not so large or convenient as at Sylvan Lodge, contain several very fine animals. At the head of the herd stands Warrior (55173), bred by S. Campbell, Kinnellar, Scotland, and imported by Arthur Johnston, Greenwood, Ont. He is four years old and has been used two years in the herd, and took first prize at Toronto, Ottawa and Hamilton in 1887. This is a good bull, of the popular red color, large, smooth-fleshed, with great width of back, good in front and rear; his chief defect is perhaps a slight flatness in the fore-ribs, which in an animal of less width of back would not be so noticeable. Leonora 2nd (6800), red and white, is a cow of fine quality and good pedigree; she is now nine years old, and has had a calf every eleven months since she was two years old. She is a magnificent milker, having made in one week in winter, without roots or any extra forcing, 11 pounds 5 ounces butter in seven days, making a pound of butter from 18½ lbs. of milk, and has made on grass alone 14 lbs. per week. She is the dam of three Provincial prize winners. Third Leonora, of Elmdale, and 4th Leonora, of Elmdale, four and three years old, respectively, are also daughters of the above cow, and have been winners at the leading shows of Canada. They are certainly beautiful heifers, great in heart girth, with broad, thick backs and well-filled quarters. The first named is a little lacking in her neck veins, but, taken all in all, they are two grand animals. Both are suckling calves which, if we mistake not, will be heard from at the fall shows. Eleventh Maid of Sylvan, three years old, is among the best, and has taken first prize at some of our best Canadian shows. She has a grand back, excellent heart girth and finely-sprung ribs, a combination seldom equaled in one animal; almost her only deficiency being a slight roughness in the rump. She is now suckling her second calf. Vacuna 11th, two years old, is also a prize winner; but a detailed description is unnecessary—the same characteristics run through the whole herd. Vacuna 12th, one year old, full sister to the above, is a perfect gem, being one of the thickest and most evenly-developed heifers we have ever seen. At the first draft she was an easy first at Kingston last fall, but it being noticed that she was a little lame, she was placed third; but two weeks later, having fully recovered, was an easy first at Hamilton. In the stall beside her stands

Princess Dagmer 7th, very little inferior, being placed next her at Hamilton last fall. Vacuna 5th, though nine years old and thin in flesh, is of good quality, and, we were informed, a great milker. Her four last calves have been Provincial prize winners. The present crop of calves, seventeen in number, they consider the best they have ever bred.

Feeding and Marketing Hogs.

BY WILLIAM DAVIES.

A large farmer west of Stratford paid us a visit by appointment, recently, to talk about hogs, and he said that we might have truthfully said that a good brood sow would be more profitable than two ordinary cows. And this man shows his faith by his works, for he built, two years ago, a pig-pen of brick, with hollow walls, frost proof, costing \$1,500, where he feeds two or three hundred at a time.

We should like to say a word or two about breeding. We find that many have an idea that to make a success of hog raising and feeding, they must be pure-bred. This is a mistake; and our advice to the ordinary farmer is to get a big, strong, long sow and breed her to a pure-bred, and for all practical purposes her progeny will be as good for feeding as a Simon Pure. And now for the promised opinions on feeding and marketing.

1.—Feeding; and we include in this, general care and housing; and the last two are of as great importance as the first.

One of the best feeders of live stock we know has often said to us: "If you want a critter to thrive you must make it comfortable." This is so self-evident a proposition, that we need not attempt to prove it. But what do we find in the larger part of the pig-pens?—the creatures lying in their own filth, and the pens only cleaned out every few weeks or months; the pen itself open to all the winds of heaven. And then many of these farmers say it is all nonsense feeding hogs. "I have tried it, and it does not pay." Then they are fed irregularly, like Paddy's pig, to make streaky bacon; fed one day and starved the next, so as to have a streak of lean and a streak of fat. Unfortunately, the class we have described do not subscribe for farm papers; they don't believe in book farming, and, besides, they can't afford it, though we have noticed they can afford to go to "hoss" trots and smoke cigars and often drink whisky.

Regarding feeding, we would say, keep the young pigs thriving and growing on skim-milk and butter-milk, with shorts and bran, and in winter, clover hay, cut up and steeped in hot water, and in summer, green clover; and when they are four months old and weighing about 75 lbs., then shut them up and feed them a mixture of boiled potatoes and barley, oat and pea-meal. By this means you will have prime hogs at six to eight months old, weighing 140 to 175, or even 200 lbs., alive.

To clinch this nail, we must again quote a "wise saw" from our old friend referred to above: "If it does not pay to feed, it does not pay to starve;" and it has been proved by frequent and careful experiment, that pigs lay on more flesh for the food fed at the ages named above, than older, and by this plan the farmer can have quick returns; and all business men know the nimble ninpence is better than the slow shilling.

Marketing.—From the experience of thirty years, acquired in the pork-packing business, if

we were fattening hogs for sale, we should aim to have them ready in two lots, from first to middle of April, and again in August or September. The average farmer has all his live stock, poultry, mutton, pigs, and a few cattle that he calls fat, but really stockers, all for sale at once, and when everyone else has,—consequently, he has to take the lowest price; but the shrewd, keen, observant yeoman knows better. Another illustration of the inspired proverb: "The prudent foreseeth the evil and hideth himself, but the simple pass on and are punished." So much for time of marketing; and now for the mode.

Except in very exceptional circumstances, it will always be best for the farmer to market his hogs alive. The reasons for this are obvious: In the first place, everything goes and realizes something; whereas, when killed on the farm, a large part of the inwards is totally lost. In a well-appointed packing house, nothing is wasted; and it may surprise many to be informed that our average profits per hog do not exceed the value of what is usually buried or burned where hogs are dressed on the farm. It therefore follows that in the long run the farmer will do better not to kill his hogs, but to sell them to drovers, whose name is legion; or, where the number he has to dispose of warrants it, to deal direct with a respectable pork packer, of which there are several in Ontario. Where this is not practicable it may often be made so by two or three neighbors joining their forces and chartering a car between them. Generally speaking, the number of hands through which a dressed hog passes, between the farmer and manufacturer, is much greater than when live hogs are dealt in, and as each dealer requires a profit, it follows that the farmer having hogs to sell can generally realize most by disposing of them on their feet. In the Western States, the greatest hog-producing country in the world, and where the business is better understood in many respects than anywhere else, such a thing as killing on the farm is never thought of. We know prejudice is strong, and time will be needed to overcome it, but we have no hesitation in saying that the absurd habit of marketing hogs dressed is of itself, unless corrected, sufficient to retard this branch of Canadian industry, so that it will never rank where it ought to, and where it must, if Ontario farms and farmers are to take their proper place among agricultural communities. It stands to reason that the cured product of hogs dressed on the farm during the winter or spring months, knocked from pillar to post, and alternately frozen and thawed, cannot be equal in any respect to that which is produced from those killed, cut and cured in an establishment where every necessary or desirable device is at hand, and where the whole operation takes less time than it takes dressed hogs generally to pass from the farmer to the packer. The natural result in the latter case is that the improved quality of the products induces consumption, and this redounds to the benefit of all concerned, from the man who grows the pigs to the man who cuts up the product on his counter. So convinced are we of the truth of the assertions we have made, that for years we have set our faces against buying anything but live hogs; and the result is we handle more than any house in Canada, and our product stands without a rival, either in this country or in England, where four-fifths of it finds a market. With your permission, we will continue to ventilate this subject, and hope in our next to have something to say about the hog in Sweden, Denmark and perhaps Ireland.

FIRST PRIZE ESSAY.

Soiling Cattle, Partial Soiling or Grazing.

BY R. GIBSON, DELAWARE, ONT.

SOILING CATTLE.—Total soiling in Ontario we may dismiss in a few words. It may be advisable and profitable in the vicinity of large towns, where land is too valuable for grazing purposes, where dairy products command the best prices, and where the dairyman deals directly with the consumer, saving freight, commission, &c. However, but few of us are so happily situated; hence arises the question, will it pay on ordinary dairy and stock farms, which comparatively speaking, may be classed as cheap lands—where labor is high and often scarce, and where the product possibly passes through two or three hands before it reaches the consumer? While I can most emphatically say yes; that total soiling in certain locations is the only profitable way of managing; I can with equal emphasis say, yes; it will pay, and pay a very high percentage upon the extra cost and labor entailed on the cheap lands above mentioned, and I believe it will be very difficult to point out a man who has adopted the system, with ordinary forethought and intelligence, that has discarded it and gone back to old principles. And I am further of the opinion that the difference often between a profitable season and an unprofitable one may be traced to the growth and use of soiling crops—or to state more plainly: they who provide soiling crops may so tide over a dry summer that they may realize a handsome profit; whereas those who have neglected so doing meet with loss that is hard to estimate. Take last season, for instance: fortunately such an one does not often visit us—still we are liable to have them; and the man provident enough to sow lucerne, or corn, &c., in anticipation, will not have cause to regret.

I do not intend arguing the point pro and con—it is so self-evident; and the arguments advanced for years by our best farmers, our best writers, are so forcible, and have been so well put, often and often, that I know nothing that I can write would induce a shiftless, careless man to adopt the system. I will mention a few of the points advanced as in its favor, and then give my experience in raising crops for soiling purposes.

1st. The saving of land. This is variously estimated by writers, the lowest that I have seen is, one acre will keep as much stock as three will if grazed; the highest as much as seven acres. I am satisfied that after the plan has become systematised and all manure saved, and only such crops grown as are most suitable and best adapted to the soil, &c., of the district, that there is not a farm in Ontario but that its stock-carrying capacity might be trebled. An arithmetical conundrum might be put here:—A has 100 acres upon which he keeps 30 cows. Finding himself circumscribed, and wishing to double his dairy—the question is, whether would it be better to buy an adjoining 100 acres, for \$7,000, or try to double the output of his present farm by soiling?

- 2nd. Saving of fencing.
- 3rd. Economizing of food.
- 4th. Better condition and greater comforts of the cattle.
- 5th. The greater product of milk.
- 6th. The attainment of manure.

I don't think it necessary to advance argument in favor of above propositions. Those who have

adopted the system are satisfied the above claims are correct. Those who have not, are unable to speak knowingly, and their argument is not based upon facts.

Of the crops to be grown, rye sown in August will be the earliest. It is, however, of poor quality, and soon passes out of the succulent into hard, dry and unpalatable food. Moreover, I think there is no season when mangels are so nutritious, or of such value as the period from 20th April to 20th May, embracing the time when rye can profitably be employed; and by May 20th a far better substitute can be used in orchard grass. This is certainly one of the soiling crops. It should be sown thickly, on good soil, as it is a voracious feeder. It will yield two good cuttings a year, and a dense third for pasture; but don't eat bare. After getting a good plant, no further care is necessary for years, except its annual fall top dressing.

The next on our list, Lucerne, will be ready by the time the orchard grass has been finished. It requires a deep, rich, well-drained or naturally dry soil. It supplies a most nutritious food—I doubt if any better can be grown; it, moreover, can be cut three or four times a season. I once cut it five times, but liquid manure was applied after each cutting. Like orchard grass, one seeding is sufficient for several years; and like it, an annual dose of well-rotted manure must not be omitted.

After lucerne, oats, peas and tares will be ready, and, when at their best, a capital food they are. Unfortunately, they do not long remain in their best condition, quickly ripening. I have often wondered why some of our seedsmen have not imported the winter vetch or tare. They remain so long flowering that they still keep green and succulent. Mr. Hugh Aylmer, the celebrated stock raiser of Norfolk, England, grows some eighty acres yearly, being his main early summer feed for sheep until rape, &c., is ready, and he sows winter tares in the spring, as he once expressed himself to me, "I would not accept the spring seed as a gift, if I could buy the winter at a high figure." After the oats and peas are done, the orchard grass and lucerne will be ready for cutting again until corn is ready, and this, without doubt, must ever be one main crop—it comes in so nicely just at the season when pastures fail; the dry, parching winds and sun, burning up the bare pastures and scorching nearly every green thing, has little effect upon this plant; it seems to fairly revel in intense heat, growing large crops of a rich, succulent food. No dairyman can afford to do without it. After corn comes rape. It is an extra, strong food, more perhaps for the sheep breeder and those keeping thorough-bred stock than for ordinary dairy or farm purposes. I cannot, however, omit it, as for certain purposes it cannot be surpassed. Of millet and Hungarian grass I cannot speak highly, we have better plants for the purpose.

In conclusion, let me urge upon all who keep stock, whether for the dairy or beef, to put in a little "patch" of fodder corn this year. If it is not wanted for summer feeding, it will pay far more than the cost for winter use. You are insuring in a safe company—you don't have to die or have a fire to get the benefit. Should a drouth follow, you are prepared, and you will not have to do as so many had last season—after feeding nearly all their farms produced, almost give their stock away. The time is not far distant when

the successful farmer on the high-priced lands of Ontario, if he wishes to keep pace with his competitors and hold his own in the markets of the world, will be compelled to follow out a programme something like this:—Good cattle, well fed from birth—forced if you please—high pressure feeding; steers never out of barn until ready for the butcher, except evenings in a yard, or midday in winter, and this is even doubtful. Do the successful stock exhibitors let their cattle roam at large? Even the sheep breeders prepare their show sheep under cover. These men do not house them for sake of economy, but because they do better; hence it pays. Now, if they find breeding stock do better when soiled, no one can fail to see that fat and dairy cattle would be benefited to the same extent.

Sheep Washing vs. Clipping in the Grease.

Our valued Scottish exchange, Sheep and Wool, has for some time been ably debating the above question. In a recent number it publishes the following report which was unanimously adopted by the Bradford Chamber of Commerce, which is composed among others of the Mayor and the three members of Parliament for Bradford, Sir Jacob Behrens, and Sir Henry Mitchel, who is President. It includes eight of the largest consumers of wool in England, also seven important merchants of goods manufactured from wool, one yarn merchant and wool exporter, one wool comber and one ex-wool comber, one civil engineer and one banker.

Previous to last year's sheep-shearing season, letters appeared in the public papers and agricultural journals advising farmers to clip their flocks in the grease.

As some letters were dated from Bradford, importance was attached to them as coming from the seat of consumption, and thus the minds of many wool-growers were unsettled.

The effect was that last year's clip was by no means as well washed and got up as usual, and many clips contained more or less unwashed fleeces. This has proved both troublesome to the users and unprofitable to the farmers; consequently the whole subject has been referred to the Bradford Chamber of Commerce for solution, and for some months the Council, through the Wool Supply Committee, have been gathering information.

In order to make themselves thoroughly acquainted with all the facts, a circular was printed and sent to all the principal consumers of our English-grown wool, asking for their opinion as to the practical effect of clipping in the grease. To this appeal a large number of replies have been received, some being of a very exhaustive character.

In these replies the subject has been thoroughly argued, and so far as the wool is concerned the opinion expressed by users is overwhelming in favor of washing. The Council of the Bradford Chamber of Commerce are unanimous in their opinion, that from this point of view it would be both unprofitable and unwise to make any change.

They are guided in this opinion by the following considerations:—

(1) As in most other commodities, the competition in the wool trade is very keen, and the trade is worked upon a very small margin of profit. The shrinkage of washed wool is much easier to estimate than that of unwashed. The grower of wool is therefore much more likely to obtain his exact market value if it is washed than he would be if the valuation were subject to

the uncertainty attending upon the shrinkage of unwashed wool.

(2) The practice of shearing in the grease would increase the liability of slipshod work, and the amount of damage to the trade arising from careless getting-up of wool in the grease would be greater than at present, and would vary greatly between a dry and a wet, dirty spring.

(3) It is admitted by all users that in the large majority of cases English wool shorn in the grease is an inferior color; and this fault is intensified when the wool is stored for any length of time.

(4) The export of English amounts to nearly 24,000,000 lbs., or approaching one-fifth of the production. This trade would be seriously interfered with by any change. The export to the United States alone amounts to over 13,000,000 lbs., and as this pays a duty of 10 cents per lb., washed or unwashed, it is easy to see that if our farmers did not wash their sheep this export trade would come to an end. As a matter of fact, no unwashed English wool is exported to America, with the exception of the Scotch black-faced, a portion of which is shipped in the grease, the reason being that the price is thus kept under 6d. per lb., consequently it can be sent in at the lowest tariff rates, which are not applicable to pure bred wool.

(5) The question of the expense of washing, which although it appears one for the consideration of the farmers, is really of interest to the entire trade. By ceasing to wash the sheep this expense would not be got rid of, but simply transferred, to reappear in the increased cost of transport and other forms.

There are also many other minor points, which need not be specified here, but which have received the earnest attention of the Chamber.

The discontinuance of the practice of sheep washing has never been called for by the vast majority of the trade, and the Chamber have devoted so much time and attention to the subject in order to settle the question exhaustively and finally, and to provide the growers of wool with an authoritative expression of the opinion of the trade, an opinion which for the future cannot be misunderstood. Having, therefore, as the mouthpiece of the consumers, gladly discharged this duty for the benefit of all parties who are interested in wool, the Chamber has no intention of reopening or rediscussing the subject.

Clonmore Farm.

This beautiful property, on the south side of Kempenfeldt Bay, Lake Simcoe, is the property of Dr. E. Morton, whose residence is in Barrie, where he has a large practice in his profession. A large herd of Shorthorns is kept on the premises, some of which are of great merit. Among which may be mentioned the following:—Lady Clonmore, a red cow slightly marked with white; Provena Rose by Prowler and Lady Wicklow by imported Primrose. A very fine young bull is Primrose, who stands at the head of the herd; bred by Campbell, of Kinnellar Scotland, and imported by Arthur Johnston, Greenwood, Ont. But chief among these fine animals is Clarence Clonmore, a bull calf of eleven months, very dark roan, of very great length and grand substance. This animal will yet make itself a name if it improves the next two years of its life as much as in the brief time it has been in existence on Clonmore Farm. We also noticed a very fine heifer calf from Lady Clonmore, which will be heard from in the future if it meets with no mishap. We very much regret that lack of space forbids a more elaborate description of Clonmore Farm and its stock.

The Farm.

Our North-west Letter.

In accordance with the promise contained in my last, I now continue my remarks about this district. I cannot, I think, do better than finish up the town of Virden. The quantity of wheat marketed at this point up to the end of March, was about 175,000 bushels, and the price ranged from 85 cents to \$1.13. The quality, generally, has been very good. In this connection much might be done in the way of improvement, by selecting only seed of the best quality, and growing that on land in which nitrogen and the phosphates of lime and magnesia are present in abundance. Here, again, will soon be a field for the exhibition of intelligence. Still, in the face of such facts, many farmers continue to ridicule and trample under foot the very means (our agricultural press) that are to improve their minds, lands and worldly condition.

The influx of people into Manitoba so far this spring has been something surprising. Virden receives a fair quota. On the express, recently, 27 were ticketed to Winnipeg, 59 to Brandon and 64 to Virden. Judging by appearances, the majority seem a very desirable class. If other parts of the province have to chronicle as large a stock, etc., as arrived in this county, Manitoba must certainly be a great deal richer in that line. Virden, I am sorry to say, is saddled (like, I presume, many other new towns) with an incubus known as the genus Biped, species Homo; habits, nocturnal and migratory; recognized by the large amount of starched linen on that portion of his body just above his shoulders—he is simply here to wear out his old clothes, or spend his or other people's money, generally the latter, in revolutionizing the methods of farming and manners of the people. Generally speaking, he does not stay long; and his departure is usually regretted by sundry hotel-keepers and tradesmen. It certainly is a mistaken idea for parents or guardians to send their "ne'er-do-wells" and black sheep to a new country. No doubt it is an effectual way of getting rid of them, as the individuals seldom make money enough by their own exertions to carry them back. This, to my mind, is not the worst feature of the case. Those given to the use of strong drink—and their name is legion—being away from all restraining influences, get care'ess, and go from bad to worse; the very opposite, no doubt, of the condition of things their advent in this country was expected to produce. The class, however, who do well—and I think they are in the majority—are agriculturists, tradesmen, mechanics and laborers—men who are not afraid to take their coats off and work, and, being in Rome, do as Rome does; to all such, Manitoba and the North-west certainly offers every prospect, if not of independence, of a competence. One very great drawback we have to contend with is the lack of real good farm hands who can be depended on. Such men only work out a few seasons, as they become themselves proprietors and useful citizens. A good man always commands good wages, and need not be out of employment a day.

At the last farmers' meeting an excellent paper was read by a Mr. Chisp, on "The best means of improving our Cattle and Sheep," but dealing principally with the latter. Space pre-

vents me speaking further than just to say that the perspicuity with which the essayist handled his subject, proved him to be a thoroughly qualified flockmaster. Another paper, on "Cattle Improvement," was postponed till the next meeting; as was also, to my mind, a very sensible motion to form the meetings on a more permanent basis. However, as the president, a very estimable gentleman, whose opinions seem to govern the majority, proposed that the next meeting be held next November, both are practically shelved. I will try and give your readers a copy of this motion in my next letter. It is one that might with benefit be acted upon by the farmers in other districts.

Farming operations started earlier this year than ever. Seeding generally commences about the 6th of April; last year it was the 12th or 15th before work was started in earnest. This year a lot of wheat was sown early in March. Many had finished by the 25th of the month. Others, again, did not care to sow so early, and deferred till the beginning of April.

Smut.

The report of Mr. Jensen's extensive experiments on the propagation and prevention of smut in oats and barley, has been published by the Royal Agricultural Society of England. His conclusions are so much at variance with those arrived at by other experimenters that we repeat them. The chief ones are:—

1. That the spores of smut falling on the ground in one season do not appreciably affect the grain sown on the same field in the next season.
2. That spores of smut adhering externally to the seed grain do not affect its smuttiness.
3. That oat smut and barley smut, if not two different species, are at least two well-differentiated varieties and it is not likely that a barley field will smut from an oat field, or vice-versa.
4. That although the smuttiness is not appreciably affected by applying smut spores externally to the seed grain, yet it is undoubted that no smut is reproduced in the plant except from a spore.

