

78.

Library of Parliament

THE FARMER'S ADVOCATE

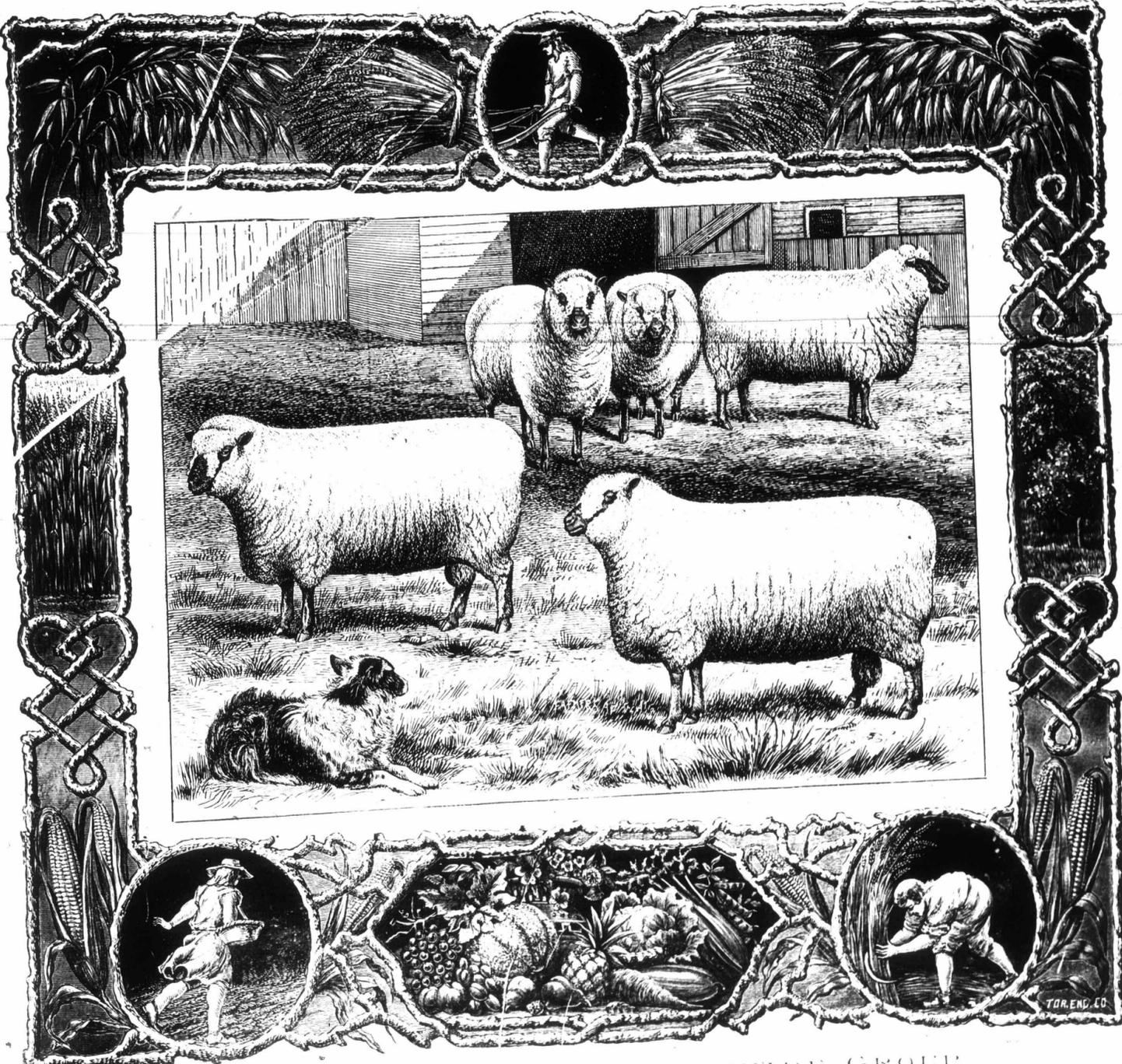
AND HOME MAGAZINE



* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE. *

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

VOL. XXX. LONDON, ONT., AND WINNIPEG, MAN., NOVEMBER 15, 1895. No. 394.



A REPRESENTATIVE SHROPSHIRE GROUP FROM THE FLOCK OF MR. E. A. S. MACMILLAN, BRANDON, MANITOBA.

EDITORIAL.

The "little red Scotch Shorthorn" does not appear to be in any immediate danger of losing his grip upon the esteem of the hard-headed British breeder, judging from the results of the great annual sales in Scotland recounted in the Nov. 1st ADVOCATE.

The purchase, during the past two weeks, and shipment of two carloads of young pure-bred bulls in Middlesex Co., Ont., for the improvement of British Columbia stock, as reported in another column, is one of the hopeful signs of the times. As a rule, such buyers do not make their appearance till the early spring.

At a meeting of the Council of the Yorkshire (Eng.) Agricultural Society, Mr. Arthur Egginton drew the attention of the Council to the evils resulting from the over-feeding of stock for show purposes, and suggested that a code of rules should be drawn up for the guidance of the judges. After considerable discussion the suggestion was unanimously adopted.

The remarkable increase in the use of commercial fertilizers is illustrated by the fact that in the U. S. in 1890, the capital invested in their manufacture amounted to \$40,594,168, furnishing employment to 10,000 men. The output of fertilizers was about 1,250,000 tons, valued at \$39,180,884. In 1894 the output nearly reached 2,000,000 tons, while the capital invested increased in a still greater proportion.

If the outlay on capital account for sheep is taken into consideration as compared with other industries; also the relatively small amount of labor which they take; also the cheapness of structure necessary for their house, and then add to these advantages their great value in bringing fertility to the soil, we must conclude that a great many more sheep than are now found in Canada could be profitably kept.

English Live Stock Journal:—"It is reported that the proposed holding of the Dairy Conference of 1897 in Canada has received a large measure of support from the members of the British Dairy Farmers' Association. Indeed, we are informed that the promises of taking part in the excursion across the Atlantic are so numerous that there is a fear that the number of those who desire to be members of the party will become unmanageably large."

The agricultural returns for the Board of Agriculture of Great Britain for the year 1894 give the following statistics as to the live stock of certain of the chief countries of the world:—

	Horses.	Cattle.	Sheep.	Pigs.
United Kingdom	2,079,587	11,207,554	31,774,824	3,278,030
Australia	1,870,058	12,637,252	110,159,732	1,027,714
Austria-Hungary	1,548,197	8,643,336	3,186,787	3,549,700
Canada, 1893	685,187	2,057,882	1,935,988	1,012,022
Cape of Good Hope	340,323	1,929,800	15,124,753	228,764
France	2,767,648	12,154,611	20,275,716	5,860,592
Germany	3,836,256	17,555,694	13,589,612	12,174,288
Russia in Europe	19,663,336	24,609,264	44,463,454	9,242,987
United States	16,081,139	53,095,586	45,048,617	45,206,498

Thursday, Nov. 21, is Canada's national Thanksgiving Day, on which special acknowledgment is made of the year's blessings, which include, generally speaking, a very abundant harvest, though some localities suffered from adverse conditions of weather. In the Great Northwest the crops were magnificent. Prof. C. C. James contributes, in another column, an able and interesting article appropriate to the occasion. In no country has the farmer passed through stringent times with as little complaining as in our own Dominion. On Thursday, 21st, the stout-hearted Canadian farmer will demolish his Thanksgiving turkey—to enjoy it in peace and comfort who has a better right?

During 1894 and a portion of the present year, negotiations were carried on through the Imperial authorities with the U. S. Government anent the recognition of Canadian records at the boundary, but nothing satisfactory was the outcome, on the technical ground that because the various recognized pure breeds recorded here had not "originated" in Canada there was no discrimination. It appears that further representations have been made from Ottawa, attention being called to the so-called French-Canadian Jersey or Canadian cow as one originating in Quebec Province. As might be supposed, the U. S. authorities have just replied that they are not satisfied from the evidence submitted as to the breeding standard of these cattle, and no change in their attitude is deemed advisable.

J. A. S. Macmillan's Shropshires.

The very striking illustration upon the title page of this issue has been prepared by our artist from a photograph of a few representative sheep from the large flock of pure-bred Shropshires owned by J. A. S. Macmillan, Brandon, Man. Mr. Macmillan's Shropshires are now becoming so well and favorably known throughout the West that a detail description of the flock would probably be superfluous at this time. Suffice to say that Mr. Macmillan personally selected the foundation flock from such celebrated English breeders as Mrs. Barrs; Mansell; Ingers, and others. And new rams are imported every year for use in the flock. This flock has been well-represented at the leading shows for the past three or four years; and their winnings this year, which included seven 1sts, six 2nds, and three 3rds, at the Winnipeg Industrial; nine 1sts, four 2nds, and four 3rds, at the Territorial Exhibition at Regina, should be ample evidence that the sheep of this flock possess high individual merit as well as good breeding.

Mr. Macmillan reports the past season as a very satisfactory one; the sheep have done well, and sales have been good. Among the larger sales recently made are the following: McIntosh & Co., Calgary, 55 head; Geo. Hope Johnston, Calgary, 40 shearing ewes; the Lethbridge Sheep Co., Irvine, N.-W. T., 15 ram lambs; Count De Soras, Whitewood, 10 ram lambs; and W. H. Upton, Whitewood, 10 ram lambs and 7 two-shear ewes. Two farms are kept: one south of Oak Lake, and the home farm, which is just two miles south of Brandon, where sheds have been erected and a large supply of fodder provided. While quite a bit of hay is put up, the main fodder will be sheaf-oats, cut green—one hundred and seventy-five acres being in oats this year. Thirty acres of oats and tares were tried, and proved a good crop. There were also five acres of turnips on the home farm, which were being stored at the time of our visit; the balance of the 350 acres now under cultivation being in wheat, barley, etc.

Now that an export trade in sheep has been established, there should be a largely increased demand for pure-bred rams; for if profit is to be made out of the business, pure-bred rams must be used; in order to get sheep of good quality.

In swine, no pure-breeds are kept, except for crossing; the Tamworth-Berkshire cross having been tried with very gratifying results.

Mr. Macmillan is a lover of a good horse, and has faith that money can be made in breeding horses of good quality. He is now the owner of seven drivers and two saddlers. His handsome black driving mare, Lady Peri, five years old, got in a good second to the light bay mare shown by Christie & Fares at Brandon summer fair. He also has a three-year-old Dexter-Prince Standard-bred, recently from California, which he thinks promises to develop considerable speed.

Thoughts for the Dairy Farmer.

Dairying, like other branches of farming, is subject to ups and downs, but the stability of the cheese market for a couple of decades past is well worthy of note, and has been a subject of frequent comment. During the past season the price of cheese sagged down considerably, though not as low as summer cheese once dropped, temporarily, a good many years ago, but latterly markets have improved. There has been a strong demand, with good prices, for butter. Canadian creamery butter is now making a place for itself in the British markets. We notice that it is being regularly quoted in provision reports sent out from Liverpool, arrivals meeting with "a ready sale as landed." Canadian cheese retains its place of pre-eminence, but no opportunity or means should be neglected to keep up the march of improvement in order to meet competition. Prices for a time may not have been encouraging, to the new cheese factories and patrons more particularly, but the older ones will not be seriously disturbed. Heretofore those who have pursued dairy farming intelligently and with steadfastness of purpose, have had their reward, as in other specialties, and so it will be in the future. None of us relish a depression in prices, but it is not without good if it compels a closer study of the business, from the selection, breeding and feeding of the cow, right on through every detail of the business, till the finished product is landed in the territory of the consumer.

The Agriculture of Canada -- Thanksgiving Day Reflections.

[By C. C. James, Deputy-Minister of Agriculture for Ontario.]

The wealth of every country is a product to which all classes contribute, or should contribute. If, however, we trace it back to its source, we shall find that four streams contribute to the volume, namely, the product of the farm, the forest, the fisheries, and the mine. The variations in our national wealth and the general condition of our national wealth are controlled largely by these four sources. In Canada, these four great industries give employment to a very large portion of our population. In 1891, out of 1,659,355 workers in all classes, 790,210 were engaged in agriculture, fishing, mining, and lumbering. The relation of the various classes of workers may be stated briefly, thus: Of the total persons having occupations, 47.6 per cent. were engaged in agriculture, mining, fishing, and lumbering; 19.3 per cent. were engaged in manufacturing and mechanical pursuits; 14.9 per cent. in domestic and personal services; 11.2 per cent. in trade and transportation; 3.8 per cent. in professional avocations; and 3.2 per cent. were in the non-productive class. The 790,210, forming nearly one-half of the total workers, were divided into the following classes: Agricultural, 735,207; fishing, 27,079; mining, 15,168; lumbering, 12,756. The annual agricultural productions of Canada amount to about \$500,000,000 in value; the forest products, \$80,000,000; the mineral products, \$20,000,000; and the fisheries products, \$20,000,000. It will thus be seen that the four streams or fountain sources of wealth aggregate \$620,000,000 a year, and that four-fifths of the total volume comes from the farm. No wonder, then, that when agriculture prospers our whole country prospers, and that Thanksgiving Day is postponed until the year's harvests have been gathered and the farmer has balanced his ledger.

The times have been hard, unusually hard, and have weighed excessively upon the farmers of Canada; and yet they have not lost heart. The farmers of Canada come from hardy stock,—the best of the yeomanry of England, Scotland, Ireland, and Germany, in addition to the thrifty French-Canadians, who may be considered almost as being native to the soil. When these nationalities shall have coalesced, the product will be a rural people unexcelled, if not unequalled.

Another cause of hope in Canada's future lies in the fact of our variety of resources. We have coal in abundance in our Maritime Provinces, east and west; iron in every Province except the prairie sections; gold in Nova Scotia, Quebec, Ontario, and British Columbia; copper and nickel to supply the world; salt, petroleum, and natural gases. We have cod fisheries on the Atlantic coast, salmon on the Pacific, and our inland lakes and rivers also contribute large quantities of varied kinds. The timber limits of the older Provinces still contribute the larger portion of the legislative revenues, while the enormous forests of British Columbia and Labrador have been only partially explored; and the agriculture of Canada is even more varied. Prince Edward Island, long noted for its sheep and its horses, is making a special effort for recognition as a dairy Province; Nova Scotia grows some of the finest fruit in the world, in the rich and beautiful Annapolis Valley; New Brunswick has, as yet, developed no great specialty, but is making a general advance in methods; Quebec, with abundant hay and rich grasses, holds her high record for Eastern Townships butter; Manitoba grows the best wheat in America; the N. W. Territories are building up a series of magnificent stock ranches in some sections, and in others general farming is developing well; British Columbia will soon have a surplus of fine fruit; as for Ontario, the Central Province, her cheese, her apples and peaches, her barley and peas and oats, her cattle and sheep and horses, all take rank unsurpassed in the world's markets. While we have a variety of resources and a variety of industries, we can also claim a wonderful variety of agricultural products, and in this there is reason for concluding that the continued prosperity of this country is assured.

Now, permit a few words of particular reference to the high quality of our Ontario agricultural products, for the country that can continue in the production of a superior article is sure to hold a high place in the markets of the world. In the matter of live stock there is no other part of North America that has reached such high excellence in the keeping of stock of so many breeds as the Province of Ontario. The Chicago records were most conclusive. Many of the best herds of the United States, especially of cattle and sheep, have been built up upon Ontario stock. Even Great Britain has drawn from our resources. The celebrated Forest Grove herd of the late Col. Moberly was sold on Oct. 23rd. Advertisements of it gave the pedigrees of 21 of the choicest Shorthorns; of these, 8 at least were Ontario stock. Within the past month, Prof. Curtis, of the Experimental Farm, of Iowa, has visited this Province, making extensive purchases of sheep and swine. Further illustrations could be given, but we shall rest content with making reference to the compliment paid to Ontario by The American Sheep-Breeder in a recent issue:—

A Manitoba Threshing Scene.

The accompanying engraving of a threshing scene in the harvest fields of Manitoba will give our Eastern readers some idea of the way "bonanza" crops are threshed out. A "threshing gang" is composed of from twelve to twenty men, depending upon whether the threshing is done out of stook or stack, and upon the capacity of the machine. Each man usually is given a certain position, which he holds day after day. It is now customary for the thresher to take with him a caboose (a large wooden van on trucks, fitted with sleeping bunks), in which all the "gang" sleep, thus relieving the settlers from providing sleeping apartments for so many extra hands. It will greatly lessen the horrors of threshing time when a "boarding van" accompanies each outfit, thus saving a good wife from the labor of providing meals. An ordinary thirty-six-inch cylinder machine, well managed, will this year, in spite of the great amount of straw, turn out an average of 2,000 bushels per day, while some of the mammoth separators will nearly double this. The usual charge for threshing out of stack is four cents per bushel for wheat, and three

The St. John (N. B.) Exhibition.*(Continued.)*

The large drill hall was completely filled with all kinds of carriages of beautiful design, style and finish, including the family carriage, top-buggies, Bangor buggies, phaetons, surreys, Gladstones, English dog-carts, road wagons and carts. The exhibition of sleighs was magnificent—every form of winter vehicle was there in a great variety of styles and finish. Blue seemed to be a favorite style of finishing, with gold trimmings. The New Brunswick people take greater interest in their winter conveyances than the people in Ontario do, the winters being longer and more severe, but they are steady and generally clear, with very few thaws, so that sleighing is very seldom interrupted during the winter months.

Our local carriagemakers had nearly all a fine display, but they were not alone in the exhibition. Ontario makers were exceedingly well represented.

During the second week of the exhibition the country people came into the city in greater numbers, over thirteen thousand being on the

carriage horse or mare in harness—1, D. W. McCormick, St. John; 2, E. Le Roi Willis, St. John; 3, F. C. Monahan, St. John.

AGRICULTURAL PURPOSES—Stallion, four years—1, E. Puddington, St. John; 2, Robt. Brown, Northampton, Carleton Co.

MATCHED FARM TEAM—1, S. Creighton, St. John; 2, Jas. Robinson, Sussex; 3, D. Ferguson, Charlottetown, P. E. I.

PERCHERON—Stallion, four years—1, George A. Bule, Grafton; 2, Hugh R. McMonagle.

These are not all the awards, as there were classes for all kinds of young stock as well; but these show that we have some stock of the best breeds of horses here, which will help to improve our general stock.

There was also a class of Standard-bred horses, which were well represented.

CATTLE.

AYRSHIRES—Bull, three years old and upwards—1, W. A. Black, Amherst, Rob Roy; 2, W. Donovan, Coldbrook, Robt 339; 3, J. M. Donovan, Coldbrook, Duke of Canada 312. Bull, two years old—1, S. Creighton, P. E. I., Scott 115; 2, H. J. Belding, Hampton, Liberal; 3, S. E. Frost & Son, Hampton. Sir Robert 413. Cow, four years and upwards—1, Wm. Donovan, Coldbrook, Hilda 440; 2, Wm. Donovan, Coldbrook, Topsy 2nd 441; 3, J. M. Donovan, Coldbrook, Jennie 3. Cow, three years old—1, J. M. Donovan, Coldbrook, Primrose 639; 2, W. Donovan, Coldbrook, Wildflower 2; 3, W. Donovan,



THRESHING THE MANITOBA "BONANZA" WHEAT CROP OF 1895.

cents for oats and barley. All the farmer has to do is to take the grain away from the machine, feed the "gang," and pay his bill.

In the background of the engraving will be noticed the "basket"—racks for drawing in—as in this instance the threshing is being done out of stook. In many cases where these are used, the teamsters pitch on their own loads, thus saving extra pitchers, and a good-sized basket rack will hold enough for a team to draw.

The single horse to the right alongside the heap of straw is one of a pair of "buckers," they being worked by a boy to "buck" the straw away from the tail end of the machine. This is managed by a long plank or pole, to each end of which a horse is attached. The pole, being drawn across behind a heap of straw under the stackers, is held down by the boy's weight while the horses draw it away to one side, where it is delivered in piles ready to be burned as soon as the "setting" is threshed out. A large water tank on a wagon provides the engine with water from the most convenient source of supply. The grain is usually bagged and teamed directly to the nearest elevator in double wagon boxes, similar to that in the center of the picture.

ground one day. The horses, cattle and sheep on exhibition were much smaller in numbers than at your western exhibitions, but the quality was, all things considered, excellent. In most of the classes a good representation of pure-bred registered stock was exhibited. Only a few years ago very few pure-bred animals were to be found in the Province. This speaks well for the enterprise and intelligence of our agriculturists. The Provincial Government has at different times brought in importations of pure-bred horses, cattle, and sheep, which have been of great benefit.

Among the more notable awards were the following:—

HORSES.

CLYDESDALE—Stallion, four years old and up—1, R. A. Snowball, Chatham; 2, H. R. McMonagle, Sussex.

ENGLISH SHIRE—Stallion, four years—1, J. H. Reid, King of Trumps; 2, Mirfield Draughtman, Exchange; 3, J. H. Reid, Fredericton, General Gordon.

HEAVY DRAUGHT—Stallion, Canadian bred—1, D. M. Fairweather, Sussex.

CARRIAGE HORSES—Stallion, four years—1, John Robertson, Kingstone, Kent Co.; 2, James D. Reid, Fredericton; 3, G. Forbes, St. John. Three-year-old—A. B. Smith, Hampton. Yearling entire colt—1, S. Z. Dixon, St. John; 2, John H. Park, St. John. Pair of matched carriage horses—1, St. John Horse Exchange; 2, D. W. McCormick, St. John. Single

Coldbrook, Nan. [NOTE.—Classes also for young stock.] Herd of one bull and four females over one year—1, J. M. Donovan, Coldbrook; 2, W. Donovan, Coldbrook.

JERSEYS—Bull, three years old and upwards—1, C. S. L. Raymond, Woodstock; 2, J. H. Reid, Fredericton, Mercury of St. Lambert 2nd; 3, Wm. Shaw, St. John. Cow, four years old and upwards [18 entries]—1, E. B. Elderkin, Amherst, N. S., Nettie St. Lambert; 2, St. John Agricultural Society, Jetsam's May; 3, Samuel Creighton, St. John, Norah. [NOTE.—Classes for young stock, also.]

We had exhibits of Holsteins and Red Norfolks, and several classes for grade cattle; also of grain of all kinds and Indian corn. Our potatoes and roots were of excellent quality and of many varieties; and the same is true of the vegetables. On the whole, the exhibition of horses, cattle, sheep, pigs, and all kinds of farm produce, was considered by everybody to be the best ever held in the Province.

A Scottish writer states that from his observations he has decided that in most cases of sows eating their pigs as soon as farrowed, that intense thirst was the cause. At farrowing time the sow is in a highly-fevered condition, which always accompanies extreme thirst. When a liberal supply of cold fresh water is placed in an accessible position to her this unnatural cannibalism is avoided.

THE FARMER'S ADVOCATE & HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

PUBLISHED BY THE WILLIAM WELD COMPANY (LIMITED), LONDON, ONT., and WINNIPEG, MAN.

JOHN WELD, Manager.

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

THE FARMER'S ADVOCATE, or THE WILLIAM WELD CO., LONDON, ONTARIO, CANADA.