Mr. Jensen believes that the spores which reproduce the smut fungus in any given plant of oats or barley, gained admission *within* the husk of the seed while it was growing or ripening, and lay there dormant until the germination of the grain.

If this theory be true, it is of great importance in the investigation of remedies. The usual preventive is washing or dressing with sulphate of copper (bluestone.) Weak solutions (one part in 400) are not very effective, while strong solutions (one part in 100) injure the seed so that it has to be sown considerably thicker, and it does not ripen so quickly as undressed seed. To use the words of the report: "Dressing cereals in the usual manner against smut and bunt causes, as a rule, a waste of seed. It is moreover injurious to the plants and is unnecessary. Treating the seed with water, heated to a temperature of 127 degrees Fahr. for five minutes prevents these diseases equally well, and protects barley much better, while it has the advantage of not injuring the seed or the resulting crops."

Do not turn your calves out to graze this summer. Keep them in and supply them with plenty of suitable green food, supplemented with a little bran and meal.

The Desirability of Discontinuing Township Shows.

(Continued from last issue.)

I cannot omit to mention here some figures presented to the public in the February number of the FARMER'S ADVOCATE. In reply to a circular said to have been sent to some of the leading farmers in each county asking for an expression of opinion as to the desirability of continuing the township show as at present constituted, answers had been received from nearly 200 persons. Of these 137 are in favor of continuance, and 57 against, showing so far as the answers have been received a very large majority in favor of the township exhibition. One is naturally curious to know just who composes the two classes. Personal interest, or what is believed to be such, becomes the guide with many persons. The gathering together of a crowd, however small, is considered the essential thing with some who live in the village or town where the show is held. The opportunity for gain in whatever trade may accrue is too valuable to be lost, and so both hands will be held up for its continuance. Now it is not personal interest merely that we should consider in dealing with this matter, but the public interest. Whatever will bring the greatest good to the greatest number should receive our approbation.

May I suggest that in the main all our efforts have been directed towards the production of better live stock. A wide field is still open in this regard. But is it not worth while to encourage and stimulate more than in the past a better system of general husbandry. I know we have given prizes for bags of grain, samples of roots, etc., but it is a lamentable fact, that two bushels of prize grain may be, and is sometimes, picked kernel by kernel from among the veriest filth and rubbish. Is it not true that the finest exhibits in small quantities are sometimes presented by the most slovenly farmers, whom no one would care to copy. Twelve prize-winning roots may be shown by a man who would be ashamed to exhibit his acres. Some favored spot heavily manured and constantly watered produces in excess of merit the average field crops of his less favored neighbor, who may after all deserve more to be copied than the former. In a word, what I wish to say is, that our present plan is not the best to educate and encourage a better general production.

Suppose then that the public money now used by the township shows should be devoted through the county organization to giving prizes to be confined to each township, for not the best bushel merely, but for the best field of grain; not for the best dozen roots, but for the best acre; compelling each man in making entry to give the manner of preparation for his crop, for the purpose of publication in connection with the award of prizes.

Suppose in addition, prizes were given in each township, and to be confined to each for the best managed farm, not allowing the *winner* to compete in his township a second time, until after a fixed period, but allowing him to come into competition with the various townships of his county or groups of counties as the case may be, at stated periods. Would not the effect be marvelous in improving the general product of the farm. Would not the different farmers in each township vie with each other for this honor, and so be stimulated to thoroughness in cultivation, and carefulness in management. And would not the townships

generally be filled with a laudable ambition to produce the best farm in the country.

Would not the very best results accrue from bringing to notice the best managed and best cultivated farm, which would be within reaching distance to be seen and copied by all. One objection to the commendable operations of the Agricultural and Arts Association concerning this matter, is the fact that so large an area is taken in each group that the winning farms have never been seen by the vast majority at all. I confess that in my own district, although I travel about a good deal, I have never yet had the privilege of viewing the winning farm. We all know the powerful influence of an advanced enterprising farmer in any community. Some of us could testify what inspiration we have received from witnessing with our own eyes, the successful operations of some energetic, thoughtful farmer in our neighborhood. When a better crop is seen growing on your neighbor's land than in your own field, self interest impels you to inquire how is this? Can I imitate those methods? And so when the imitation begins it is sure to continue, and as certainly as the falling pebble dropping in the quiet waters produces a ripple, which ever extends its circle until the farthest shore is reached, so certainly will the influence of this one man continue to multiply itself, until the whole community are directly or indirectly benefitted. And so, Mr. President, without attempting to tear away this time honored institution, around which our affections gather as we think of past associations, I have suggested what it seems to me would be an improvement, with the hope that the one may be dropped for the only reason that something better may be grasped.

Our Maritime Correspondent.

There has been a great change in the beef business here in the last few years. Instead of shipping beef to the English markets, as we did at that time, both Halifax and St. John butchers have been purchasing beef in Ontario. A great many farmers think that it does not pay to make beef at present prices, and so are either dairying or selling their stock. While the latter practice for a time brings in more ready money, it is conceded to be bad farming, except in localities where there are large tracts of meadow land that do not require manure. While not inclined to complain, I think farmers in all the provinces are feeling the sharp competition from outside, and are in a spirit to adopt all advanced methods as fast as their capital will admit, and it can be shown that the new is better than the old. Farmers' clubs and associations and conventions for the discussion of practical questions, have been well attended this winter.

The new Agricultural School, established by the N. S. government, is not so well patronized by the farmers as it was hoped and expected it would be. It is an excellent school, however; and Professor Smith, who has charge of it, is a practical, as well as a theoretical farmer; and he is so confident that the farm in connection with the school will more than pay its way, that he has agreed to give the government a fair per cent. for the money they have invested in it, the government to make all permanent improvements.

Interest in horse breeding continues to increase, and a number of fine horses have been brought into both provinces the last few weeks. New Brunswick and Nova Scotia claim that they can raise horses just as cheaply, and just as good animals, as they do in Prince Edward Island; and they propose to convince the world of the fact by showing the horses. "The proof of the pudding is in the eating."

The N. B. government lost one of their best Clydesdale stallions. The remaining ones are leased for the season, and are distributed over the different parts of the provinces.

Farming Affairs in Great Britain.

(From our English Agricultural Correspondent.)
JUBILEE OF THE "ROYAL."

In April, her majesty the Queen, represented by the Prince of Wales, entertained the Council of the Royal Agricultural Society at a banquet in St. James's Palace, to celebrate the entry of the society on its year of jubilee. In reality, as the "English Agricultural Society," it was established nearly fifty-one years ago—in May, 1838; but it was not till March 26th, 1840, that the association was incorporated under royal charter as the "Royal Agricultural Society of England," and from this point of view the society is in its fiftieth year. Nearly 2,000 new members have joined the society since it was announced that the Queen had accepted the presidency for the current year, and that it was desired to increase the number of members in honor of her Majesty. The total number is nearly 11,000. The published property of the society is £30,000, and at the Windsor show, next June, £12,000 will be awarded in prizes.

ENGLISH AND FOREIGN CHEESE-MAKING.

In the new number of the British Dairy Farmers' Association's Journal, Mr. Joseph Rigby compares English and foreign cheese-making practices in a very interesting manner. The makers of Stilton cheese, he says, use their milk warm from the cow, with rennet at 80 to 82 degs. F. in sufficient quantity to thicken the milk in twenty minutes. They "lode" the curd in strainers without cutting it, and let the separation of the whey go on of its own accord, drawing the corners of the strainers together as it shrinks. Some makers leave curd and whey together for 24 hours, then break it up, salt, and fill in hoops. Others leave the whey with the curd an hour or two, then run it off and salt at the end of 36 hours. Yet others let the whey run off an hour after lading, and keep the curd to "cure" 43 to 60 hours before breaking and salting it. As a rule, one pound of salt is added to 65 lbs. of curd. The dairy in which this work is carried on, and in which the cheeses are kept while in hoops for six or seven days, is maintained at 65 to 70 degs. F. No pressure is used. When the cheeses are ready to come out of the hoops they are smoothed with a knife and carried to the coating room, where they are kept at 60 to 63 degs. F. for ten or twelve days, until the wavy-coated appearance has come on them; then they are taken to the curing room, where they stay three or four months, within which time the fungus growth—blue mould—will have made its appearance if the work has been well done.

HOW CHEDDAR CHEESE IS MADE.

The evening's milking is left to cool down during the night—artificial cooling being necessary only where the quantities are large—and the morning's milk is added, with rennet at 80 to 82 degs. F. in sufficient quantity to produce a curd ready to be cut in 45 minutes. Some makers at the same time add some whey, in the proportion of one gallon to twenty gallons of milk. It is usual to begin to break up the curd while it is somewhat tender, and to reduce it to the size of small peas, then gradually to raise the temperature to 106 degs. F., stirring all the time to prevent the particles adhering. The hot test is used to decide when sufficient acidity is developed; but the whey is drawn off and the curd is put on drainers to cool, and left till tough enough for salting and grinding, 2½ lbs. of

salt being used to 100 lbs. of curd. The cheese is then put into the press at once and kept there for three days, being turned daily.

MAKING GORGONGOLA CHEESE.

As Gorgongola is perhaps the most famous of all foreign cheeses, a brief description of its manufacture, abstracted from Mr. Rigby's article, may be welcome to many readers. The rennet is added to the milk as soon as the latter is drawn from the cow, the temperature not being allowed to fall below 85 degs. F. Enough rennet is used to cause coagulation in 25 to 35 minutes. The curd is then carefully broken up, and, in the case of the night's milk, it is laded into cheese cloths, about three gallons in each, and hung on pegs over a drainer till morning. The morning's milk is treated similarly, except that the curd is hung up for only about fifteen minutes. The two curds are next taken out, placed in wooden hoops, inside each of which a cheese-cloth has been put. Care is taken that the warm curd of the morning is kept to the side, top and bottom of the hoop, so that it will unite and form a smooth crust, while the cold curd of the preceding evening is kept in the centre. The latter never perfectly unites, and it is in the spaces left that the blue mould begins to grow as the cheese ripens. In one hour after making, the cheese is turned, and again three or four times during the day. At night the cloth is taken off, and the cheese is turned once daily for three or four days, after which the salting begins; and experience only can tell a maker when to begin and when to leave off. Some take 30 days to finish, some 20, others only six days. The temperature of the dairy in which these operations go on should be 60 degs. F. When the salting is finished the cheese is taken to a drying room for several days; and bright pink spots will begin to form on the coat if it has been well made; otherwise it will begin to grow soft and grey-colored, gradually turning black. From this room the cheese is taken to the curing cellar, which is kept at 60 degs. F., and there it is turned every alternate day for four or five months, until it is ripe.

EXPERIMENTS WITH BARLEY.

The results of applications of various manures for barley, by Prof. Kirsch, of Winchester Royal Agricultural College, were as follows, last harvest, compared with the averages of the three previous trials, so far as no change in the manuring has taken place:—

Manure per acre.	Yield per acre in bushels of 56 lbs.	
	1888.	Average, 1885-7.
None.....	27%	20%
3 cwt. kainit, 3 cwt. superphosphate, 2 cwt. nitrate of soda.....	30%	35%
3 cwt. kainit, 3 cwt. superphosphate, 2 cwt. sulphate of ammonia.....	39%	34
3 cwt. phosphate, 2 cwt. nitrate of soda.....	42	38%
3 cwt. kainit, 2 cwt. nitrate of soda.....	41%	38
2 cwt. nitrate of soda.....	43%	35½
175 lbs. sulphate of ammonia.....	37%	33%
3 cwt. superphosphate, 1½ cwt. nitrate of soda.....	40%	—
3 cwt. superphosphate, 131 lbs. sulphate of ammonia.....	34	—
7 tons farm-yard manure.....	31%	26½
14 tons ditto.....	35%	29½

The liberal allowance of 56 lbs. per bushel for barley makes the results all round smaller than they should be. It will be noticed that the plots which received non-nitrogenous manures alone (mineral superphosphates and kainit) pro-

duced less than the unmanured plots. It is not uncommon to find scarcely any difference; but the reason of less being produced in this case is probably because one of the two plots (all trials were in duplicate) dressed with these mineral manures was inferior in natural character, as it yielded 13 bushels an acre less than its duplicate. The best results have been obtained from the common mixture of nitrate of soda and superphosphates, but in ordinary rotation cropping, smaller quantities suffice.

EXPERIMENTS WITH MANGOLDS AND OATS.

In some experiments carried out by the Essex Agricultural Society, the principal object was to show how far the manures applied to the mangold crop, in 1887, would benefit the oat crop of 1888, which was not manured. In 1887 it was proved that the manures which had produced the greatest weight of roots in the preceding mangold crop, gave the best yield of oats, thus showing that the manure was not all exhausted by the mangold crop. Out of eighteen plots two were unmanured for mangolds in 1887, twelve were dressed with 12 tons per acre of dung, some with and some without artificials, and four with artificials only. The results for mangolds in 1887, and oats in 1888, are shown below:—

Average yield per Acre of	1887.		1888.	
	Mangolds.	Oats.	Mangolds.	Oats.
Plots unmanured	Tons. 9	Bushels. 18	Tons. 22	Bushels. 69.41
Dung only	11	12	22	69.52
Dung and artificials, including nitrate of soda	13	12	22	74.57
Dung and 2 cwt. of nitrate of soda, with or without other artificials	15	12	22	83.98
Dung and 4 cwt. of nitrate of soda, with or without other artificials	15	17	22	76.61
Without dung, 4 cwt. nitrate of soda, with or without other artificials	15	8	22	

The great yield of oats after nitrate of soda and artificials, applied to the preceding crop, shows that the nitrate had not been all exhausted, or else that benefit resulted from the leaves and rootlets left after the great crop of roots had been cleared off the land. As to profit, there was only one instance of it where dung was used, valuing the roots at 10s. a ton, and oats at market prices; whereas artificial manures paid well. The report states that 4 cwt. of nitrate of soda, costing £2 2s., gave an increase valued at £2 11s. 6d. per acre. Superphosphate, 3 cwt., with 4 cwt. of nitrate of soda, costing £2 11s. 3d., gave an increase valued at £3 19s.; while 6 cwt. of guano with 4 cwt. of nitrate of soda, costing £4 6s. 6d., gave an increase valued at £6 5s. 6d. The most costly artificial dressing where no dung was used was, therefore, the most economical.

GREAT DEMAND FOR SHIRE HORSES AND CLYDESDALES.

I am glad to see that a Shire Horse Association has been formed in Canada. In this country the Shire Horse Society and its Stud Book have proved very beneficial to breeders, and

there is now a great demand at home and abroad for good horses. A successful sale of Shires was held the other day, when the stud of the late Mr. German, of Measham Lodge, Derbyshire, was disposed of. Sixteen mares of various ages averaged £85 13s. 10d., and fourteen stallions, £72 13s. 6d. One of the latter, Measham Pride, realized 225 guineas. Clydesdales are selling equally well, the average for forty sold at the Seaham Harbor sale being £77 9s. 1d., while the top price was no less than £341 5s. At the recent Shire Horse show and sale in London, a few horses sold at still higher prices.

Are Dogs a Necessity?

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

This question will be answered by different persons in accordance with the circumstances in which they are placed, and their early education. To the shepherd, handling large flocks of sheep without any other assistance than his dog or dogs, they are certainly a necessity. But to the ordinary farmer in this country, who has no such work to perform, I unhesitatingly affirm that the presence of a dog on the farm is not at all essential. Nor are dogs generally kept because of their usefulness. The affirmation was made in the legislature, and elsewhere as well, that not one dog in fifty, take them as they come, can be proven to be of any use whatever. They are nearly always pets of the family, as much endeared and doted upon as any member of it. No one may harm it without incurring the ill-will of almost every member. Such persons think they cannot do without their dog, but any outside opinion of the same dog would be of an utterly reverse nature. For at least twenty years in the past, on my farm of four hundred acres and upwards, no dog has been allowed; not because there is no fondness for pets, because that is a characteristic of the family; but because the conviction has been growing that a dog is not needed, and may prove not only useless but destructive and even dangerous. He has, therefore, been discarded, and no inducement could be given, after these years of experience, strong enough to cause one now to be kept.

There are some useful dogs, but they are vastly in the minority. Few people have taken the trouble to inquire what the dogs of our country cost to maintain. Early last winter, from actual returns received from the township municipalities in the south riding of Ontario, I discovered that fully \$1,000 worth of sheep were destroyed annually by dogs. Presuming that the same death rate occurs in the north riding, we have an annual destruction in the county of Ontario of two thousand dollars. This has been going on from year to year for a long time. In 1882 a return was asked for in the legislature, showing the number of sheep killed and injured for the three previous years. Out of four hundred and eighty municipalities only one hundred and thirty were heard from, which is less than one-third of the whole. In these municipalities the return showed that the number destroyed for the three years was 9,943. Total amount paid, \$38,621. But this, it will be remembered, covers only two-thirds of the actual value. If we add one-third, we shall have \$51,494 as showing the actual value of sheep destroyed during the three years covered by the return. But as only one-third of the Province was included in that return, and assuming that the destruction was similar in the portions not reported, we have the astonishing

sum of \$154,476 worth of sheep destroyed in the Province of Ontario during those three years, or an average of \$50,000 each year.

If it be any comfort to know that others are similarly situated—and it is said that misery loves company—perhaps it might be interesting to note how the destruction goes on annually in Ohio, U. S. From returns published through the proper department, we learn that the total number of sheep killed and injured for the year 1888 was 59,560, and the total valuation, \$146,202. The Ohio Farmer of October 27, 1888, published a list for the past eight years. The totals of killed and injured were 432,828, and the total value, \$1,215,747. The number of dogs owned in that State is computed at 300,000. I do not know what it costs to keep each one; but perhaps a fair estimate would be \$5 per year. If that be correct, the total cost for keeping these dogs that worried the sheep during the eight years for which the table is given would be \$12,000,000. Add to this the value of sheep destroyed, and you have a total of \$13,215,747.

The question I ask just here is, are they worth it? I maintain they are not; and if every dog could be banished from this province to-morrow and the destruction of sheep stopped, an immense gain would be made in this branch of agriculture. This province would be just that much richer. This, however, cannot be done; and if dogs must be kept by persons who determine that they cannot get along comfortably without them, what course shall be taken to limit the destruction which is sure to follow? The thought upon which the bill before the legislature during the last session was based, was that, to double the tax on dogs and make it universal, would limit the number kept to those alone which were of practical value, and would prevent large numbers of persons, unable properly to keep themselves, from being the harborers of dogs allowed to prowl about the country at will. Dogs of value are generally cared for and kept under proper control. It is the dog of no merit, except that he is MY dog, which most needs extirpation. The second thought was, that persons who insisted on keeping dogs should be compelled to keep them in charge and under control; that if they permitted them to wander about the country at large they did so at their peril,—such dogs being liable to be shot while straying away.

My position is briefly this: First, outside of exceptional cases, dogs are not a necessity, but, at best, an expensive luxury. Second, the vast majority can be shown to be utterly useless except as pets of the household. Third, they are dangerous both to person and property. Besides the destruction to sheep, so constant, how many ghastly wounds are inflicted on children by dogs roaming the streets? How many valuable robes are torn and ruined by the useless road cur grabbing at the sleigh or cutter? How many flower beds are scratched and torn beyond recognition by these night prowlers? How many vegetables are saturated and made unfit for food by these inveterate leg-lifters? How many horses are daily frightened and set to kicking, tossing the occupant of the vehicle headlong in the ditch, at the risk of neck and limb, by these barking whelps, who allow no one in peace to use the Queen's highway? And all this for what? Who can tell?

Mr. George T. Powell mentions that every farmer he has known who has raised trotters as a business, bred a good-sized mortgage at the same time.

PRIZE ESSAY.

The Benefits of the Ontario Agricultural and Experimental Union to the Canadian Farmer, and Its Profitable Results.

BY H. H. DEAN, HARLEY, ONT.

That experiments are necessary to the welfare of Canadian farmers, is conceded by almost everyone. Both the Provincial and Dominion Legislatures have recognized this need and have established experiment stations for all the provinces. Our neighbors across the lines are even more zealous in this work than we. Farmers themselves say they are necessary; perhaps not in so many words, but in reality they admit it; for you will talk to scarcely a farmer but he will tell you of some experiment which he tried, and which gave such and such results. If you attend a Farmers' Institute the talk is principally on the line of experiment; in fact, as a farmer said recently at an institute meeting, "This seems to be a sort of experience meeting, so I will give you mine."

While this individual experimenting is very valuable to the persons conducting them, and possibly to some others, yet the great fault in such work is, that nothing very definite is obtained from the majority, and, consequently, such experiments cannot benefit the masses. The object of the Agricultural and Experimental Union is to carry on, develop and tabulate, a series of experiments covering every branch of agriculture. As with a great many young institutions, its progress has not been as rapid as might be desired, yet it is slowly but surely gaining in public favor. In the past the Union has devoted its energies chiefly to holding meetings to discuss questions of moment to the agriculturist, and in carrying on experiments with different fertilizers on different kinds of grain. The results of these have been very satisfactory, and now the Union has something to show for its work. It can say that during the years 1886-'87 and '88, special manures, such as salt, apatite and superphosphate, gave comparatively good or bad results, when tested on the same kind of plots with no manure and farm-yard manure. For instance, over a great number of tests carried on by the best farmers all over the province, superphosphate has given the best results for the last two years—better than farm-yard manure; and Prof. Shaw certainly scored a point at the last meeting of the Union, when he pointed out that if superphosphate, costing \$5.00 per acre, would give better results than farm-yard manure costing \$14.00 per acre (manure valued at \$1.00 per ton), it was a matter worthy the attention of farmers who had not enough manure for their farms (and there are not many who have), or who were buying manure. But this may not be established as a fact—it is the result of only two years' experiments. But if for several years there should be similar results, then we might consider that it was something more than mere coincidence. This, however, is only one line of experiments which it is proposed to take up and test thoroughly. The number of experiments and the range of work which they shall cover, will be limited only by the means placed at our disposal. Last year committees were appointed to carry on experiments in horticulture and in the apiary. The committee on horticultural experiments decided

on a series of tests with seed potatoes, which proved very interesting and profitable. But we must remember that it is only the result of one year; and we would impress upon our readers the inadvisability of placing too much reliance on the result of one or even five years' experimenting. Time is needed to test these things thoroughly. Look, for example, at Sir J. B. Lawes, of England, who has been carrying on experiments for a great many years; yet he is still pursuing them, resolved to test them until there can be no doubt as to the results obtained. If the Union does nothing more than awaken enquiry among farmers, it shall have accomplished a good work.

The experiments in the apiary were placed on a proper basis only last year, and something definite may be looked for next year.

This year it is proposed to enter those important branches of farming, stock-raising and dairying. Already a series of experiments in regard to live-stock have been decided upon—not elaborate or expensive ones, but really practical tests which are of great importance to farmers; yet their comparative merits have not been fully settled. We mention a few of those proposed:—The Comparative Profit in Rearing a "Scrub" and a Pure Bred; The Value of Warming Water for Stock in Winter; Which Gives the Better Results in Feeding Pigs, Dry Meal or Wet? What is the Value of a Soiling Crop in Raising and Fattening Hogs? also, The Comparative Values of the Different Soiling Crops, such as Lucerne, Fodder Corn or Clover when Fed to Milch Cows.

It will thus be seen that the Union has already covered a wide field of experiments which are of great benefit to the Canadian farmer, and that it proposes to enter fields which shall yet be more interesting and profitable to him. The average farmer has not the time, the means nor the ability to carry on a great many of these, yet the Union enters cheerfully into the work and expects that in the not distant future it will have an accumulation of facts which every farmer will hail with delight, and which can be had by making application for the report which the Union issues annually.

A learned man has said: "All national wealth depends upon an enlightened agriculture." While we do not claim that the Union is the only luminary to the agriculturist, yet we do claim and insist that it is, and will continue to be, a source of great enlightenment and profit to Canadian farmers. It will be able to show them where a great many breakers are located, and will warn them against running the staunch craft of Agriculture on such hidden rocks as some sellers of artificial fertilizers who gather up road dust and mix some ammonia or liquid manure with it and sell it for fifty or sixty dollars per ton; or else it will be able to show by some experiments which have been carefully and fully tested, that it will not pay to buy a certain kind of fertilizer; or that a certain course pursued in regard to horticulture, or the management of live stock, is not profitable, but a different course will give much better results. There is certainly much room for improvement in the management of many Canadian farms; and any reliable information which the Union has at its disposal it will cheerfully give to those who ask for it. In fact, it is hoped that the path of the agriculturist will ere long be made so plain that he who runs may know whereon he treads. That the Ontario Agricultural and Experimental Union will have contributed its share towards making this plain path, we have no doubt whatever.

Garden and Orchard.**Orchard Work in June.**

BY C. G. CASTON.

The month of June is the time of all the year when the orchard requires the most attention. The first part of the month is the proper time for pruning, and this should be skillfully done. There are men who go about the country, making a business of pruning orchards, and whatever time they get to your place, they will tell you that that is the proper time for pruning. They often make a fearful butchery of the trees. I have made experiments at different times of the year, and the result of my experience is that June is the proper month to prune fruit trees. The wounds never bleed, and they heal over in a very short time. Whereas an orchard pruned in winter or early spring, is very apt to bleed through the summer, and is sure to grow suckers. One very important point in pruning is to never remove a large limb. Better to thin out the small brush and let the large limbs be, unless it is found absolutely necessary, where the limbs are crossed, and then the wound should be kept covered with wax until it heals over. But if an orchard is pruned properly, and done every year, there will be no need to remove large limbs. The trouble is in removing such limbs, that before the wound heals the rot strikes in and soon gets into the heart of the tree, and it dies a premature death. Another very important point is, to cut close to the tree, in removing a limb. This gives it a chance to heal over quickly without leaving a scar. The wounds should be covered with shellac or white lead, to keep out the wet and prevent decay setting in before the wounds heal over. But if done at the proper time, a small wound will heal over in one summer in a healthy tree. The object in pruning should be to keep the top open to the sun and air, and at the same time preserve the symmetry of the tree.

Another thing that should be attended to is, to scrape the rough bark off the tree with a trowel or some such tool. It should be done so as not to injure the green, fresh bark underneath, and with an old birch broom scrub the tree with strong soap suds or very weak lye; this removes the moss and the oyster shell bark louse, prevents the borers from depositing their eggs in the bark, and gives the tree a smooth, healthy appearance. This is the month when the codlin moths deposit their eggs in the embryo fruit. The very best remedy that has yet been tried for this pest is to spray the trees with Paris Green, a spoonful to a pail of water. This should be done when the blossoms are falling, and repeated in a week if it should be washed off by the rain soon after it is put on. A great many plans have been tried to catch the moths. About the first week of June they are most active, and may be seen in great numbers flying around towards evening. One plan is to place a vessel containing whey, of which they are said to be very fond, in the orchard. The vessel is so arranged that they drop in and can't get out, and are drowned. Another, is to place a lantern over a pail of water at night; they will be attracted by the light and drop into the water. But the Paris Green is by far the most effectual remedy yet tried; young trees should receive constant cultivation through the summer. If a man wishes to succeed in growing a good orchard, he must never sow grain or grass among them until they

are at least seven or eight years planted. The ground should be in some kind of root crop, or else fallowed, so as to keep the soil mellow and porous and moist. The trouble with having grass or grain among them is that it not only robs them of nutriment, but in the hot, dry months of summer the ground gets dry as an ash heap about the roots, and the young tree becomes stunted and scraggy, and in most cases soon fails.

How often do farmers plant young fruit trees among wheat or oats, and sometimes in a twitch grass sod: they might as well throw their money away. Another thing that shows up about this time of year is the fruit tree agent; and here I may say that I am much surprised to see so much money sent out of our country every spring for fruit trees. By far the largest number of fruit trees delivered in this county (Simcoe), are from Rochester nurseries. Now, I am in no way connected with any nursery, nor interested in any, but I think our farmers should patronize our Canadian nurserymen; for they can get just as good stock, and just as cheap from them as they can from those across the lines. In fact, the best stock I ever saw delivered here was grown in Ontario. One great fault I have to find with the agents is that they often recommend to those who are not posted, varieties that will not grow here. They are either deceiving in order to make a sale of certain varieties, or else they don't know what they are talking about; but any farmer before he makes a purchase, if he is not posted himself, should ask the advice of some experienced fruit grower of his acquaintance before he makes a selection of varieties. And also he should become a member of the Fruit Growers' Association of Ontario; he will then have the advice and assistance of the most experienced fruit growers in the Province. This is also the month for planting evergreens, and what can be more beautiful in the adornment of a farm than a lot of our own native spruce, balsam and cedar. The spruce and balsam make a splendid wind-break for the orchard and garden, and gives the homestead a cosy appearance at all times; and the cedar will make with very little trouble a beautiful hedge running from the house to the road. The first week in June is about the best time for planting them, and care must be taken to prevent the roots from getting dry; a damp drizzly day is the best, for the roots will keep moist, and with reasonable care will be sure to grow.

Potash for Asparagus.

BY B. F. JOHNSON.

The last of the season's asparagus having been gathered, it is the proper time to apply manure for the benefit of next year's crop. Experienced gardeners and intelligent amateurs need not be reminded that in order to get quick and large growth above ground there must be a strong development below. For vigorous root development there are several essentials, prominent among them, broad space for the roots and plenty of the right kind of plant food for them to assimilate or feed upon. To produce the best asparagus, a good, strong, well-drained soil is best, but any soil may be made rich enough; and possibly where earliness is the first thing to be considered, a sandy or gravelly soil is preferable to a clay loam, or even a sandy one. Four feet apart from any other plant is none too far, for if three rows only are planted 4 ft. apart, the outer rows yield the largest and best shoots. Nightsoil and butcher's offal, highly nitrogenous and very offensive manure, liberally and persistently applied produce enormous crops of large asparagus, but with the fatal defect to the delicate palate that there is in the rank growth a

slight flavor of the matter the plants were fed upon. But there are other fertilizers which will feed the roots so that they will send up shoots as quickly, as tender, and as large as the offensive ones named, and among these are tobacco stems and a solution of silicate of potash.

Of the stems it is only necessary to say that they should be spread over the surface of the bed from five to six inches thick as soon as the crop is off. The silicate should be applied in the form of a weak solution—10 lbs to the barrel or 40 gallons of water, a gallon weekly during the growing season of each plant, if the best results are aimed at. Asparagus roots fed with these fertilizers produce as rapid a growth of large and tender shoots as those nourished on nightsoil, putrid meat and other abomination, with the advantage that the delicate flavor of the vegetable is preserved at its best. Perhaps some asparagus which I raised this year would not attract attention in the New York market by its size and general appearance, though shoots 7 to 8 inches long, and three-fourths to an inch in diameter were the average results of the growth of twenty-four hours. These shoots after cooking thirty minutes were as tender and delicately flavored as young peas. In conclusion let me warn experimenters against being imposed upon by accepting silicate of soda, a very different thing, and a cheaper substance much used in the arts, but of almost no account as a fertilizer for potash plants. It might be added that since the only purpose of the silicate of potash in this mixture can be to supply potash for the crop, and it is not easy to get of good quality, and is by no means easily made, the chloride of potash, supplying the same plant nutrient in a no less soluble form, being easily obtained, is worth trying as a substitute.

English and Canadian Forestry.

BY R. W. PHIPPS, ONTARIO COMMISSIONER OF FORESTRY, TORONTO, ONT.

When travelling through England and Scotland last summer, nothing was as plainly observable to a Canadian as the fact that the country was well sheltered. Everywhere were hedges; everywhere, fine trees along them; every here and there, plantations. Those who owned the land apparently were far from grudging the trees their standing room; and the result well repaid them. Such crops of wheat—such weight of grass per acre, as was there obtained—doubled or often trebled Canadian products! Comparing Canadian with English farming practice, no one could doubt that the shelter given had much to do with the fertility of the land. It was a painful contrast to many of our Canadian farms, where it looks as if the owner had cut every tree from the surface, to produce a square expanse of bare earth; as bare, as hard and as unsightly as an Illinois stock-yard.

How different this to what a farm should be, with its reserve of forest, well kept, free from the intrusion of cattle, and in good forest condition; its bed deep with leaves, its young trees rising, emulous, to the height of the old—ready to replace them when they are cut down for use, its massive wealth of foliage, its pleasant walks, cool and umbrageous in the hottest day; its living springs preserved by trees, its lines of wind-breaks opposed to the cutting blasts. Such a farm, so kept, is a place of beauty—a place to live and die in. The other, shaved flat to the surface, is a place to toil, to make money, if farming pays, perhaps; but it is never a pleasure to those who inhabit it, if they possess any of the finer sentiments of our nature. It is not always the best place to make money by farming, for he who has the trees will have the grass crops; he who has the grass crops will have the manure; and he who has the manure will have the wheat.

The new Forestry Report is now being distributed, and any one desiring it, by sending his address to me, will receive one by mail. It will be found to contain much useful information.

Fruit Growers' Association of Ontario.

The summer meeting this year will be held in the town of Seaford, early in July, in accordance with an invitation received from the Town Council of that place. Enquiries have also been received concerning the holding of it in Windsor, as the County of Essex is rapidly reaching a foremost place among the counties of Ontario in fruit culture. The officers of our Association are pleased to receive such invitations at any time, and other things being equal, will try to visit each district sending in an invitation in the order in which their invitations are received. These should either come from the corporation of the town, or from the officers of some organization, such as Farmers' Institutes, Horticultural Societies, local Fruit Growers' Associations, etc., who will take an active part in working up a local interest in the meeting.—[Can. Horticulturalist.]

Black Knot.

(Continued from last issue.)

But the knife and fire should not be spared until the fruit is gathered and the leaves fall. Like many another fungus, black-knot has two kinds of spores—a summer spore that grows on little filaments above the balls, and which crowded together give that dark green felt or velvety appearance to the vigorously growing knot. Indeed for some years this was supposed to be a different fungus and was called cladosporium. On sections of black-knot taken in winter, and put under the microscope, fragments of these filaments will be seen, but the summer spores (fig. 7 in last issue) that were in the little bags at the top are all gone. These do not likely survive the winter, but doubtless contribute very largely to the spread of the fungus in the summer. A similar phenomenon—the production of summer spores distinct from winter ones—takes place in the ordinary rust of wheat, and in many other parasitic fungi. The practical lesson this knowledge conveys is that any fruit-grower who wishes to save his trees must be constantly on the alert for signs of black-knot, and promptly on its appearance cut it out root and branch. If a thread of the mycelium ramifying through the soft bark escapes, it will, before the end of the season or in the early part of the next, originate a new outbreak. If time cannot be spared to prune the trees oftener than once a year, the best time to do that one pruning is as soon as possible after the leaves fall, taking particular care to burn every chip of the prunings. In the parts of Middlesex, through which my duties lead me to travel, a plum tree in fruit is very seldom seen, and that only in the orchard or garden, whose owner has been constantly on the outlook, knife in hand, for the appearance of the fungus. In the same district I believe ninety per cent. of the cherry trees are dying or killed by the black-knot, entailing incalculable loss of a delicious and wholesome fruit. The timely and heroic use of the knife, with burning of the cuttings, would have saved us the cherry. I do not think any other effective remedy has been discovered. I tried on some plum trees in my own garden a saturated solution of sulphur and lime* prepared by Professor Saunders, the effect of which, if I examined it aright, was to arrest the cladosporium growth, but not to kill the

* This preparation is sold under the name of Itch solution, (or Vlemnick's). It might, if diluted so as not to injure the host-plant, prove an effective fungicide in the case of mildews and blights.

spheres nor even to check the spreading of the mycelium where the knife was not used.

The knot that grows on the plum is doubtless identical with that growing on the cherry. Under the microscope not the slightest difference can be detected. It may seem strange then, that when the plum was destroyed by its ravages the cherry generally escaped, but not more strange than that of two varieties of wheat growing side by side, one is badly affected by rust, while the other is hardly touched. Necessary measures to the restoration of profitable cultivation of the plum and cherry demand the cutting down and burning of all hopelessly diseased trees, and the vigorous pruning of all affected branches of others, not only of such as are enclosed within orchard and garden fences, but of the wild ones growing in woods and hedge-rows that are fostering the deadly parasite. And deadly it is, for it not only surely kills the tree on which it grows unchecked, but also frequently causes severe illness of those who eat the fruit of badly affected trees.

Poultry.

Attention to Details.

BY W. C. G. PETER.

It is a pretty safe thing to say, that all disasters experienced by poultrymen are due, directly or indirectly, to neglect. I heard only yesterday a man say (in fact it was said to myself) that he was "going out of the hen business altogether," and was now "going into duck raising." I asked why. "Well, I set two hens this spring and they both died before their chicks were due," was his complaint. "But there must be a reason," said I; "it is not natural for them to die on the nest." "Well, I guess it was the lice killed them—they were just awful; but I am going into ducks any way." Now, reader, is it likely, think you, that our friend will succeed with his ducks. I tell you emphatically, no! and my reason for speaking of this is that so many blame their luck for their want of success. Now if there is a business where luck has no work to do, it is in poultry-keeping. No doubt our friend referred to will pay more attention to his ducks just to prove himself right—that he has more luck with them. I hope he may have, for the sake of the ducks. But it will not be his "fate" doing it, of that he may rest assured.

Are you cleaning out your poultry houses, brother poultry keeper? I hope so. And do not forget the perches, remove them and give them a good brushing with coal oil, and also brush the rests bearing the perches, with the same, and plentifully too. Another fruitful source of disappointment is, that those who keep poultry do not take the trouble to get the best returns possible for their poultry produce, nor market it in the best possible condition. The ordinary poultry-keeper sells his eggs and chickens at any time, regardless of the state of the market. He don't bother about it. But just as he is about ready to start somewhere, his good wife calls out, "just wait till I see if I've got any eggs, and get me sugar for them." Then, with the help of the youngsters, she hunts the barn and stable and "scars up" a few dozens, not over clean, not over fresh eggs. Or if it is chickens she has to sell, she gets up "airly" in the morning and scalds the skin off in her hurry to get them ready by the time the team goes to market. And so the dirty eggs, the blue bodied half skinned chickens, (so disgusting to a would-be purchaser) find a

slow sale, they fetch little, because they were not sent to market in the best possible condition to bring a high, or at any rate the highest, market price. But let butter be advancing only one cent per pound, and what a difference it makes; who so careful to have it of the best value, who so careful to "scour the churn," scald the pans, pack the butter cool, and even put cool leaves round each roll to keep it nice for market, as this same careless poultry-keeper. Now, the trouble attending poultry keeping is infinitely less than dairying, and quite as profitable, and a great deal less laborious, too; and if our farmer wives would bestow one quarter the care on poultry that they do on their dairy produce, the odds would be greatly in favor of the now-despised poultry yard. Who wants to buy a dozen dirty, stale-looking eggs, or a torn, badly-dressed, half-scalded chicken, with a crop full to bursting? No one! But I venture to assert that a few dozens undoubted new laid eggs, a nicely dressed, plump, yellow skinned chicken, will be absolutely clamored for. They are all in demand at any time, and at high prices, in fact at such an advance that it will not be deemed true, should I venture to state it. Now, I trust some of you who read this will try it—try and gather your eggs daily—keep them cool and in the dark till market day; if any are dirty, wash them. Keep your birds without feed at least one day before killing them. Pluck them dry; and if they, both birds and eggs, are not in great demand every time you go to market, then I do not know anything about poultry.

Pour enough kerosene oil over the corn you give your fowls to make it glossy, once a week, and they will not be troubled with colds, roup and kindred diseases, half as much as they will if let go without.

It is unwise to use pullet eggs for hatching unless they are fully one year old, and even then stock from the same birds will be larger and more vigorous from the eggs laid the second year.

Our North-west Enterprise.

Believing that few of our 100,000 monthly readers know or realize the greatness or value of the Canadian North-west, as a home for the agriculturist and stockman, we have sent two thoroughly practical and reliable assistants, viz., Mr. Thomas Weld, who has been on our staff for a number of years, and is one of our best men; and Mr. F. W. Hodson, our assistant editor, who is widely and favorably known among the stockmen and farmers of Canada and the U. S. A., as a successful farmer, breeder and importer, and a well-known writer on agricultural and stock subjects. These gentlemen will spend the summer in Manitoba and the North-west, and will give just such reviews of the country as will be useful to the practical farmer. Parties owning large tracts of land, important farms or ranches, which they desire reviewed or illustrated, should telegraph or write us at once.

Much practical and reliable information will be given concerning the "land of promise," during the next eight months. What is written may be relied on, as our men are honest and know their business.

Standard-Bred Trotting Stallions.

We take great pleasure in calling attention to the advertisement of Messrs. J. D. O'Neil, V. S., and Donald Ferguson, in this issue. They recognized the need of fashionable and standard-bred stock to cross with our mares, to meet the demands of the market; and went to Kentucky in April, 1888, and spent some time visiting the famous stock farms of the Lexington district, and purchased three highly-bred standard stallions; Moorelight 9887, Sardine 8004, Abelard 1846. Moorelight, foaled 1885, is by Twilight 315; dam, Lady Carr (dam of Ambassador, 2.21 $\frac{1}{4}$; sire of five from 2.15 to 2.30; Aldandre, 2.26 $\frac{1}{4}$; Strathblane, 2.34 $\frac{1}{4}$; trial, 2.30; Allan Clay, trial, 2.29 $\frac{1}{4}$, and Lady Mark, a promising filly, in training for the grand circuit this year) by American Clay 34. Twilight, by Hambletonian 10; dam, Mary Hulse (dam of Charley Chaplin, 2.21 $\frac{1}{4}$), by American Star 14. In point of breeding he ranks among the highest in the land, having in his veins the most potent-producing blood known to breeders, and inherits it direct and close up through two of the greatest representative mares of the two greatest brood-mare families.

Moorelight is a horse of grand size, handsome carriage, high spirit, and great substance of both bone and muscle. He stands 16 hands high, and in color is a rich dark-brown, with a coat of satin-like gloss; star; snip, and a little white on all four feet. He has a cleanly-cut, shapely head, fine crest and neck, perfectly fitted into a pair of oblique shoulders; his back is remarkably short, while he has great length of belly line; his coupling is smooth and of the strongest, and his quarters are deep, broad and powerfully muscled inside and out; his barrel is full, well-sprung and closely ribbed up; his legs are of the best, clean and cordy, and, like his joints, broad and flat, while his feet we do not think could be improved upon. He is very intelligent, quiet and sensible, and afraid of nothing. Moorelight has never been trained for speed. He is a large, open-kalped colt, and his owners deem it unwise to hurry him. He was shown at the Western Fair, London, last fall, winning first prize over twelve competitors, and was awarded diploma for best roadster stallion of any age. They propose driving Moorelight easily this fall, and intend training him next year for a record, when they are confident he will add one more to Lady Carr's 2.30 list. To see him in exercise will convince anyone that he is a trotter.

Sardine, foaled 1886, by Socrates, four-year-old record, 2.34 $\frac{1}{4}$, beating Lucille Gold-dust, who afterward got a record of 2.16 $\frac{1}{4}$, dam by George Wilkes, Socrates, by Hambletonian, dam Lady Falls (dam of two in .30), by American Star. This horse is of the Wilkes type, and is the favorite with many, though not so large as the half-brother of Ambassador, 2.21 $\frac{1}{4}$. He will give a good account of himself, as there is a look of action, power and endurance about him, which seems to say that he will trot fast and last to the end. He is a closely knit, elegantly proportioned, clean cut and finely moulded horse, a splendid bay and has a beautiful coat. His legs are of the best quality of bone and sinew, and has a grand head, and is very docile and intelligent. His gait is perfect, smooth and frictionless, grand action, and is a trotter, sure; and we think that any person who sees him will be convinced that he is. His breeding tells its own tale of speed, inheritance and staying qualities, which he will certainly transmit to progeny, as he comes from families that breed being a trotter and is sired by a trotter that has sired trotters, and his dam being by the greatest speed-producer and out of a trotter.