CONTENTS.

EDITORIAL: 449-Illustration. 450-Editorial Notes; J. A. S. Macmillan's Shropshires; Thoughts for the Dairy Farmer; The Agriculture of Canada - Thanksgiving Day Reflections. 451-Do Not Delay - Act To-day; The Fowl this Winter. STOCK: 451-The Classification of Grade Cattle at Agricultural Shows, Again! 452-A Manitoba Threshing Scene-Illustration; The St. John (N. B.) Exhibition. 453-Study of Bacteriology; "The Classification of Grade Cattle at Our Shows"; A Good Dog--The Farmer's Friend. 454-Breeding and Feeding Beef Cattle. 455-The Manitoba Stock Yards-Illustration; The Advantages of Keeping Sheep: Oats for Stock. 456-Feeding Live Stock--Experience at the Ontario Agricultural College; The Cattle Quarantine; An Embargo on Sheep. FARM: 456-Potato-Cake for Cattle; Agriculturists in Session. 457-Successful Cultivation; Experience in Potato Feeding; The Care of Farm Implements; Manure for Hay; The Northwest Farmers' Thanksgiving Day. THE HELPING HAND: 458-Handy Farm Contrivances and Methods; Handy Hog Catcher--First Prize; A Good Plow Slide--Second Prize; One Man Cross-Cut Saw; Log Wagon Wheels; Tanning a Sheep Skin. DAIRY: 458-Is the Fat of Milk a Correct Measure of Its Value for Cheesemaking Purposes? 459-A Plan for Securing Greater Uniformity in the Quality of Cheese. VETERINARY: 459-Tuberculosis Among Cattle. APIARY: 459-North American Bee-Keepers' Convention. GARDEN AND ORCHARD: 460-Covering Strawberry Plants; Nova Scotia School of Horticulture. POULTRY: 460-Fitting Poultry for the Shows; Eggs and Meat. QUESTIONS AND ANSWERS: 460-Legal. 461-Veterinary; Miscellaneous. LIVE STOCK MARKETS: 461-Toronto Markets; Montreal Markets. 462-Chatty Stock Letter from Chicago; Toronto Horse Market. FAMILY CIRCLE: 462. CHILDREN'S CORNER: 462. THE QUIET HOUR: 464. STOCK GOSSIP: 465, 467, 469, 470, 471. NOTICES: 465, 467. BOOK TABLE: 467. ONTARIO FARMERS' INSTITUTE MEETINGS: 468. ADVERTISEMENTS: 463 to 472.

Study of Bacteriology.

The organization of a Department of Bacteriology in connection with the Agricultural College at Guelph is an important step in advance. F. C. Harrison, B. S. A., the Bacteriologist, is, we believe, thoroughly equipped for this difficult and responsible work. He devoted special attention to general microscopy and bacteriology in his own college course; after graduation, he visited all the best bacteriological laboratories on this Continent; and the summers of 1894 and 1895 he spent at practical work in the botanical and bacteriological laboratories of Cornell and Michigan Universities. Owing to the enterprise and foresight of the Hon. John Dryden and President Mills, the new bacteriological laboratory at Guelph is thoroughly equipped. Mr. Harrison is now at work, and we expect valuable results, directly to the students of the College and indirectly to the people of the Province at large, particularly in relation to dairying.

"The Classification of Grade Cattle at Our Shows."

AN OPEN LETTER TO THE "PRESIDENT AND BOARD OF DIRECTORS OF THE WESTERN FAIR."

GENTLEMEN,—As judges at your fair are requested to submit recommendations and suggestions promotive of the efficiency of the fair, with a promise of careful consideration, I would beg leave to draw your attention to Class 17, viz., "Grade Cattle." My attention has been drawn to this class for several years, particularly so for the last two years while acting for you as judge on Jerseys at your show, and also by some articles that have appeared in the columns of the FARMER'S ADVOCATE upon this same subject. Now, the first class for cattle in your list is Class 15, Durhams, registered; then Class 16, Fat Cattle, any breed; then Class 17, Grade Cattle; then Class 18, Jerseys, registered; but you do not follow this by a class for Grade Jerseys, neither do you in any of the other breeds. Now, as the class for grades comes after Class 15 and before Class 18, one might suppose it was intended for Durham grades only. The time was when very few grades would be shown but grades of the Durham breed, but things are very different now, and I think that the time has fully arrived when grades of the different breeds should be allowed a fair chance for competition.

Now, I am aware of the fact that you allow grade cattle of any breed to compete in Class 17, and it is to that very fact that I wish to call your attention, and beg leave to suggest to you that you are spending money in that class and are not giving a satisfactory plan of competition for it. It may be satisfactory to some, but cannot be generally so. Some exhibitors seem to think that the large breed or breeds should have the whole class, and that smaller cows are scrubby and not worthy to compete with the larger bovines; others suggest that they be judged as general purpose animals, seeming to forget the claims of other breeders who believe in special purpose animals, and the number of these men at present are not a few. In our special business of butter dairying, in the last ten or more years, I have been most intimately associated with the owners of some of the best butter cows that are found anywhere, some of whom have cows that each make over 300 pounds per year; and none of these are very large, neither are they general purpose cows. They are special purpose cows, and they are nearly all grades. Now, if all grade animals be classed together, who will judge them? That is the great difficulty. It is almost impossible at present to get a judge who has not a fondness for some one breed, viz., the kind he owns himself; and if he judges the grade class, the animals looking most like his kind, in color, etc., will be likely to get the premiums, and who can blame him; he has a fondness for that kind and cannot help it. Men are as foolish about their cattle as they are about their wives. Every man thinks his own the best in the world.

It has been suggested by some that the class be cut in two, and that they be known as grades of the beef breeds and grades of the dairy breeds; but I still see the same difficulty. I want to show my Jersey grade. My neighbor thinks his Ayrshire grade a better cow. Who is to be the judge? Some good dairyman! Yes, but what kind does he keep himself? Or has he not a fondness for one kind or the other? The difficulty is still before us, only changed somewhat. It is like men with their wives, still. In the former case it is a matter of choice between a large and a small one, and in the latter case I believe it is worse, as it is a matter of which of two large or two small ones are the better looking.

The plan I have in view is as follows, viz.: Do away with Classes 16 and 17; that is, class for beef animals and also for grade animals, and instead of these, in each class of thoroughbred cattle add a few sections for grades of the different breeds. In the two classes mentioned, 16 and 17, you give nearly \$200 in prizes, which, divided by eight, means \$25 for each kind. Now, this seems very little, and would not be very much for each, but I would say, let the prizes be less for grades, also entry fees small; also some sections could be dropped out if need be. But I would certainly say, let the judge of amount of money to each breed and let the grade of the thoroughbred also judge the grade of the same kind; though the prizes might be smaller, yet the competition would be fair to all, and the judge would be able to do his work impartially.

For Jerseys, I would suggest the following sections to be added to the class of thoroughbreds, giving prizes for females in milk only, and a section for heifer calves, viz.:

Table with 2 columns: Sec. and Amount. 1. Grade Jersey cow, 3 years and over, in milk... \$5 \$2 \$1. 2. " " heifer under 3 years, in milk... 3 2 1. 3. " " heifer calf, under 1 year... 3 2 1. 4. Herd of 4 calves, the first owned and bred by exhibitor... 3 2.

Now, these are small prizes, but they would be competed for by local men who would not be at expense of shipping their animals by railway, and they could be allowed to take their animals away, if they thought wise, before the close of fair. The above thought wise, before the close of fair. The above plan might do for the other dairy breeds, but for the beef breeds I would not suggest any plan; the breeders or judges of these would plan for themselves as they thought best. Special prizes, I think, should then be given by breeders who have been

winning year after year in the different classes to the grades of their respective breeds, and thus a lively interest would be taken in the exhibit of the different kinds of grade animals. I think you see these suggestions to be on the principle of fair play to all, and should result in a much larger show of grade animals. I hope this may be helpful to you in disposing of this matter, as I think a change is demanded in the near future.

Another difficulty has presented itself to me in the two years' work, and I think the judges of the other dairy breeds must meet with the same trouble; that is, in the section for yearling heifers. I find that to be a very hard class to judge, for this reason: that you meet animals varying so much in age, some 13 months, and some 23 or 24 months old, and what is worse, some in milk, some heavy in calf, and some perhaps not bred at all. Now, I think it almost impossible to judge a female in milk with a heifer not bred at all and give fair play to each. I would rather say: let two-year-old class include all heifers under three years, in milk or near calving, each exhibitor to show certificate to judge, showing age in months; they could then be judged according to age, and their appearance for usefulness, better than as they now are. Also, exhibitors should be prepared to show certificate showing age of all younger animals, as judges find so much difference in age in all the younger classes.

Wishing the Western Fair every success, I am, yours very truly, R. McCULLOCH.

[NOTE.—Mr. McCulloch has well said of the table presented in the above article, "these prizes are too small" to be competed for at a fair such as the Western, where the animals would, of necessity, have to remain four or five days at least. It appears to us that before any additional classes should be added to the prize list very many of the prizes for pure-bred sections should be considerably augmented. Would the finances warrant it, and were there no other special calls, such a classification, with much larger prizes than Mr. McCulloch has proposed, might be in order; but, as the conditions at present exist, it is not desirable to create more classes which teach as little as grades usually do, thus depriving the more worthy pure-bred classes of what should be offered in order to draw them to the show.—ED.]

A Good Dog--The Farmer's Friend.

Our frontispiece in this issue portrays a scene true to the life—an intelligent Collie lying quietly before a fine group of Shropshire sheep, at once their keeper and friend. Scrub dogs, like other scrub stock, are the curse of the farmer. Conspicuous in the scrub category is the hungry, sheep-killing cur—the greatest enemy of the industry in America. A well-trained Collie is a boon to any farmer as a guard and servant, saving many miles of weary tramping, not to mention his companionship; for he ranks in intelligence alongside the well-bred horse. His good qualities, like those of other animals, do not come by chance;—breeding lies at the foundation. Young men (as well as older ones) take pride in the possession of an extra good dog, and in order to bring such within access of our readers we have made arrangements with Mr. Robert McEwen, of Byron, Ont., distinguished as a breeder of Collies, enabling us to offer as premiums for obtaining new subscribers to the FARMER'S ADVOCATE, pure-bred puppies six weeks old and upwards, eligible to registration. We hope in this way to encourage to some extent the keeping of better dogs. It is not possible in any other way to secure dogs of such merit, as will be seen by a glance at our premium page. Mr. McEwen is so well known as a breeder that we need add but little on that point. He has been breeding Collies for about fifteen years, and has, perhaps, bred more prize winners than any other breeder on the Continent. This has been accomplished by importing only stock of winning strains, and mating them with judgment. They have won prizes in New York, Chicago, Detroit, Boston, Philadelphia, Pittsburg, Buffalo, Toronto, Montreal, etc., and have been sold to customers from the extreme east in P. E. I. to B. C. and even China in the West. None but the best bitches are reserved for breeding purposes, and they contain the blood of such noted individuals as Champion Christopher (sold for £1000), Champion Sifton Hero (sold for £500), Champion Southport Perfection, etc. For years Mr. McEwen has been one of the Executive of the Collie Club of America, and last year was engaged to award the prizes in Collie classes at shows in New York and Toronto, all of which is a sufficient guarantee as to the breeding of the dogs.

We trust a number of our readers will be fortunate enough to secure a young Collie, bred at these famous kennels. For the conditions, we would refer all to the premium announcement on another page.

A dairy school will be opened in Winnipeg, Man., early in January in charge of Mr. C. C. Macdonald, Provincial Dairy Superintendent, for butter and cheesemakers, open to farmers' sons and daughters. The tuition will be free and at the close of the term certificates will be issued on the basis of an examination.

Breeding and Feeding Beef Cattle.

[An Ontario Farmers' Institute address by Thomas McMillan.]

The study of the Agricultural industry of this Province leads us to believe that in order to be thoroughly successful we must make a specialty of some particular department of the farm. In this respect we are simply following the example set by manufacturers. In these times the march of invention has been so rapid, and competition so keen, that, in order to succeed, manufacturers must concentrate their forces, and confine themselves to certain particular lines. So it is with the farmer. It is an old saying, and a true one, that if we would wish to succeed, we require to have some definite object in view, and in our operations endeavor to attain that object. The first thing which every farmer must decide for himself is, in what particular line shall I engage? There is plenty of room for a choice. In glancing over this Province we find some farmers engaged in sheep rearing, some in hog rearing, some in dairying, some in beefing, and so on; and we find men in all these departments who have been successful. Therefore, I consider the first great requisite to success depends upon ourselves, and requires that we must carry into our business the necessary skill and attention which, when properly directed, is certain to give satisfactory returns. In the department of breeding and feeding cattle, we first require to put ourselves in the possession of a number of good, serviceable, healthy cows—cows which will not only return a profit at the pail, and produce a well-formed and healthy offspring, but which, when no longer required for these purposes, will possess the inherent quality of taking on flesh easily and rapidly, and of making a satisfactory return at the block. Some of the main characteristics of such an animal are the fine, clean-cut head, and full, mild eye, which indicates a good and profitable feeder; good and straight in the back, broad, full and deep in the chest, well-sprung and deep in the ribs, full in the flank and fore flank, smooth over the kidneys, with the buttocks reaching well down to the hocks, and that fineness of bone which indicates a fineness and smoothness of the carcass generally. Apart from these features, one of the main points in a good beefing animal is what is called a good handler (an animal with a nice soft skin, covered with a fine coat of mossy hair).

Once having secured a few such animals, our aim should always be to increase the quality of their excellence and never allow them to deteriorate. To accomplish this, we must never breed from any but pure-bred males—animals of good individual merit, with pedigrees which can be traced back to a long line of notable ancestors—as such animals are much more likely to possess to a greater degree that prepotent power to transmit their own excellent qualities to their offspring.

With many farmers it seems to be a common practice to settle in their own minds from which cows they intend keeping their next year's stock of calves; these they may perhaps mate with a good male animal, and the balance of the herd is often bred to a scrub for the sake of fifty cents or one dollar in the service fee. This is a most ruinous practice, and will never yield the most satisfactory returns, as it is a settled principle in stock breeding that "like begets like," and that any one conception must affect a succeeding one, either beneficially or injuriously, as the case may be. Another great mistake, and one which is not confined to the general farmer, but often pursued by breeders of thoroughbred stock, is that of breeding from young males from one to three years old, and then, just when they have reached an age of sufficient maturity when we might expect they would be able to transmit to their offspring that health and vigor of constitution which is most desirable to have, they are sold to the butcher. This practice I believe to be one of the causes of the general complaint among farmers, that their animals are not so healthy and vigorous as they were years ago. Once having decided to follow a proper system of breeding, in order to hold and improve the good name which we have for the quality of our beef, we must determine to make war upon all scrub animals. They are a positive sign of want of thrift in every barnyard where they are to be found. They are an unprofitable commodity to have, and the narrowing margin of profit will not allow us to handle them. We must not close our eyes to the fact that there is still room for vast improvement in the quality of our herds; and when we know that the same quantity of food which will put two pounds additional weight on a scrub animal will put three pounds on a well-bred grade, it is a matter of the first importance that farmers should endeavor to rid themselves of all poor animals. Let me cite one experiment in support of this contention. Mr. Britton, at one time a feeder of cattle in Toronto, gave evidence before the Agricultural Commission in 1873 regarding some experiments he had carried on. In one he bought 103 scrubs north of Peterboro, paying for them two and a-half cents per pound; he bought another lot of well-bred grades near Goderich for from three and a-half to three and three-quarters per pound. He fed the two lots for a period of seven months. Although he did not weigh their feed, he stated the scrubs consumed much more than the grades. At the end of seven months he found the scrubs had gained an average of 130 pounds each, while the grades had gained an average of 270 pounds each. When selling he obtained \$1.63 per hundred pounds for the scrubs, and \$5.37 for the grades; so that notwithstanding the fact that the grades cost him from one to one and a-quarter cents per pound more than the scrubs, they were

the more profitable animals to handle. Mr. Hobson, of Mossboro, and Mr. Clay, who was for a lengthy time connected with the Bow Park Farm, have each given similar testimony; and I may also say that this testimony is borne out by our own experience during the past twelve or fifteen years.

Although good breeding will do a great deal, yet a judicious system of feeding will do just as much; and if we wish to attain the best results we must adopt such a system of feeding as will bring our animals to maturity as early as possible. Therefore the one great point which farmers should never grow weary of impressing upon each other is the great folly of allowing young animals to lose flesh. There is no mystery in the growth and rearing of animals. Every pound of additional weight put upon an animal represents so much food, and is a certain cost to its owner. In fact, whether the animal is allowed to increase, remain stationary, or decrease in weight, it is costing its owner so much each day. Thus it is evident that the only profit to be obtained from the food consumed is through the increase in weight which we may be able to obtain. Hence the utter ruin which must and does result from the current practice of allowing our young animals to run on bare pasture during summer, and run around straw stacks in winter. Such a system not only retards the present growth of the animal, but it so injures their digestive system as to render them unable to digest their food profitably when being fattened. And this, too, is the great reason why very many farmers are compelled to feed their beefing cattle such heavy grain rations while stall-feeding them. If our young beefing animals are kept and fed properly they should, in a measure, be nearly ready for the butcher at any time, and when we know that more gain can be obtained from the same amount of food the younger the animal it is, becomes our duty to furnish our young animals with such full and appropriate rations as will bring them to maturity as early as possible. Every individual who knows anything of the nature of animals knows well that while the animal is young, and in the rapid stage of its growth, its digestive and assimilative functions are most active; its percentage of waste in its system is much less than after it reaches maturity, and that the older it becomes, even before it reaches maturity, the more food it requires to supply this waste. Therefore the same amount of food will produce so much more weight when the animal is young than afterwards, and here it is our duty to mature our animals as early as possible, as early maturity offers the only safe system of profitable beef production.

In outlining a system of feeding to be followed, let us start with the young calf, which we like to have dropped some time from the month of November on till spring. Although, no doubt, the sleekest and best calves can be obtained when they are allowed to suck the dam, yet I believe the more profitable method is to milk the dam and feed the calf from the pail. We separate the calf from its dam at birth, as it can be done with less trouble and annoyance than at any future time. Keep the calves separate until they have been taught to feed well, as we invariably find if two or more young calves are allowed to run together they will learn to suck each other after receiving the usual milk ration. In the case of the male calves which we intend to castrate, we do so as soon after birth as possible. We have never found any injurious results from performing the operation at this time, whereas if we wait till the animal is three or four weeks old, as is generally the practice, it will often be eight or ten days in coming round to be as frisky as usual again. For the first two or three weeks we feed the young calf upon new milk; then we introduce a skim milk ration at noon, in which is mixed a little boiled flax or oatmeal. We also gradually change from the new milk ration, morning and evening, by mixing with a little skim milk supplemented with a little boiled flax or oatmeal, care being taken always to heat to new milk temperature, as we consider it very injurious to feed cold milk. We also keep clover hay (if available) in their stall, and crushed peas and oats in a box to which they have access. If they do not take readily to the meal, feed it from the hand, and when they have learned to eat the dry meal withdraw the grain mixture from the milk. Gradually supplement their meal ration with roots and corn silage. In all our experience we have found no fodder to which young calves will take more readily than corn silage. It seems to give them a fine, sleek skin and develops their digestive system admirably. In fact, our experience in the feeding of silage to calves leads me to believe Mr. Stewart, in his notable work on feeding animals, when he says: "Corn silage must take the place of the steaming and cooking of foods, which is largely practiced in the older countries; that its succulence is greater than can ever be attained by the steaming of food; and it must approach in digestibility very nearly that of green grass eaten in pasture." When the spring growth starts, so that we have grass, let the calves have some. If we have a grass plot near the barn we let the calves on it; if not, cut the grass and feed them in a loose box. Young calves should never be allowed to roam over large fields, or be exposed to the scorching heat of a summer sun, or have their usual grain ration neglected. When the fall season comes round they should never be exposed to inclement weather, but by this time be comfortably placed in winter quarters. Feed judiciously the first winter a ration of grain, with roots, or corn silage, cut feed and clover hay. If the young animal is well fed and properly cared for the first year of its exist-

ence, its growth and condition as a thriver is determined; it forms the habit of laying on fat, and with proper treatment we have very little trouble in keeping it in good condition after this time. During the second summer, turn upon grass, and if, on account of drought or other cause, there is not a plentiful supply of pasture, this must be supplemented by some soiling food; thus we will invariably find our animals coming to their winter quarters in good condition, and with liberal feeding over winter they can easily be made ready to ship to the British market at from two to two and one-half years of age. In fact, the best feeders in our country who fatten cattle of their own breeding, make a practice of having them ready to ship not later than this age; although there is still a great many—I may well say a large percentage of our farmers—who still persist in raising their animals to two and one-half, and often three and one-half years of age, and then sell them as stockers. I need scarcely say this is a most ruinous system. All these farmers require to do to have their animals right enough for the beef market is to feed a little more liberally, and they would be doubly repaid for the extra amount of food supplied; for when we know that it takes about two-thirds of a full ration for the food of support, or to supply the waste of the system, it becomes evident that the only profit to be found is by feeding the remaining third. To show how much cheaper beef can be produced the younger the animals are, let me quote an experiment carried on by the Groff Bros., of Elmira, who in their day were among the most successful feeders in Ontario, carrying off the highest premiums, both in this country and Chicago:—

"Two steers, bred by Groff Bros., weighed at 12 months, 1,000 lbs. each, and cost \$34.67, or \$3.46 per 100 lbs. The same steers gained during second 12 months, 500 lbs. each, and cost \$52.13, or \$8.68 per 100 lbs. The same steers gained during the third 12 months, 650 lbs. each, and cost \$81.50, or \$12.53 per 100 lbs."

To corroborate the above, I take one statement from Mr. Stewart "On Feeding Animals":—

"Average cost per 100 lbs., of nine animals, at 12 months of age, \$3.39. Do., from 12 to 24 months, \$7.97. Do., from 24 to 36 months, \$12.54."