Abelard, foaled 1881, by Mario; dam by Almont; Mario by Sentinel, dam by Pilot Jr.; Sentinel, 2.29 $\frac{1}{4}$, sire of eight in 2.30 and the dams of three. This is a great showing for a horse that trotted for a record and died at ten years. Almont is the sire of thirty-three, with records from 2.17 $\frac{1}{4}$ to 2.30, and divided the honors with George Wilkes in Kentucky. Abelard's grand-dam is by American Clay, the great sire of brood mares. She is the dam of Capoul, 2.28, which is the sire of five better than 2.30. Alice Clay and Rose Clay, Abelard's first and second dams, are two of the highest-prized brood mares at the famous South Elkhorn stock farm, and their produce are held at high figures. Abelard's third dam is by Downing's bay Messenger, sire of dam of Clark Chief 80, sire of dam of Phallas, 2.13 $\frac{1}{4}$; Majolica, 2.15, and Wilson, 2.16 $\frac{1}{4}$. Abelard is dark-brown, and is, individually, a grand horse. He has unusual ranginess and massiveness of body, low to the ground; short back; long, abdominal curve; large barrel and girth; broad hips, deep flank; deep hams and very full chest; oblique shoulders; fine, resolute head; handsome neck; the best of legs and feet. He is a horse of great power and vigor, and presents a very spirited appearance, and has an excellent disposition.

All the above horses can be seen at their stables, 347 Talbot street, London, Ont., where Mr. Hiram Shane is in charge, and who takes a great pleasure in showing visitors this grand collection of high-bred stallions.

Subscriber, Campbellton, writes:—Will you give me the name of a firm in London that manufacture hand force-pumps? Answer.—In reply to our correspondent, we may say, that the pump you refer to is manufactured at 245 Dundas street, London, Ont., where this firm have the sole right to manufacture Brooks' Champion Force Pump for Canada. They have a double cylinder, so that you can throw a steady stream and spray evenly. They are just the thing you require for the purpose. They are cheap, and can be obtained for \$3.50.

Secretaries of agricultural societies should send us the date of their respective exhibitions, and their own address, at the earliest possible moment. They will be published as received.

Family Circle.

The Coquette.

BY HOWARD HALL.

I have often wondered
Nature's use for you;
Is it that by contrast
We may know the true?

Is it that thy falsehood
May a background be
To some nobler sister
Travestied by thee?

Pretty colored insect!
Soon your wings are soiled,
All your arts abortive,
All your fawning foiled.

Should I stay for scolding
What so soon is low—
Shrunk to dust and ashes?
Laugh and let her go.

Dross and dust of woman,
Tricky, trivial toy!
Trust aside by manhood—
Playing for a boy.

Fill thy little station,
Walk thy narrow ways:
What art thou so mangle
With my earnest days?

Through my choral fancy
Time's wild music rings;
Should my words be warring
With such little things?

All her play of glances,
Lids that shade or show—
All her change of color,
Blushes come and go!

All the little shiftings
In this shallow sea,
Surging and subsiding—
What are they to me?

Kinder eyes shine for me,
Truer lips I taste,
And my warm embraces
Press a gentler waist.

Take these careless couplets,
Captured hit-and-miss!
Every little trifle,
Ponder over this.

INCAPABLE.

BY LILLIAN GREY.

CHAPTER I.

"She's no suitable wife for you, Silas. I should think you'd see that. Your father give you the creek farm on condition that you pay off the mortgage, an' you want a help-mate to do it, an' not a pretty doll that can't do nothin' but sing an' play, an' paint, an' chatter furrin' languages, an' mercy knows what other foolishness!"

"Why, those are accomplishments, mother, and only add to her attractions in my eyes."
"Well, you may think so now, but you'll find they ain't equal to bein' a good cook and butter-maker. I've nothin' agin' the girl, Silas, only she ain't the right one for you. Bein' brung up a minister's daughter, she's always been made a sight of by everybody, an' invited here and there, and yonder, whenever she wasn't to school—why it stands to reason that she don't know no more about farm work than a butterfly; nor cooking either."

"Well, perhaps not; but she can learn. She's wonderful quick at learning things, and so handy."
"Yes; you'll see how she'll take to milkin', cookin', churin', an' feedin' chickens an' turkeys, an' so on."

"The young man grew thoughtful. It did seem beyond all reason to expect these practical duties of the delicate, lady-like girl, whom he really loved; but with the blind comforting assurance of youth, that things are sure to come out right somehow, his face lost its momentary anxiety, and he said coaxingly:

"Now, mother, if she and I are suited, why need you complain about it? We're willing to risk the future."

"Oh, it's no use a-talkin', of course. I knew that fore I begun. Young folks know it all, an' won't hear to no advice. Mirandy's nice, but she's as incapable as a child; and you've always been used to a comfortable home an' good meals—if I do say it myself; an' it will come tough to you to eat soggy bread, an' waxy batter, an' lumpy cake an' rilly coffee, an' all such onrelishin' things."

"Why, Mirandy's mother can cook; she gets up real good teas Sunday nights—good as I'd ask for."
"Law, yes; she's had experience; but her daughter's been took up with other thing an' ain't had no chance to learn, even if she'd a-wanted to; an' here you're plannin' to be married so sudden, there ain't time for nothin'."

"Well, you see I don't want her to go away with her folks in the spring, and if I am going to take the other farm, why that's the time to begin with it.

It will be so near that you can come over often and show Mirandy a little, till she gets the hang of the work."

"Yes, I calculate I'll have to oversee, an' likely do the heft of the work, an' so have two families on my hands instead of one—old as I be. Ah, well!"

The tenth of March saw the union of Silas Warren and Mirandy Ross. They were married in the village church by the bride's father, and a pretty bridal it was, everybody said. A reception followed at the parsonage, and the young couple were speeded on their wedding journey by a host of good wishes, and the time-honored rites of rice and slipper throwing.

The middle of April found them settled down in the farmhouse of the creek farm. The young wife's father was removed to another field of church labor, so far distant that it was a great grief to both mother and daughter. The farmers' girls smothered their regrets that the minister's daughter had captured handsome Silas, and turned their girlish thoughts elsewhere, while their capable mothers waited in serene expectancy to see how Mirandy would manage as a farmer's wife.

At first all was delightful. The respective mothers vied with each other in supplying the young couple with the products of culinary skill. Loaves of snowy bread, rusk and frosted cake, cans of fruit and cups of jelly, pickles and pies, were daily arrivals.

There is a joy and pride and exquisite delight—impossible to describe—in setting one's own house and belongings in order for the first time, that is unlike anything else in the world; and a fair little housekeeper sang light-heartedly about her work as she draped her pretty scrim curtains over the small paned windows, and arranged her wedding bric-a-brac to suit her fancy. The newly-papered walls were brightened with her own paintings, and the dear old piano furnished one whole side of the little parlor.

Silas and his wife were genuinely happy; there could be doubt about that; and if mortals could only remain in a state of contentment without this incessant routine of eating and drinking, domestic skies might be comparatively cloudless. But that time will doubtless come in with the millennium; and so in this new house, as all others, came up the constantly-recurring problem, what shall we have for breakfast, dinner and supper? The helpful mother moved far away, and the mother-in-law thought it was time for "Silas's wife" to begin to find out what she was good for, and his father being disabled with rheumatism for a few days, she had a good excuse for staying at home, and left the young people to themselves. Shortly the bread gave out, as it has a habit of doing. There was no friendly bakery within reach, so Mirandy made her first attempt. She had cooked diligently under her mother's direction during the short time before her marriage, but that was very different from depending on her own inexperienced judgment. However, there was no other way, and armed with a cook-book and a package of yeast cakes—warranted to raise anything—she set hopefully to work. That night while Silas was gone for the cows, she dug a grave in the rear of the garden and buried within it the result of her day's labor—tears and smiles struggling for mastery.

That night the young housekeeper had toast for supper, and for breakfast she made biscuit that were passably good, and again made bread. She was almost sure that her failure arose from her having the sponge too hot at first, so she went to the other extreme and started it so cold that the process of raising was very slow; but the loaves finally came out of the oven looking quite respectable. Silas might have found occasion for the time-honored remark, "it ain't as good as mother makes," but he did not say it. He was very patient with his incapable wife, more so than she was with herself, and many secret crying spells did she have over refractory pies and obstinate puddings, for they never seemed to come out just right, unless by accident.

But when the day's work and worry was over, and Silas and she opened the dainty little parlor, then care was forgotten. The buoyancy of youth asserted itself, and as the young husband listened to his wife's brilliant music, and surveyed the landscapes and other creations of her magical fingers, he congratulated himself on gaining so accomplished a wife.

Sometimes he hummed a tenor to her pathetic rendering of "Annie Laurie," or "Robin Adair"; sometimes they read, but always they talked, and they had such a world of things to talk about, and summer evenings are so short.

But every morning music and its accessories retired into the back-ground, and toil came to the front.

"I wish I could have a hired girl," Mirandy said once to her husband's mother, who was again a caller.

"For the land's sake! What would the neighbors say?"

"Why should they say anything? It don't concern them."

"Well but they'd talk about it; only you and Silas to do for, and the hired man only here to dinners. What under the sun would you find for her to do?"

"Why, the dairy work, and the heavy part of the housework. Oh, there seems to be so much to do all the time."

"Dear me! Your work's nothin' but play to what I've done some years. I've took care of ten cows and fed three hired men weeks an' months right in hot weather, an' had an' old man an' children to wait on besides."

"Well, I couldn't do all that to save my life.

"Nobody knows what they can do till they try. Silas has got a mortgage to pay off on this 'ere farm, an' his expenses hadn't ought to be any heavier."

"But if I had time, I think I could give lessons in music, and perhaps painting, and earn enough to pay a girl's wages and probably more, and it's easier."

"Hired girls is dreadful expensive; they break and destroy like wild horses, and there's their board and bed to be found, too. I hope, child, you ain't said nothin' to Silas about it, 'cause he's that easy he'd say yes, whether it was wise or silly. An' I know folks'd talk!"

So the matter was dropped and the little woman plodded valiantly on, while the days grew long and hot. The pretty yellow chicks would persist in dying in spite of her tenderest care, and the marauding young turkeys lived to grow saucy, and led her many a long chase. The pigs and calves were blessed with unending appetites, and persistently called to be fed in and out of season, and she humored them until they were spoiled. In the spring, Mirandy's father suggested that water be brought into the kitchen, and Silas promised to see to the matter as soon as the new wagon house was done.

But the building cost more than he expected, and the water still remained in the bottom of a deep well in the farthest end of the yard. He always thoughtfully filled the water pail whenever he saw it empty, but every housekeeper knows what innumerable pails of water are consumed in a busy forenoon, and can perhaps recall the look which a man when he comes home to dinner will jerk up an empty pail placed suggestively in his way, and the aggrieved tone in which he says: "Why, I brought you a brimmin' pailful the last thing before I went away this morning!"

CHAPTER II.

The last day of June was very hot. Mirandy had chafed and ironed in addition her other work, and when the dinner work was finally done and the house in order, she sat down to write to her mother; but her hands were hot and swollen, and trembled so she could hardly guide them, and her head ached too, so after a few lines she put the paper by till a better time, and she was in a more cheerful mood; for never had aught but the bright, happy side of her life gone into her home letters.

She went into the parlor, and selecting a favorite book of poems, decided to spend an hour or two on the lounge, resting both soul and body; but on going to the window to let in a little more light, she spied Mrs. Warren's stout figure surmounted by a gapping blue sunbonnet, coming along the field-path between the houses, for fortunately, or unfortunately, the farms joined. She walked briskly, unmindful of the heat. "No rest for me now," thought young Mrs. Warren, as she regretfully replaced the book, and darkening the parlor went back to the living-room and picked up a bit of sewing. Mrs. Warren, senior, did not approve of parlors being used except on special occasions.

"It's pretty middlin' warm, ain't it, Mirandy?"

The visitor hung her bonnet in the entry as she came in, and settled herself in the big rattan rocker, with a complacent look around the tidy room.

"What luck did you have with your butter today?" she asked, after a little chat about other things.

"Oh, I think it's quite good. We'll go and see it soon; I've got to work it over once more. It was a long time coming though. Silas churned as long as he could stay, and then I finished it."

"Dear me, how it must have hindered him about his own work. I seen splendid strawberries as I came through the medder. Silas is dreadfully fond of berry short-cakes. Made any of em yet?"

"No, I haven't. I don't know how."

"Law, it's easy enough to learn! If you'll jest run out an' pick the berries, I'll stay an' make one for supper an' show you how; an' while you're gone I'll work up the butter for you, an' pack it down."

So the daughter started for the seething hot "medder," and the mother went into the cool milk-room.

"Quite fairish butter," she said to herself, as she salted it to her experienced taste. After that was finished, she looked around to see if anything else required to be done, and accidentally looked into the cake box. It was empty.

"Dear me, no cake for supper! How slack! I wish I'd brought over some of my fresh ginger cookies for Silas; he's so fond of 'em. It does seem as if Mirandy might keep such things on hand, instead of settin' down so much."

She came in finally with the berries and red with heat.

"The land, child! Why didn't you hull as you picked?"

"Oh, it was so hot out in the sun and such slow work!"

"Yes, but sunshine is called dreadful healthy. I always hull 'em as I go along, 'cause it saves handlin' 'em over. But never mind, I'll turn to an' help do 'em."

"She don't offer to stir up a n'lasses cake nor nothin' for supper," thought Mrs. Warren, as she deftly mixed the short-cake. "Well, if it don't worry her, it shan't me!"

But when the supper-table was ready, it bore beside the luscious berry short-cake, a loaf of sugar-cake, which on eating, proved to be as nice as Mrs. Warren's.

"Thoughtful creetur' after al," she mused to herself. "I wonder where she kept it!"

Mirandy did not enjoy the supper after all. Her head ached dreadfully, but it did her good to see her husband eat, until she began to fear he would be sick.

"Silas, why in the world don't you learn Mirandy to milk?" asked his mother, as she passed the yard on her way home.

"Because I don't want her to! She does enough now!"

"It would be a dreadful help to you when hayin' an' harvest comes on. I don't know how your father ever could 'a got along if I hadn't been a capable woman. I used to do all the milkin' in busy times, an' weedin', too. I see your garden beds wan' weedin' out terrible bad."

Her parting words to Mirandy were these:—"Now child, do try an' have them short-cakes often while the berries last. You see how Silas enjoyed this one."

With this admonition fresh in her mind, the dutiful little wife hurried her morning's work to gain time to pick the berries before the heat of the day.

But the forenoon seemed to have wings, and when she came back with her pail full of the precious fruit, she was frightened to see that it was nearly noon. She flitted around to prepare dinner, but in spite of all her hurry the men had to wait for it.

Her attempt to rival the short-cake of the night before was a fair success; but the heat and work, and anxieties of the day, had again brought on a headache, so she could not eat; and even Silas began to think that such luxuries might be dearly bought.

CHAPTER III.

The long summer dragged itself away, and the autumn trailed slowly after it, bringing all kinds of work and new experiences. Canning, drying, pickling and preserving, were a worry and vexation of soul, as well as a pride and delight to the ambitious young housekeeper, and some of her jellies were exceedingly good, and some were good for nothing.

But through all her toil, the thought of pleasure to come buoyed her up; for she was to go home to spend the holidays. It was to a strange place which she had never seen, and yet because the dear home friends were there, it was home; and when the long-wished for time arrived, she and Silas set their house in order and closed it, placed the stock and outside belongings in his father's care, and started for the first visit home. How gay and light-hearted they were, and Mirandy felt as if she had grown suddenly years younger as the burden of care was lifted from her unaccustomed shoulders. They received a merry welcome, and the time speeded by only too fast, filled with holiday cheer and doings.

The mother and daughter also found many hours for quiet talk. "If I could only work as easily as you do, mother!" said the young wife one day. "Cooking don't seem to worry you, any I'm in such a fever of anxiety all the time for fear things won't come out just right, and I get so tired that way."

"There's no use worrying over things, dear; you get confused and can't do near so well; but I suppose you can't help it, sometimes; but I shall teach your sisters housekeeping first, and let accomplishments come after, for fear like you they may only have time to acquire one. I expected to have you at home two or three years at least, after your lessons were over, and make a practical little woman of you, but you and Silas demolished that plan in spite of me."

Visits, however pleasant, must come to an end; so the young people returned to their own home. The trip had done the wife good in more ways than one. She felt so rested and encouraged, and she had also gained some of her mother's repose and confidence, and every week saw an improvement in her cooking. She had no out-door duties now, for her husband had time to attend to the poultry, and the milk had grown beautifully less.

The social instincts of the community now came out in full force, and not a week passed without one or more invitations to visit, and finally the young housekeeper herself gave a "high tea."

What a riotous hours of planning, and what busy hours of preparation it caused; also what hours of suffering with nervous headache when it was over. But she had one supreme satisfaction. The neighbors said, one and all, "They was beat to see how nice everything was!" and Mrs. Warren herself, said, "You done remarkably well, Mirandy, for a new beginner!"

Winter passed, and with March came Mirandy's mother for a three weeks' visit. How quickly they passed, those busy, happy days! A quilt that was pieced the summer before, was rot on the frames and quilted off; and then a constant succession of visits received and returned, for the former pastor's wife had many friends who were delighted to see her.

After this pleasure was passed, next came the doubtful pleasure of house cleaning. The old house needed a great deal of repairing and remodeling to make it convenient; but Silas was growing ambitious—not to say penurious. He hoped by strict endeavor to pay off the mortgage, and then next year, perhaps lay by something toward a new house, and when his wife suggested a little present outlay, he said:

"What's the use in throwing away money on this old shell; getting window blinds, laying water pipes and all that, when by waiting a year or two we can have the whole new, and build all these improvements in. I want to get out of debt first!"

So the patient little woman said no more, whatever she might have thought, and things went on as they had the year before, only there were now six cows instead of four, and one man to board all the time; for Silas had taken some land to work on shares, and seemed intent on making money. But his wife's strength did not increase with the increased demands upon it, and as the hot weather came on she dragged herself about her work in a

way pitiful to see, and her mother-in-law found many occasions for the old time remark, "Silas's wife is so incapable; he's got a hard row, jest as I told him!"

The piano was rarely opened now. Nights, the poor girl was too tired, and when on Sunday afternoon she tried to please herself with the dear old music, her fingers seemed to have lost their cunning, and were clumsy and sore from hard work. So her attempts savored more of disappointment than pleasure; and Silas did not seem to care for her playing as he used to do, either. With him the honeymoon had waned. He seemed perfectly contented now to sit down after supper, and talk with his hired man or a neighbor, about the probable yield of the rye field, and the prospective price of corn and oats, while his wife washed the supper dishes and milk pails, and prepared things for breakfast.

Silas had bought a mowing machine, and was making money, and all other aims and purposes were merged in the one pursuit.

"I tell you, Mirandy, we'll be rich folks some day!" he would say exultantly. "I'm making a good pile this year, and in a few more, we'll be above board. Then you shall have a nice house, and nice things in it, too; and as good clothes as money can buy. I mean to have a carriage an' span that'll make folks open their eyes, too."

But sometimes, she was not as ambitious and enthusiastic as he wanted her to be.

"Don't you care for nice things, Mirandy?"

"Of course, Silas; but it seems as if I would rather have rest than anything else."

"Well, when we get well off you can rest all the time; work before pleasure, you know, is the rule."

"Yes, it's all work now-a-days, there's so much to do."

His conscience did stir a little as he saw how frail and shadowy she was growing, and he remembered the water pail—which seemed always empty, and the slop pail—which seemed always full unusually well for several days after such a talk.

But, sometimes when he came home late after a hard day's work, and had to finish milking after dark, the wish would force itself into his mind. "If Mirandy was only as strong and capable as mother is! But she does pretty middling well, and she is really getting to be a prime cook!" he said complacently to himself, as he remembered the flaky biscuit, pressed chicken, and lemon jelly that graced the supper table. "She'll make a smart woman yet!"

"Mirandy don't wear well; she's fading terrible fast for one so young!" said the neighbors, while Mrs. Warren, Senior, often told her husband: "Silas's wife didn't seem to have a spark of ambition now-a-days; he's goin' to have dreadful up-hill work with her I'm afraid, if she gives up to bein' an invalid. Then mebbe he'll think of what his mother told him! He's turnin' out dreadful smart an' go ahead though; I'm reely proud of Silas. He'll be a well-to-do man if he lives, an' don't have no terrible pull-backs; but what a pity it is that he ain't got a capable wife!"

One August day Silas came in at supper-time to find no supper ready, and the clothes which were washed that morning were yet swinging on the line. Miranda usually took them down, and ironed some of them in the afternoon, like the neighbors, but she was nowhere in sight. It was not like her to neglect her duties in this way.

Silas walked through the house, which seemed oppressively silent and empty, and finally opened the door of the seldom-used parlor. His wife lay quietly on the lounge with her slender, incapable hands clasped together. He advanced a step or two, and called her name. She did not spring up half-awake, and wholly frightened lest she had overslept, as she usually did from her morning slumber. It was very strange she should be so indifferent.

He stepped a little nearer, and asked faintly: "Mirandy, are you asleep, or sick?"

She did not answer his frightened question, but she was not sick—no. She had meekly and uncomplainingly slipped away from the life that had proved too hard for her, and had gone to the land of infinite rest.

Her husband was stunned with wonder, grief and remorse. Of what avail now were those plans for the future—the convenient house, pretty dresses and leisure that was to be? Another—more merciful than he—had lifted her burdens, and given her rest.

The doctors called it "heart-failure," and the neighbors were shocked and said sadly: "What a mysterious dispensation of Providence!" And even Mrs. Warren bemoaned her.

"Poor little thing! She meant well enough. Mirandy did, but she was too frail for this world; though I never dreamed of her going off so sudden, an' all alone, too. Well, the Lord's will be done! But it's a terrible blow an' expense to Silas, poor boy!"

A very convenient bag to hang up in a bedroom in which to put soiled handkerchiefs, cuffs, collars, etc., is made of a fancy towel. Cut it in two pieces, one enough longer than the other, to form a flap of the fringed end to hang over the opening. Turn the shorter piece so that the fringed end will come at the bottom of the bag. Tack a stick across the top to keep it straight, and hang it up by a pretty ribbon fastened with a bow at either end of the stick. The flap end of the bag, and the centre of the shorter piece, should be worked with some pretty, conventional design in outline stitch.

Minnie May's Dep't.

MY DEAR NIECES:—Every machine requires a rest; and while in use it must be oiled, to prevent friction, and make it last longer. During the heated months, when our time and strength are taxed to the utmost to accomplish all, let us consider how we can secure that rest, which we will call the lubricator, which will enable the human machine to run smoother and last longer. We should try to make Sunday what it was set apart and intended for—a day of rest. Our horses, and the men of the family—even the old house-dog—seem to take it easy on that day; but there is no rest for us. The routine of house-work goes on as ever. It is pleasant to see friends on that day; but we are making a grievous mistake in making strangers of those friends; let us treat them as one of our family, as, indeed, they are for the time. Make no extra preparation; and I sure they are not worthy to be called by the sacred name of friend if they do not appreciate the change of treatment. Seeing one's friends is delightful; and living apart from society has a narrowing influence upon everyone. But we make a labor of a pleasure too often. Monday, in all well-regulated households, is the day on which the family washing is done; and shall I say that in all well-regulated households there is a washing machine? It does the work in half the time, and at an immense saving of strength and temper; for stooping over a tub-full of foul linen for several hours has not the most sweetening or refining influence. If the clothes are put to soak while you wash up the breakfast dishes and restore the kitchen to order, then have a large pot of boiling water, with a bar of soap dissolved in it; pour this over the clothes, and rub clean. You need not touch them with the hands; the heat of the water makes them clean very readily. Then the wringer does its work. Rub them through another hot water, without soap, and hang to dry. Pin securely on the line. If the weather is fine, when dry, take the clothes-basket to the line, fold all such articles as sheets, pillow-cases, towels, night-dresses, and underwear of all sorts; place at once in the bureau drawers, without ironing. And there is still enough to give you several hours' warm toil, such as table cloths, table napkins, dresses, pinafores, shirts, cuffs, collars, &c. Can we not avoid some of the sweeping and dusting, too? for we should think and plan how to save strength. When we learn to appreciate a nap in the afternoon, we will take it regularly. Just after the dinner dishes have been cleared away is the best time. Stretch on a sofa or bed; think of something pleasant for a few minutes, and away you go to the land of Nod. Half an hour's sleep will fortify you for the rest of the day. Economy of strength is necessary, for you will soon learn that strength is money; and do not neglect to do so until all the vital force is expended.

MINNIE MAY.

Our Art Prizes.

For the encouragement of artists we offer prizes of \$20, \$10 and \$5, for pencil drawings, subjects to be taken from active life or the most pleasing and useful scenes in rural life. Prizes to be awarded the last day of the Provincial Exhibition in London, 1889.

Bantams.

There are no more agreeable or profitable pets than a flock of bantams. If treated kindly they are quite tame and will fly on the shoulders, arms, or head of the attendant, and perch there proudly until removed. There are several varieties, all of which have their admirers. We give an illustration of the Japanese and Silver Sebright varieties. This illustration is not like most pictures, made from an imaginary bird, but from life, the birds being owned by Mr. Richard Oke, Brough's Bridge, just outside the limits of this city. There are no varieties more popular at the present time.

On the left are the Japanese. They have clear, short legs, a white body, and a very upright or squirrel tail, which is a dense, bronze black; the sickle feathers and coverts having, however, a sharply defined white edge. The combs are rather large, single and upright. On the right is the Silver Sebright, so called from having been greatly improved by an English gentleman, Sir John Sebright. His carriage, like that of the Japanese, is very conceited, in many instances even more so than is represented by our illustration. His restless, lively motions, wings drooping half-way down the legs, head thrown back until it almost touches the upright tail, he looks as though always in search of an antagonist. The plumage is close and compact, and every feather laced with black, right up to the head, which on account of the smaller feathers seems darker than the rest of the body. The cock must be hen-feathered, as shown in the cut, legs blue and the beak slate-colored, earlobes should be white according to the standard, but pure white ones are seldom seen and most birds have only sufficient white to give them a blue tinge. The comb should be rose with a neat spike behind, pointing rather upward, free from any depression and rather livid in color. The eyes should be a dark red. Bantams are usually fairly prolific layers, and their friends claim they are as profitable in proportion to the food consumed as the larger varieties. They should be hatched in the month of June or early in July, as they do not grow so large and coarse, and the feathering is generally nearer the mark than in earlier hatched birds.

What to Wear.

"As a rule plainness in outline at least will be a distinguishing characteristic of the season's styles. Yet so wide is the latitude allowed for the exercise of individual taste, that dresses of the past two seasons, with slight modifications of the draperies, will still be within the pale of fashion."

The Princess of Wales appeared at a State ball without a suspicion of a bustle or "improver" of any sort. So we may safely look upon the bustle as doomed to go. Basques are still worn in preference to waists and all are elaborately trimmed, either in vest form or with revers, some device to cover the buttons. The collars are still worn high. Green is the prevailing color, and is seen on every bonnet, lovely in its soft fresh tints, but not so very becoming to all faces. Wise women, who have a suspicion of sallowness in their complexions, will do well to let green alone and admire it upon somebody's else's bonnet. Small wraps of all materials are seen, and very dressy they are. Made either of velvet,

plush, satin, silk, jetted lace, or less expensive material, they add just the necessary warmth about chest and shoulders, without the weight of a larger mantle. Dress fabrics were never more beautiful from the soft self-colored cashmere to the rustling silks and satins. All-wool goods, in all shades and prices, come in a variety of designs. Printed calicoes appear in lovely colors—dainty white and cream grounds with sprays of buds and leaves, looking equally pretty as China silks. In fact, any taste or purse can be readily suited. The ugly Empire veil with a pleated border has been discarded by ladies of good taste as very disfiguring. Why should we tie up our faces in bags of net? A small veil worn just above or over the eyes is enough to keep the hair tidy.

"Gentlemen."

I can scarcely help being amused at an article in your May edition, entitled, "Gentlemen," by "Snowdrop," purporting to be, I suppose, a supplement to "A Manitoba Reader's" letter in April number, but which is, in reality, a severe denunciation upon farmers and their sons. The great cause of complaint in this lady-like epistle is, "utter lack of refinement, courtesy, and thoughtlessness among farmers, as



JAPANESE AND SILVER SEBRIGHT BANTAMS.

regards their treatment of the female sex." Now, Mr. Editor, while I can sympathize with the outraged finer feelings of a young lady under grievances of a character as described in "Reader's" letter, it seems almost incredible that a woman presumably so modest and "refined" as "Snowdrop," should make such a wholesale slaughter of farmers as to set it down as an axiom that, because some are unconsciously thoughtless, the general farmer should be dubbed as "unrefined," etc. In the first place, "Snowdrop" has made an extreme interpretation of "Reader's" letter. "Reader" innocently acknowledged that she wrote it when tired; and, at such times, everyone knows, complaints are invariably unreasonable and extravagant. I am sure she would not wish us to infer from what she has written, that farmers' sons especially are destitute of all true principles of manliness; and yet "Snowdrop" would almost have us believe so. I would like to ask "Reader" if "Burt" never takes her for a drive, or to a picnic? never brings in a pail of water? never milks her cows in wet weather? never fills the wood-box in winter? and performs numberless acts which have become so customary as no longer to be regarded as favors. I am sure she would be benefited by classifying the merits, in-

stead of brooding over the imaginary or real improprieties of her people.

Then, regarding education, "Snowdrop" very properly asks: "Why should farmers be uneducated?" Let me say, they are not. It might be that in the past many of the farmers emigrating from the Old Country, started life in this country as poor men, not having had the opportunities of receiving much education, but who worked hard to lay the foundation for their own and their descendants' present success. These men (all honor to them) may not have had the refined culture and learning so easily obtained in our day, and, possibly, were more accustomed to talk "crops" to shop-keepers than other matters; but the "sons" of these same men have taken advantage of their opportunities for a more liberal education; and, although few may have the benefits of a collegiate training, yet, thanks to our splendid public school system, cheap literature and papers, they are quite equal to conversing intelligently upon most current topics which "shop-keepers" or others may introduce. As a general rule, girls are at liberty to receive a more complete education than the boys; as, where there are several in a family, some can be allowed to attend school without causing any inconvenience, but in the boys' case there is plenty of work on the farm to keep all busy; and, generally, the brothers are pleased that their sisters can have this privilege, and are quite willing to work hard, and make sacrifices if necessary, to provide the extra expense. Then, don't you think it ungracious for sisters to look upon their less privileged brothers as "unrefined," "uneducated," etc. Seems to me, if these complaining women would exercise their functions aright, there would be less cause for this prolonged howl. But, truly, as one of Scotland's great poets inscribed:—

"O woman! in our hours of ease,
Uncertain, coy, and hard to please."

Since reading "Snowdrop's" article, I have been calling to mind all my acquaintances—not a few—and comparing the daughters with the sons in each family, in intelligence, refinement and courtesy, and I give it as an unprejudiced, actual fact, that the boys, instead of being "selfish, unrefined boors," will in almost all cases equal, and in many surpass, their sisters in these lines; and I further declare that I know of some families where the boys have made connections socially that it would be hopeless for the girls to aspire to. And while they may not in some cases have as finished an education as their sisters, they are still able to so utilize their knowledge as to hold their own in any of their sisters' society. The fact is, a great many girls are getting above farm work, as instanced by so many of them who will sooner form an alliance with the public school teacher, or a third-rate preacher, than accept an honest, hard-working, and, perhaps, less polished but, nevertheless, true-hearted farmer's son.

I hope "Snowdrop," if she has any connection with a farmer or his sons, will calmly reflect upon these few facts; and if she will only take into consideration all the circumstances, and not judge too rashly, she will yet find cause to be proud of farmers.

YOUNG FARMER.

Little Bessie (accustomed to see baby creep)—
"Oh, mamma, come quick; baby is standing on her hind legs."

PRIZE ESSAY.

A Breakfast for a Farmer's Family for Seven Days, and How to Prepare the Same.

BY MRS. JAMES DAVIDSON, CAMBRONE, ONT.

It has been said by one writer, that "there is no better test of good health in a woman, than to be able to eat a good breakfast; and improved on by another who said, "except to be able to get up in the morning, build a good fire and cook it." Well, whether this be so or not, there is certainly no one thing more essential to the satisfactory progress of farm work than that of having breakfast well and promptly prepared, so that the men may be able to avail themselves of the cool hours of early morning for the work of themselves and their teams.

Breakfast, as well as other meals, ought to be varied, to suit the seasons; as one that would be very tempting on a cold, frosty morning in early spring, or late fall, would be quite the reverse on a hot, sultry one, such as we often have during haying and harvest. The bill-of-fare, therefore, can be varied to suit the season. The preparation of breakfast should be taken into consideration while cooking dinner the day before, as there can then be enough of meat and potatoes cooked for both meals at the same time. They can both be warmed over in a great many different ways, or the meat can be eaten cold if preferred. If either or both are to be freshly cooked, they ought to be prepared, as far as possible, the night before, so they can be cooked as quickly as possible. If there is much work to be done in the morning, it is an advantage to have the table set the night before, also.

The list given is not intended as a rule, but merely as suggestions, to be varied according to tastes, circumstances and seasons. The meats can be varied, to include fowls, fresh fish, mutton, lamb or veal. Similar variations can be made in the vegetables and fruit. Eggs can be made to take the place of meat, in a great measure, during the hot weather, as they can be cooked in such a variety of ways, and are said to contain more nourishment to their bulk than any other article of food. Fruit should be used every day the year round. Where apples are abundant this can be easily done, as they are always available. Small fruits should be used freely in their season. Any article given in the list is perfectly wholesome, can be procured by the generality of farmers, and, with a good fire, can be prepared in from 30 to 45 minutes:—

SUNDAY.—Cold boiled ham, stewed potatoes, poached eggs or omelette, bread and butter, or toast, tea or coffee.

How to Cook.—Boil the ham slowly for several hours; leave it in the water till cold; then

skin, and grate dry toasted bread over it. This will keep for a long time if necessary.

Stewed Potatoes.—Wet the spider with cold water; slice cold boiled potatoes; cover with milk; when hot stir in a tablespoonful of butter, rolled in flour. Let boil up once and serve.

Omelette.—To each egg allow one tablespoonful of milk; beat the yolks well; add the milk; then the whites, beaten to a froth; pour in a hot, well-buttered pan; cook till set; a little parsley, chopped fine, or a little minced ham, is a great improvement.

MONDAY.—Oatmeal porridge, fried bacon and eggs, potatoes from previous dinner, sliced and fried in a little hot dripping; bread and butter, tea and milk.

How to Cook.—Cut the bacon as thin as possible (if properly cured it will not be too salt); fry to a light brown in its own fat; break the eggs carefully into the same fat, pouring it over them with a spoon until the white is set.

TUESDAY.—Bread and milk, hot; beef steak, broiled, or fried with onions; or a mince made of

hour; stir occasionally. Sausage cakes are much nicer than ordinary sausages, and are made by making the meat, after it has been chopped and seasoned, into little cakes, with the hands floured, and frying in hot fat. Potatoes will bake in three-quarters of an hour in a good hot oven, and are very good with sausages.

THURSDAY.—Porridge, boneless cod, mashed potatoes; maple syrup or fresh fruit in season.

How to Cook.—Boneless cod, soak over night in a warm place; in the morning put into fresh water; boil 20 or 30 minutes; make a sauce for it by mixing a tablespoonful each of flour and butter till smooth; pour on about a pint of boiling water; stir (only one way) till it boils. Garnish the fish with slices of hard-boiled eggs and pour the sauce over.

FRIDAY.—Indian meal mush, corn-beef hash, and scrambled eggs.

How to Cook.—Cut cold beef into small pieces, with cold potatoes and a sliced onion; add pepper, salt if needed, and water to nearly cover; cook just long enough to heat thoroughly; lay

slices of toasted bread on the platter, and pour the hash over it. Scrambled Eggs.—Allow to each egg one-half cup of milk and one teaspoonful of butter; heat milk and butter together; break the eggs into it; stir till it thickens, not allowing it to boil.

SATURDAY.—Cracked wheat, fried breakfast bacon, shirred eggs, boiled potatoes, corn bread.

How to Cook.—The bacon is much nicer if cut very thin and fried carefully. Shirred Eggs.—Heat a little butter in a pie-pan; put in the eggs carefully; do not break the yolks, and bake in the oven. Boiled potatoes are more wholesome than fried, and are no more trouble if they

are prepared the night before. Corn Bread.—One pint buttermilk, one heaping pint of meal, one teaspoonful soda, two eggs.

This concludes the seven breakfasts; but, of course, there are many more dishes one can have for a change; for instance, fresh fish, where it can be obtained; calves' liver, etc., make nice changes. The principal object is to have well-cooked, wholesome food, and plenty of it.

Pheasants.

Last month we gave an illustration of the beautiful Golden pheasant. This month we give the Silver pheasant. These birds are naturally timid, and will seldom lay, and scarcely ever sit, if confined in an aviary open to view, near the house. In such circumstances, shrubs should be planted to afford them seclusion, which may induce them to breed; but it will be necessary, even then, to hatch them under a hen. Bantams are best for this purpose. Pheasants, even more than other stock, require the most scrupulous cleanliness, with plenty of green food, and more animal food than other poultry. The aviary must be covered with wire netting only, or the



SILVER PHEASANTS.

the beef or cold mutton left from the previous day; boiled potatoes, apple sauce, etc. We suppose all will have bread and butter, tea or coffee, and plenty of milk for the children.

How to Cook.—Milk is sweeter and tastes nicer, if only brought to a boil, and yet not allowed to boil; then drop some bread into it and allow it to steam for a few minutes. Beefsteak broiled; heat both sides of the broiler very hot; after rubbing it with a bit of suet, broil over a fire of clear coals, turning frequently till done; lay on a hot platter, sprinkle with salt, pepper and a few pieces of butter; set in a hot oven for two or three minutes. Fried, put a little butter or dripping in the spider; heat very hot; put in your steak; turn several times; when done, slice some onions very fine into the gravy; cook for several minutes; stir in a little flour and boiling water and pour over the steak.

WEDNESDAY.—Cracked wheat, sausage cakes, baked potatoes, cold baked apples, or stewed prunes.

How to Cook.—Stir your wheat into boiling water, previously salted, and boil for half an

feathers of one wing must be cut or stripped, as it is absolutely necessary that they should have plenty of sun and air. The chicks hatch on the twenty-fourth or twenty-fifth day, and should be treated very much like turkey chicks, giving them a tight, dry, board coop, and allowing them on the grass only when quite dry and warm. For the first few days they should have ants' eggs, or hard-boiled egg, chopped fine (the former preferred). After a week, the staple food may be oatmeal dough, mixed very dry and made into pills; or Spratt's Food, varied with crushed hemp seed, and occasionally crushed wheat. The animal food must not be forgotten even for a day. Some fanciers hang a piece of meat in a warm place, and allow it to become fly-blown, and breed worms for them. Pure spring water is an absolute necessity, to prevent the gapes, which is much more fatal to young pheasants than any other fowls. While the young birds are very tender, adult birds are very hardy, and except in winter, do not require protection beyond what a few shrubs will afford. They do much better on a light, than a heavy soil. A cock and three or four hens make a very attractive aviary; and there is no doubt, that if carefully kept for a few generations, would be almost as tame as our lighter breeds of poultry.

Care of a Canary.

The first thing to do after getting a bird is to see that he is provided with a suitable cage. This may be of brass or iron wire, or wood, and never should any of them be painted. If you will watch a bird in a cage you will see him peck at the wires of the cage often; if it is a painted cage you will notice the paint off in little spots where he has been pecking, and it will take but a short while for the white lead used in the paint to do its work by killing the bird. A brass cage is also dangerous if not cleaned often, owing to the verdigris that collects in the crevices. A brass cage may be cleaned by using ammonia and whiting mixed to a paste. Rub every part of the cage with this, using an old tooth brush to get into the crevices, then wipe with a soft, dry cloth, using a dry brush to remove all the powder from the interstices. While cleaning the cage the bird should be in another cage, or, if tame enough, allowed to fly around the room. Any bird may be tamed enough to fly about the room, with a little patience, and all birds should be allowed to exercise their wings a few minutes each day in this way.

The inside of the cage should be cleaned out every day. Always have a layer of sand in the bottom of the cage. If a piece of thick wrapping paper is cut out the size of the bottom of the cage, and the sand placed on this, it can be removed each day, and the bottom of the cage be kept clean and dry. There are sand papers manufactured for this purpose, which can be bought in any bird store, and cost only a few cents a dozen. After washing the roosts, be sure they are thoroughly dry ere replacing in the cage, for if damp the bird is in danger of having sore feet. Give fresh drinking water each day, and wash out the drinking cup. Some birds will not bathe at first, and should be taught, for they never can be kept healthy and clean unless they bathe daily. While the bird is in the cage, remove the bottom of cage, and place the top with the bird on the table over the bathing dish, which should be filled with fresh water. If he

does not feel inclined to bathe, sprinkle a few drops over him, and when he feels how good it is, it will be only a short time ere he bathes of his own accord. In winter always take the chill off the water.

The plain canary seed is the healthiest kind of food for the bird, although a little mixed seed occasionally will do no harm, but should not be adopted as a regular food, as there is a seed in this mixture (the hemp, we think) which is very fattening, and the constant use of this seed in a cage where the bird has no chance of exercising will in a short time result in death. If the bird is troubled with dizziness and falls from the roost, take away the mixed seed and feed wholly on plain canary. The practice of giving a bird bits of sugar, candy, cake, etc., cannot be too strongly condemned, for aside from injuring its voice, the health of the bird suffers also in consequence. Pieces of green are always good, such as a bit of lettuce leaf, chickweed, blades of grass, and if you wish to delight the little songster, place in the cage a bunch of plantain seed bulbs. Always keep a piece of cuttle fish bone in the cage, which may be bought of any druggist. A piece of hard-boiled egg may be used with good effect.

After buying a bird do not keep it in the tiny wooden cage in which it is brought home any longer than you can help. Don't hang the bird-cage too near the ceiling, as the heat ascends and the bird may be very uncomfortable, particularly in warm weather. The spring hook is an excellent thing to use. Be careful that the cage is not hung in a draught, and if near a window, do not open the top of window unless the cage is removed. When hanging the cage outside, do not hang in draught or sun, and if in the latter, put something over the top of the cage as a shade. When carrying a bird in a cage through the streets for any distance, wrap the cage in a newspaper, to prevent the draught hurting the bird.

Regularity of Habit.

One of the most difficult of all the minor habits is to acquire that of regularity. It ranks with that of order. The natural inclination of most persons is to defer until the last possible moment, or to put off to another time, where this can possibly be done. Yet, habits of regularity contribute to the ease and comforts of life. A person can multiply his efficiency by it. We know persons who have a multitude of duties, and who perform a vast deal of work daily, who set apart certain hours for given duties, and are there at the moment, and attend rigidly to what is in hand. This done, and other engagements are met, each in order, and a vast deal accomplished; not by strained exertion, but by regularity. The mind can be so trained to this that at certain hours of the day it will turn to a particular line of duty; and at other hours to other and different labors. The very diversity is restful, when attended to in regular order. But let these be run together, and the duties mixed, and what before was easy is now annoying and oppressive. And the exact difference between many is just at this point. There are those who confuse and rush, and attempt to do several things at once, and accomplish little; while another will quietly proceed from one duty to another, and easily accomplish a vast amount of work. The difference is not in the capacity of the two, but in the regular methods of the one, as compared with the irregular and confused habits of the other.