To show another phase of the ruinous practice of raising animals to two and a-half and three and a-half years of age and selling them as stockers, careful analysis and experiment proves that a young, growing animal will take from 25 to 50 per cent. of the elements of fertility which its food contains to build up its system in the shape of bone and muscle; while after this time, during the fattening period, it will return fully 95 per cent. (almost all) of the elements of fertility which its food contains back to the soil through the manure; so that farmers who follow such a system are simply manufacturing so many machines out of the fertility of their farms and then handing them over to their more fortunate neighbors to use for a most beneficial purpose. Although, as I have stated, we have raised a few animals each year, yet our practice largely has been to buy these very animals which other farmers persist in selling. In pursuing such a system great care must be taken in selection. Buy good animals, and those in good condition. Stockers which have grown to be two or three years old and have not formed a habit of taking on fat are undesirable and seldom prove remunerative. Care must also be taken to have them stabled before it gets too late in the fall or they will lose flesh. When the weather is such that we are subjected to a succession of light frosts, it is time to have the animals stabled. Every farmer should have some settled system of feeding which he intends to pursue, and for this purpose have his fodder prepared so that his animals can be fed regularly and liberally from the start. When feeding, we should study the nature of the animals we feed. All ruminants are possessed of large stomachs, calculated to digest bulky and fibrous food; therefore they should never be fed upon concentrated grain alone, but always have it mixed with bulky fodder, such as cut hay or straw, corn silage, etc. In the feeding of grain it is much more profitable to give a mixture rather than confine our stock to a single variety. For instance, experiments have proven that eight pounds of bean meal will give one pound increase in live weight; eight pounds of pea meal, ditto; five or six pounds of linseed cake, ditto. But four and a-half pounds linseed cake and peas, in equal proportion, will give one pound increase in live weight; and three and a-half pounds linseed cake and beans, in equal proportion, will give one pound increase in live weight; therefore it is evident how much more profitable will our results be by feeding a judicious mixture than by confining our operations to a single variety. Great regularity should be maintained in feeding. It is surprising how readily animals will learn to know just when to expect their different rations. If any of these are withheld for an hour or so they will rise and remain restless until their food is supplied. Cleanliness and tidiness should also be encouraged and enforced. Animals should be given at each feeding only what they will lick up clean. As far as possible the same feeder should be allowed to feed the animals continually; and above and beyond all, if we desire to obtain the most profitable results from the food consumed, we must accompany the food with the kindest and most humane treatment. There is no place in a cattle stable for a passionate man. Animals do not thrive if excited and irritated. They must be taught to regard their feeder as their best friend.

Feeding Live Stock -- Experience at the Ontario Agricultural College.

This important subject has not received the close consideration it deserves from many farmers. To feed stock successfully requires intelligence and good judgment in adapting the food to the kind of animals, and to the different stages of development. Young cattle should be fed bulky and easily-digested food; food suited to the production of bone and flesh, such as clover, either cured or green; roots, bran, crushed oats, etc. Young stock, fed on such food regularly and moderately, develop into strong, healthy animals. A diet for young animals containing an excess of rich, concentrated food tends too much to the production of fat, renders an animal liable to disease, and is likely to check or stunt it in its growth. Animals should be fed according to the object desired. For breeding purposes, it is important that both male and female be fed on food that will produce bone, muscle, and flesh, instead of fat. The live stock of the Ontario Agricultural College were fed during the past winter as follows:—

Cattle.—On the 6th of Nov., 1894, 16 steers rising three years old were purchased by the Farm Superintendent, Mr. Rennie, in the Guelph market, at 3½ cents per pound, the average weight per animal being 1,157 pounds. They were fed largely on rape until Christmas, receiving in addition, night and morning, a mixture of cut hay, chaff, pulped roots, and ensilage, about 25 lbs. per day; also 2 lbs. of crushed barley and oats, with 1 lb. of bran per day; the cost of feed per day for each animal being about 7 cents, including the rape. During January, February and March they received no hay. The food fed to them was a mixture of chaff, ensilage, pulped roots, 50 lbs. per day, fed in three meals, at 5 a. m., 12 noon, and 6 p. m.; the cost for each animal being 8 cents per day, including 4 lbs. grain and bran. With these rations from the 6th Nov. till the end of March, 144 days, they gained an average of 265 lbs. per animal, or 1.84 lbs. per day. Allowing 40 lbs. each for shrinkage, the net gain was 1.56 lbs. each per day for 144 days.

For April the average gain was 50½ lbs. per animal, or, say, 1½ lbs. per day. Cut hay and clover were added to the second mixture mentioned above.

During May the increase was only 26 lbs. per animal, say five-sixths lb. per day, while the food was 4 lbs. pea-meal and 2 lbs. bran, with cut hay, chaff, ensilage, and pulped roots mixed together, 50 lbs. per day to each animal; the cost of this food being about 10 cents, each animal, per day.

From the 1st of June the food was cut clover and ensilage, mixed, 45 lbs. each per day, with ground grain (barley, rye, wheat and bran, 7 lbs.), the cost being 12 cents for each animal per day. The average gain in weight for each animal was 1 lb. per day.

In these estimates, clover hay is valued at \$7.00 per ton, chaff nothing, ensilage \$2.00, and roots \$2.50 per ton, mixed grain 1 cent per lb., and bran \$12.00 per ton.

The milch cows were fed the same as the steers in winter, except that they received an addition of 20 lbs. of mangels per day when giving milk.

It will be observed that the greatest gain for the food consumed was in the first five months, while the steers were fed on the coarse, bulky, and easily digested food. The last three months they were fed at a loss, while they were being fed on the stronger and more concentrated food.

The steers were sold to Messrs. J. A. Leaman & Co., of Halifax, Nova Scotia, at 5½ cents per lb. live weight, and shipped to them on July 26th.

RESULTS.

November 6th, 16 steers averaged 1,157 lbs., total 18,512 lbs., at 3½ cents	\$ 647 92
July 26th, 16 steers averaged 1,555 5/8 lbs., total 24,890 lbs., at 5½ cents	1,368 95
Gross gain	\$721.03

Food Consumed.

November 6th to the end of December, 55 days, at seven cents per animal	\$ 3 85
January, February and March, 39 days at six cents per day per animal	7 12
April and May, 61 days at 10 cents per day per animal	6 10
June 1st to July 25th, 55 days at 12c.	6 60

Total cost of food for each animal	\$ 23 67
Total cost of food for 16 animals	378 72
Total gain for 16 animals	\$ 721 03
Cost for food	378 72

Net gain for 16 steers	\$ 342 31
Net gain for each animal	\$ 21 39

The manure is taken as equal to the cost of the labor for feeding, etc. Had the stock been sold in May, as is the custom, there would have been a much larger profit, as will be seen from the above figures. They were kept until July, that the large number of farmers who visit the College during June and July might see the result of this method of feeding.

Pigs.—The principles of feeding pigs are similar to those applied to other live stock, viz.: Animals kept for breeding purposes should be fed on food that will form bone, muscle, and flesh, instead of fat. The brood sows at the College Farm are fed twice a day, on boiled roots, either turnips, mangolds, sugar-beets or potatoes, mixed with bran and middlings. The young pigs are fed the same kind of food three times a day. As they have no milk for the young pigs, for three or four weeks after weaning flax seed was mixed in their food as a substitute for milk, about one-half pound per day for each litter of 8 or 10 pigs. The cost of the food at the age of four to five months is 2½ cents per day for each

animal; and the increase in weight is over 1 lb. per day. After five months, until sold, pea-meal was substituted for middlings.

The following will show the results from four lots of cross-bred pigs, that were sold to Messrs. J. A. Leaman & Co., and shipped with the steers on July 26th:

February 13th, 7 animals from Tamworth sire and Berkshire dam, average weight at 4 months	117 pounds.
March 13th, 7 animals from Tamworth sire and Berkshire dam, average weight at 5 months	154 "
April 13th, 7 animals from Tamworth sire and Berkshire dam, average weight at 6 months	204 "
May 13th, 7 animals from Tamworth sire and Berkshire dam, average weight at 7 months	255 "
June 13th, 7 animals from Tamworth sire and Berkshire dam, average weight at 8 months	301 "
February 25th, 5 animals from Tamworth sire and Chester White dam, average weight at 4 months	96 "
March 25th, 5 animals from Tamworth sire and Chester White dam, average weight at 5 months	131 "
April 25th, 5 animals from Tamworth sire and Chester White dam, average weight at 6 months	167 "
May 25th, 5 animals from Tamworth sire and Chester White dam, average weight at 7 months	226 "
June 25th, 5 animals from Tamworth sire and Chester White dam, average weight at 8 months	267 "
February 25th, 8 animals from Yorkshire sire and Poland-China dam, average weight at 4 months	102 "
March 25th, 8 animals from Yorkshire sire and Poland-China dam, average weight at 5 months	137 "
April 25th, 8 animals from Yorkshire sire and Poland-China dam, average weight at 6 months	186 "
May 25th, 8 animals from Yorkshire sire and Poland-China dam, average weight at 7 months	226 "
June 25th, 8 animals from Yorkshire sire and Poland-China dam, average weight at 8 months	256 "
April 27th, 4 animals from Berkshire sire and Yorkshire dam, average weight at 4 months	99 "
May 27, 4 animals from Berkshire sire and Yorkshire dam, average weight at 5 months	138 "
June 27th, 4 animals from Berkshire sire and Yorkshire dam, average weight at 6 months	177 "

There was little difference in the quantity of food consumed by the different crosses; and the food was limited to what they ate within half an hour of feeding. The Chester White dam suffered from fever for about a week after farrowing, so that her pigs were badly stunted at the start, from which they did not recover until between four and five months old. The pigs were inspected by two of the most prominent pork-packers in this Province, and the Tamworth crosses were pronounced the most suitable for their purpose.

In order to have roots to boil for the pigs during the year, about two acres of sugar-beets are grown. They will keep until the first of August, when the new crop of mangels is ready to feed. For a time both tops and roots are boiled. By this system of feeding, it is estimated, the best quality of pork can be produced for two cents per pound live weight.

The Cattle Quarantine.

(From an address by Hon. John Dryden, Provincial Minister of Agriculture.)

In an able address before the reorganized Dominion Cattle Breeders' Association, Hon. John Dryden, Minister of Agriculture for Ontario, after pointing out the growing importance of Canadian live stock husbandry, as shown by our increasing exports, and the need for a strongly-officered organization, added:—

"It is not enough, however, to have an important industry, which is sought to be represented in this way. Those who are engaged in it must express a willingness and a heartiness in co-operation together for the common good. There are some things in connection with cattle-raising which I can accomplish perfectly all alone; but there are other things in connection with the industry which cannot be brought to pass without the union of those interested. It is evident that if the cattle industry should be laboring under any obstacle which can only be removed by recourse to those in authority in our country, a single individual presenting the case would have but little weight. But when a strong association, representing vast interests, unitedly petitions the authorities and properly presents their case, even the dullest politician comes to see that something must be done by way of relief. I have a case in my mind at present. Those of us who are engaged in breeding thoroughbred cattle know the difficult situation at present. Formerly we had a large trade covering various States of the American Union. Our cattle, because they were imported into that country for breeding purposes, were allowed to enter free of duty. They are still allowed to enter duty free, and yet the trade is practically prohibited. It has been brought about in this way. Formerly Canada enjoyed an advantage over the Americans, because our cattle had access to the inland markets of Great Britain, while those of the United States had to be slaughtered at the port of entry. In order to hold our position in this respect, a quarantine was placed on American cattle coming into Canada. At that time there was danger of certain diseases, which then existed, being brought into this country, and it was an essential thing to prove that our herds could show a clean bill of health. Notwithstanding this, an embargo has been placed upon our cattle similar to the Americans, and it has been over and over again declared by the British authorities that we have sent from this country pleuro-pneumonia—a disease which no man, expert or otherwise, can find in the Dominion. This statement serves as an excuse for the British authorities to maintain the embargo. We have hoped to see it removed. The case has been presented to three different Governments, but the answer has always been the same;

and our conclusion now is that the majority of those whom the Government represented do not wish it to be removed; and it is likely, therefore, to remain. If this be true, why should this quarantine be kept up? The quarantine which the Americans have placed on our cattle is not to keep disease from entering the United States, but it is placed there because we have placed our quarantine against them. At present there is no cattle disease in Canada which can be carried into the United States, nor do I know of any disease in the United States which could be brought into Canada. You cannot keep up the best herds of the country unless the proprietors of these herds can have a very extended market. It will be impossible to maintain them in their present flourishing state if the market be limited to our own Province or Dominion. To allow these herds to deteriorate in quality and decrease in influence will in the end react upon the ordinary cattle of the country. It is, therefore, of the utmost importance that they should be maintained. Now, this is a matter that cannot be handled by any single individual. But if the cattle breeders are of one mind, which I think they are, then the presentation of the case from a strong association, representing the best of our farmers interested in this great industry, would be necessary in order to secure any relief in this regard."

An Embargo on Sheep.

As stated in the ADVOCATE some months ago, the British authorities have been strongly urged by those representing the breeding interests there to pass an Act of Parliament fixing slaughter of cattle on landing as a settled policy. A recent cable dispatch states that this is now to be done, and also that sheep are to be included. For months past references have been appearing in Old Country journals showing that they regard very seriously the competition from America. Our Montreal market report in this issue states that Canadian shipments of sheep have this season run up to over 180,000, an increase of 51,000 above last year. The direct basis of the clamor for a sheep embargo is that scab (a disorder with which British flocks have been overrun for years) is said to have been discovered in several shipments. A sheep embargo would compel the finishing of all sheep here, so that they would be ready for the butcher before shipment from Canada, as is now the case with cattle. We understand that steps have been taken at British ports of landing for largely increased slaughtering facilities, which adds color to the news that a permanent live stock embargo is on the tapis. The complaints of the British farmer have been many and loud, and under cover of the crusade against animal diseases (with which we must admit Britain has been sorely afflicted) they will accord whatever advantage may come from shutting out all but finished stock, thus getting rid of the competition of an inrush of cheap animals for feeding purposes, besides, as they put it, closing one possible avenue against disease.

FARM.

Potato-Cake for Cattle.

A recent number of "Le Bulletin des Halles" contains an article by MM. Nivere and Hubert, the directors of the Agricultural Laboratory of Beziers, on the manufacture of potato-cake. These authorities state that they have made numerous experiments in the transformation of potatoes into the form of cake with the most successful results. The method is to grate the potatoes and to press the pulp by means of a press similar to that used for beetroot. Potato-cakes prepared in this manner contained, when dry, about 95 to 97 per cent. of solid matter. They will keep for a considerable period, and can be very advantageously used for cattle. With the addition of meat or fish-meal they are said to form an extremely nutritive and digestible feeding stuff for fattening stock. The liquid which is extracted from the potatoes by the press contains certain nutritive matter in solution, and need not be entirely lost, as it would be possible to utilize it to some extent in the feeding of stock. The great advantage of the potato-cake lies, it is maintained, in the concentration of the nutritive qualities of the potato in a shape easy for transport, and capable of being preserved for an indefinite period.

A Manitoba correspondent of the FARMER'S ADVOCATE has suggested that oats and barley might with advantage, in shipping, etc., be pressed into solid cakes, like cakes from the linseed mills, or larger.

Agriculturists in Session.

The annual meeting of the Ontario Experimental Union is to be held at the Agricultural College, Guelph, on the 12th and 13th of December, 1895, for which an excellent programme is being arranged. J. A. Craig, Professor of Animal Husbandry, Madison, Wis.; John Craig, Horticulturist, Dominion Experimental Farm, Ottawa; Miss J. Livingston, Superintendent School of Cookery, Ottawa; and others, are expected to be present to deliver addresses. This important meeting, coming as it does at the close of the annual Fat Stock Show, and also the annual meetings of the Dominion Sheep and Swine Breeders' Associations and the Guelph Poultry Association, should bring together a much larger concourse of visitors than usually attends the "Union."

Successful Cultivation.

SIR,—I feel impelled to give my brother farmers my experience with a field during the past three years, as I think it proves that growing fodder corn, properly cultivated, is the best possible preparation for Manitoba wheat.

In the winter of 1892-3 I hauled the manure daily from the stables and spread it on the snow. As soon as the frost was out sufficiently the manure was plowed under and the ground harrowed once to fine the soil; about the 18th of May harrowed again to kill the weeds then germinating and drilled with shoe-drill, one-half bushel Dakota White Flint corn, rows about 28 inches apart. When the corn was about three inches high harrowed again, which killed another crop of weeds (just showing through the soil) without materially injuring the corn. This treatment left the ground so clean that we only had to cultivate twice during the summer with a Planet Jr. winged steel cultivator. Two boys with hoes followed the cultivator, cutting and pulling any stray weeds from the rows. They could easily keep up to the cultivator, cleaning six to seven acres daily. This treatment prevented any weeds seeding, and when the corn was cut by a binder with "kicker" the land was absolutely clean.

The corn thus grown, cut early so as to barely escape frost, is the best fodder I have yet found for milch cows, and they eat it all, not leaving a butt even, as it is the juiciest part of the stalk.

As soon as the land was fit to work in spring of 1894 I gave this corn stubble a stroke across the rows with Acme harrow (a common harrow will do nearly as well, though it will pull a few of the corn roots up) and then drilled with shoe-drill, 1 1/2 bushels of wheat per acre, going with the rows of old corn stubble. (The corn should be cut as low as a binder can be run, as more fodder is secured and less corn stubble left on ground.)

Although the average yield of wheat in Manitoba in 1894 was low, owing to the drought, I threshed 31 bushels No. 1 wheat per acre from this field. In the spring of 1895, finding the wheat stubble absolutely clean, I again drilled 1 1/2 bushels of wheat, and have just threshed 56 1/2 bushels per acre from it, all No. 1, unfrozen grain. I think this is a valuable experience. I have from one dressing of green manure and one plowing raised one crop of corn and two crops of wheat, pays very well for work done and all expenses, leaving a good profit. I think this present crop of 56 1/2 bushels per acre raised on stubble ground, unplowed, is something uncommon. I may say that the land is measured and the 56 1/2-bushel yield is threshers' measure, using the bagging attachment, counting two bushels to each bag. The grain was cleanly threshed and is expected to go two bushels and ten pounds to the bag, which would make the actual weighed yield 62 bushels and 42 pounds per acre. I have kept this grain in a separate bin, and intend weighing it carefully to ascertain the exact yield. I believe that while this dressing of fresh manure is a benefit to the immediate crop of corn, it is a much richer plant-food for the first crop of wheat to follow and a still richer food for second crop of wheat.

As it would be interesting to know how it would feed a fourth crop (the third of wheat) without plowing, I am tempted to try it in wheat again next year.

As a result of this experiment, I would strongly advise farmers carrying a number of milch cows to manure as much land as possible in winter and try this system.

The stock objections are two:—
1st—That by spreading fresh manure, ungerminated fowl seeds are also spread.
2nd—That the cultivation of the corn in a busy time in summer is too much bother.

To the first I would answer, that in this dry country it is next to impossible to so pile manure as to decompose it and germinate the fowl seeds; and I do not care if the ungerminated fowl seeds are turned under for a few years, because I have no difficulty in killing them all when turned up to the sun, which will be the first time I summer-fallow the land, as experience has taught us how it should be fallowed. I have been spreading this fresh manure in winter on my lands for years, and the first plowing after is always summer-fallow, and I have as clean a farm as I see in all my travels—not excepting Mr. Elder's, near Virden.

To the second objection I would reply, that the only extra work on account of the corn crop is the cultivation and boys' work following, and the extra value of the fodder crop for milk over any other we have is well worth this extra work, to say nothing of the plowing for the successive crops of wheat, which is saved.

Had I plowed my field in question for each crop of the two last above described, the labor would have been more than double that which I have expended on it.
W. A. DOYLE.
Beulah, Manitoba.

Experience in Potato Feeding.

J. D. Smith writes as follows in the Dairyman and Agriculturist:—"I know from practical experience that potatoes make most excellent pig food during the fall months, my practice being to fill a forty-five gallon farmers' boiler one-half full with potatoes, and fill up with sliced pumpkins, with potatoes, and fill up with sliced pumpkins. When well cooked I mix in a peck of corn-meal, and pulverize all together thoroughly; then remove to

a barrel and mix with what skim-milk we have. Our twenty-six pigs now on hand are making a very fine growth on this diet. Fed judiciously to cows in milk, I value them equal with grain. This may seem a broad statement, but I will explain. We milk more or less of our cows all winter, and our experience is winter milkers need liberal grain feeding. It often occurs that a cow will begin to lose her relish for her grain. The moment I see any disposition on the part of the cow to mince, I remove her grain and substitute a feed of potatoes. Two or three feeds of them regulate the stomach, and the grain is again eaten with a relish. Horses, colts and calves love them dearly, and they are of great value when these animals are confined to dry food. I refused to fill an order recently for anything less than forty cents per bushel, preferring to keep them and feed to stock. The present season is an excellent one for farmers to try experiment in feeding this valuable farm crop."

The Care of Farm Implements.

Among the many jobs to be completed before winter sets in is the cleaning up and putting away of implements and farm machinery. On many well-regulated farms, where there is a roomy, convenient shed, no matter how cheaply constructed, and the men who use the implements are thoughtful, the job is never allowed to grow into more than a few minutes' work, which can be done at leisure on some stormy day. Upon too many farms, however, this is not this case. How often is an implement left at the very place where its labors ceased! or, perhaps, by more careful hands, it is taken to a bare corner of the field and there left exposed to all sorts of weather. At the end of an indefinite period, during which the implement may have been alternately soaked, dried, frozen and thawed, it is probably removed to the buildings and placed in a barn mow or implement shed just as it has been brought from the field, covered with accumulations of dirt, damp and rust, and altogether in the precise condition that is most favorable to the rapid wasting of its substance, the injury of its working parts, and the permanent impairment of its usefulness. In this state it is left without further care until it is again wanted in the field. Most probably it then receives a hurried examination, or is sent out without any, the expectation being that it was laid away in fair working order, and it should be found in the same state. Now, this hope cannot be other than fallacious, as the above mentioned unfavorable conditions must produce damaging effects. In many cases a trial will prove the implement defective and incapable, and has to be dispatched for repairs. Valuable time is wasted and pressing operations delayed, perhaps with the result of serious and irretrievable loss. This may seem overdrawn to some farmers, but to others it is a good picture of their own experience if they will but admit it. Not only is there loss from delay upon the farm by waiting for the return of the implement, but in many cases the machinist, who is overcrowded with work, does not give the perfection of work that would be done in a more slack season. Further, with his utmost efforts, the busy manufacturer may have to detain the machine longer than was anticipated, and the farmer, perhaps with his crops fully ripe and his harvest waiting, has to bear the loss of much valuable time.

Prof. Wright, of Technical College, Glasgow, deals in an able manner with this subject in the English "Farmer and Stock Breeder." He goes on to explain that, as implements are usually constructed of wood and metal, the contraction and expansion of the two by heat, wet and cold are by no means the same.

"It is true," says the Professor, "that the greater part of the implements of the farm cannot be wholly preserved from the influences of the destructive atmospheric agencies that have been mentioned. Those employed in tillage or outdoor operations must, of necessity, be subjected to a good deal of weathering. Now, because complete preservation can not be obtained, in too many cases it is not considered worth while to take any precaution whatever. Hence, plows, harrows, scufflers, etc., receive little, if any, care, and are allowed to lie about for weeks or months in the wet season of the year, cumbering the head lands, or smothered in the dank herbage of some corner of a field, exposed to every passing shower, and alternately chilled by every evening's frost and thawed again by every morning's sun, while hayrakes and even by mowers may be seen buried in the aftermath of fields from which the hay has long been gathered.

The means that may be taken to retard the progress of deterioration and to shield implements from the wasting influences of the atmosphere are few and simple in character, but not unimportant in effect. One very simple, practical direction is of great consequence. All implements employed at intermittent work should be taken to the shed and placed under cover, repaired, well cleaned and oiled, immediately after use. When laid up for long periods, such as winter, they should be at once overhauled, thoroughly cleaned, repaired, if necessary, painted and oiled, and be kept ready for sary, painted and oiled, and be kept ready for working order. By thus putting away implements and tools, much time, worry and money will be saved, and the slovenliness of a yard strewn with machines will not rise up and pronounce against the careless one as a slovenly, untidy farmer."