Uncle Tom's Department.

A Little Bird Made a Nest.

"A little bird once made a nest,
Of moss and hay and hair,
And there she laid five speckled eggs,
And covered them with care.
"Five little birds were hatched in time,
So small and bare and weak:
The father fed them every day
With insects from his beak.
"At last the little birds were fledged,
And strong enough to fly;
And then they spread their tiny wings,
And bade the nest 'Good-by.'
"There's many a little home like this,
Sheltered in every grove;
To teach us how to make our homes
Abodes of peace and love."

MY DEAR NIECES AND NEPHEWS:—One day, some years ago, a man whose peculiar dress told he had travelled far, registered his name at one of the hotels at Niagara Falls. A quiet man, unattended, but carrying with him that dignity which a true object in life gives to the possessor, whether dressed in homespun or broadcloth. Over his shoulder a worn knapsack was suspended. As he passed through the society-loving company gathered there, he attracted no attention, unless, indeed, a second look, from ruder eyes, who saw not the man but the dress. It was Audubon. That man of whom my nieces and nephews have read. Where has he not travelled? What about birds—and that is but a small part—does he not know? It is said by John Burroughs, himself a most interesting writer on this subject, that "Audubon, on the desolate coast of Labrador, is happier than any king ever was; and on shipboard is nearly cured of his sea-sickness when a new gull appears in sight." Such intense love has this man for his work, that, exposing himself to all kinds of inconveniences and climates, over land and sea, north and south, over thousands of miles, he has followed the objects of his search, and given to the world the result of his discoveries.

Burroughs says, in his "Wake-Robin":—"First find your bird; observe its ways, its song, its calls, its flight, its haunts;" and your Uncle Tom is really interested to know who have been busy since last writing. The birds have been busy, anyway; and if the little bare feet have not been slower than their Uncle gives them credit for, they, too, have had their eyes and ears open. What did they see and hear? When they went for the crows, or planted the potatoes, or picked the beautiful trilliums or nepatica or the buttercups in the woods, or went to school, what lessons from the bird world did you learn, and which of you, with your clear, sweet voices, can rival the singing of the birds? Some of them, of course, do not sing sweetly; yet, which of them would we not miss? The robin, canary, blackbird, crow, hermit-thrush, or many others? No; we want them all, and to learn of more. How beautiful God has made them; and their sweet singing seems like hymns of praise to their Creator, these lovely June days. Did you ever wonder why visitants from the spirit world are ever spoken of as coming on wings? But there is more than ornithology to be touched on this time. Too busy at school just now to read up extra subjects? Well, get interested in the birds now without reading; then read Burroughs, Audubon, and everything else that is good on the subject.

Have an appetite for what you read. After years of experience, one lesson has been im-

pressed. The food eaten with an appetite for it is strengthening and beneficial; so to the mind; what is read with zest and eagerness, with an object in your reading, is remembered long, is digested and becomes part of the mind itself. Like the celebrated preacher who, in his sermon, accidentally swallowed a fly. After mental debate he swallowed it whole, and continued his discourse, and presumed that that fly went to preaching, too.

This lovely month, with its freshness of verdure, its roses, its long days of almost unbroken sunlight, its blue skies and its pleasant evenings, makes your Uncle's heart rejoice and sing with joy. What a beautiful, bright world we live in; and what must be the glory of the Heavenly home when this, the Father's footstool, is so gorgeously arrayed, and so far above our highest conceptions of beauty? Enjoy it all now, for—

"As your pathways shall divide, From the roof-tree—wand'ring wide— Memory of these morning hours, Song of bird and scent of flowers, Bleat of lamb and song of rill, Will come sweetly o'er you still, And your thoughts so yearning back O'er this simple childhood's track."

Dear children, may they be sweet thoughts of improved privileges. UNCLE TOM.

Puzzles.

1-CHARADE.

Dear Uncle Tom, I know you're tired, And need a long vacation, And so, to cheer your kind old heart, Here is an invitation. Pray let me be your advocate. And then I will advise you, To come to Sackville, small but great, "The sights" here will surprise you. Now please don't say you haven't time, And cannot yet leave London. But, dear old uncle, do this—first, Or, really, we'll be undone! Don't give your work a second thought, Be ready "in a second," Well second is this sage advice,— On having you've reckoned, Good-bye—I'll trouble you no more, In spondee or in dactyl, If you will only leave your all, And visit us at Sackville!

HARRY A. WOODWORTH.

2-DIAMOND WITH SQUARE ENCLOSED.

My first is the FARMER'S ADVOCATE. My second is on rails; and I will state My third will burn; (this statement's not my fourth). My fifth is in the north. In the word square, my first, a —, swiftly will go, (This puzzle was made a long time —) Apples and pears sometimes —, you know. The first and last words of this little word square, When read in connection (as you are aware, If to guess all the rest of this you have been able), Spell what's dug in the garden, and ate at the table.

HARRY A. WOODWORTH.

3-DOUBLE LETTER ENIGMA.

In the "land and the ocean," In the home of the free; In all "modest Canadians" As you will plainly see, In the "red man of the plain," In every "free man bold," And in "the Californian," That once did dig for gold. In fact I'm in "all good men," And in "all women" too; My whole is something, puzzlers, That should be loved by you.

FAIR BROTHER.

4-HAT RACK.

Diagram.



B to H—An organ of sight. A to I—One who appoints. D to J—without sound. E to K—Doctrine of emetics. F to L—A sound. C to E—Ancient. C to E—Showing. H to F—The Goddess of Love. I to G—Oratorical. J to L—A declivity.

FAIR BROTHER.

5-TRANSPOSITION.

Hurtt dherusc of hrate, lash sire anigh, Het rictane syrea, fo odg rea serh; Uth reror, dndwueo, hwerist ni npla Dna esdi namog ish hopenwrisper. —Yarbnt. FRANK RIDDLE.

6-RIDDLE.

I made a box and divided it into compartments. Sides and partitions were alike, the floor was different. The picture on the cover represented the shore of a hot country. I painted the box the color of my eyes. I put in it a common table luxury, a summer vegetable, fruit of a foreign tree, and a very bitter substance. What nuts are represented by the box, its sides, picture, color and contents.

7-TRANSPOSITION.

Sit tbebt of eb worly robn dan gaern twih lubehm srevg ni tontee. Uath of eb keerdp pu ni a tiglennis frieg dan arew a dogeln rosrow kaseparesh. HENRY REEVE.

8-DROP VOWEL PUZZLE.

H-pp- th- m-n, -nd h-pp- h- l-n. H- wh- c-n-oll t--d-- h-s-n; H- wh-, s-c-r- w-th-n, c-n-s-. T- -m-tr-, d- th- w-r-st, fr- h-v- l-v-d t-- d--. —Dr-d-n. HENRY REEVE.

9-ILLUSTRATED REBUS.



10-TRANSPOSITION.

Gouthh gownsyam sayw eth lordw of yad, Ouy dohl eth danh fo tafe; Sigh dogs dese ssgow natheeb eht nossw, Tighr nac rafod of thaw. A. T. REEVE.

11-DROP-VOWEL.

-r b- rds -o- sngw -r-e s-l-nt l-ng. Th-t s-l-ss gr-v-s w-r- d-mb; B-t G-d's t-m- s s-mm-r t-me, -nd th t-s s-r- t- c-m-. —C-hb. A. T. REEVE.

12-GEOGRAPHICAL STORY.

While in (a town in Ontario), my friends, (cape east of United States) (a mountain in Australia) and (a river North-east Territory) (a river in Kansas) (a town in England) went to the art department. The first thing they saw was a fine monument. On one side of the base was carved a (river in Idaho) and a (lake in Oregon), (a cape in Tasmania), looking (lake in Maine) with a (river in Montana), and on the opposite a (mountain in Texas) and (bay in Ontario), eating a (island near the Sandwich Islands), like a (island west of Mexico). The shaft was most tastefully designed, representing a (island north of Nova Scotia) (mountain in New Brunswick) headed (lake in New York) (island west of England), holdin a (mountains in New Hampshire) (river in Australia) in one hand and a (sea in Europe) (island east of Spain) in the other, and the whole surmounted by a (cove west of Cape Breton Island) statue of a (cape west of Africa), selling a (river in Quebec) (a port in Maryland) and (sea in Europe) (river in Indiana). They said it was a (river in Ontario) (lake in Nevada) worthy of notice. But the best piece of art was a figure piece. The principal figures were a (lake in Ontario) of a lady and gentleman in the foreground. The lady stood on a (river in Utah) (village in Simcoe county) covered (lake in Ontario) (lake in Wyoming). She wore a (cape north Madagascar) colored (mount in Oregon). In the right hand she held a (islands west of Africa), and with the others she was presenting the gentleman with a (river in Nova Scotia) (island east New Brunswick). Her mouth looked like a (island west of New Granada), and her nose resembled a head (island in Georgian Bay). The gentleman had in his mouth a (port in Prince Edward Island) cigar, and for a cane he carried a (river in North-west Territory) (river in England). On the whole they had a (mount in New Brunswick) time, and made a (island north of Labrador) to go again. HENRY REEVE.

Answers to May Puzzles.

- 1-ADVOCATE. 2-Small service is true service while it lasts. Of friends, however humble, so: not one; The daisy, by the shadow that it cast; Protects the lingering dew drop from the sun. KEY-ABCDEFGHIJKLMNPOQRSTUVWXYZ. MLKJIHGFEDCBZYXWVUTSRQPON. 3- CHIEF PAPER OH OR OA EO M A R A U R M U E M F V L T A E TRADEWIND PROVISION I L L E M I P N T O R T E M P E E O A DIVAN RAVEN 5-True merit wins. 6- TENNESSEE R E G E R X A N O E A N D T M C S E N T I M E N T F I T S N O O I T O E R S I U S M I N A C I O U S

- 7-Let no man hello he is safe till he is through the wood; He who will not say when he may, must tarry when he should; He who laughs at crooked men, shall need walk very straight; O, he who once has won a name, may lie abed till eight. - THORNBURY. 9-Punctuality is the very hinge of business. 10-She dealt in earthenware. 11-As Albert Warren was cutting some bark from a long green cedar pole in his five acre lot, he thought of his twin sisters Ida and Florence, and he accordingly made a resolution to visit New York. His long brother George gave him a nice parcel of white, black and red grapes from his grand orchard for them. When he arrived in the town the first thing he saw was an old Irish woman, selling milk and salmon sandwich. He was surprised, and asked a negress who looked friendly, the way to King street where his connections lived. Having delivered his brother's present with safety, he sat down to a grand dinner. There was plenty to eat, and he being very hungry, he made a great meal. After a three week's visit he returned home laden with presents. For his mother he had a red and blue jacket of superior make, for his father a brier pipe, for Dan a toy cat with a gray tongue, and painted yellow, for himself he had Shakespeare & Spenser's works. Thus ended our hero's trip.

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

I. Irvine Devitt, Mabel Clazie, Hubert Chisholm, Robert Wilson, Frank Riddle, Willie N. Redner, E. Eulalia Farlinger, A. T. Reeve, Henry Reeve, Helen Connell, Amy Shaver, A. S. Howkins, Anna K. Fox, Ed. A. Fairbrother, Elinor Moore, Frank Porter, Edward McKenzie, Jessie Morley.

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.

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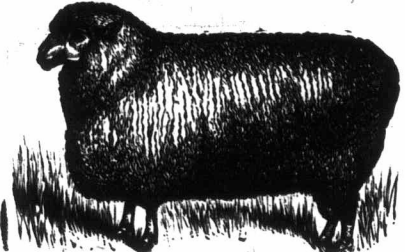
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279-y



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,
PORT PERRY, ONT.
279-y



HILLHURST HERDS

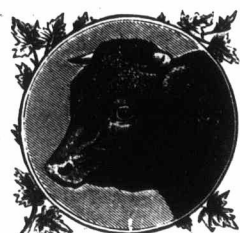
ABERDEEN, ANGUS, HEREFORD,

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.
273-y

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.
282-y



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



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 81 1/4 per cent. Victor, and 18 1/4 to 37 1/2 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,
St. Anne de Bellevue, P. Q., Can.
282-c

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-a

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 (4024), 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

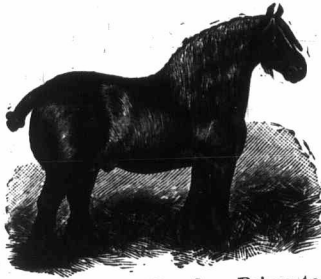


We always have on hand a large number of imported and home-bred Clydesdales (male and female) of good breeding and quality, which we will sell at honest prices. Our specialties are good and well bred horses and square dealing. Come and see us or write for particulars.

277-y

COLDSTREAM STOCK FARM,

WHITBY, ONTARIO.

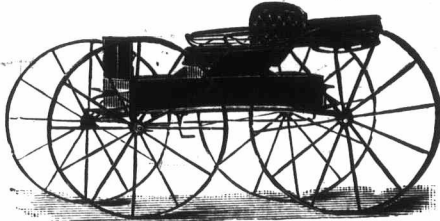


We have on hand and for sale a superior lot of imported and home bred Clydesdale

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

TOP BUGGIES OUR SPECIALTY.



Side Bar End Spring Top Buggies

Made on the premises by skilled workmen, and best materials used.

Will sell to farmers at wholesale prices as we employ no agents. All work guaranteed. Freight prepaid.

H. A. STRINGER

Wholesale Manufacturer,
 141 and 143 King-St., LONDON, ONT.
 281-a

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

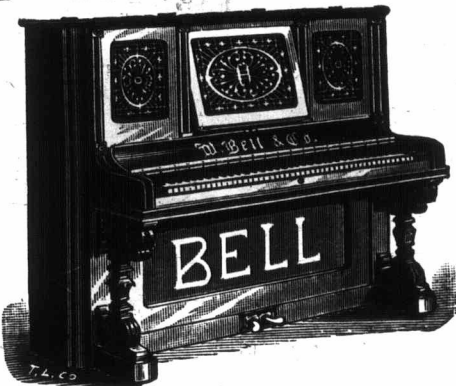
MR. ALFRED B. OWEN,
 AGENT, DR. BARNARDO'S HOMES,
 204 Farley Avenue, TORONTO.
 279-y

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

PIANOS.



For Catalogues, etc., address—
WILLIAM BELL & COMPANY,
 GUELPH, ONTARIO.
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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 gales, 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 this heading at \$3.00 per line per annum (including AD-VOGATE).

- 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.
- W. J. REID & CO.,** London, Importers of Crockery and Glassware, Decorators of China, etc.
- 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, 398 Richmond street, London, Ont. 283-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 169, 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.
- PETHICK & McDONALD,** 293 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,** 361 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, Branford. 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. 288-y

SPECIALTIES—
 FINE ART & LIVE STOCK
 MECHANICAL
 HIGH CLASS
WOOD GILBERT & CO.
 TORONTO ENGRAVING CO
 BRIGDEN MANGR
 REMOVED TO
 53 KING ST W
 COR BAY
 TORONTO

\$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 30 new names, a Shropshire Ram or Ewe Lamb, bred by John Miller & Sons, Brougham, Ont., or Jno. Dryden, M. P. P., Brooklin, Ont.
- For 30 new names we will give a Cotswold Ram or Ewe Lamb, bred by Joseph Ward, Marsh Hill, Ont., or David Birrell, Greenwood, Ont.
- For 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, Galloways, Black Red Games, any variety of Leghorns, Wyandottes, Dorkings, Spanish, Bantams, Ducks, etc. Eggs will be given as prizes when desired from the yards of Wm. Hodgson, Brooklin, Ont.
- We will give as subscription prizes young animals, either male or female, of any of the following breeds: Shorthorns, Herefords, Galloways, Ayrshires, Jerseys, a bull or heifer (of fair quality), purely bred, for 100 new subscribers, accompanied by \$100. We can also supply home-bred or imported stock of any desired breed, age or quality. In all cases we will guarantee satisfaction as to the quality, breeding and value of the animal. We will give very liberal terms to agricultural and other societies, and farmers in new sections, special inducements in sheep and poultry. Write for particulars.

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 \$30, manufactured by J. O. Wisner & Son, Brantford.
- For 110 new names we will give a first class wagon, value \$75, manufactured by the Chatham Manufacturing Co., Chatham, Ont.
- For 75 new names we will give one of the celebrated Westward Ho Sulky Plows, value \$40, manufactured by Copp Bros., Hamilton, Ont.
- For 15 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 30 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.

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

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 45¢ per rod (16½ 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

THRESHING 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

W. & F. P. CURRIE & CO.

100 Grey Nun St., Montreal,

MANUFACTURERS OF

SOFA, CHAIR AND BED SPRINGS.

A LARGE STOCK ALWAYS ON HAND.

IMPORTERS OF

Drain Pipes, Vent Linings, Flue Covers, Fire Bricks, Fire Clay, Portland Cement, Roman Cement, Water Lime, Plaster of Paris, Barax, Whiting, China, Clay, etc. 285-y

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, 177-McDougal Street, New York. 277-y

BINDER TWINE!**HOBBS HARDWARE CO., LONDON.**

AT WHOLESALE. NOT IN COMBINATION.

LOW PRICES FOR QUANTITY. QUALITY GUARANTEED. 282-b

FARMERS, ATTENTION!**Porous Terra Cotta Building Material**

— MANUFACTURED BY —

THE RATHBUN CO., DESERONTO, ONT.

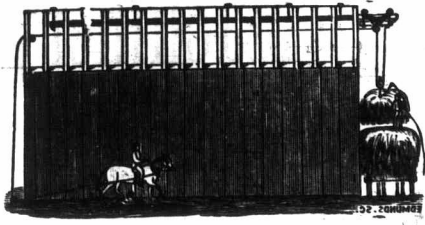
— IS JUST THE MATERIAL FOR THE CONSTRUCTION OF —

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

BUCHANAN'S
Malleable Improved Pitching Machine

For unloading hay and all kinds of loose grain



Will unload on either side of barn floor without changing car. No climbing necessary in order to change from one mow to another. Will unload a load of hay in four fork fulls. All cars made of malleable iron. All forks made of steel. Machines guaranteed to give satisfaction or no sale. The purchaser to be the judge. Responsible agents wanted in all unoccupied territory. None but responsible men need apply. Send for circulars and terms.



THE COMMON-SENSE SHEAF LIFTER

Works in connection with the hay carrier, and is the most complete apparatus ever offered to the public for unloading sheaves. Leaves the sheaves in the mow just as they come from the load. Satisfaction guaranteed. Price, \$5.00.

M. T. BUCHANAN,
INGERSOLL. 278-a

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.

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.**

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.**



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

PROOF THE MANAGERS OF THE
St. CATHARINE'S BUSINESS COLLEGE

Will give \$100 to any charitable institution, named by any person or rival college, who can furnish the name of a student who has taken a full course in Shorthand at this College, and who has failed to secure a position; or for any student who has taken a full course in any department, and who has lost his position through incompetency.

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

N.B.—The best costs no more than the poorest.
274-y

ARE YOU GOING TO PAINT
IF SO, USE JOHNSON'S PURE LIQUID PAINTS.

DURABLE PAINTS! BEAUTIFUL PAINTS!
READY TO APPLY

No Mixing. No Difficulty About Getting the Right Shade. Always the Same.

Genuine old-fashioned Paints covering capacity
Equal to Pure White Lead and Linseed Oil.
They will last longer, look better,
Work easier and give better satisfaction.

Good results only can be produced by the
Use of good materials. The main expense
in painting is not the cost of paint
But the cost of labor and oil.

It costs more labor and more oil to apply inferior paint than to apply the best that can be obtained. We will re-paint, free of charge, any building or decoration painted with Johnson's Liquid Paints where results are not found in accordance with this guarantee. WE STAKE OUR REPUTATION ON THE PURE QUALITY OF OUR GOODS.

MAGNETIC :- IRON :- PAINT!

Oxide Iron, 92%; Hydraulic Cement, 8%.
We guarantee that it will cover 50% more surface, pound for pound, than any other oxide in the market. Five pounds of this Paint mixed in one gallon of pure linseed oil will cover 900 square feet of dry pine wood.

It does not blacken the lead as other oxides do. It forms beautiful warm tints with white lead, such as grey stone, drab and brown stone, and these tints, thus made, are most lasting. It does not scale or peel off. It covers 15% more than lead.

It is not affected by change of atmosphere or temperature. It contains 92% of Pure Magnetic Iron; absolutely pure; a rich brown color; fire proof; uniform in color; economical, everlasting, unfading; free from grit and acids. It contains no sediment.

We guarantee that Johnson's Liquid Paints will cover a similar surface as well as Pure White Lead and Linseed Oil. They will look better, work easier and give greater satisfaction.

The above goods are for sale by every first-class dealer in paints throughout the Dominion, where samples may be seen, or obtained upon application to the manufacturers.

THE WILLIAM JOHNSON COMPANY,
14 ST. JOHN STREET, MONTREAL.

STOCK GOSSIP.

Mr. John Campbell, Woodville, sailed for England on 27th May. He will doubtless bring out something good in his favorite lines of stock.

Arthur Johnston, Greenwood, Ont., finds sales of young bulls as brisk during March and April as he has ever known them to be, and the demand for females brightening very much. This he attributes to a superiority in the Shorthorns over all other breeds, as general farm cattle.

Before this reaches our readers, Mr. J. C. Snell, of John Snell's Sons, will have sailed for England. We understand he intends to import Cotswolds and Berkshires. The Snell family are the oldest and probably the largest breeders of Cotswolds on the continent. In Berkshires their stock stands very high.