Manure for Hay.

Hay land, like any other from which a crop is taken year after year, must be supplied with plant food in order to avoid an annual decrease in the crop produced. All hay crops, except clover, have no ability to extract food from the atmosphere, and the amount drawn up from the subsoil is very meager.

Where clover can be grown successfully, it is entirely the most economical hay crop to grow, but where timothy and other grasses have to be depended upon, and are grown on the same field year after year, it is well to know how to treat such land in order to get the most profitable returns.

In 1894 Prof. R. P. Wright conducted a series of experiments in Scotland, for the purpose of determining the best methods of utilizing farmyard manure upon the hay crop. In this case the manures were all applied in the spring, which would, in all probability, have resulted differently had the application been given in the autumn.

On plot nine, twenty tons of farmyard manure per acre were used, which produced an average crop of a few pounds over three tons. This was a larger crop than any obtained from the artificially-manured plots, although plot six, which had received 2 cwt. muriate of potash, 2 cwt. superphosphate, and 1 cwt. nitrate of soda, yielded within about 300 pounds of the farmyard-manured plot.

In the calculation of profit and loss, when due allowance is made for the residual value of the farm manure, a profit of seven shillings per acre is shown, which is considerably less than that realized from the artificially-manured plot, which, of course, could not be credited with any residual value.

On plot ten, ten tons of farmyard manure were applied, and gave an average crop of two and four-fifths tons per acre, being an increase of 1,288 pounds over the unmanured plots. This, like the former farmyard-manured plot, incurred a loss on the first cutting, which would be more than made up from the residual returns on following crops. The effects of the manure was much greater on the timothy plots than on those of rye grass.

The relative merits of the small, as compared with the large, dressing may perhaps be more clearly appreciated if expressed in the following manner: On the average, of all the farms dealt with, farmyard manure, applied at the rate of twenty tons per acre, gave an increase of crop of 1 ton 128 pounds over the crop from the unmanured land. One hundred tons of farmyard manure, applied at the rate of twenty tons per acre, would thus give a total return in hay of about five and one-third tons. On the other hand, the manure, applied at the rate of ten tons per acre, gave an increase of 1,288 pounds per acre. One hundred tons of the manure utilized in this manner would, therefore, give a return in hay of six and one-third tons, as against five and one-third tons when the larger dressing of twenty tons per acre was applied.

On plot eleven, ten tons of one cwt. of nitrate of soda. This combination has produced the largest crop obtained in the experiments. On the average of all the farms, 364 pounds more hay per acre was thus obtained than where twenty tons of manure had been used.

The average increase over the unmanured plot was 1 ton 408 pounds, as compared with an increase of 1 ton 128 pounds on the plot heavily manured with farmyard manure, and 1 ton 40 pounds on the plot where artificials alone were applied. The efficacy of this manuring was fully confirmed both on the rye grass and timothy sections of the experiment.

With regard to the character of the vegetation upon the different plots, it may be said that the heavy dressing of farmyard manure encouraged a strong and rank growth of the grasses, but proved very unfavorable to the clovers. On plots where the smallest dressing of farmyard manure was applied the clover was in general fairly good, whereas the grasses were less strong and prominent than where the heaviest dressing was applied. The quality of hay from the plots treated with both farmyard and artificial manures was not only very satisfactory, but it also produced the largest crop, and from it the largest profits in the experiment were obtained.

The Northwest Farmer's Thanksgiving Day.

The Manitoba and Northwest farmer will eat his Thanksgiving Day dinner with a great deal of zest. On a conservative estimate the Manitoba wheat crop alone amounted to 35,000,000 bushels, other grain in proportion, while the Northwest Territories show similar results, comparing the area under crop. Wheat yields ranging as high as 40, 50 and 60 bushels per acre are reported. One Brandon farmer (Mr. McFadden) has sold 22,000 bushels, bringing him \$10,000. D. Fraser & Sons, of Emerson, threshed 11,000 bushels, and so on. There have, as usual, been some severe losses from prairie fires, frost, and smut. Some 10,000 fat cattle will be shipped from Winnipeg, and the year's total will probably reach 50,000. About 25,000 or 30,000 hogs were marketed, besides a large number of sheep, and the wool clip amounted to 1,000,000 pounds. About 50 cheese factories and 33 creameries are now in operation.

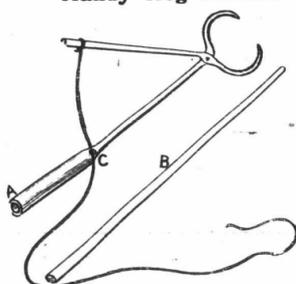
THE HELPING HAND.

Handy Farm Contrivances and Methods.

Upon almost every farm there are some handy, original devices, or improved methods and practices not generally known, which, if given to the public, could be utilized by others in rendering farm management more economical and remunerative. This department is intended to bring out such information for the benefit of our readers, and is to be maintained by them in holding out a helping hand to their fellow-workers by the interchange of descriptions of labor-saving tools and contrivances, particular ways of management, original and successful experiments tried, or any other feature in connection with farming not generally known.

To encourage subscribers to contribute to this department of the FARMER'S ADVOCATE, we offer a cash prize of \$2 for the best, and a second prize of \$1 for the next best contribution received prior to the 15th of each month. These and other contributions deemed of sufficient merit will be published as rapidly as our space will permit, but will not necessarily appear in order of merit. Compensation according to our standing offer for accepted matter will be allowed for suggestions published, but not awarded a prize. The decision in every instance will be final. Suggestions must be written upon one side of the paper with pen and ink, and must bear the contributor's full signature and address. They must be as short and concise as possible, 100 words being just as good or better than 500 if they tell the same story. Where an illustration will assist in making a description clearer, a rough pen sketch should accompany it on a separate sheet from the written matter. Every contributor must be a subscriber to the FARMER'S ADVOCATE. These contributions must not be mere reproductions of what have been published elsewhere. What we want is original matter. Plain sufficiently ahead so that the contributions will be as seasonable as practicable. We desire descriptions of contrivances or methods that have been actually tried and found successful.

Handy Hog Catcher--First Prize.

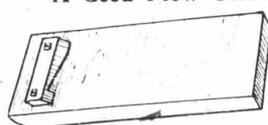


ELLIS F. AUGUSTINE, Lambton Co. —It is made in the form of large pinchers, as shown in the accompanying illustration. The handle of one jaw is made hollow at A, into which a wooden handle (B) is made to fit loosely. A rope is fastened to handle of opposite jaw, which passes through hole at C. When you wish to catch a hog, place the long wooden handle in socket, when you can advance the pinchers to encircle the leg of the hog; then pull quickly on the rope and withdraw the wooden handle, and you have the hog secure.

To prevent a sow from crushing her pigs against the wall when lying down, before she is expected to farrow nail boards around the sides of nest-room in the form of shelves about eight inches from floor. Then when the sow lies down, instead of crushing the pigs, they will slip beneath this protection. The litter for nest should be of chaff or finely cut straw.

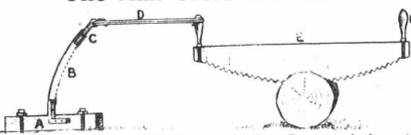
To break a kicking cow, take an old bridle bit and buckle one ring securely to each leg with a short, wide strap. In this way the worst kicker can be securely milked, and in a short time will be completely broken of the habit.

A Good Plow Slide--Second Prize.



SIMEON SNYDER, Waterloo Co., Ont. —Take a two-inch plank two feet long and one foot wide; then take a piece of wood nine inches long and two inches square; cut a notch out so that if it be bolted on this plank with the notch downwards, the plowshare will just fit in. Bevel front end of slide. When all is fixed place the plow on top, let the point of the share slip into the notch, and you can drive out into the field very comfortably, and not wear the plow.

One Man Cross-Cut Saw.



ROBERT WARR, Richmond Co., Que. —A is a two-inch plank, four feet long, staked to the ground; upon it is bolted a right-angled brace, riveted to an old handsaw. B, which is riveted to a short rod (C) which joins with the double fence wire (D). This wire is fastened securely to one handle of the cross-cut saw (E). The handle (F) is grasped by the sawyer. It will be readily seen from the illustration that the old handsaw (B) acts as a spring which aids in hauling the saw (E) back through the log.

Log Wagon Wheels.

While on a trip through the south-western portion of Ontario Province, we noticed a number of low-down wagons in use. The wheels were of buttonwood logs, about fifteen inches in diameter. The logs were sawed off the length of a wheel hub and sent to a wagonmaker to insert the iron boxing of old wheels. Wagons fitted with these wheels or rollers serve a good purpose in hauling manure, stones, etc., as they are as low as a sleigh, and will not cut into the soil, even of a plowed field.

Tanning a Sheep Skin.

There is nothing better suited for a buggy or cutter mat or robe than a woolly sheep skin. One Kenosha, a tanner, tells, in the Rural New Yorker, how they can be tanned at home. The method is as follows: Within a few hours after the skin is removed from the animal, put it to soak for 24 hours in a barrel of fresh spring water. Then take it out and lay it on a barrel, flesh side up, and scrape it thoroughly free of flesh, tallow and blood. This is easily done by means of an old scythe, which fits the oval shape of the barrel very nicely. If the skin has become dry in places, more vigorous scraping will be necessary. If the skin is perfectly fresh, it should be scraped all over the second and third day after removing from the water. To clean the wool, tramp or pound it while in the barrel of water before taking out for the second day's scraping. Also scrape lightly on the wool side with a wooden scraper while water is being dashed upon it. Should iron come in contact with the wool it is liable to color it. When the skin is ready for tanning, lay it out flat, flesh side up, and apply the following mixture: Pulverized alum, one-half pound; common salt, about one pound; saltpetre, one-half pound; and about twice the quantity in bulk of bran as of the chemicals. Sprinkle about half of it in a nice even layer over the skin, folding the edges over to the backbone, then roll up tightly from the head. Keep it damp in a cool place for a week, then open up, scrape off the application, sprinkle the skin with a pint of water and apply the remainder of the tanning mixture, and leave rolled up for another week, at the end of which time hang it over a scantling, and after two or three day's drying, scrape down towards the ground with a blunt knife until it is softened on the whole flesh surface. Then comb out the wool with a horse-mane comb, when you will have an ornamental and warm foot-rug or lap-robe. It may be lined and left white or dyed, according to taste.

One Johnston gives his method, and declares it better than the foregoing: Spread the skin, flesh side up, sweep off all coarse dirt, salt, etc., and cover with a mixture of two parts salt and one of each of alum and saltpetre, fold the flesh sides together, roll tightly, and place in a cool place for eight or ten days. Then brush off all salt and place in a barrel, and pound out in strong soapsuds, with a clothes pounder, until as clean as desired; then rinse. The skins may, with advantage, be put through a large clothes-wringer. Care should be taken that the suds be not too hot. While still warm, stretch and nail to the side of an unpainted building, flesh side exposed to the sun, for several days, the hotter the better. When well dried, take down, lay on a bench, flesh side up, and do some vigorous rubbing with No. 1 or 2 sandpaper; a few minutes will make a skin as soft as one could wish.

DAIRY.

Is the Fat of Milk a Correct Measure of Its Value for Cheesemaking Purposes?

SIR,—The year 1895 has been a trying one for our cheese factories. Many of the new factories will have a struggle to continue another year, while patrons of older factories who have experienced good returns during the past are finding their faith wavering in the old stand-by cheese. Old hands in the business will remember, also, many years ago, when summer cheese once dropped as low or lower than this season; but it did not stay down long. Fortunately, the markets are mending as the season advances, which will put new courage into the faltering ones. In a season like the past, it is more important than ever that each patron should receive his exact share of the fruits of his toil. Inspectors find that in such a season the temptation is very strong to not only recover lawful dues, but also unlawful shares of the milk pooled at the factories. If the energy and money that are now expended in stealing and catching the thief were expended in the solution of a system which would encourage honest milk and honest returns, and discourage all dishonest practices, it would be the better for the cheesemaking industry of Canada.

For two years the Dairy Department of the Ontario Agricultural College, Guelph, has been endeavoring to solve the problem. Last year, when we advocated the two per cent. system, a great hullabaloo was raised in several quarters. The gods of the children to the south were being spoken against, and their worshippers in their native country, and in Canada, were exercised very much; in fact, there was a stirring of the dry bones.

Before giving the results of our work in this connection for 1895, as you suggest, allow me to quote briefly from a letter recently received from the secretary of one of our large factories, where the two per cent. system has been in use during the year. He says: "At the close of the first year that we paid according to the fat readings, I was not altogether satisfied. For, although it might be an improvement on the old system of paying entirely by weight, still I thought there should be something like a sliding scale, as there appeared to me to be too much difference, and to the gain of the rich milk, except extra quality in the cheese made from the rich milk were made out and brought in for consideration. The new system of adding two per cent. to the readings this year accords better with my opinion on the matter, and agrees better with the figures."

He further expresses himself as not altogether satisfied yet, largely for the reason that in some months, when the average per cent. of fat in milk is higher—say, July and August,—it requires more fat to make a pound of cheese than it did in May, when the milk averaged a lower per cent. of fat. I think this can be explained on the ground that spring cheese usually (or should) contain more moisture than summer or fall cheese; there is less loss by shrinkage before the cheese are sold; and there is less trouble with "gassy" milk and "fast workers," which do not produce so well as milk of good quality. But I must come to the experiments. I shall not trouble you with tables of figures showing the yield of cheese per pound of fat in rich and poor milk, as I think that readers generally prefer the results stated in words rather than in figures.

For the months of April, May, June, July and August, which are all the months of which I have the data completed, our experiments give the same result as last year, viz., that a pound of fat in poor milk, testing, say, three per cent. of fat, will produce more cheese than a pound of fat in rich milk, testing, say, four per cent. of fat and over. The average per cent. of fat in one lot of milk during April was 4.21, which yielded 2.54 pounds of cured cheese per pound of fat. The average fat in the other lot was 3.39, which produced 2.72 pounds of cured cheese per pound of fat. In May, when the average was 4.09 per cent. of fat, the yield of cheese was 2.55 pounds per pound of fat, while the other lot of milk, averaging 3.30 per cent. of fat, produced 2.69 pounds of cheese per pound fat. June milk produced 2.54 pounds cheese per pound fat when the milk averaged 3.91, and 2.80 pounds of cheese when the milk averaged 3.16 per cent. of fat. July, with an average of 3.78, produced 2.61 pounds cheese per pound of fat, and the lot averaging 3.00 per cent. fat produced 2.95 pounds cheese per pound fat—the highest yield of cheese per pound of fat we have had up to this time. In August, when we had the lowest per cent. of fat (2.91) that we have had during any month, the yield of cheese per pound of fat was 2.97, while the milk averaging 3.82 produced 2.61 pounds of cheese per pound of fat.

Now, don't let any one run away with the idea that I am arguing for poor milk in our cheese factories, as we need normal milk of good quality and containing about 3.5 per cent. of fat to make good export cheese. Neither do I wish any one to say that this will encourage skimming or watering, as I am not discussing such milk, but normal milk. What we are after is to solve the question as to whether the yield of cheese is in proportion to the fat contained in normal milk. I have no hesitation in saying that the yield of cheese is not in proportion to the fat contained in the milk; therefore the foundation on which rests the system of payment for milk at cheese factories, according to the butter-fat, is insecure and untenable unless it can be shown that extra quality of cheese is produced from richer milk. This point I shall not discuss at present, as my article will be too long.

Having spoken of the incorrectness of one system, it will be in order to suggest an improved one. At the present time I have no apology to offer for the addition of two per cent. to fat readings. Further research may disclose something better; but at present it nearly fills the bill, as the following table will show:—

MONTH.	Lbs. milk.	Average fat for month.	Lbs. of cured cheese produced.	Reckoning the cheese at 8c. per lb. net, each lot would be worth the following amounts of money, if divided according to:—			
				Weight of milk.	Per ct. of fat.	Per ct. of fat + 2.	Weight of cheese
April	1800	4.21	192.50	\$14 35	\$15 90	\$15 36	\$15 40
	1800	3.39	166.25	14 35	12 79	13 33	13 30
May	4500	4.09	470.50	34 89	38 53	37 31	37 64
	4500	3.30	401.75	34 89	31 24	32 47	32 14
June	3600	3.94	361.00	27 20	30 17	29 11	28 88
	3600	3.16	319.00	27 20	24 23	25 29	25 52
July	3900	3.78	383.50	28 91	32 34	31 10	30 68
	4200	3.00	367.00	31 13	27 70	28 94	29 36
Aug.	3900	3.82	388.75	29 09	32 99	31 56	31 10
	3900	2.91	338.50	29 09	25 18	26 62	27 08

The foregoing table shows that the addition of two per cent. to the fat readings gives a slight advantage to the richer milk, under 4 per cent., when compared with the actual value of the cheese produced. This is the strong point of the system, as it encourages the sending of good milk to the factory (say milk with 3.5 per cent. fat, which is rich enough to make first-class Cheddar cheese); but when the milk tests over four per cent., as in the months of April and May, then such milk does not receive any advantage—in fact, is placed at a disadvantage. It is a question whether milk containing four per cent. of fat and over is best made up into Cheddar cheese for export or into something else.

The average percentage of fat in the milk at the factory referred to (which is one of our best) is as follows:—

Month.	Per cent. of fat.	
	1894.	1895.
April	3.35	3.26
May	3.35	3.35
June	3.44	3.34
July	3.48	3.33
August	3.53	3.43
September	3.69	3.42
October	3.87	
November	4.03	

H. H. DEAN,
Dairy Department, Ontario Agricultural College.

A Plan for Securing Greater Uniformity in the Quality of Cheese.

One of the requisites in maintaining the high standard of Canadian cheese, and retaining first place in the best markets, is *uniformity* in quality, as well as *fine* quality. If in any cheese district one half the factories make an inferior article, the sale of the product from the other half, where finer goods are made, will be injured, and the reputation of the whole lowered. So it is in the interest of those factories where fine goods are made to have the quality of the cheese made in neighboring factories brought up to as high standard as their own. To do this successfully there should be co-operation between factories, and a mutual desire to help one another.

Though the finest quality of Canadian cheese is made in many Western Ontario factories, yet all have not yet reached the proper standard. It will therefore benefit every factory, in that or any other district, if the general quality can be raised equal to that of the finest. To accomplish this, a uniform system of making must be carried out, and this can only be accomplished by a uniformity of instruction and inspection. We have an example of uniform methods of work in connection with the cheese factories in Prince Edward Island. The output of the factories there is said to be of a standard quality throughout. This has been brought about by having one skilled man supervising the methods of making in all the factories.

The Western Ontario Dairymen's Association has under consideration plans for bringing about still greater uniformity within its jurisdiction. As soon as these are perfected they will be submitted to the factorymen. The number of factories in Western Ontario is too large to admit of giving uniform instruction at all by one or two persons, so it is proposed by the Association to arrange them into five or six groups or syndicates. A thoroughly skilled maker will be placed over each combination, to visit the factories regularly and give instruction in making; while one or two competent men will be employed to look after and instruct those in charge of the syndicates.

To carry out such a plan of systematic instruction a considerable amount of money will be required. The present Government grant would not be sufficient to meet this extra expenditure. Therefore, to finance it successfully, the factories would need to contribute; in fact, if the Association cannot depend upon each factory in the several groups or syndicates to pay its share of the expenditure, the scheme proposed cannot be carried out. There are estimated to have been about 22,000 tons of cheese manufactured in Western Ontario in 1894. If each ton of cheese made were taxed, say, 15 cents, \$3,300, or an amount sufficient to pay for four or five instructors for syndicates, could be obtained, which would enable the Association to do a large amount of valuable practical work. There are about 340 cheese factories in that portion of Ontario. Another means suggested of raising this revenue would be to have each factory pay \$10.00. This would furnish about the same amount of money, but, for obvious reasons, would not be as fair a basis as the other. It would not be fair to tax a factory making 40 tons of cheese as much as one making 100 tons.

Copies of the scheme, when perfected, will be sent to the factory representatives, to be discussed at the annual meetings during the winter, and submitted to the patrons for their approval. If it meets with the co-operation of the factorymen, arrangements will be made to have it carried into effect next season.

The object in view is certainly most laudable, and can only be achieved by hearty co-operation. Canadian dairying for years past has been reaping a sad harvest from efforts in this direction. Systematic instruction in dairying has brought the business greater profits, which is the ultimate object of this new proposal. Whenever we begin to relax our efforts in improving the quality, just so soon will we begin to lose our hold upon the cheese markets of Great Britain. The English consumer is not so much concerned about the place where his food comes from as about its quality. With him the place that sends him the finest quality is going to get his custom.

VETERINARY.

Tuberculosis Among Cattle.

[A paper read by S. J. Thompson, Veterinarian for the Province of Manitoba, before the Manitoba Dairy Association.]

"There has been so much said and written about this disease that it is not my object to give you a long history of the disease, but to give you, in as concise a way as possible,—

"First—To what extent I find the disease prevailing in this Province I speak after a careful inspection of a great number of cattle in different parts of the Province, and after having used the tuberculin test on about 120 suspected cases, of which 68 were found to be affected with tuberculosis, the greater part of which have been destroyed, and post-mortem examination made on the great majority (which helps to prove the value of tuberculin as an agent for detecting the disease in its earlier stages, while quite impossible to detect it by physical examination), and after a careful summing up, I believe I am quite safe in saying there is not more than three per cent. of our cattle affected; but there is no doubt we will find the great majority of those among our dairy cattle. We find there are many people who go to extremes

on almost every subject—this among others. Some will tell you there is little or no danger; that the disease is no worse than it was twenty years ago, and that the tuberculin test is all nonsense; while others will paint in the darkest colors the great dangers the people are exposed to by using milk or meat from tuberculous animals, and loudly call for the destruction of every animal affected, however slightly. I believe these are the two extremes. That there is danger from the use of tuberculous animals cannot be successfully denied, as many smaller animals and calves have been infected by its use in carefully made tests; yet we find that in 80 per cent. of diseased animals the milk is not infected; that is, none of the bacilli or germs can be found in it. We might say that in the majority of cases where the disease has been found in the milk, tuberculous nodules have been found in the udder, or the disease had so far advanced that it was disseminated through the system.

"Second—Measures to prevent the spread of the disease:—(a) By testing every thoroughbred animal coming into the Province. This I consider very necessary, as cattle breeders in other parts are getting to understand enough about the disease to want to get rid of any animal showing the least symptoms of it, and as it is so prevalent in other places we cannot be too careful in admitting cattle into this Province. (b) By testing with tuberculin all thoroughbred cattle sold in this Province for breeding purposes, especially males, as the disease is often introduced into healthy herds in this way. (c) By the destruction of all animals showing physical signs of the disease; that is, piners or wasters, cattle that become emaciated, having a cough and discharge from the nose, or with enlarged glands of the throat, flanks or udder, or a combination of symptoms. (d) The thorough cleaning and disinfecting of all stables where affected animals have been stabled. I wish you to distinctly remember there is little or no use destroying animals if you put healthy animals into the same stable without thoroughly cleaning and disinfecting it. There is no doubt that 90 per cent. of the disease is caused by the inhalation of the bacillus tuberculosis in the form of fine dust; therefore our great care should be not to allow any of the discharge to dry on the mangers, stalls or floors, or to rise in dust. Sprinkle your stable floor thoroughly before sweeping. (e) By allowing no person affected with tuberculosis to feed or care for cattle, as there is no doubt that the disease originates in some herds in this way. (f) By careful isolation and branding of all animals that react with tuberculin test.