William Rolph, Markham, writes:—I shall not be able to give you the article on Jerseys you wished for. I do not wish to sell any Jerseys at present. I want my herd kept up to about fifty head; and always after an article appearing in the *ADVOCATE* like the one requested, I am deluged with correspondence. However, in the near future I hope to take advantage of your kind offer.

Mr. E. D. George, Putnam, Ont., writes:—Spring trade is exceptionally good. Ohio improved Chester Whites have come to stay. Have orders booked from parties in Nova Scotia, Prince Edward Island and Quebec; which proves the *ADVOCATE* to be a good advertising medium. Fifty-four young steers to hand; four sows to farrow; prospects for 1889 most flattering. Boar Middlesex 3717 at the head of the herd. Several of the females bred to Free Trade 4359.

The Shropshire Breeders' Flock Book Society, College Hill, Shrewsbury, England, have, through their secretaries, Messrs. Lythall, Mansell and Walters, offered a silver cup at the Buffalo show for the best Shropshire ram and five of his get, the get to be two years old, to be bred and owned by the exhibitor. A silver cup at the Indiana Fair, at Indianapolis, for the best Shropshire ram of any age; and four ewes, one year old and over, and two ewe lambs.

Mr. R. J. Mackie, Oshawa, writes:—My stock has wintered well, considering the scarcity of feed and no straw for bedding. The prospects for Herefords look better. I have had more inquiry for bulls this winter than for several years. I could have sold five carloads of bulls if I had them, to the ranches in the west. They are learning that the Hereford comes to the front when they have to hunt their living on the ranges. I sold to Jordan Van Nest, Taunton, Ont., the imported cow, Cherry Blossom.

Prizes won by Cupbearer, recently bought by the Bow Park Farm:—1886, Royal Northern, of Scotland, 1st for 2½ year-olds, and reserve for cup, 1887, Iowa State Fair, 3rd prize; Nebraska State Fair, 1st and sweepstakes, best bull, any age; Kansas State Fair, 1st in class and 2 sweepstakes, best bull any breed; Illinois State Fair, 1st, and champion bull, any beef breed; St. Louis, 1st in class and champion Shorthorn bull; Kansas City, 1st in class, 1888— Iowa State Fair, 2nd in class; 1st in class, and champion bull, any age or breed, Nebraska, Kansas, Illinois and St. Louis.

At the great Luther Adams' sale, Dexter Park, Chicago, where seventeen bulls sold for \$6,685, or an average of \$395.20, a Strathearn 7794, bred by Mr. John Miller, Brougham, brought the highest price paid, viz., \$700. At this sale Mr. Miller, through his son Robert, bought the imported Nonpareil bull, Northern Light for \$650; also, Bessie Lass, bred by S. Campbell; Arathusa, bred by A. Cruickshank; Spring Rose, bred by Wm. Dublin; 34th Duchess of Gloster, bred by A. Cruickshank; Golden Crest, bred by Luther Adams. Mr. Miller also sold the heifer, Victoria Nonpareil, for \$375. At the same sale, Mr. Arthur Johnston, Greenwood, Ont., bought 34th Duchess of Gloster, bred by A. Cruickshank, for \$225. The forty-nine females sold brought \$12,458, or an average of \$253.67.

DEAR SIR:—In the January number of the Live Stock Journal, there is an account of the Christmas Fat Stock Show, which was held in Guelph last December, which we consider misleading and un-called for, by the editor or his correspondent. We wrote a reply for the February number of that paper, but, as we understand, it has never been published. Would you kindly put it in the *ADVOCATE*, and oblige, yours truly, &c., J. & R. McQUEEN.

To the Canadian Live Stock Journal.

SIR:—Through the kindness of some unknown friend, we have received a clipping from the above Journal (Live Stock), in which appears an account of the Guelph Fat Stock Show. There is a paragraph on the exhibit of J. & R. McQueen that we consider rather misleading. You say the females shown by Messrs. McQueen were mostly the same as shown in Toronto at the Industrial, but since which time they have ceased to breed. Now, Mr. Editor, you will please give us a space in your Journal to state the facts of the case. The Messrs. McQueen did not show a breeding herd in Toronto at all. They showed "four grade females over one year old," all that the rules of the show required. The late editor of the Live Stock Journal also showed four females, and protested against our getting first prize, but failed to convince the directors that we had broken any of the rules. We were told some time ago that he had severed his connection with the Live Stock Journal, but this paragraph appears to be the voice of Jacob still, whether the hands are hairy or not. In conclusion, if you have anything to say against us in your paper, please send us a copy, as we do not care to be prodded in the back. J. & R. McQUEEN.

WE LEAD 'EM ALL!

—WITH THIS SPLENDID LINE OF—

Standard Harvesting Machinery!

—AND—

FARM IMPLEMENTS.

THE PATTERSON LIGHT STEEL BINDER, 5, 5½ and 6 ft. Cut.
THE PATTERSON MOWER No. 4, Front Cut.
THE PATTERSON MOWER No. 5, Rear Cut, Changeable Speed.
THE PATTERSON "BUCKEYE" No. 6, Front Cut.
THE PATTERSON ONE HORSE MOWER.
THE PATTERSON No. 23 "TIGER" RAKE.
THE PATTERSON COMBINED GRAIN DRILL AND SEEDER.
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THE PATTERSON HAND-POWER STRAW CUTTER.
THE PATTERSON SPRING-TOOTH CULTIVATOR.
THE PATTERSON Spring-Tooth HARROW, 3 Sizes, 16, 18 & 20 Tooth.
THE PATTERSON TWO-FURROW STEEL GANG PLOW.
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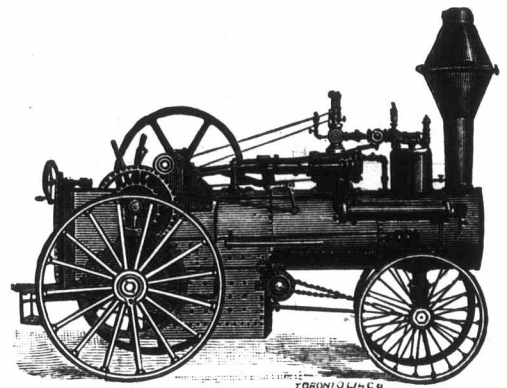
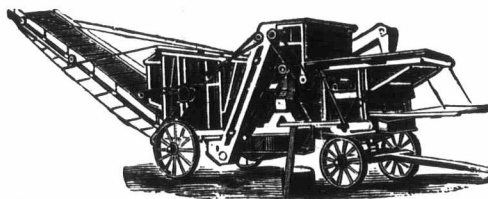
We make a more complete assortment of Farm Implements than any other company in the Dominion, and we make only the best. Our new Catalogue for 1889 is now complete. Write to us and we will gladly mail you a copy.

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INGLETON & CO.,

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

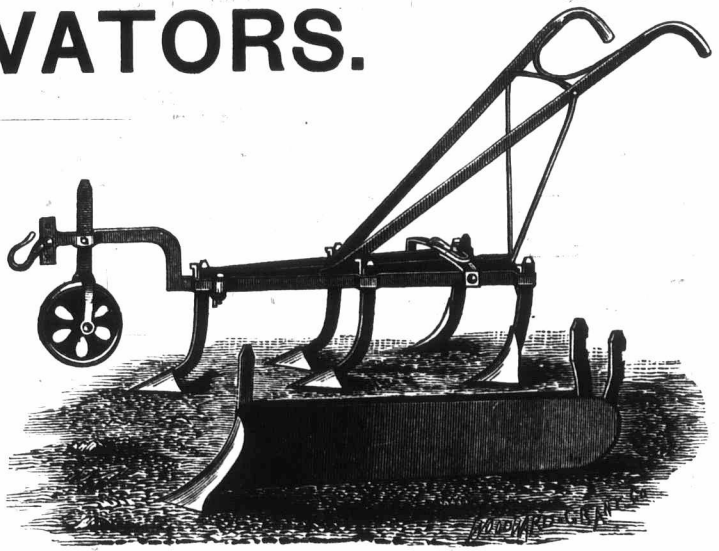
We will guarantee our Engines and Machines superior to any others made in Canada, and challenge anyone to produce a Machine that shall equal the work done by our Double Blast Separator. 280-f
CATALOGUES FREE.

CULTIVATORS.

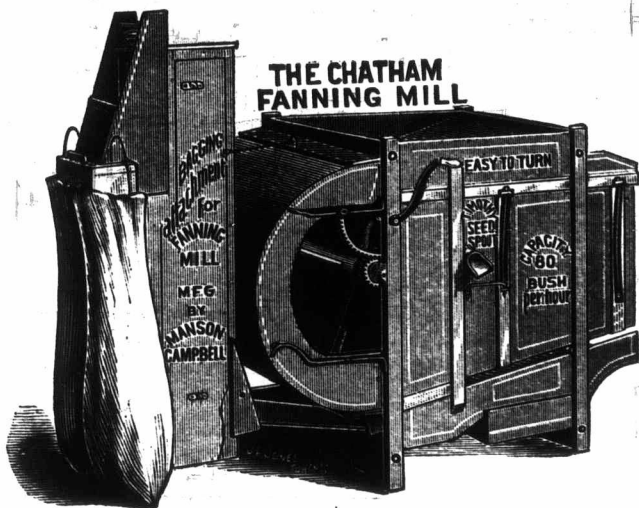
Our line of Cultivators is very large, and of the most approved design. Anyone reading this advertisement will confer a favor by sending for fuller information. Do not purchase until you have corresponded with us. We shall esteem it a favor to hear from any farmer or dealer.

COPP BROS.,
Hamilton.

282-a ONT.



—THE—
CHATHAM FANNING MILL.

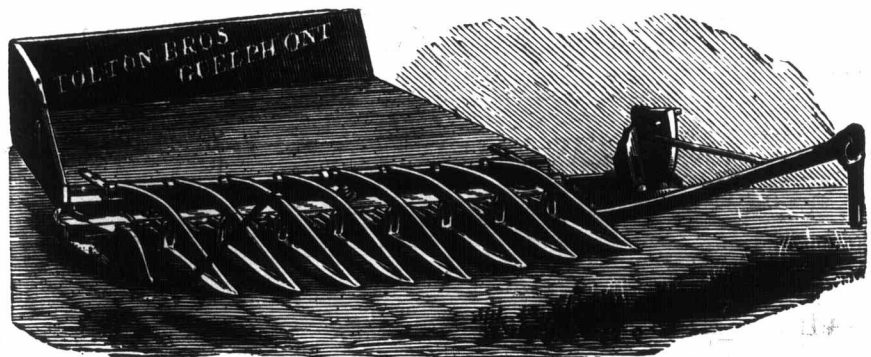


Farmers desiring the best fanning mill manufactured, should order the Chatham Mill, which has all the latest improvements. My sales last season were 2,500. This speaks for its popularity. The Bagging Attachment has been greatly improved, and put in front of the mill, thus saving considerable room. It 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-c

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 Sifter, having a practically successful movement to suit the unevenness of the land, of which we are the Sole Manufacturers and Patentees.

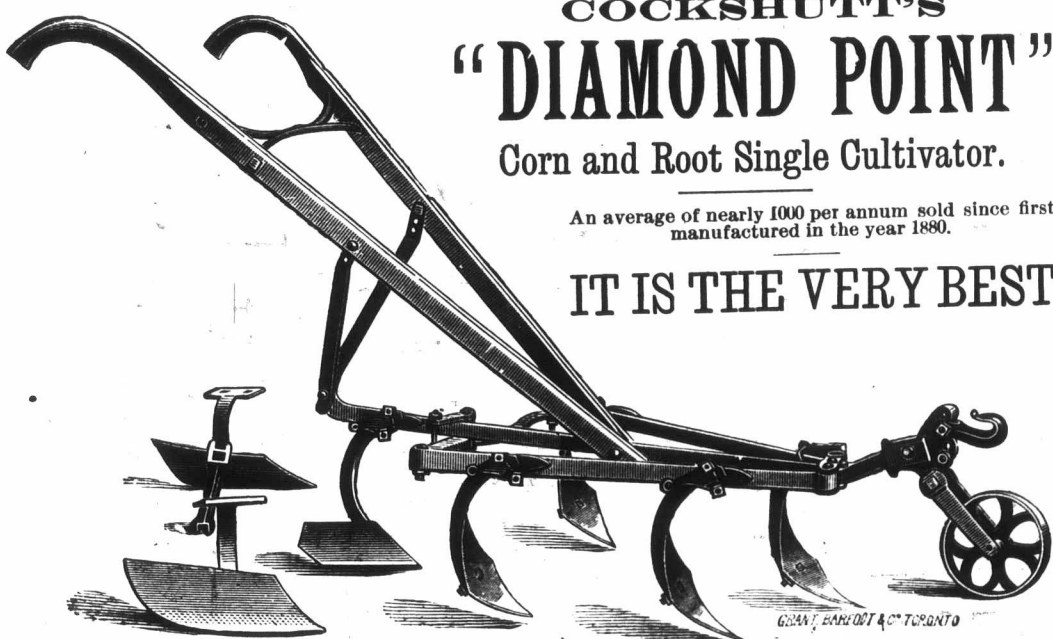
280-b

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.

The May number of the Canadian Poultry Review and Kenel Gazette is specially interesting. We are pleased to notice the improvement made in this journal by the present publisher, Mr. H. B. Donovan, Toronto. It is almost indispensable to poultry and dog breeders.

The Dominion Sheep Breeders will hold their semi-annual meeting in the city of London, Thursday evening, September 12th. A first-class programme will be rendered. All interested in sheep-breeding should be present, as several important matters will be discussed.

At no time during its past history of the ADVOCATE has the outlook been so encouraging at this season of the year, as at the present time. For the month of June our circulation required 1,100 more copies than the preceding month. Our July number will be an exceedingly large issue.

Brown Bros., Iona, Ont., have bought of John Dryden, M. P. P., Lavender Victor. They also report having sold all their young bulls. The latest sales are to J. & H. Roberts, Sparta; D. J. Watson, Fingal; Ira Gilbert, Shedden; Levi Pollard, Iona, and Peter Cameron, Wallacetown. Their Oxford Down ewes have all lambed, and done well.

Mr. William Jeffrey has recently sold the imported Clydesdale stallion, Jumbo, to Mr. John Adams, Port Perry. The young stallion, Merriment, is doing exceedingly well. All three of his stallions are doing big seasons. Sold one 2-year-old filly to Mr. John Rice, of Whitby, at a good figure. Also, purchased a young Durham bull from Mr. David Birrell, of Pickering—a good one. Other stock doing well. Prospects for farmers in this section are good at present.

E. Jeffs, Bond Head, writes he has made the following sales of Berkshire boars lately: To John Gearns, Dalston; A. Ayerest, Cookstown; A. S. Jenkins, Delaware; James Fizzell, Bradford, and H. Manning, Bond Head; and sows to John Kidd, Cookstown; William Sproule, West Brook, and George Raikes, Barrie. A very fine lot for sale now, April and May litters, and expect two June litters; all registered.

John Miller & Sons, writing under date of May 22nd, say:—Our horses, cattle and sheep have come through the winter well, and have been on good pasture for some time. We have had an early spring, and crops of all kinds look well. We have found good sale for good young stock of all kinds, and have only two stallions (which we have plenty of work for) left. We have two very promising colts, one year old this spring, and some good fillies from our best mares. Have only one young bull left for sale, and he is a good one, out of the same cow as Rose of Strathallen 2nd, that was so successful for T. & A. B. Snider. We have a few splendid heifers, fit for any show ring. Our present crop of calves are as good as we have ever had. We have a grand crop of lambs from our flock of 150, two years old, imported Shropshire ewes; and trade promises to be as good as last year.

We have received the prize list of the North Lanark Agricultural Society. Their exhibition will be held on September 24th to 26th, inclusive, in the town of Almonte. Two thousand five hundred dollars are offered in prizes; while they have a full class for nearly all the pure breeds bred in Ontario, we regret to see that this society have thought it necessary to give prizes for grade males in nearly every class. It is quite right and proper to give prizes to grade females, but never in the case of males. The practice is exceedingly pernicious and harmful, injuring the man who wins the prize, and the neighborhood where the animals are kept. If used, as they will be for stud purposes. Good, pure-bred males can be got anywhere at such low prices that they only should be used. To use a grade when a pure-bred could and should be used, means an individual and national loss every time. The prize list of this association may be had by applying to William P. McEwin, secretary, Almonte, Ont., who deserves much credit for the early and tasteful appearance of the list.

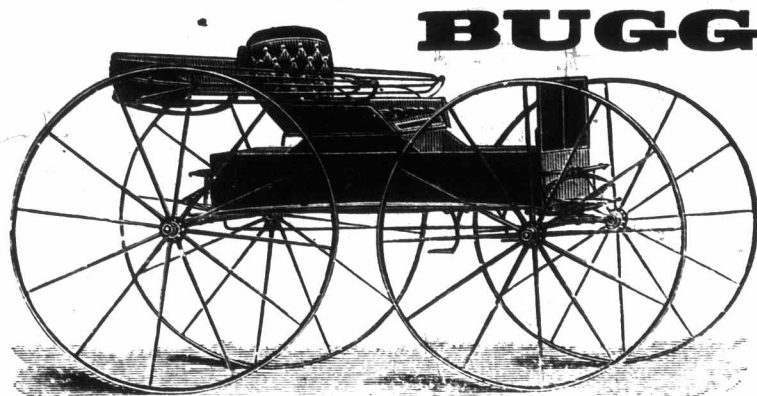
We have just received a letter from The Horseman, published in Chicago, Ill., in which they ask us to warn our readers against J. W. Healey, who is, they say, travelling through portions of Canada, falsely representing himself as an agent of The Horseman, and collecting money on subscriptions. Just how many people he has defrauded is not known, but he has been heard from at various points. If those holding receipts signed by Healey will kindly forward the same to this office, we will be greatly obliged to them. Healey was at one time in the employ of The Horseman, but never had authority to collect money due the company; and since March 15 has not had the right to solicit business of any kind for the paper. That others of our friends who have not been victimized by this man may be on their guard against him, his description is given herewith:—Between fifty and fifty-five years of age; he is about five feet six inches tall, and looks like a man who would weigh 140 pounds, but really is heavier; gray eyes; dark-brown hair well tinged with gray; moustache and whiskers of the same description, the latter worn short and close cut, in the form of side-burns. His hair is thin and bald on the crown of the head. His complexion is sallow and features rather pinched. He was born in Quebec, can speak French, and for fifteen years was a commercial traveller for ready-made clothing houses in Hamilton and Toronto. Almost every hotel man in Canada knows him. If any of our friends meet this man, they will confer a favor by telegraphing to The Horseman at once, at the company's expense.

STOCK GOSSIP.

THE WYTON SALE OF HOLSTEINS.—The half-yearly sale of Holsteins by the Wyton Stock Breeders' Association (Scatherd's), West. Nissouri, on Friday, 19th, was fairly attended by farmers and others interested. The famous black and white cattle of Holland, some half dozen young bulls (yearlings), were disposed of, the auctioneer being Mr. James Brady, of Ingersoll, at prices ranging from \$75 to \$120. A few females were also sold.