"I will be asked what is the use of isolating them if they have tuberculosis? I answer, to slaughter as food for man, or for breeding purposes. The question will be asked, Is meat from tuberculous animals fit for human food? I answer in the affirmative; that is, where the disease is localized in the lungs, liver, or some of the smaller glands. After a careful study of the many tests made by Professors Nocard, Bangs, Williams, and the Professors of the Bureau of Animal Industry at Washington, and others, I have come to the conclusion that there is little or no danger from the use of meat from animals with localized tuberculosis, and positively none if the meat is well cooked. Therefore, when we have a herd with a number of young animals slightly affected, as we sometimes find the case, I do not think it right or necessary for stock raisers or dairymen to be at the loss of their cattle, but all that are not required for breeding purposes should be at once fattened and killed.

"Breeding from tuberculous cattle. If I had a herd of dairy cattle that to all appearance was healthy and strong, with a few exceptions, I would feel it to be a very great grievance and wrong if I were forced to destroy them unless I was fully recompensed. It would be quite right and just to prohibit me from selling milk or butter from such a herd, but to prevent me keeping my cattle isolated that I might increase my herd with their progeny, 90 per cent. of which, with judicious care, I would expect to be free from this disease, I would consider a great hardship; therefore, if I had a herd of cattle that I had cause to suspect were affected with tuberculosis, I would have them tested with tuberculin. Those that showed physical signs of the disease, besides reacting with test, I would destroy; the others that reacted I would isolate. I would go on and breed them as usual, taking away their calves as soon as they are born and feed them on boiled or sterilized milk. I would again test those calves when about a year old, with the full expectation of finding them free from tuberculosis. And I believe, under certain circumstances, I would go further; that is, where I wished to isolate my cows in a distant pasture, where it would be very inconvenient to milk the cows and feed the calves, I would allow the calves to run with their mothers until time to stable them in the fall, when, before stabling, I would test the calves with the expectation of finding very few, if any, affected by the disease. There is one thing more I wish to mention and to lay a great deal of stress upon, namely, I believe it should be made a criminal offence to sell milk or its products from tuberculous cows, or to sell an animal that is tuberculous (or has been branded as such) without informing the purchaser and also notifying the Department of Agriculture, so that the continued isolation could be insisted on. Where sold to butchers to be slaughtered, it should be inspected by a qualified man. These are some of the means I would take to hinder the spread of this disease and minimize its effects on our dairy cattle, and through them on the human family."

APIARY.

North American Bee-Keepers' Convention.

(Concluded.)

The Rev. L. L. Langstroth gave an address on "The First Importations of Italian Bees." The Commissioner of Patents in the United States gave a commission to Mr. S. B. Parsons to secure the Italian bee; and after much trouble, the Italian bee secured a footing on the American Continent. Mr. Langstroth stated that the drones from these queens were black; they found, however, that pure Italian queens, purely mated, could have Italian drones; the color in queens and drones was not decisive but in the workers.

"Introducing Queens.—Mr. S. T. Pettit, Belmont, Ont., followed upon this subject. Mr. Pettit stated that many queens, apparently introduced safely and surely, were accepted under protest, and were often superseded or killed. He liked to introduce a queen to a weak colony; they were less liable to object. An excellent plan was to make up a colony of combs of hatching brood; the bees were then all young, and the queen perfectly safe.

"The Bee-Keepers' Union.—Doctor C. C. Miller, Marengo, Ill., and Thos. G. Newman, Chicago, Ill., introduced the question of the union of the Association with the Bee-Keepers' Union. The Bee-Keepers' Union is noted for having taken hold of cases where, out of ill-feeling, ignorance or other cause, bee-keepers have been prosecuted, or bees have been prohibited, by ordinance or by-law, from towns, cities, villages, etc. The Union has shown that such prohibition is illegal and unconstitutional, and cannot be enforced; if they lost a case in a lower court they invariably won it in the higher. From the discussion, it is likely that the union will take place; the question was put in the hands of a committee.

"Something of Interest to Bee-Keepers.—G. M. Doolittle, Borodino, N. Y., gave an interesting address. In it he said bee-keepers had made a mistake to speak so much of adulteration; the right way was to go to the Legislature or Parliament and quietly have an Act passed putting heavy penalties upon adulteration, and then enforce the law; such methods would soon stop adulteration. Mr. Doolittle's remarks fell upon a sympathetic audience.

"Address by the Hon. John Dryden.—Thursday evening was one long to be remembered, and members felt themselves honored by the presence of the Hon. John Dryden, Minister of Agriculture, and Dr. Mills, President of the Ontario Agricultural College. Mr. Dryden spoke in his usual pleasing, forcible and instructive way, pointing out the great resources of the Dominion and Province of Ontario, for the benefit of the people in the protection of bee-keeping, the grants of money allowed for its development. In closing, he said: "I wish you every success in your enterprise. You represent a large industry. It is composed of very small drops, but taken together it means a great deal. Our people in this country and the people in the United States do not realize what it means, but you can add wealth to this country and to your country by paying attention to this industry. We who represent the Province believe we help all the people when we help the bee-keepers of Ontario; and therefore it is that we give grants year by year to this Association, and assist as far as we can to help them in their work." (Applause.)

Jas. Mills, M. A., LL. D., President of the Ontario Agricultural College, followed in an address which showed careful thought, and from which those present could derive, in the application, much profit. Doctor Mills said that success in farming, more than any other calling, depended on a number of uncertain and uncontrollable conditions or circumstances; he would venture to say, in his judgment it was not advisable for a farmer to concentrate his whole attention to any one line or branch of his occupation; that it is not wise for him to put all his eggs into one basket. President Mills then spoke of the Ontario Agricultural College and the experiment in bee-keeping which had been started, in which a keen interest was taken by those present. Different experiments were suggested.

At the close both gentlemen received the rare honor of being elected honorary members of the Association.

Mr. R. L. Taylor followed upon the subject of "Experimental Agricultural Stations," asking that greater interest be taken in the work.

Mr. Allen Pringle followed upon "Some Mistakes of Bee-Keepers and Bee Journals." Amongst other things, Mr. Pringle said: "In the first place, when a man gets by mistake into the wrong business (for him) of tending bees, it is another mistake not to get right out of it again before his money and himself have parted company. To have parted company, make a little fortune out of bee-keeping (saying nothing about a big one) takes time and patient, nothing about a big one) as well as special aptitude and persistent work, as well as an extra local-ability; and, in addition to all this, an extra local-ity for the abundant yield of nectar. But a little fortune may undoubtedly be made under the favorable conditions noted."

Mr. R. McKnight, Owen Sound, followed upon "Legislation for Bee-Keepers"; this elicited nothing very new.

The following officers were elected:—President, A. I. Root, Medina, Ohio; Vice-President, Wm. McEvoy, Woodburn, Ont.; Secretary, Dr. A. B. Mason, Auburndale, Ohio; Treasurer, W. Z. Hutchinson, Flint, Mich.

Adjourned.

GARDEN AND ORCHARD.

Covering Strawberry Plants.

BY ELLIS F. AUGUSTINE, LAMBTON CO.

By the end of this month, or as soon after as the ground is frozen sufficiently hard to bear the weight of team and wagon, all strawberry plants should be covered for the winter. It is often stated that this covering is not required before January, and that the work may even be delayed much later if the ground remains hard frozen. Some claim that the leaves of the previous summer's growth are of no more use to the plant, and all that is required is to protect the roots from being heaved by the alternate freezing and thawing of early spring. This is an erroneous idea, and no young fruit grower should be misled by it into making what will prove a very serious mistake. The hearts as well as the roots of the tender plants require protection, for often after a twelve-hour gale of searching zero wind they will crumble to the touch like so many dry leaves; this we once learned through costly experience. We now find that the plants are much more vigorous if covered while the leaves retain their summer freshness, and that such plants will give double the yield of fruit of others whose covering has been delayed until all the outer leaves have turned brown.

Forest leaves are often recommended as a covering. These may answer for a small garden plot, if brush is laid upon them to keep them in place; but if used in an open field, without other protection, the first heavy wind will scatter them. Marsh hay is also recommended, and no doubt will prove most satisfactory of all in sections where it can be readily procured, but there are comparatively few localities where it is to be had. Cut cornstalks have been tried with excellent results, but are altogether too expensive for general use.

The only covering which can be generally used is wheat, oat or barley straw. Pea straw is too compact, and when used freely and weighted by heavy snows, often causes the plants to rot. But whatever kind of straw is used, it must be entirely clean, if a large amount of extra work is to be avoided; this we also learned by experience. Ten or twelve years ago we had several acres of fine plants to be covered. A stack of old straw was offered to us at a low price, so we purchased it and spread it carefully over the field. But later on we found that we had seeded that field heavily to Canada thistles, pig weed, rag weed, wild mustard, and many other kinds of foul weeds—equally difficult to eradicate. It was many years before the field was entirely rid of these pests, and it is needless to state that that was the most expensive covering we ever purchased. (Right here I wish to state that this one mistake cost us more than the subscription price of half a dozen good farm journals, like the FARMER'S ADVOCATE, for as many years; and as it is the province of every good farm paper to give just such experiences, it is the farmer that leads who avoids committing like errors.) If one is not sure that the straw is entirely free of weed and timothy seed—and how little straw is, is shown by the multitude of weeds which invariably spring up where the straw is thrown to the ground in unloading—the following plan should be adopted: Build a scaffold of poles or rails beside the stack, four or five feet from the ground. Three persons are then required for the work: one pitches the straw in small forkfuls upon the scaffold, where the second, after shaking it up well, passes it on to the loader; in this way, practically all weed seeds are shaken from the straw; and in strawberry culture even wheat is considered a weed.

The straw, when unloaded, must not be allowed to remain in large heaps more than a day or two, or the plants beneath will be smothered. It should be spread evenly over the whole field to a depth of two or three inches; more than this will smother the plants. In the spring, part of this should be raked off the rows and tramped down in the paths between, leaving just what the plants can readily push their way through. The straw about the plants acts as a mulch and keeps the fruit clean during heavy rains, while that between the rows will largely prevent any weeds from springing up; of course no cultivation is given till after the fruit is harvested.

This work of early covering and thorough mulching is one of the chief factors to success in strawberry growing.

Nova Scotia School of Horticulture.

We are pleased to record that the Nova Scotia School of Horticulture at Wolfville reopened on Nov. 1, entering upon its third year with greatly improved facilities and most encouraging prospects generally. Prof. E. E. Faville, the Director, will gladly furnish intending students, or others, any information desired regarding the institution.

Too many farmers' fruit gardens are seldom entered after the fruit is all picked. This is all wrong if a crop is desired next season. All weeds, dead wood, trimmings and rubbish should be removed and every plant and bush protected for winter. Give the ground a coat of fine farmyard manure, and then it will be no fault of yours if a crop be not obtained in 1896.

POULTRY.

Fitting Poultry for the Shows.

Now that the fall exhibitions are over, and the winter poultry shows some distance in the future, a few pointers on the method of keeping the fowls in the pink of condition may be appreciated by some new beginners.

A bird to be in first-class show form must be in the best of health. This rule, which holds good with all stock, is fundamental, all the rest being subordinate to it. A bird, too, must be plump to stand any chance of winning a premium, but it is not desirable to retain this plumpness after the show is over. In fact, the best results are always obtained by keeping birds which are intended for exhibition in only fair condition up till within a few weeks of the show, when they should be put on special treatment, which will give them the much-desired bloom. Mr. R. Gordon, in Farming World, says: "Three weeks' special treatment before a show is generally all that is required; and when the birds arrive home again they should be put on plainer fare until such time as they are wanted for show purposes again."

"Different sorts of birds require different treatment. Games, etc., which require to be shown in very short, hard plumage, should receive very little soft food, only sufficient in which to give some of the highly concentrated nitrogenous foods, such as lean meat, liver, etc. A little hemp seed should be given occasionally, and canary seed may well form a considerable proportion of their diet. Game fowls require a good-sized grass run in order that they may obtain a strong muscular development."

The above-mentioned writer claims that soft-feathered breeds may have one meal of soft food daily, with an allowance of boiled liver. Hemp seed and wheat may be given in moderation, and it is the practice of one of Ontario's most successful poultrymen to add a little tincture of iron to their drinking-water, which has the effect of giving the face and comb a brilliant red. Indian corn should not be given to white feathered birds, as it has a strong tendency to give a yellowish tinge to the feathers. It has the same effect on the legs, and therefore should be given in moderate quantities to Plymouth Rocks, Brown Leghorns, etc. Oatmeal has also a good effect upon the yellow leg, and may take the place of corn in such breeds as have yellow legs, and plumage that corn would injure.

Birds with light-colored plumage suffer from tanning when exposed to strong rays of the sun; however, this factor has not much force after this season of the year. There are two especial conditions in which they should not be exposed to strong sun rays: 1st, when the birds are moulting, and 2nd, when the plumage is at all wet, as at such conditions the color tans very readily. Not only do light-colored birds suffer by strong sun rays, but such as barred Plymouth Rocks sunburn to a rusty brown quite easily.

The feathery-footed Asiatic breeds require careful looking after in order to keep the masses of foot feathers from being broken and otherwise destroyed. A grass lawn, kept very short, makes a good run for them. No heavy breeds, especially if feathery footed, should be allowed to roost, but should be bedded at night on sawdust or fine hay or straw. When white birds require washing before going to show, great care and some practice is necessary to do it well. They should never be sent to an exhibition before they are trained and accustomed to being examined, as the judge will have to do. A little acquaintance with the show pen at home will give them confidence when they arrive at the place they have been fitted for. An occasional dusting with insect powder will keep them comfortable, so far as the absence of vermin will conduce. A constant supply of clean water, sharp grit and green food are indispensable at all times.

Eggs and Meat.

BY M. MAW.

Poultry raisers often fail to make their stock pay because they do not keep the right kind, and breed from grade roosters. It is an acknowledged fact that the first cross from a pure-bred male and ordinary females produces good results, but by using the grade male the results are disappointing. Inbreeding is another cause of failure, resulting in stunted offsprings and a loss of size and vitality. It is not necessary to keep a pure-bred flock to insure good results. If you have a mixed flock, secure a pure-bred male, of the variety you like best, and mate with eight or ten of your best hens; setting the eggs from this pen, you will have a good start the following year, and can kill off all the old stock; then by getting a pure-bred male occasionally, you will have a flock that will compare, for stock purposes, with the best in the country, at a very small outlay. In starting your flock it is necessary to consider the probable market you will have for your produce—both meat and eggs. If you have a local demand, ascertain whether light or dark-colored eggs are required, also the color of the legs and skin in dressed poultry. In England they like white legs and skin, while the demand in the States is for yellow skin and yellow legs. The time is near at hand when large quantities of dressed poultry and eggs will be exported from Manitoba and the Northwest, and those who have the right class of stock will find a paying market. Exporters will require eggs of good size and uniform in color

and shape; poultry well fattened, properly dressed, and uniform in color and size. England imports millions of dollars' worth of both eggs and poultry, and there is always a market for a first-class article. Canada to-day ranks high for cheese, and her butter shipments, under the present system, are sure to be a success, and there is nothing to prevent our eggs and poultry (shipped in similar cars) finding a paying market either in the large American cities or on the English market. The experimental farms have been trying various crosses of pure-bred poultry, and recommend White Leghorns and Light Brahmas, and Brown Leghorns and Partridge Cochins to produce eggs and carcass, but the Plymouth Rock and Wyandotte males crossed with ordinary stock will produce a bird that for general purposes cannot be beaten. In the Manitoba climate it is rather hard, under ordinary surroundings, to get early sitters; but, if possible, get a few early hatches. The pullets will lay early in the fall and continue through the winter, if properly housed, and be the first to sit in the spring. By selecting these early-hatched birds, your flock will in a short time moult early in the fall and lay when eggs command the highest prices. Early-hatched cockerels can be marketed in July and August, before the wild fowl come on the market. By killing the cockerels off at this early stage it makes more room for the stock you intend to keep over, and the cost of feeding the flock is considerably reduced.

QUESTIONS AND ANSWERS.

[In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to us advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquirers must in all cases attach their name and address in full, though not necessarily for publication.]

Legal.

RECOVERY OF MONEY—NO AGREEMENT.

A. W. B.:—"A, while under twenty-one years of age, being a Public school teacher, paid or lent about \$175 a year for two years to his father, with whom he resided during the time he was teaching, as previously. Nothing was said by either party as to whether A was to pay for his board or whether or not the moneys paid to the father were paid as for board or as a loan or gift. Can A now recover back from his father the moneys paid or any of them?"

[No. We think the moneys paid would be deemed to be paid as for board, etc.]

MONEY PAID UNDER MISTAKE.

M. J., Huron Co., Ont.:—"Last year I agreed to breed a mare to B's horse and to pay the money this last spring if the mare proved to be in foal; but before time for payment I sold the mare and B came in the spring and said the mare was in foal, and I paid him the money. I afterwards ascertained the mare was not in foal at all. Can I recover the money I paid to B?"

[Yes. If the money was really paid under a mistake or by reason of the false statement of C.]

PAYMENTS ON MORTGAGE.

A. R. G., Wellington Co., Ont.:—"To whom must payments on the mortgage be made where the mortgagee himself lives at a distance and desires payments sent direct to himself, although his agent lives near at hand?"

[The payments should be paid direct to the mortgagee unless he otherwise directs, and moneys paid to the agent after notice not to pay to him are made at the risk of the mortgagor.]

ABOUT PROVING WILLS.

WENTWORTH, Ont.:—"1. What is the object of proving or probating a will?"

[No person has power to collect debts and give valid receipts or is safe in managing an estate until the will is proved. It is the official means of showing that the will is the valid and last will of the testator.]

"2. Do all wills require to be proved?"

[Yes; sooner or later, if the estate is properly managed.]

"3. What is the cost; and is the cost always the same?"

[From, say, \$25 upwards; more in larger estates.]

"4. When must the will be proved?"

[It may be done at any length of time after the decease of the testator, and generally will require to be done at an early date.]

"5. Is there a penalty for not proving a will?"

[No.]

SALE OF LAND—INFANT INTERESTED.

M. E., Hastings Co., Ont.:—"I. A, by his will divided his farm to his wife (B) for life, and after her death to his son (C), and appointed executors. B and C both desire to sell, but C is not twenty-one years old. Can they and the executors sell and make a valid conveyance. Kindly explain?"

[A conveyance to be effective in conveying the interest of C would require to be approved of by the official guardian for infants, and he would require C's share of the purchase money to be under his

charge till C came of age, to be then paid to C. By getting this consent and approval, a valid conveyance can be made now, providing there be no restriction in the will requiring the land to be kept unsold during B's lifetime or otherwise.]

"2. How long must land be held by possession to obtain a title to it?
[When the legal owners are of age and not under any disability as lunacy, etc., ten years.]

"3. Can a trustee obtain title by possession?"
[A trustee in possession of course holds only for the beneficial owners, not for himself, and he cannot himself obtain title by possession as against the persons whom he represents, but care should be taken that the trustee really holds as trustee, and if there be any doubt, he should be asked to sign a paper admitting the fact.]

Veterinary.

TREATING "LUMP JAW."

GEO. McCAUSLAND, Grey Co., Ont.:—"I have seen several enquiries in the ADVOCATE about how to treat lump jaw in cattle. By experience I have found a method that has proved successful in every case, and I have treated several. I first throw the beast, and with a sharp knife remove or open the lump and clean out the matter. I make a swab of cotton or take a feather and dip in oil of vitriol (using a wide-mouthed bottle), rubbing it on the wound, which crusts over and stops bleeding. The wound heals quicker with that treatment than any other I have tried. The animals suffer more from the knife than from the oil of vitriol, which does not eat into the flesh."

[NOTE.—The standard veterinary treatment for actinomycosis (commonly called "lumpy jaw") is the administration of dram doses of the iodide of potassium morning and evening for two or three weeks, given in a bran mash or in a drench. An abscess arising from a blow is sometimes mistaken for actinomycosis, which is, however, a much more serious matter.]

MANGE.

F. J. B. D., Wakopa:—"I have some young pigs about three and a-half months old, which are everlastingly scratching themselves. They are a cross between a thoroughbred Yorkshire boar and a good grade Berkshire sow. They are all white as regards their hair, but the skin is red, and about the necks and backs scabby. When they were about three weeks old, I noticed cracks on their tails and back of ears, so thought it advisable to shut them up in a cool, dark stable till they healed up, when they were allowed to go out and in as they pleased. For the first two months their food chiefly consisted of skim-milk and boiled oats; this last month, of boiled barley and swill. These pigs have liberty to roam where they please. Kindly state what is wrong with them and what treatment should be followed?"

[Your pigs are evidently suffering from mange. Wash well with strong soapuds; dry off by rubbing well with coarse cloth, and then apply the following ointment by rubbing in with the hand: Sulphur, four ounces; vaseline, eight ounces; mix. W. A. DUNBAR, V. S., Winnipeg.]

RHEUMATISM.

S. P. HUNTER, Crystal City:—"I have a three-year-old mare colt that is affected with swelling in the legs. One leg at a time swells—worse in the hind legs. The swelling is painful to touch. The colt has never done much work and is in good condition generally. Sometimes gets lame in front legs without swelling. Have consulted a V. S., who thought she was affected with rheumatism, she having wintered at a stack on the prairie when two years old. Please advise."

[The symptoms are indicative of a form of rheumatism, often the result of exposure to vicissitudes of weather. Give a purgative ball composed of Barbadoes aloes, six drams; calomel, one dram; treacle or soft soap, a sufficient quantity. After the physic has ceased to operate, give for two weeks, morning and evening, in bran mash and boiled grain, alternately, salicylate of soda, two drams. Apply to swollen limbs, once daily, the following liniment: tincture of opium and soap liniment, equal parts. Keep in clean, warm, and well-ventilated stable. W. A. DUNBAR, V. S.]

Miscellaneous.

MARL IN MIDDLESEX.

We recently received from a resident of Middlesex County, Ont., a sample of marl from a deposit of considerable extent on his farm. We submitted a portion of it to Prof. Shuttleworth, Chemist at the O. A. C., for analysis. He writes as follows:—

"In reply to your note of the 22nd inst., I beg to inform you that the package from Middlesex farmer contains a sample of calcareous marl. We have examined it for manurial constituents, but have found it to have no value as a fertilizer. It is largely composed of carbonate of lime, and its action on soil would be similar to that of lime. This sample soil would be similar to that of Shallow Lake, near Owen Sound, which is utilized in making Portland Cement. Such marl, occurring near suitable clay, would be of value for making cement. A. E. SHUTTLEWORTH, Ontario Agricultural College."

MANGOLDS VS. TURNIPS.

W. McK., Victoria Co., Ont.:—"1. Are mangolds better food than turnips for pigs;—wherein do they differ? 2. Are mangolds as good as turnips for beef cattle? 3. Are mangolds better for milch cows than turnips? 4. What kind of soil is best suited for mangolds?"

[1. We prefer mangolds to turnips as pig-feed for the reason that they are much more relished by hogs, while they contain almost the same amount of nutrition. The quality of palatability is worthy of more consideration in stock feeding than is usually given it. 2. Turnips seem to get the preference on most beef-feeding farms, which we think is warranted for the reason that mangolds contain a higher percentage of starchy food, which is already in excess in the ordinary diet of cattle, viz.: straw, hay, and corn fodder. Turnips have a nutritive ratio of 1:5.8, while mangolds have 1:9.3. The extra starch diet is not lost in pig feeding. 3. Mangolds are to be preferred for milch-cow feed because they never impart an objectionable flavor to the milk, which is likely to occur when turnips are fed. Except for that reason turnips give better results. Mangolds are greatly relished by cattle. 4. Well-drained and enriched, but moist, loamy soil.]

LARGE LITTERS OF SWINE.

F. J. BARBER, Halton Co., Ont.:—"What is the largest number of pigs farrowed at one time that has come under your notice? I have a year-old sow (which farrowed on Nov. 7) that had a litter of 18. She is a Duroc-Jersey, and I understand that one of the claims made for this breed is its prolificacy. Is this more noticeable in this breed than in any other?"

[From our observations it would seem that the Duroc-Jersey breed of swine can justly claim the quality of being very prolific. During a visit to the herd of Tape Bros., Ridgetown, we were shown a sow that had a few days previous farrowed a litter of seventeen live pigs; this is one of the largest litters that has come beneath our notice. We have also known a few instances of Yorkshire sows each farrowing eighteen at a litter.]

ASHES.

ANCASTER FARMER:—"Having read your valuable paper with considerable interest in the past, I thought you could, perhaps, give me an idea or two in your next issue regarding the following: We have quite a lot of ashes at our disposal and would like to know the most profitable place to put them. We have a large apple orchard, grow wheat, barley, peas, oats, and corn; also roots, and meadow. Our land is a loam in good condition. Please explain the use and need of ashes to the different soils, crops, trees, etc."

[A favorite way of applying wood ashes is as a top dressing to grass-land and to pasture, thereby encouraging the growth of clover and some of the better kind of grasses, which do good service in crowding out inferior grasses and weeds. They are also highly esteemed for potatoes, corn and roots. Leguminous crops, too, are much benefited by applications of any potassic manure. They are especially valuable to an apple orchard, where, perhaps, "Ancaster Farmer" will receive most benefit from an application of ashes. Wood ashes are valuable as a manure because of the ingredients contained in them. The most valuable constituent is potash, which every plant must have in order to grow. They are least valuable on heavy clay land, because in most cases such soil has already an abundance of potash. Ashes also contain a small amount of phosphoric acid, without which no plant can exist. Carbonate of lime makes up a large proportion of ashes, which answer a good purpose on soils poor in lime. Not only does lime feed plants, but it also tends to liberate plant food of other sorts which may be in the soil in an unavailable condition.]

LIVE STOCK MARKETS.

Toronto Markets.

The trade during October was very quiet, and prices all along the line were bad. There was no sign of speculation or profit in anything; drovers complained that in every market that they attended they lost money; when beef cattle sold the down to 1c. per lb., someone must have been losing. Offerings have been caused by a plethora of poor stock. Offerings were not altered, trade was quiet in every line except stockers and hogs.

Export Cattle.—Very little doing in shipping cattle, heavy receipts and poor cattle keeping the prices down to last week's rates; 3c. per lb. was the top price for the day.

Mr. J. Eakin was the principal buyer, taking seven carloads for shipment at prices, ranging from 3c. to 3c. per lb. Really choice shippers will bring 4c., but there are none on offer. He purchased 9 bulls from D. Macdonald, of Lucknow, County Bruce, paying 3c. per lb., averaging 1,800 lbs. each.

Butcher's Cattle.—Demand very poor and offerings small. A few picked lots sold at 3c. per lb. Common cattle were hard to sell, and went as low as 1c. per lb. for very poor stuff sent to market because of scarcity of feed. Two carloads were taken for the Montreal market at 3c. per lb. Nothing went

higher than 3c. per lb. One carload 1,000-lb. cattle went at 2c. per lb. Ten cattle, 850 lbs. average, \$15 each. One carload cattle, 1,000 lbs. average, 3c. per lb. Ten cattle, 900 lbs. average, \$22 each. One carload, 1,000 lbs. average, \$31 each.

Stockers.—Most of the feeding byres are filled, and very few wanted; 2c. to 3c. per lb. for choice; 2c. to 2c. per lb. for inferior. Those being bought are for farmers' use, some of them being sent to the Northwest to feed on ranches.

Feeders.—There was a better feeling in this line and prices stiffened up a little. One or two extra fancy lots sold for \$3.15 per cwt.; those weighing from 1,000 lbs. upwards wanted.

Bulls.—Mr. Macdonald is still buying bulls, and Mr. Wilson was taking a few at prices from 3c. per lb. for really good ones. One bull, weighing 1,640 lbs., sold for 2c. per lb.; there were about 30 on the market.

Sheep are weaker in tone; receipts large; 2,322 head on market. Exporters sell at 3c. per lb., and butchers' at 2c.; a few 140 lb. sheep brought about 3c. per lb.

Lambs.—Limited supply, and selling at \$2 to \$3 each; a bunch of 77, 30 lbs. average, sold for \$2.35 each. Sixty lambs, 90 lbs. average, 3c. per lb., less \$5 on the deal.

Cable dispatches state that Canadian sheep are to be scheduled in Great Britain as well as cattle, it being alleged that scab was discovered in recent shipments.

Calves.—Offerings were light but sufficient for the demand. Good ones were fetching from \$4 to \$6 per head, according to quality; one was sold for \$7.

Milk Cows were shown in about the same number as the last few weeks, and met a decidedly better trade. Fresh calved Holstein grades fetched \$40; the range was from \$20 to \$40. Good cows wanted; poor ones hard to sell.

Hogs.—The hastening of stock to market in an unfinished condition has brought down weights and prices. Best sold at \$4 per cwt., thick fat at \$3.75, stores at \$3.50, sows at \$3.00, stags at \$2 to \$2.50.

Hides and Skins.—The long-expected drop in hides has at last taken place. In this market, dealers are now paying 6c. for green hides, and asking 7c. for No. 1. The market is dull and rather easier; two carloads of cured sold at 7c. per lb.; green are quoted at 7c. Sheep skins are unchanged at 70c. to 75c. each; lamb skins at 55c.

Pulled Wools.—There is some enquiry from the home mills, but the market is not active, and prices are steady at previous quotations.

Wheat.—The strength of the Ontario wheat market is a puzzle to millers and dealers. Wheat sold on this market during the week at 73c. to 74c. per bushel in spite of the fact of the great Northwest crop and low prices in the United States and Great Britain. U. S. prices for wheat to-day range from 58c. to 68c.

Oats.—Steady; 500 bushels selling at 28c.

Barley.—There is some enquiry from the United States, and the market is firmer. Choice extra at 46c.; No. 2, 37c. to 43c. per bushel.

Feeds.—Bran scarce, at \$11 to \$12; shorts, \$14 to \$15.50.

Hay and Straw.—There were unusually heavy supplies of hay on the street market, and many farmers are holding out for \$20 per ton, with a few sales at \$17.50 to \$19.50 the highest. On track, a few loads quoted at \$13.50, and No. 2, \$12.50. It has been suggested that the grade No. 1 timothy be changed, throwing out the present quantity of clover allowed and permitting nothing but timothy, and at least no dark clover. Quebec No. 1 grades on this market No. 2.

Straw.—Very firm and scarce; \$12 per ton.

Eggs.—Receipts of fresh laid are smaller and the demand good; the market steady at 20c. to 25c. per dozen.

Butter.—Good dairy table creamery, 22c. to 25c. per lb.

Poultry.—Fowls, 35c. to 50c. per pair; ducks, 60c. to 80c. for choice; turkeys, 8c. per pound, 50c. to 70c. each.

Montreal Markets.

Cattle.—The change to milder weather which has taken place this week has had a depressing effect on the market, butchers showing little inclination to buy, evidently wishing to work off any surplus stock they have on hand; and owing to the extremely low prices at which cattle have been sold of late, they have, no doubt, considerable laid in. Sales were few to-day (Thursday), none of the usual heavy buyers (that is, from one load upwards) taking anything. Offerings, with few exceptions, were of very poor quality and made little money, quite an amount of stock changing hands around 1c. per lb., and even as low as 1c. in some cases. A fairly good animal, not too thin, can be had from 2c. to 2c. per lb.; and with the exception of half-a-dozen head or so which made 3c. per lb., anything on the market can be had from 3c. to 3c. per lb. There are no cattle fit for export offering.

Sheep.—Quite an improvement was felt in good shipping sheep and heavy lambs, and all offerings were promptly picked up at from 3c. to 3c. per lb. A quantity of space available suitable only for sheep we understand was the reason.

Calves.—Very few calves are brought into the market, all offerings meeting ready sale at from \$3 to \$5 for the poorer grades; \$6 to \$12 for medium and choice.

Hogs.—With the exception of a few lots which were picked up at \$4.25 per cwt., off cars, and about 600 which were rushed in to the market on Monday week last and sold at \$4.50 per cwt. in the yards, the trade is fairly steady at \$4.40 to \$4.50, off cars, for nice bacon hogs—any contracts made from western points being on this basis. In most cases the larger packers have all they will require to keep them going, till the weather settles, contracted for.

Dressed Hogs have been coming in rather more heavily since last writing, owing to the favorable weather. Receipts this week were \$38 against \$30 for the preceding week, making a total of 1,337 for the two weeks. Quite a drop has also taken place, car lots being offered at western points at \$5.15 per cwt., or about \$5.50 here. This is considered high by dealers who are only paying from \$5 to \$5.25 per cwt., on spot. Small lots and single carcasses are making 25c. to 35c. advance on these prices. The present mild weather will no doubt have a tendency to limit shipments.

The Cow market is very quiet—very few offerings and very few apparently wanted. A few sales have been put through at from \$20 to \$35 per head.

Shipments of live stock show considerable falling off from the previous two weeks; due to the scarcity of space. They were: 4,620 cattle, against 5,999; 21,520 sheep, against 26,531; and 800 horses, against the previous fortnight's 987. Allowing for about 3,000 head of cattle billed to arrive from the Northwest in the next two weeks, receipts from that country will amount to 50,000 head of cattle and 10,000 sheep, in round numbers; an increase of 20,000 head over last season. The total shipments to date are: 91,290 cattle, 181,451 sheep, and 12,251 horses; an increase over last year of 9,070 cattle, 51,911 sheep, and 6,801 horses.

A FEW REPRESENTATIVE SALES.

Cattle			
3 head, average 1,050 lbs., at 3c. per lb.			
2 " " " 1,150 " "	3c.		
2 " " " 1,150 " "	2c.		
21 " " " 800 " "	\$1.30	per cwt.	
22 " " " 850 " "	\$1.50		
28 " " " 1,050 " "	2c.	per lb.	

Sheep and Lambs			
50 head, average 77 lbs., at 3c. per lb.			
380 " (sheep) " 110 " "	3c.		
280 " (lambs) " 80 " "	3c.		
1 load lambs " 81 " "	3c.		

It is claimed that a woven-wire fence twenty inches high will keep hens from getting out, as they cannot jump over and it is so low they do not think of flying. Has any reader noticed this?

"A Little Lost Word."

I lost a very little word
Only the other day;
A very naughty little word
I had not meant to say,
If it were only really lost,
I should not mind a bit;
I think I should deserve a prize
For really losing it.

For if no one could ever find
Again that little word,
So that no more from any lips
Could it be ever heard,
I'm sure we all of us should say
That it was something fine
With such completeness to have lost
That naughty word of mine.

But then it wasn't really lost
When from my lips it flew;
My little brother picked it up,
And now he says it too.
Mamma said that the worst would be
I could not get it back;
But the worst of it now seems to me,
I am always on its track.

If it were only really lost!
Oh, then I should be glad.
I let it fall so carelessly
The day that I got mad.
Lose other things, you never seem
To come upon their track;
But lose a naughty little word,
It's always coming back.

The Multiplication Table.

Kitty sat out under the sweet-apple tree in the golden October noontime, crying real salt tears into her Primary Arithmetic.

"Now, what's the matter, Kittyleen?" asked big brother Tom, coming out with his Greek Grammar under his arm. "I supposed you were eating sweet apples and studying, and I came out to do so, too, and here you are crying."

"It's—this—dreadful—multiplication table!" sobbed Kitty. "I can't never learn it, never!"

"Hard?" asked Tom. "Oh, it's awful! Harder than anything in your college books, I know. It's the eight's this afternoon and I can't learn 'em, anyhow."

"Don't you know how much eight times one is?" asked Tom, picking up a small apple and beginning to eat it.

"Yes, of course. Eight times one is eight. I can say up to five times eight all right."

"Can you? Well, that's encouraging, I'm sure. Let's hear you."

Kitty rattled it off like a book. "Five times eight is forty"—and there she stopped.

"Oh, go right on," said Tom. "Six times eight is forty-eight."

"I can't," said Kitty. "I can't learn the rest. I've tried and tried, and it's no use."

"Do you learn so hard?" asked Tom. "Now, hear this, and then repeat it after me as well as you can." And Tom repeated a verse of a popular college song.

Kitty laughed, and repeated the nonsense word for word.

"Why, you can learn!"

"But that has a jingle to it. It is not like the dry multiplication table."

"Let's put a jingle into that, then:

Six times eight was always late,
Hurried up and was forty-eight;
Seven times eight was cross as two sticks,
Had a nap and was fifty-six;
Eight times eight fell onto the floor,
I picked it up and 'twas sixty-four;
Nine times eight—it wouldn't do,
I turned it over and 'twas seventy-two.

"Did you make that all up, now?" asked Kitty, in wonderment.

"Why, yes," laughed Tom.

"Oh, it's splendid! Let's see, how is it?" And she went straight through it with very little help. "Ten times eight is eighty. That one's easy enough to remember."

"And now," said Tom, when she had the jingle well learned, "say the table aloud and the jingle in your mind as you go along."

Kitty tried that, and a very few times made it a success. With the ringing of the first bell she was ready to start to school, with those "dreadful eight's" all perfect.

"You're the best Tom in the whole world!" she said, with a good-by kiss. "And I don't believe there's another boy in college that could make such nice poetry."

Tom laughed as he opened his Greek Grammar.

A Prudent Plan.

"The sentiment of Fear," declared my Uncle Zebedee, "is beneath the recognition of a valiant man like me. I loathe timidity; I scorn a coward; and, oh, dear! I should so hate to feel the paltry sentiment of Fear! And in order to prevent it, why, I take some pains at night To have the house closed up and barred securely, snug, and tight."

I should really hate to have a burglar getting in; and hence I have placed alarms at frequent intervals along the fence, And on the doors and windows, and the cat-hole in the shed, And the scuttle in the attic roof. Before I go to bed I lock and bar the doors, and fasten weighty iron chains Across; I don't like burglars, and I therefore take the pains To place, as an additional precaution, pots and pans At all the doors and windows, and tin pails and empty cans; So if a burglar should come in, I'd wake in time to fling My watch and money where he'd see them on first entering. And then just step into the wardrobe, which I have supplied With a key with which it may be firmly locked from the inside.

Thus, by these simple plans, it is indisputably clear I shall never feel the despicable sentiment of Fear. So far beneath the calm, composed and noble dignity Of a brave man such as I am," said my Uncle Zebedee.

How Rubinstein Played.

Played well? You bet he did; but don't interrupt me. When he first sat down he peared to keer mighty little 'bout playin', and wisht he hadn't come. He tweedleleede a little on the treble, and twoodleoodler some on the bass, just foolin' and boxin' the thing's jaws for bein' in his way. And I says to the man sittin' next to me, says I, "What sort of playin' is that?" And he says, "Hush!" But presently his hands commenced chasin' one another up and down the keys, like a passel of rats scamperin' through a garret very swift.

I was just about to get up and go home, bein' tired of that foolishness, when I heard a little bird awakin' up away off in the woods and call sleepy like to its mate, and I look up and see that Rubin was beginning to take some interest in his business, and I sit down again. It was the peep of day. The light came faint from the east. The breeze blowed gentle and fresh, some more birds waked up in the orchard, then some more in the trees near the house, and all begin singing together. People began to stir, and the gal opened the shutters. The next thing it was broad day; the sun fairly blazed, the birds sung like they'd split their little throats. It was a fine mornin'. And I says to my neighbor, "That's music, that is;" but he glared at me like he'd like to cut my throat.

Then, all of a sudden, Old Rubin changed his tune. He ripped out and he rared, he tipped and he taired, he pranced and he charged like the grand entry at a circus. 'Peared to me that all the gas in the house was turned on at once. It was a circus and a brass band and a big ball all going on at the same time.

He changed his tune again. He hop-light ladies and tip-toed fine from end to end of the keyboard. He played soft and low and solemn. I heard the church bell over the hills. The candles of heaven was lit, one by one. I saw the stars rise. The great organ of eternity began to play from the world's end to the world's end, and all the angels went to prayer. . . . Then the music changed to water, full of feeling that couldn't be thought, and began to drop-drip, drip-drip-drip, clear and sweet, like tears of joy falling into a lake of glory.

He stopped a moment or two to catch breath. Then he got mad. He ran his fingers through his hair; he shoved up his sleeves; he opened his coat-tails a little further; he dug up his stool; he leaned over, and, sir, he just went for that old

pianner. He slapped her face, he boxed her jaws, he pulled her nose, he pinched her ears, and he scratched her cheeks till she fairly yelled. He knocked her down and he stamped on her shameful. She bellowed like a bull, she bleated like a calf, she howled like a hound, she squealed like a pig, she shrieked like a rat, and then he wouldn't let her up. He run a quarter stretch down the low grounds of the bass, till he got clean to the bowels of the earth, and you heard thunder after thunder through the hollows of perdition.

Then he fox-chased his right hand with his left, till he got way out of the treble into the clouds, whar the notes was finer than the pints of cambric needles, and you couldn't hear nothin' but the shadders of 'em. And then he wouldn't let the old pianner go. He for'ard tow'd, he crossed over first gentleman, he chassade right and left, back to your places, he all hands aroun', ladies to the right, promenade all, in and out, here and there, up and down, perpetual motion, double, twisted and turned and tacked and tangled into forty-seven thousand double-bow knots.

By jinks, it was a mixtery. And then he wouldn't let the old pianner go. He fecht up his right wing, he fecht up his left wing, he fecht up his centre, he fecht up his reserves. He fired by file, he fired by platoons, by company, by regiments, and by brigade. He opened his cannon—siege guns down there, Napoleons here, twelve-pounders yonder—big guns, little guns, middle-sized guns, round shot, shells, shrapnel, grape, canister, mortar, mines, and magazines, every



COLUMBUS AT THE COURT OF LA RIBIDA.

Columbus at the Court of La Ribida.

The interesting episode in the life of Columbus illustrated in our picture is thus referred to in Washington Irving's "Life of Columbus":—

"A stranger who was 'travelling on foot, accompanied by a boy, stopped one day at the gate of a convent of Franciscan friars, and asked for bread and water for his child. Friar Juan Perez de Marchena, happening to pass, was struck with the appearance of the stranger, and observing from his air and accent that he was a foreigner, entered into conversation with him, and soon learned the particulars of his story:—that stranger was Columbus."

Here we see the great navigator, with his son Diego by his side, demonstrating on a map his theories of the possibility of sailing to the West, and thereby reaching the Indies. That the great discoverer stumbled on America in his way detracts nothing from his broadminded, farseeing courage, and the great debt of humanity to him. In the picture, to the right of Columbus is the Prior, listening with lively interest. The man leaning over the table is a physician named Garcia Fernandez, invited to the conference from his known interest in all scientific knowledge. The third man is a renowned sea captain of his day—Martin Alonso Pinzon, who became so convinced of the practicability of Columbus' plans that he became his companion on his first voyage.

livin' battery and bomb a-going at the same time. The house trembled, lights danced, the walls shuk, the floor came up, the ceilin' come down, the sky split, the ground rockt heavens and earth oration, sweet potatoes, Moses, ninepenny, glory, tenpenny nails, Samson in a simmon tree, Tump Thompson in a tumble cart, ruddle-oodle-oodle-oodle, ruddle-uddle-uddle-uddle, ruddle-oodle-oodle-oodle, pr-r-r-lank! Bang!!! lang! perlang! pr-r-r-r!! Bang!!!

The Country Girl--She is a Much-to-be-Enviied Young Woman.

At this season the country girl feels that her life is not as rosy as that of the city friend who has theatres, concerts and lectures ever at her hand and an infinite variety of gayety that naturally can have no part in truly rural existence. Of course there are the family feasts at Thanksgiving and Christmas, when all is bustle for days before and during the actual celebration of the annual festivities, but outside of that country life is regarded by the discontented one as dull, stupid, and monotonous.

The swirling leaves, as they sweep across the dead brown of the erstwhile soft green lawn, speak to her ears only of lonesomeness, and the crow's mournful cry is the knell of all her hopes, so far as good times in the long, weary waiting between autumn and spring are concerned.

Many a body blessed with a lovely home in a picturesque section of the country sighs for city life, thinking that all that is exciting and desirable lies amid the clang and rush of trolley cars and beneath the cold glitter of electric lights. To these discontented ones let us have a few words to say that are given honestly from heart to heart. To begin with, unless one is blessed with a good income the majority of the enticing entertainments are as much barred against them as though they dwelt in the very heart of the backwoods. Again, the sum that dresses a girl well in the country, giving her a positive and assured position among the others similarly situated, would count for nothing in town, where giant fortunes are the only ones that cause any special stir. Leaving her home in the country to make a livelihood amid the fascinating scenes of metropolitan life will necessarily be attended with difficulties grim and imposing. It isn't all clear sailing, even though a place is assured and a salary guaranteed. That salary will not be large at first, and though it may sound like a veritable dream of wealth while in the country, it will prove meager and insufficient among the thousand and one expenses incidental to city life. A hall bedroom instead of the liberty of the old farmhouse, a fleeting glimpse across an alley instead of the great panorama of woods and sky seen from the porch of the old homestead, meals but poorly cooked instead of the wholesome and generous menu of the home table—these are some of the disadvantages that city life entails, to say nothing of that harrowing homesickness for well-known faces as the girl trudges along amid hurrying crowds engrossed in their own interests, not knowing or caring to know the stranger, who finds that concerts, free libraries, and eminent speakers, do not compensate for the heart hunger that is the daily and nightly companion of the foolish wanderer who did not appreciate the value of a good home and honest friendship when she had them.

A Scotchman Outwits a Scotchman.