PUBLIC SALE OF SHORTHORN CATTLE.—The following is a list of the sales of Shorthorn cattle made on the 15th inst., at Dexter Park, of the Bow Park herd of cattle, for account of B. C. Rumsey and James Hunter. The sale will be completed on the day of this issue, and will be reported in full by us:—**Bulls.**—Grand Duke of Oxford and Ridgewood 2nd, red, calved September 3, 1885; sold to D. W. Smith, Illinois, \$300. Lord Wild Eyes, of Eve 7th, red, calved January 13, 1888; sold to F. E. Ward & Son, Missouri, \$100. Lord Underly Barrington 6th, red, calved July 2nd, 1885; sold to Seth Fisher, Wisconsin, \$500. Duke of Kirklevington 28th, red, calved October 4, 1888; sold to F. Merrit, Michigan, \$130. Waterloo Duke 25th, roan, calved September 10, 1888; sold to F. A. Baker, \$100. Duke of Kent 7th, roan, calved November 18, 1888; sold to C. Walker, Illinois, \$75. Earl of Aberdeen, red, calved January 19, 1887; sold to John Smith, \$125. Orpheus 25th, red, calved March 22, 1887; sold to R. Ogilvie, \$85. Earl Verbena 7th, red, calved September 29, 1888; sold to Thomas Stewart, Illinois, \$55. Earl Verbena 6th, red, calved September 30, 1887; sold to A. H. Henslaw, Illinois, \$100. Cows and Heifers.—Seraphina Duchess of Belvoir, red, calved November 5, 1886; sold to W. S. Jacobs, Madison, Wisconsin, \$75. Seraphina Duchess 7th, red roan, calved February 31, 1883; sold to John Smith, Illinois, \$70. Countess of Belvoir 7th, white, calved March 6, 1883; sold to John Smith, \$115. Eleventh Countess of Belvoir, red roan, calved March 8, 1888; sold to John Smith, \$50. Duchess of Oxford 28th, red, calved January 2, 1885; sold to H. Brook, Michigan, \$2,500. Duchess of Clarence 24th, roan, calved September 2, 1883, with calf at side; sold to Judge Sloan, Wisconsin, \$130. Duchess of Clarence 54th, red, calved February 9, 1887; sold to E. W. Smith, Illinois, \$85. Mosele 5th, red, calved May 4, 1882, with calf at side; sold to F. A. Baker, Michigan, \$90. Mazurka 2nd, roan, calved September 15, 1888; sold to R. B. Ogilvie, Wisconsin, \$115. Rose Branch, red, calved June 8, 1885; sold to Thos Swann, Wisconsin, \$35. Rose of May, red, calved May 23, 1883, with calf at side; sold to R. B. Ogilvie, \$75. Wild Eyes of Erie 4th, roan, calved January 10, 1886; sold to F. A. Baker, \$190. Wild Eyes of Erie 7th, red roan, calved November 10, 1887; sold to F. A. Baker, \$210. Bushbury Countess of Kirklevington 7th; sold to J. B. & L. B. Smith, Illinois, \$280. Kirklevington Duchess 43rd, roan, calved April 22, 1888; sold to F. A. Baker, \$205. Waterloo 66th, roan, calved March 24, 1888; sold to F. A. Baker, \$160. Waterloo 54th, roan, calved October 23, 1887; sold to F. A. Baker, \$225. Adeliza 20th, calved October 15, 1881; sold to C. Walker, \$100. Adeliza 30th, roan, calved March 12, 1887; sold to John Smith, \$110. Adeliza 32nd, red, calved January 29, 1888; sold to C. C. July, \$60. Verbena 14th, red, calved July 16, 1887; sold to C. Walker, \$75. Lady Fawcley 16th, roan, calved December 24, 1886; sold to John Smith, \$100. Baron Oxford of Niagara, calved June 13, 1888; to D. F. Merritt, Charlotte, Michigan, \$225. Waterloo 55th, calved November 21, 1887; to W. H. Jacobs, Madison, Wisconsin, \$125. British Ensign, calved October 9, 1886; to R. B. Ogilvie, Madison, Wisconsin, \$95. Lord Woodbine 2nd, calved October 30, 1886; to John Smith, Bristol, Illinois, \$140. Roan Duchess 26th, calved March 31, 1881; to W. H. Jacobs, Madison, Wisconsin, \$185. Roan Duchess 45th, calved April 21, 1887; to W. H. Jacobs, \$100. Barrington of Erie 7th, calved July 16, 1887; to same, \$330. Barrington of Erie 8th, calved June 8, 1888; to same, \$275. Lord Barrington of Erie 16th, calved August 23, 1887; to N. H. Everly, Prairie City, Illinois, \$205. Kirklevington Duchess 40th, calved July 12, 1887; to L. W. Brown & Son, New Berlin, Illinois, \$200. Duchess Nancy 1st, calved August 19, 1879; to D. W. Smith, Bates, Illinois, \$107. Duchess of Clarence 31st, calved December 22, 1887; to W. H. Jacobs, Madison, Wisconsin, \$100. Waterloo 50th, calved December 21, 1885; to same, \$100. Roan Duchess 34th, calved July 1, 1884; to Homer Brooks, Wixham, Michigan, \$255. Duke of Oxford 57th, calved May 5, 1887; to Frank Cole, \$145. Duke of Kirklevington 57th, calved May 31, to F. S. Andrews, Macon, Wisconsin, \$115. Earl of Darlington 10th, calved November 23, 1887, to Robert Ogilvie, Madison, Wisconsin, \$50. Roan Duke 25th, calved January 10, 1888; to W. H. Jacobs, Madison, Wisconsin, \$75. Crown Prince, calved October 28, 1887; to L. D. Love, DeKalb, Illinois, \$65. Sir Masscoat, calved November 2, 1888; to R. B. Ogilvie, Madison, Wisconsin, \$25. Kirklevington of Erie 10th, calved June 20, 1887; to W. H. Jacobs, Madison, Wisconsin, \$150. Lord Kirklevington of Erie 13th, calved July 1, 1888; to Robert Ogilvie, Madison, Wisconsin, \$10. Kirklevington of Erie 3rd, calved September 6, 1882; to D. W. Smith, Bates, Illinois, \$80. Flossy Gwynne; to same, \$140. Gwynne Duke 2nd, calved July 23, 1888; to Robert Ogilvie, \$50. Gwynne Duke; to same, \$70. Geraldine 4th, calved March 14, 1888; to H. Brooks, Wixham, Michigan, \$170. Music of Can-hellan, calved February 15, 1888; to same, \$90. Lady Queen's 2nd; to same, \$155. Welcome Guest, calved November 17, 1888; to W. H. Jones, Madison, Wisconsin, \$105. Roan Duke 2nd; to Robert Ogilvie, Madison, Wisconsin, \$30. Earl of Goodness, calved July 30, 1888; to H. H. Jacobs, Madison, Wisconsin, \$70. Four Duchess heifers were sold to same person for \$90 each.

MANY OLD FARMS require so much fertilizing that farms & gardens **WONT PRODUCE A PROFIT.** The rich, loamy soil of Michigan Farms produces a fine crop without this expense. The near Markets, general healthfulness of climate and freedom from cyclones, blizzards, together with good society, Churches, etc., make Michigan Farms the best in the world. Write to me and I will tell you how to get the best farms on long time; low rate of interest. O. M. BARNES, Land Commissioner, Lansing, Mich.



BUGGIES!

We make a specialty of **PIANO BOX TOP BUGGIES** specially adapted for farmers' use. Our output for 1888 was over 1,000.

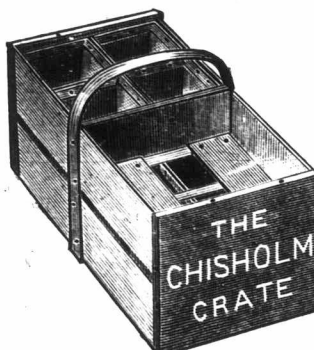
Agricultural Agents will find it to their advantage to send for Catalogue and Price List.

All work is guaranteed.

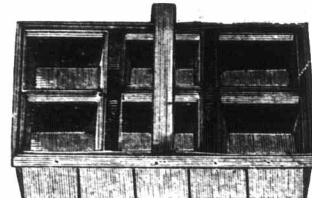
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Well to ship his small fruit, early apples, etc., into the city markets in neat and compact packages of such size as will be convenient for the consumer to take in his hand and carry home instead of being shipped in barrels or other second-hand packages, has been fully demonstrated by the immense quantities of such fruit that has been readily disposed of during the last few years in our fruit baskets. A customer will, nine times out of ten, stop and buy a basket of Red Astrachans or Early Harvest apples, if put in that shape; when he would not take the second look at them if in barrels or bulky packages. We make the best shipping packages for every variety of fruit. GIVE US A TRIAL.



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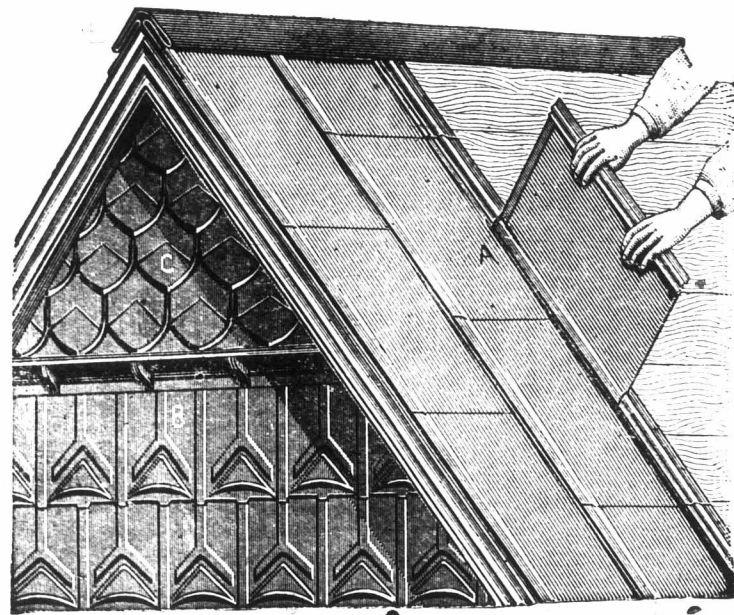
for Strawberry, Raspberry, Currant, Cherry, Huckleberry, Pear, Grape and Peach Baskets, Gardener's Plant Boxes, Farmer's Grain and Root Baskets, Clothes and Market Baskets

of every description The accompanying cut shows our 24 quart shipping basket especially adapted for Strawberries and Raspberries. Address: 279-d

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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

- TONGUING UP EDGES,
- DOUBLE-SEAMING,
- COPING OF RIBS,
- RIVETING OF RIBS,
- EXPOSED FASTENINGS
- AND GLEATS

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



**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.

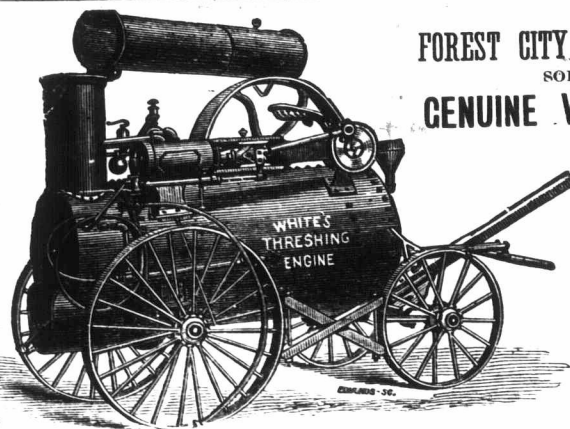
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Bowmanville is on the line of the G. T. R., 40 miles east of Toronto and 234 west of Montreal. 278-y



**"THE FITTEST SURVIVES."
FOREST CITY MACHINE WORKS, LONDON, ONT**

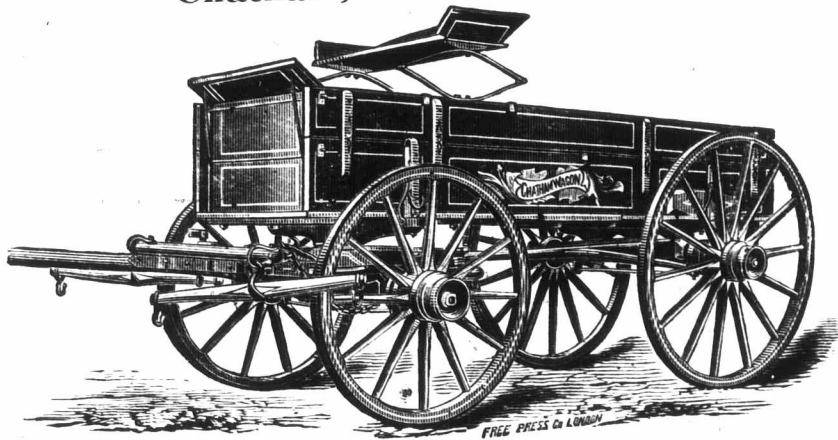
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GENUINE WHITE THRESHING ENGINE,

Special 20-horse power Portable Saw Mill Engine, (same pattern and style), Light and Heavy Traction Engine, and is licensed by all Insurance Co's, and has proved itself to be the most durable. The Engine for the Northwest is made to burn either coal, wood or straw. A thorough warranty given with all Machines and Engines. Call and examine our Machinery, or correspond with us before purchasing elsewhere.

NEW IRON SEPARATOR.
GEO. WHITE, Proprietor and Manager.
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The CHATHAM MANUFACTURING CO., Ltd.
Chatham, Ontario, Canada.



MANUFACTURERS OF THE

CHATHAM WAGON

Of which we give a faithful illustration, and which the Government of the Dominion of Canada has adopted as the Standard Wagon. We simply ask intending purchasers, in their own interests, to send to us for particulars of the Chatham Wagon before purchasing any other.

**Railway Platform Baggage Trucks. Farm and other Dump Carts.
Hardwood Lumber and White Oak Gang Sawed Ship Plank.
The Patent Champion Hay Rack, Etc., Etc.**

CORRESPONDENCE SOLICITED. 268-y

NOTICES.

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.

We call our readers' attention to Talton Bros' advertisement of Pea Harvester. This is an implement which every farmer should have. Full particulars will appear in our July issue.

We take great pleasure in directing our readers' attention to Messrs. J. F. Millar & Son's advertisement of the celebrated Warrior mower. This mower is well known, and deserves a very large sale.

Mr. Manson Campbell, of Chatham, the noted fanning mill manufacturer, has again added some more improvements for 1889 to his already celebrated mill. The bagging attachment is now placed in front, instead of the side of the mill. His mill is becoming more popular each year. The sales last year numbered 2,500.

We have received the report of the second annual convention of the Canadian Association of Fairs and Exhibitions, held at Toronto on the 26th and 27th of February, 1889. It is a neat pamphlet of 33 pages, well printed on tinted paper, and, being the condensed ideas of the most experienced fair managers in Canada, is valuable to those interested. It may be had on application to the secretary, Mr. George McElbroom, London, Ont.

We would call our readers' attention to the advertisement of the William Johnson Company, contained in another column. We recommend with confidence the superior quality of their paint. As they claim a speciality in the manufacture of pure paints only, all the brands of goods, whether ready mixed paints, oxide of iron for roofing, &c., coach colors, window-blind greens, may be relied upon for their purity, fineness and general excellence.

The annual report of the Secretary for Agriculture for Nova Scotia has been received. The report contains about two hundred and four pages, and consists of reports that seem to embrace every department of agriculture in that province, including the reports of agricultural societies from the various counties, and a full report of the Provincial Agricultural and Industrial exhibition, held at Truro in September. Also, complete list of the awards made.

MACHINE OILS.—Attention is directed to advertisement in another column of Rogers's well-known Peerless machine oils. These oils, for farm machinery—threshers, &c.—have deservedly become the favorite with careful farmers throughout the Dominion, on account of their superior wearing qualities. Every good farmer wisely chooses only the best oil for his machinery. The merits of Rogers's oils is further attested by eleven gold medals received at the great fairs of the country. Peerless oil is kept in stock by dealers everywhere in the Dominion.

A concise and interesting report is that of Ontario's exhibit at the Centennial Exposition of the Ohio Valley and Central States, by the commissioner, Hon. T. W. Anglin. The exhibit was composed of gold, silver, copper, nickel, iron, lead, zinc, mica, gypsum, barytra, phosphate of lime, terra cotta, hydraulic cement, marble, granite, building stone, &c., &c. Mr. Anglin reports a keen interest taken in our ore and other products, and thinks the exhibit will be the means of opening up a trade in many kinds of ores. The iron ores, especially, were the subject of much attention and enquiry, and but for the duty barrier a good trade would be done with our neighbors in finer grades of this mineral.

Prof. William Saunders, of the Central Experimental Farm, Ottawa, notwithstanding his arduous duties as director of the experimental farms of the Dominion, has found time to issue a second edition of his valuable work, entitled, "Insects Injurious to Fruits." Those of our people who enjoy the personal acquaintance of Prof. Saunders, will not require to be told of his abilities to impart information on that subject. The work is dedicated to the Fruit Growers of America, with an earnest hope that it may be of practical use to them in the warfare with destructive insects, in which they are constantly engaged. The Professor is a prominent member both of the "Fruit Growers' Association of Ontario," and the "Entomological Society of Ontario," being the secretary-treasurer of the latter. Having been over twenty years a student of the subject of entomology, and a practical fruit grower as well, he now gives the public the benefit thereof in plain, concise terms, avoiding all scientific terms as far as practicable.

The twentieth annual report of the Fruit Growers' Association of Ontario has just been issued. It contains a voluminous report of the winter meeting, held at Ottawa on Wednesday and Thursday, February 8th and 9th, and the summer meeting, held in Shire Hall, Picton, on Wednesday and Thursday, July 11th and 12th, 1888. Also, the annual business meeting and election of officers for 1889, held in the Court House, Hamilton, on Tuesday, February 19th, at 8 p. m.; the address of welcome, by Mayor Deram, and the reply of President Allan; also the very interesting address of the president on the following morning. This association is of great benefit to the country in disseminating knowledge on fruit-growing and kindred subjects. Mr. A. McE. Allan of whom an excellent portrait is given as a frontispiece was elected president again, this being his third consecutive term of office. He is a man well qualified for the position, being well versed in, and fully alive to, the interests of Canadian fruit-growers, both commercially and in production; and he is ably supported by competent officers and directors.

Binding Twine.

Our readers are aware that the rumor has been freely circulated throughout the Dominion, that high prices on binder twine are accounted for by a combination of manufacturers, who are organized for the avowed purpose of controlling the output, and increasing the marketable value. On looking carefully into the position, we conclude that such rumor is absolutely devoid of fact, and that the high prices on twine are the result of high prices on raw materials, over which the manufacturers of twine have no control.

Manilla hemp is over 100 per cent. higher than last year, and shows no weakness, we are assured, even for delivery in the months of September and October next. From the market reports we have gathered the following facts, which speak for themselves:—

Raw manilla advanced from £29 per ton in May, 1888, to £34 per ton in January, 1889; and has held firm since that date. We give the market reports in detail of the prices of raw manilla between the above dates:—

May, 1888, opened at £29 and closed at £31 per ton	
June, " " from £32 to £35	" "
July, " " £36 to £39	" "
Aug., " " £39 to £41	" "
Sept., " " £41 to £38	" "
Oct., " " £39 to £42	" "
Nov., " " £43 to £47	" "
Dec., " " £48 to £50	" "
Jan., 1889, " £50 to £54	" "

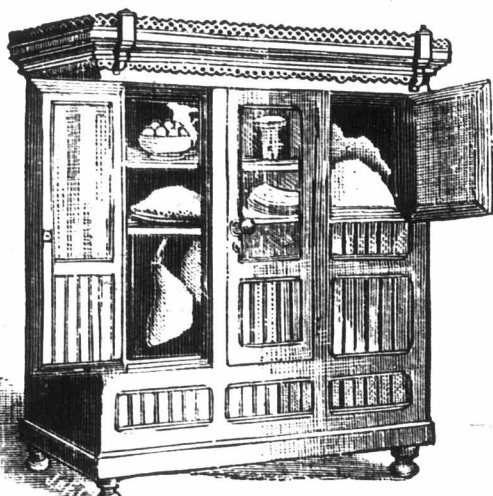
Our readers will note that there was a steady advance in prices from May, 1888, to August-September, with a drop during the latter part of September; while October opened firm at an advance; and from that date till January, 1889, the advance was firm and rapid.

It would take more space than we have at command to go into this subject as fully as we would wish; but the information we have given will be of value to our readers. The above figures illustrate that present prices of binder twine are based on legitimate values; and the outlook is poor for any lowering of prices, as we understand most of the available supply has been sold; and the general impression amongst the knowing ones is that prices will stiffen in sympathy with the great demand in the coming months of June-July. We would, therefore, advise our friends who have not yet contracted for their binder twine to do so at once. We draw your attention to the advertisement in our columns of a reliable hardware house in this city who are large handlers of binder twine.

I am not a regular farmer, but have seven acres of land. * * * Have shown farmers how to get five tons of hay off an acre, and how to pasture a cow on half an acre. I was brought up on one of the best farms in the county, and had a good farm training; and still feel very much interested in it. * * * The ADVOCATE is a good paper. I admire its honest tone, and good, sound, agricultural information. Yours truly, S. T. ALLEN, Yarmouth, N. S., May 18, 1889.

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.

CROSS EYES STRAIGHTENED
AUTOMATIC REFRIGERATOR CO.
 —MANUFACTURERS OF—
HANRAHAN'S PATENT REFRIGERATOR



Specially adapted for the preservation of fresh meats, fish, milk, butter and other perishable articles. A thorough circulation of dry, cold air. No one article will take taste from another. All are kept in the same Chamber. For full particulars write 333-335 Wellington St., Ottawa, Canada. Toronto Branch: Office and Warehouse, 70 King St., West. Montreal Branch: Office and Warehouse, 1749 Notre-Dame St.

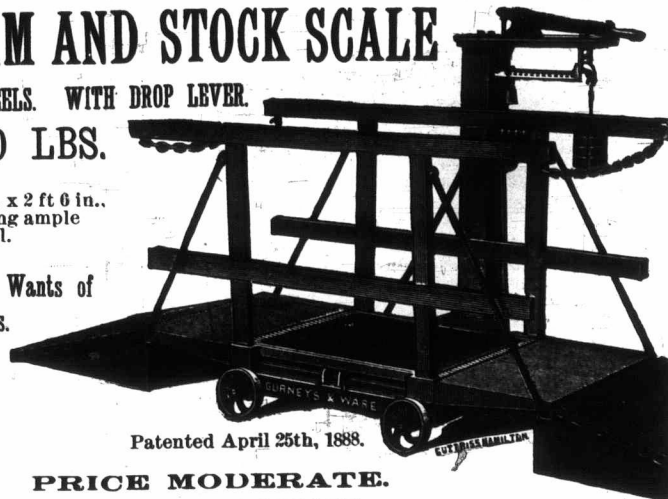
GURNEYS' FARM AND STOCK SCALE

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

SCALES! SCALES!



The Platform of this Scale is 6 feet by 4 feet.

No Farmer, Stock Raiser or Produce Dealer should be without one.

It weighs Accurately from half pound to 4,000 pounds.

DAIRY SCALES,
 SPECIAL FAMILY SCALES
 COUNTER SCALES,
 PLATFORM SCALES,
 HAY SCALES,
 &C., &C.

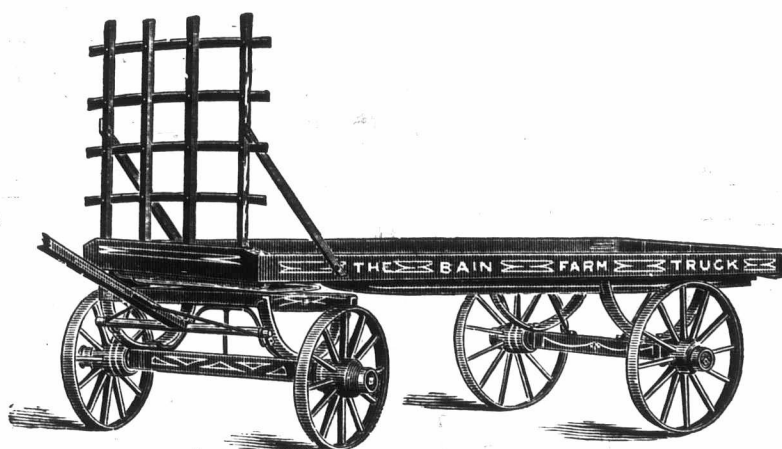
Quality, Accuracy and Beauty of Workmanship unsurpassed.

271-y

BURROW, STEWART & MILNE, Hamilton, Ont.

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.

279-1f

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