Some years since, before the sale of game was legalized and a present of it was thought worth the expense of carriage, an Englishman who had rented a moor within twenty miles of Inverness, wishing to send a ten-brace box of grouse to his friends in the South, directed his gillie to procure a person to take the box to the capital of the North, whence the London steamer sailed. Not one, however, of the miserably poor tenants in the neighborhood could be found who would take the box for a less sum than eight shillings. This demand was thought so unreasonable that the Englishman was thought to be a Scotch friend who was shooting along with him. The Scotchman replied that "the natives always made a point of imposing as much as possible upon strangers; but," said he, "if you will leave it to me, I will manage the matter for you; for, with all their inclination to knavery, they are the simplest people under the sun." A few days thereafter, going out a-shooting, they saw a man loading his cart with peats, when the Scotchman, approaching him, said, after the usual salutation, "What are you going to do with the peats?" "I'm going to Inverness to sell them," was the reply. "What do you get for them?" "One shilling and eightpence, sir." "Indeed! Well, I will buy them from you if you will deliver them for me in Inverness." "That I will, and thank you, too, sir." All agreed, the Scotchman resumed his walk for about twenty yards, when he suddenly turned round and said, "By-the-by, I have a small box I want taken to the same place. You can place it on top of the peats?" "That I will, and welcome, sir." "Well, if you will call at the lodge in the evening, I will give you the direction for the peats, and you can have the box at the same time." The man did so, and actually carried the box and gave a load of peats for one shilling and eightpence, although neither the same individual nor any one of his neighbors would forward the box alone for less than eight shillings.

The "Home Queen."

As anticipated in our announcement in last issue, the "Home Queen Cook Book," as a premium, is taking well and going quickly; the first one being secured by a reader away in Nova Scotia. No such volume was ever before placed within reach of our readers on such easy terms, viz., the securing of one new subscriber, as per premium page announcement. Read it, and by prompt effort be fortunate enough to secure a copy. The supply being very limited, we will mail them in rotation as the orders reach us. From personal knowledge, we commend this work.

Old Poll Parrot Story Retold.

A gentleman made a present to a family of a Poll parrot. On arrival at the farmhouse, it would not speak, and the farmer undertook to teach her some Queen's English. After several unsuccessful attempts at "Pretty Poll," "What o'clock," etc., he lost his patience, and withdrawing Miss Poll from the cage, said: "Now, then, talk or I'll wring yer neck." This failed, and with great disgust he threw her into the hencoop as a fit companion to the dumb birds.

On paying his usual morning visit, he was much surprised to hear, "Talk or I'll wring your neck," from Poll. Opening the door, he found that there were about a dozen dead chickens around, the last one in the process of execution. Poll, with a very knowing look at the farmer, said: "You talk or I'll wring your neck." Collapse of farmer.

A Sermonette for Wives.

"We all know how some women, after a year or two of married life, get careless about their dress," says a lady novelist. "They seem to think that their fortune is made, and it isn't necessary to arrange the hair becomingly and put on a pretty gown just for their husbands."

"This is all wrong, and it is an error that arises from laziness."

"Men like to see their wives look pretty just as much as they did when they were sweethearts."

"Take a woman's advice, and if you can have but one attractive gown, let that be the one to wear indoors."

"Endeavor to have daintily-arranged hair, and a neat and simple costume for breakfast."

"Go in largely for laces. A man is very fond of frills; bits of white about the neck and wrists always appeal strongly to him."

Little Kindnesses.

If you were toiling up a weary hill,
Bearing a load beyond your strength to bear,
Straining each nerve untringly, and still
Stumbling and losing foothold here and there,
And each one passing by would do so much
As to give one upward lift and go their way,
Would not the slight reiterated touch
Of help and kindness lighten all the day?

If you were breathing a keen wind, which tossed
And buffeted and chilled you as you strove,
Till, baffled and bewildered quite, you lost
The power to see the way, and aim and move,
And one, if only for a moment's space,
Gave you a shelter from the bitter blast,
Would you not find it easier to face
The storm again when the brief rest was past?

There is no "little" and there is no "much";
We weigh and measure and define in vain.
A look, a word, a light, responsive touch,
Can be the ministers of joy or pain.
A man can die of hunger walled in gold,
A crumb may quicken hope to stronger breath,
And every day we give or we withhold
Some "little thing" which tells for life or death!

—Susan Coolidge.

Puzzles.

1—SQUARE WORD.

My FIRST, although 'tis soft and spongy, yet is "energy";
My SECOND is a mental thought,
Oft found but very seldom bought;
My THIRD is that which, often lost,
Can't be returned at any cost;
My FOURTH is loved by many a nation,
And yet it is a "constellation." CLARA ROBINSON.

2—CURTAILMENT.

When whole I'm a bird that wades 'mong the reeds,
Curtail and I'm a doer of many brave deeds;
Again, I'm a female, as surely you'll see;
Again, and a female's the opposite to me. "LISETTE."

3—CHARADE.

FIRST is a little animal that runs about your feet;
SECOND, a word that oft denotes a number small and neat;
TOTAL sounds at evening, calling children off the street,
For at eight o'clock 'tis time they all were safe in home's retreat.

4—DROP LETTER.

C-n-e-t-s-o-e-u-e-g-h-t-a-n-i-t-n-
l-r; i-l-n-t-n-y-e-d-e-s, -u-i
t-m-a-r-w-a-i-w-u-d-m-r-v.

P. P.

Answers to Puzzles in October 15th Issue.

1—L A T I N
A L O N E
T O O L S
I N L E T
N E S T S

3—J A R
L A V E R
J A V E L I N
B A L L I S
P I N

2—Mistake (Miss Take).
4—Neck-lace. 5—A mistake. Was not intended as a puzzle.

SOLVER.

Clara Robinson.

Affection never was wasted;

It enrich not the heart of another, its waters, returning
Back to their springs, like the rain, shall fill them full of
refreshment. Longfellow.

THE QUIET HOUR.

The First Tangle.

Once in an Eastern palace wide
A little child sat weaving;
So patiently her task she plied,
The men and woman at her side
Flocked round her, almost grieving.

"How is it, little one," they said,
"You always work so cheerily?
You never seem to break your thread,
Or snarl or tangle it, instead
Of working smooth and clearly."

"Our weaving gets so worn and soiled,
Our silk so frayed and broken,
For all we've fretted, wept and toiled,
We know the lovely pattern's spoiled
Before the king has spoken."

The little child looked in their eyes,
So full of care and trouble!
And pity chased the sweet surprise
That filled her own, as sometimes flies
The rainbow in a bubble.

"I only go and tell the king,"
She said, abashed and meekly;
"You know, he said, in everything
"Why, so we do!" they cried, "we bring
Him all our trouble weekly."
She turned her little head a-side;
A moment let them wrangle;
"Ah, but," she softly then replied,
"I go and get the knot untied
At the first little tangle!"

O little children—weavers all!
Our "broiery" we spangle
With many a tear that need not fall
If on our King we would but call
At the first little tangle?

The Little Things of Life.

I recently heard a sermon which gave me new light on the doing of little things. The whole import of the sermon was, that in working for God the little minor details necessary in preparing for the work are as truly service as the actual work itself. We start on a journey with the intent of doing something at the end of the journey for God or His cause. The packing of one's trunk, and the getting this, that and the other together, and the hundred and one little preliminaries which had always seemed to me unprofitable (that is, in a spiritual sense), are just as much work for Him as the end for which all the preparations are made, and without which, of course, the end could not be accomplished.

It came to me then, that if our time were consecrated to Him, everything would be service. I doubt if we give enough thought to the little things of life, little everyday courtesies, pleasant words and smiles. I know I have had the whole tenor of a day changed by a cheery "Good morning" from a friend.

The old saying that "life is made up of little things" does not lose any of its truth by being old, and I doubt very much if in God's sight there are any little things. Isn't it the motive that gauges the value of our actions, rather than the actions themselves?

To me there is great comfort in the thought, that if we who cannot do great things, will do the little things faithfully, they will in the end make a great whole. "He that is faithful in that which is least, is faithful also in much."

How many there are who think there really is nothing which they can do—not, perhaps, having money to give. They do not think that a bright letter to some far-away or "shut-in" friend, a half-hour spent in reading to some one unable to read, an invitation to the stranger at the church-door to come again, can all be given as service to Him, and no one knows how far-reaching the influence of the letter, or reading, or pleasant word may be.

I have before me an extract recently clipped from one of our helpful journals. It is this: "A society of a single member may accomplish great results. Do what you can, however little, and the Lord will wonderfully increase your ability."

Ah, let us every night bring our few loaves and fishes unto Him, not crying, "O Lord, what are these among so many?" but, "Here, Lord, take, bless, multiply, and feed the multitude"; and then trust Him to do it.

In one of those celestial days, when heaven and earth meet and adorn each other, it seems a poverty that we can only spend it once; we wish for a thousand heads, a thousand bodies, that we might celebrate its immense beauty in many ways and places. Is this fancy? Well, in good faith we are multiplied by our proxies. How easily we adopt their labors! Every ship that comes to America got its chart from Columbus. Every novel is a debtor to Homer. Every carpenter who shaves with a foreplane borrows the genius of a forgotten inventor. Life is girt all round with a zodiac of sciences, the contributions of men who have perished to add their points of light to our sky. Engineer, broker, jurist, physician, moralist, theologian, inasmuch as he has any science, is a map-maker of the latitudes and longitudes of our condition. These road-makers on every hand enrich us.—Emerson.

My Presence Shall Go with Thee.

"My presence shall go with thee." Yea, my Lord,
Faith listens till that noiseless step is heard,
As each new day breaks, open, shine revealed,
O Christ, by fear's long morning mist concealed,
O let me daily know that glorious rest
Of leaning hourly on a Saviour's breast;
Yea, but to know Thou knowest—this is best.
C. A. FOX.

Horse Owners! Try GOMBAULT'S Caustic Balsam



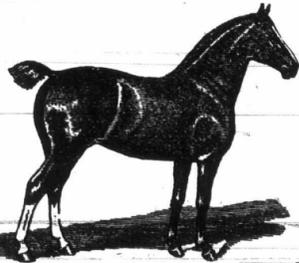
A Safe Speedy and Positive Cure
The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. **SUPERSEDES ALL CAUTERY OR FIRING.** Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars. THE LAWRENCE-WILLIAMS CO., TORONTO, ONT.

MUST BE SOLD



A few Imported Mares in foal to Grandeur. Also a promising yearling Hackney Colt. They will be sold very cheap.
BOLD BY (4257) (1144)
IS AT THE HEAD OF OUR STUD.
D. & O. SORBY, - GUELPH, ONT.
6-2-y-om

HORACE N. CROSSLEY,
PROPRIETOR OF THE
SANDY BAY STOCK FARM,
Importer and breeder of
SHIRES, HACKNEYS, AND COLLIE DOGS.



The above stud, though only commenced in 1890, has achieved unparalleled success at all the leading Canadian shows, such as Montreal, Toronto and London, also at the **EMERALD WORLD'S FAIR**. The most notable in this stud are, the Shire horse Bravo II, 1888, winner of first at Toronto, Montreal and London, and also beating all Clydes at the latter show in the sweepstakes. Hackney, Fireworks No. 3602, winner at Chicago, Toronto and London. Shires and Hackneys always on hand for sale. For further particulars apply to the Proprietor, ROSSEAUX, Muskoka.
1864. HILLHURST FARM, 1894.
HACKNEY HORSES,
Shorthorn and Aberdeen-Angus cattle, Shropshire and Dorset-Horn sheep.
M. H. COCHRANE,
16-2-y-om HILLHURST STATION, P. Q.

DR. LEAVITT'S
NEW CHAMPION
DEHORNING CLIPPER
The quickest working and the strongest clipper made.
Every Pair Warranted.
For list, etc., address,
S. S. KIMBALL,
577 Craig St., MONTREAL
7-v-om

Shorthorns, Shropshires, and Berkshires.
Having rented one of my farms, I will sell at very much reduced prices five young cows due to calve Sept. to Dec.; 4 ewes, one to four years old; my (imp.) Bradburn stock ram (first prize winner in England); 16 yearling rams and a choice lot of lambs; four sows, due to farrow in Sept. and Oct.; one boar, 12 months old; and six litters of spring pigs. All registered. 15-y-om
W. C. Pettit, Fraeman P.O., Burlington Stn., C. T. R.



I HAVE **Eight Bulls** FROM 10 TO 15 MOS. FOR SALE. From my best dams, and got by PREMIER EARL and INDIAN CHIEF, which I will sell very reasonable.
Claremont on C.P.R. and Pickering on G.T.R. Write for prices or come and see my stock.
DAVID BIRRELL, Greenwood, Ont.
1-1-y-om

Sewing Machines!

The New Empress. The Queen of all Machines.

We have the CHEAPEST and the EASIEST running Sewing Machine on the market. Price only (\$16) sixteen dollar each, delivered freight paid to any station in Ontario; or \$18, freight paid to any station in Canada. A first-class Sewing Machine. Send money with your order, either by registered letter or post office order. We ship promptly.

Razors, \$1.—Send us \$1 and we will mail you (postage paid) our very best sell for \$3 in the United States. Our price only \$1.

Waltham Watches, \$7.50.—A genuine Waltham Watch, with a dust-proof silver case, stem-winding and stem-setting, will be mailed, post-paid, to any Canadian post office upon receipt of only \$7.50.

STANLEY MILLS & CO., Hamilton, Ont.

ISALEIGH GRANGE STOCK FARM, DANVILLE, QUEBEC.

We have now on hand for private sale, choice stock of pure-bred AYRSHIRE and GUERNSEY CATTLE, SHROPSHIRE SHEEP, and IMPROVED YORKSHIRE SWINE. At our recent annual auction sale we disposed of a lot of our surplus stock, consequently we are in better shape to attend to the requirements of our correspondents.
We are preparing for publication a permanent stock catalogue, which, when ready, we shall be pleased to mail to all applicants.
CORRESPONDENCE INVITED.

J. N. GREENSHIELDS, Proprietor.
T. D. McCALLUM, Manager, Danville, Que.

MAPLE GROVE Ayrshire Stock Farm.

R. G. STEACY,
IMPORTER AND BREEDER. LYN, ONT.
Largest importer in United States and Canada of the most noted milk, butter and Prize Record Ayrshires procurable in Scotland. Head of herd is Carlyle Lessnessock, whose grand-dam was never defeated in a milking contest in England and Scotland, competing against all other dairy herds for years in succession, and awarded more prizes in gold medals, cups and money than any Ayrshire ever exhibited. With the imported females of noted individual records, I am in a position to offer none but performers, at reasonable prices. Do not fail seeing my stock at all leading exhibitions this fall. Registered Rough-coated Scotch Collies from imported stock for sale.
16 2-y-0

Use:- Queenston :- Cement

FOR BUILDING CONCRETE OR OTHER WALLS, Cisterns, Stable Floors, Hog Troughs, &c.

Write for Prices and Particulars. When parties use our goods, when necessary we will send a skilled man, at our own cost, to give instructions how to build. FARMERS can thus build their walls and save half the cost.
ISAAC USHER & SONS,
THOROLD, ONT.
13-y-0

ARTHUR JOHNSTON

HAWTHORN HERD OF DEEP MILKING SHORTHORNS.
FOR SALE—Four young Bulls, all reds, descendants of 2nd Fair Maid of Hullett = 9047 =, with a record of 52 lbs. of milk and 2.54 lbs. butter in one day. **WM. GRAINGER & SON, Londesboro, Ont.** 13-y-om
2 THOROUGHBRED COWS FOR SALE.
Forward in calf to 1st prize bull Commander = 18828 =, and three young bulls at bargain. 12-y-om **A. J. C. SHAW & SONS, Thamesville.**
F. A. GARDNER, Britannia, Ont., breeder of Scotch Shorthorns, and Berkshires for sale. Also Good young Bulls and Heifers for sale. Also a number of eight-week-old Berkshires of both sex, and choice breeding. Prices right. Correspondence solicited. 22-2-y-0

CARGILL HERD OF SHORTHORNS.

Stock from imp. bulls and imp. and home-bred cows. Catalogue now in printer's hands. Send for one.
H. CARGILL & SON,
CARGILL, ONT.
11-y-om

A. J. WATSON, CASTLEDERG, ONT.

(ASHTON FRONTVIEW FARM), breeder of choice SCOTCH SHORTHORNS. Young stock of either sex, and choicest breeding, for sale at reasonable prices. Correspondence solicited. 22-2-y-0

SHORTHORNS.

I have FOR SALE two Shorthorn heifers and two bull calves of fine breeding, fine colors, fine form and carriage, in fine condition, at fine cut prices. Also one or two cows.
D. ALEXANDER, BRIDGTON, LAMBTON CO., ONT.
5-y-0

ADVERTISE IN THE ADVOCATE

STOCK GOSSIP.

In writing to advertisers, please mention the Farmer's Advocate.
The attention of our readers is directed to the announcement in another column of the 12th annual Fat Stock and Dairy Show in Guelph, Ont., on Dec. 10th, 11th and 12th. This promises to be a fitting finale to the great Canadian show-yard events of 1895.

In this issue will be found W. C. Shearer's (Bright) advertisement of choice Barred Plymouth Rock cockerels, pullets, and one-year hens, bred from imported stock. This presents an opportunity to secure a breeding pen to start with, or even a cheaper start could be made by purchasing a fine large cockerel to cross with the fowls now on hand, and raise as many pullets as possible next summer; they will all be the color of the male next fall. Change him for another of the same kind, and you will find yourself possessed of a nice and profitable flock of farm poultry. The Barred Plymouth Rocks are excellent winter layers, when eggs are high in price; the hens are fine, quiet mothers. The chicks are easily fattened, and can be turned off early before the market is glutted.
HORSE BUSINESS BRIGHTENING.

Graham Bros., Claremont, Ont., write:—
"We recently consummated one of the most important sales of horses made in Canada for some years. Mr. F. R. Black, of Amherst, N. S., acting for the Nova Scotia Government, purchased the Canadian champion Hackney stallion of 1895, Kilwick Fireaway 36998, and the choice Hackney stallion, Seagull 2261, besides two very promising Hackney fillies, daughters of Seagull. Kilwick Fireaway 36998, foaled July, 1890, by Tripaway 2296, is a beautiful dark bay with black points, stands 15 2 and is a fine actor, with perfect knee and finehock action. He captured sweepstakes both at Toronto and Ottawa this fall. Seagull 2261, by the great Danegalt 174, dam Lady Lucy 1846, is a perfect Hackney in conformation, and while not as good an actor in the show ring as Fireaway, has proved himself a remarkable breeding sire—the Hackney characteristics being stamped on his colts. To Mr. Forgie, of Washington, Pa., we sold the imported Clydesdale mares, Daisy and Evergreen, which took first at Montreal and Ottawa exhibitions, and the black saddle gelding, Gentleman Jack; to G. P. Smith & Bro., Hagerstown, Maryland, the Hackney stallion, Dundrennan, and to Mr. A. Montgomery, of Castle Douglas, Scotland, we recently shipped a handsome team of hackney five-year-old mares. We have also just sold to John Miller & Sons, Brougham, Ont., the grand Clydesdale filly foal, Bonnie Bess, by Queen's Own, at a long price; we regard her as being the best Clydesdale we have ever bred. Our stock are all doing well, and business brightening."
MESSERS. A. & D. BROWN'S SHORTHORNS AND OXFORD DOWNS.

A short drive from the Village of Iona, Ont., is the fine five-hundred-acre property of Messrs. A. & D. Brown. These gentlemen have been breeding Shorthorn cattle and shipping cattle and sheep for the English markets the last twenty years, generally grazing off from one to two hundred steers every summer, and but recently made a large shipment of lambs to the Old Country. The Shorthorn herd is not large, but much care and judgment has always been exercised in selecting, feeding, and mating; therefore it is not to be wondered at that the present stock is of a high standard and comprises some twenty five individuals of a very useful type. A grand imported bull, Warfare 66712, bred by S. Campbell, Kinellar, Scotland, was used on the herd the past few years, and left some remarkably fine stock. He has recently been replaced by a massive three-year-old red imp. bull, Royal George, bred by the late S. Campbell, Kinellar, Aberdeen, Scotland, and imported by Arthur Johnston, Greenwood, Ont. He is by Royal James (54973) and from Maid of Primrose 6th. His calves are now beginning to drop, and give promise of turning out good ones. A bull of the celebrated Lavender family was used before Warfare, and from which are the older heifers and some of the best cows. Among the cows some of the best are: Charlotte (imp.) 11008, bred by S. Campbell, Scotland, imported by John Isaac, Markham, Ont.; she was sired by Gravesend (46461), and from Cecilia 1st, by Borough Member (83189). A two-year-old daughter of hers, Strathroy imp. Reporter = 624 =, is a straight, square-built, evenly-fleshed heifer; and in Heather Blossom by Warfare we found another worthy daughter of the old imported cow. Probably one of the best cows of the herd, of general utility, is Ruby Syme by Lavender Victor 12329, dam Anna Syme = 13980 =, an exceptionally good milker for a Shorthorn, and some of her daughters are now for sale. Leda Keeso = 15601 = Clara Syme = 15301 = by Pilot 4061 =, dam Anna Syme = 13980 = by Duke of Rutland; and Laura of Iona, are all good cows and grand breeders. We saw three young bulls about ten months old, from the three last-named cows and by imp. Warfare; and a better trio it has seldom been our lot to see—deep, rich roans, thick-fleshed, strongly-built, with plenty of good bone, and full of quality and character, deep-ribbed and level-backed, with exceptionally fine heads, and a general style that would recommend them as the head of almost any herd. These young bulls will no doubt go quickly, as will also a few choice heifers noticed.
The Oxford Downs number some forty head, and are descended from imported Murray stock, and combine fair quality with good size. A few strong, stocky ram lambs are still on hand.

NOTICE.

Many farmers' sons look forward to the winter season as one of release from irk some toil, which is a grand change from the twelve and fourteen-hour days of more than half the year. We know from experience that this rest from labor is none the less appreciated when some line of improving study is taken up and pursued vigorously. The Central Business College, Toronto, presents an opportunity of obtaining a practical business education, without which a farmer or any other business man is seriously handicapped through life. The cost of a term is within easy reach. See ad. in this issue, and send to Shaw & Elliott for free catalogue.

"Farmer's Advocate" Premiums! Every one good value.

To any of our subscribers furnishing the required number of names we will send per mail or express, as most convenient, the following premiums, charges prepaid on all except Animals:



DUKE (PLAIN).



DUCHESS (ENGRAVED).

Read What Those Say Who Have Earned It.

NEW DUNDEE, October 23rd, 1894.
 DEAR SIR, - I received your watch as a premium, and it has given entire satisfaction in every way. I will always endeavor to further the interests of your paper by sending a few names now and again.
 Yours truly,
 JACOB STOLTZ.

EAST ORO, ONT., October 23rd, 1894.
 DEAR SIR, - The watch which you sent me for getting subscribers for your paper has given entire satisfaction, being an excellent time-keeper. I will try to get you some more subscribers.
 Yours truly,
 WM. C. WILSON.

CHATHAM, November 26th, 1894.
 DEAR SIR, - I received your letter the 23rd inst.; also, the watch came to me in good order, and I am very much pleased with it. I am endeavoring to get more subscribers for the ADVOCATE, but almost every farmer takes it around here.
 Yours truly,
 JOHN LONGMORE.

Either watch, with chain and charm, will be given to any subscriber sending us the names of three new yearly paid-up subscribers.

A thoroughly reliable 18 size watch with a Genuine American lever movement. Runs over 30 hours. Total weight, only 4 1/2 ounces. They are perfect time-keepers.

To find the size of ring required, take a narrow strip of paper that will draw tightly around the finger, forward same to us, and we will assure you a perfect fit.

CHILDREN'S OR MISSES' REAL STONE SETTING.

- | | | | |
|--|--|--|--|
|  |  |  |  |
| No. 1—Price, \$1.25.
1 Pearl, 2 Garnets.
2 New Subscribers. | No. 2—Price, \$1.25.
1 Garnet.
2 New Subscribers. | No. 3—Price, \$1.50.
3 Pearls.
3 New Subscribers. | No. 4—Price, \$2.00.
1 Pearl, 2 Garnets or Coral.
3 New Subscribers. |

LADIES' REAL STONE SETTING.

- | | | | |
|---|---|---|---|
|  |  |  |  |
| No. 5—Price, \$3.50.
2 Pearls, 3 Garnets.
5 New Subscribers. | No. 6—Price, \$3.50.
2 Garnets, 5 Pearls.
5 New Subscribers. | No. 7—Price, \$3.50.
1 Garnet, 2 Pearls.
5 New Subscribers. | No. 8—Price, \$2.00.
3 New Subscribers. |

SOLID GOLD KEEPERS.

- | | | | |
|---|---|---|---|
|  |  |  |  |
| No. 9—Price, \$2.00.
3 New Subscribers. | No. 10—Price, \$4.00.
6 New Subscribers. | No. 11—Price, \$2.50.
Wedding.
5 New Subscribers. | No. 12—Price, \$6.50.
Beautifully Chased.
10 New Subscribers. |

FOR ONE NEW SUBSCRIBER.

To any subscriber sending us the name of one new yearly paid-up subscriber we will give any one of the following premiums:

- Canada's Pride.
 - Canada's Columbian Victors.
 - Two Copies of Dairying for Profit.
- (BY MRS. E. M. JONES.)

LIVE STOCK

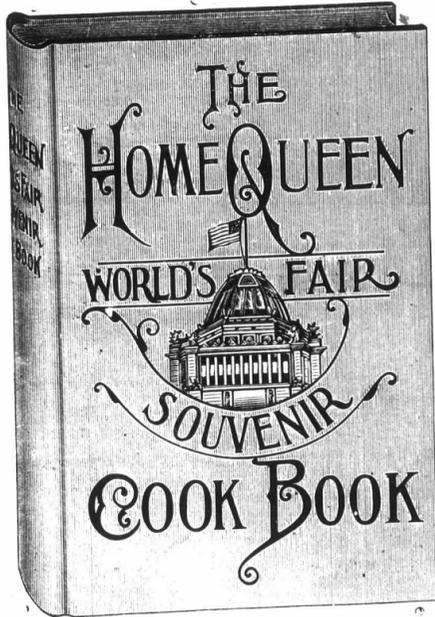
To those desiring pure-bred stock of any breed as a subscription prize, we are prepared to supply same on most favorable terms.

How to get the
 "FARMER'S
 ADVOCATE"

FREE

FOR SENDING us the names of 3 new yearly paid-up subscribers we will give free, 12 months' subscription to the FARMER'S ADVOCATE.

An Extraordinary Offer.

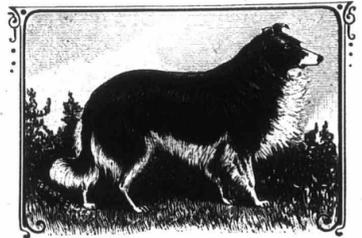


BELOW is given a brief outline of the contents of this handsomely illustrated Cook Book. See page 440, November 1st issue.

- | | |
|--|---|
| Food and Health.
Foods in General.
Table Etiquette.
Morning Meal.
Mid-day Meal.
Evening Meal.
Party Suppers.
How to Carve.
Selecting Meats.
Soups.
Fish.
Shell-fish.
Meats.
Sauces for Meats.
Poultry and Game.
Pickles.
Sweet Pickles.
Vegetables.
Butter and Cheese.
Eggs and Omelets.
Salads.
Bread.
Biscuits, Rolls, etc.
Waffles and Griddle Cakes.
Unleavened Bread.
Grains and Mushes. | Cake.
Layer Cake.
Filling for Layer Cake.
Frosting and Icing.
Cookies and Jumbles.
Gingerbreads.
Crunners and Doughnuts.
Pastry and Pies.
Custards and Creams.
Ice Cream and Ices.
Puddings.
Sauces for Puddings.
Preserves.
Jellies and Jams.
Canned Fruits and Vegetables.
Fruit and Fruit Sauces.
Drinks.
Confectionery.
Menus for Every Month.
Folding Napkins.
Housekeepers' Hints.
Keeping Fruits and Vegetables.
The Toilet.
Miscellaneous.
The Laundry. |
|--|---|

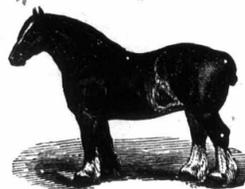
This premium will be sent to any subscriber sending us the name of only one new yearly paid-up subscriber.

How to Get a First-Class Collie



To any subscriber sending us the names of 10 new yearly paid-up subscribers we offer a young Collie, six weeks old or over, eligible to registration, and bred by Mr. R. McEwen, Byron, Ont. (See this issue, page 453, for fuller description.)

THORNCLIFFE STOCK FARM!



Montrose, The Ruler, Carruchan Stamp, Knight Errant and other celebrities. My stock in the above lines were very successful at all the large shows last year. Call and examine our stock before purchasing elsewhere. Terms reasonable.

SHROPSHIRE.

Orders can now be booked for Shearling Rams, Ram Lambs and Ewes, sired by the celebrated prize-winning English ram, Bar None. Also Rams and Ewes of this year's importation.



SHORTHORNS!

CHOICE YOUNG HEIFERS and BULLS

by the celebrated Cruickshank bulls

NORTHERN LIGHT

—AND— VICE CONSUL



ROBERT DAVIES, Proprietor. P. O., Toronto.

19-1-y-om

STOCK GOSSIP.

ANNUAL SALE AT THE O. A. C.
The seventeenth annual sale of surplus pure-bred stock was held at Guelph on October 30th. The attendance was somewhat slim, attributed to the busy season of the year, scarcity of feed, etc. Very few were present from a distance, and prices realized were rather low, though not unduly so, considering some of the stock offered. The writer refers particularly to the sheep. Whether for the benefit of the general public who may attend these annual sales, by placing before them practical illustrations of what may be accomplished by skillful selection, breeding, and general management, or to afford people opportunities to acquire improved breeding stock, what is superior in type, conformation, condition and quality is looked for. The flocks and herds of a public institution are subject to the same natural laws that control others, so that all bred may not prove desirable, but such should be weeded out by being sent to the shambles by those in charge. The very pre-eminence deservedly attained by the College in this the banner stock breeding Province makes this all the more imperative and no one should grumble if a few dollars less be realized because a few animals are fattened and sold. The cattle were the most credible stock offered, though the numbers were limited. The auctioneer, Mr. J. Taylor, performed his part in a business-like and satisfactory manner. First to come under the hammer was College Premier, a very good Shorthorn bull calf, calved May 26th, 1895; Alex. Gerrie, Fergus, was the purchaser at \$64.00. Next came a Hereford bull calf, College quality; pion, calved Oct. 20th, 1894; very good at \$37.00. Alex. White, Guelph, was the buyer at \$37.00. A good Galloway heifer was sold in College Bright Eyes, calved Dec. 3rd, 1894; purchased by D. McCrae, at \$22.00. College Beauty, calved April 29th, 1895, was knocked down at \$10.00; also to D. McCrae. A Sussex heifer of nice quality was sold to A. Stone, Guelph, for \$11.00. The last two heifers went to beef prices. The Sunox heifer, College Fairy, calved Oct. 12th, 1894, was also bought by A. Stone, at \$22.00. College Beauty, calved Dec. 3rd, 1894, was knocked down at \$23.00; to Dec. 3rd, 1894, was also bought by the same purchaser. A good Ayrshire heifer, same College Spot, calved May 15th, 1895, went at \$15.00; H. D. Kewley, Sarnia, was the purchaser; and D. Redmond, College, was the buyer of her mate, College, Ernososa, at \$15.00. Quite a large number of Yorkshire and Tamworth swine were sold; many of them going at butchers' prices. Some of the choice Yorkshires brought better figures. A couple of three Berkshires were offered, and four very good Chesters brought \$53.00. The offerings in good Cheaters included six Cotswolds, four Lincolns, three Leicesters, three Southdowns, one Hampshire, three Suffolks, six Oxford and one Dorset—not attractive, and prices correspondingly low.

NOTICES.

HOW TO GET "SUNLIGHT" BOOKS.
Send twelve "Sunlight" Soap wrappers to Lever Bros. (Ltd.), 43 Scott St., Toronto, who will send post-paid a paper-covered book, 160 pages. By leaving the end-stage, remember it will go for one cent postage. Remember "Sunlight" now sells at six cents per twin bar.
TWENTY DOLLARS FOR A STORY.
"Our Monthly," published by the Manufacturers' Life Insurance Company, Toronto, offers \$20 for the best argument for life insurance in the form of a story not exceeding fifteen hundred words. Particulars from Editor of "Our Monthly," 63 Yonge St., Toronto.

BOOK TABLE.

The Statistical Year Book of Canada, ably compiled by Mr. George Johnston, Statistician, Ottawa, grows apace. A few years ago it was a modest volume; last year it contained 995 pages; but the copy which has just reached our desk embraces 1,134 pages, being the tenth issue. Seventy-six pages are devoted to agriculture. As a reference work we have found it of great use in office work; to make it more complete in all departments, thereby increasing its value to public men, journalists and others. We regret that the binding is of a very flimsy character, and owing to its large size would stand but little handling without going to pieces, so that if it survived a year's usage it certainly would not be a fit volume to appear in the office library permanently.
Mr. Geo. Batten, of New York, in his recently-issued "Directory of the Agricultural Press" gives some pertinent facts in his introduction relative to the farmer as a buyer. He estimates the production of the American farmer at \$2,500,000,000 in value yearly, a great proportion of which is necessarily spent for what is needed on the farm. A reader and a farmer as a shrewd buyer, a reader and a thinker who believes in his agricultural paper and makes greater use of its advertising columns every year. In fact, he says the time is at hand for the business man who is like advertisement in an agricultural paper, which the thumb on the hand, and against which the fingers of mail, freight, express, and telegraph will hold to a bargain.

Geo. Downey & Bro., CASTLEBERG, ONT., breeders of SHORTHORN CATTLE and COTSWOLD SHEEP. A few very choice young rams for sale at low prices. No. 1 breeding and fine quality. Stock guaranteed to be as described. St. Bolton, C. P. R.; Palgrave, G. T. R. 22-2-y-o

For Sale!—A very fine four-year imported Shorthorn bull, Sirius = 15281—, bred by Wm. Duthie, Scotland, and got by the great stock bull, Leonidas = 52930—, This bull is of first-class breeding and No. 1 quality, deep roan in color, and will be sold at a bargain. A. F. MCGILL, Hillsburg. 22-2-f-o

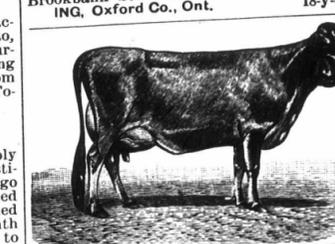
THE KEYSTONE DEHORNER
Cuts clean on all sides—does not crush. The most humane, rapid and durable knife made, fully warranted. Highest World's Fair Award. Descriptive Circulars Free.
A. C. BROSIUS, Cochranville, Pa.
Can ship from Picton and Hamilton, Ont. 17-1-om

MAPLE HILL HOLSTEIN-FRIESIANS.
Have you the blood of the great butter cows, DeKol 2nd, Empress Josephine 3rd, Meckthilde and Pauline Paul, in your herd? If not, why not? The demand for this blood exceeds the supply. Speak at once if you want some of it.
11-y-om G. W. CLEMONS, St. George, Ont.

GEM HOLSTEIN HERD
6 MONTHS' CREDIT GIVEN.
BULLS, all Registered Holsteins; quality the best, and fit to head any herd; we have them all ages. Write for particulars to
ELLIS BROTHERS, BEDFORD PARK P.O., ONT. 7-y-om

LARGE IMP. YORKSHIRE PIGS
—AND—
HOLSTEIN - CATTLE.
We breed nothing but the best, and sell cheap and guarantee satisfaction or ask no pay. Come and see us, or write for prices and be convinced. **FLETCHER BROS.,** Oxford Mills P. O., Ontario, Kempville Station, C. P. R. 5-1-y-om

HOLSTEINS!
WE now offer young stock that have won prizes, and calves from our show herd, from one month to one year old, whose dams have large records—any age or sex—FOR SALE, at very low prices to quick buyers. Also some Poland-China Pigs, 1 and 6 months old; same quality (the best).
A. & G. RICE, Brookbank Stock Farms, CURRIE'S CROSS-ING, Oxford Co., Ont. 18-y-om



JERSEYS FOR SALE.
On account of shortness of winter feed, I will sell cheap the following registered Jerseys—handsome and richly bred: Three young Cows handsome and richly bred; 4 Heifer Calves; 1 Bull Calf. Also, 3 young Cows and 3 Heifers in calf, high grade. Jerseys from deep milking and rich butter strains. Come or write. Also 5 young Berkshire Boars—fit for use.
J. C. SNELL, Edmonton, Ont.
R. R. Station, Brampton, G. T. R., and C. P. R. 8-y-om

WILLOW GROVE HERD OF JERSEYS.
Sweepstake herd of 1894. Stock from imp. bulls and imp. and home-bred dams of St. Lambert, St. Heller, and Signal strains. Young of splendid individuality always for sale at 15 months. Eggs, \$1.00 per setting. Highfield St., G. T. R.
6-2-y-om **J. H. SMITH & SON.**

ADVERTISE IN THE ADVOCATE

For Sale.

JERSEY BULL, "RIOTER'S JUPITER"
Two yrs. old; Solid Dark Fawn, Blk. Points.

Sire, Liliun's Rioter, 1st prize Toronto, Montreal, Ottawa and Gananoque, 1895. Headed 1st prize Herd, Toronto, Montreal and Ottawa, 1895. Took Silver Medal, Toronto, Montreal and Ottawa, 1895. His dam makes 17 1/2 lbs. butter a week, milks 20 quarts a day, and never goes dry. Dam of Rioter's Jupiter is a daughter of Lulu Delle, 1st prize and Silver Medal overall Canada. In my 1st prize Herd at Toronto and London. Was one of my three at London, winning Silver Tea Set, for three Best Dairy Cows. Price of Rioter's Jupiter, \$125.00. Also, two bull calves, 5 and 6 months, grandsons of my famous prize bull, Canada's Sir George, whose dam made 26 1/2 lbs. butter a week. Two bull calves, 3 and 4 months, g. g. sons of Massena, 654 lbs. butter in her 16th year.

MRS. E. M. JONES, 8-y-om Box 324, BROCKVILLE, Ont., CAN.

JERSEY-CATTLE
Of the heaviest milking strains. One of the largest herds in Canada; bred closely to the great dairy cow at Chicago, also the famous two-year-old Sires of both were sold from this herd. Also Welsh Blood Ponies for ladies' and children's driving. Stock for sale always on hand. **Geo. SMITH & SON,** Grimsby, Ontario. 8-y-om

REGISTERED JERSEYS.
Two two-year-old Heifers with Bull Calves at foot, all solid colors, closely bred, handsome and promising. The lot for \$175 cash. Young Bulls—fit for service, solid colors. \$50. Must sell for want of room.
E. PHELPS BALL, 17-y-o Lee Farm, Rock Island, P. Q.

GLEN ROUGE JERSEYS
WILLIAM ROLPH, Markham, Ont. offers Twelve Jersey Bulls and Heifers (pure St. Lambert), one of tested cows. Grand individuals. Prices right. 21-y-om

JOHN YEAGER, OSAGE AVENUE, SIMCOE, P.O. Breeder of Choice Jerseys, Berkshire Swine, and Scotch Collie Dogs. 6-2-y-o Correspondence solicited.

JERSEY HURST HERD OF JERSEYS
ROBERT REESOR, LOCUST HILL, ONT.—Choice Jerseys for sale at all times; grand individuals of the St. Lambert and St. Heller strains. Locust Hill is 20 miles from Toronto, on C. P. R. 6-2-y-o

GUERNSEYS
This is the Dairy breed for ordinary farmers. Large, vigorous and hardy, giving plenty of rich milk. Imported Bull Benefit, son of Vice-Pres. Morton's famous butter cow Bienfaitrice 4th, heads the herd.
Address: **SYDNEY FISHER,** 17-y-o Alva Farm, Knowlton, P. Q.

75 PER CENT.
OF PRIZES WON AT LEADING FAIRS BY
Ingleside Herefords.
Special offerings for next thirty days. Choice young bulls.

YORKSHIRE and TAMWORTH SWINE.
Fall litters at bargains.
H. D. SMITH, Ingleside Farm, Satisfaction guaranteed. COMPTON, QUE. 17-y-om

AYRSHIRES - AND - YORKSHIRES.
The largest herd in the Province of Quebec; selected from deep milking strains. Also choice Yorkshires. Orders booked for young pigs.
W. F. & J. A. STEPHEN, Trout River, Que.

STOCK GOSSIP.

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

J. C. Snell, of Edmonton, changes his advertisement in this issue. Jersey butter always returns a high price for the food consumed to produce it.

We call attention to Mr. Arthur Johnston's (Greenwood) change of advertisement in this issue. Mr. Johnston reports his stock, young and old, as being in fine condition.
A short time ago there was shipped from Great Britain a large and valuable lot of Shorthorn cattle for Buenos Ayres by Mr. Donald MacLennan. The consignment, one of the largest and best ever despatched, included several well-known prize-winning animals, chief among which were the unbeaten Count Victor, from Mr. Willis's herd; Roland Gwynne, from Mr. Law's Aberdeen herd; Staffordshire Boy, from Mr. Blundell's herd; Marathon, bred by Mr. Duthie; Red Prince, bred by Mr. McWilliam; Sir Lionel, bred by Mr. McTear; Ringleader, bred by Lord Lovat; Lord John, and Meredith, bred by Mr. G. Bruce. The Hereford bull, Grandison, bred by Lord Hereford; an Aberdeen-Angus bull, bred by Sir W. Gordon-Cumming, and a heifer of the same breed, bred by Mr. Smith, were also included. The female Shorthorns comprised Warrior's Plume 2nd and c.e., bred by Mr. Mills; the famous Royal Charity, bred by Mr. Beattie; Millie Stamma 2nd and c.e., bred by Mr. G. Harrison's herd; Pearl, bred by Mr. Hill; and Stanley Butterfly, bred by Mr. Crooke. Mr. MacLennan shipped at the same time and for the same destination about forty rams, Lincolns and Oxford.

MR. E. DOOL'S IMPROVED YORKSHIRES.

Mr. Dool is one of the foremost farmers and breeders of the vicinity of Hartington. Seeing that there was money in the pig business if handled in the right fashion, a few years since Mr. Dool laid the foundation of the best herd by selections from some of the best breeders in the country, namely, Messrs. J. E. Brethour, Burford, and J. M. Hurley, Belleville. By judicious management and the introduction of first-class boars, success has crowned his efforts, and the herd now comprises some sixty head, of very fine quality. The present stock boar is Champion—1597—, sired by Oak Lodge Diamond 4th—1135—; dam Millie Stamina 2nd—800—. This boar was purchased from J. N. Greenshields, P. Q., and shown by him last season, winning first at Toronto and Ottawa in the under six month class, and first this year at Kingston. A useful eleven-months boar, by Jackson 2nd—1026—, figure. One of the best of the brood sows is Jane Ann 3rd—1396—, a two-year-old sow of fine type but somewhat thin in flesh to show well this season; she was bred by J. E. Brethour, and had for her sire Oxford Lad (imp.) 335, and for her dam Jessie 6th. May—1265—is another of the good ones, nursing a litter of good pigs at the time of our inspection. This sow was bred by J. M. Hurley & Son, Belleville, her sire being Duke of York—607—; dam Madam 2nd—152—, Yorkshire Daley 6th—1060—, by Model Duke—747—, dam Yorkshire Duchess 2nd—307—, is also a grand sow that was due to farrow Sept. 10th, by Champion. Many other excellent sows are to be seen among the breeding animals, and Mr. Dool can supply young pigs of all ages and sizes, good ones and richly-bred, at prices within the reach of all. See his advertisement.

W. J. SHIBLEY'S BERKSHIRES.

Some three years ago Mr. W. J. Shibley, of Harrowsmith, launched out in the breeding of pure-bred swine. After deciding that the Berkshires were the breed to his liking, a selection was made, Mr. Snell's stock being the preference. During this short time, Mr. Shibley has established a very useful herd, now numbering over thirty head. A few of the best were fitted this year and shown at Kingston, where they succeeded in winning seven prizes out of twelve given. The herd is now headed by Premier imp. in dam, and bred by N. J. Benjafield, Montcombe, Dorset, Eng., and imp. by J. C. Snell. He was sired by Rudolphus—2869—, dam Matrina—3410—, and is a fine, lengthy, smooth boar, fine-haired and strong-boned. Another of Mr. Shibley's show boars is a good yearling by Premier, and from Maid of Marlton—2762—, Recently a young boar, now five months old, was purchased from T. A. Cox, Brantford, with intention of keeping him for a stock boar. He is a very nice, smooth pig, but a trifle undersized; still, good enough to win first in the class for under one year against older ones at the above show. Among the breeding sows one of the best is Maid Marion—2762—, bred by J. C. Snell, Edmonton, Enterprise (imp.), dam Royal Duchess (imp.)—2640—, Maid Marion has just farrowed a litter of twelve fine pigs by Premier, Hester—3589— is another good sow, also bred by J. C. Snell, and sired by Pilot (imp.)—1331—, dam Queen 11th—3449—, by King Lee—1777—, dam Bonny Queen—2664—, is a good sow for points, but a little out of condition, owing to raising a litter of youngsters. This sow was a winner at the larger fairs the year Mr. Shibley purchased her. The breeding sows number some ten head all told, all of which were either purchased or descended direct from Mr. Snell's stock. The young stock should be good, as the above proves their rich breeding. Mr. Shibley's advertisement will be seen in our columns offering young stock.



Champion Dairy Herd of Ayrshires at various government tests. Prize winners at the World's Columbian Exposition, Chicago. Write MESSRS. ROBERTSON & NESS, Howick, Que. 19-y-om

Ontario Farmers' Institute Meetings.

Superintendent Hodson, of Guelph, has arranged, as given below, the regular winter series of Farmers' Institute meetings to be held, with the exception of Division 10, in January, beginning on the 7th and extending through the month. An able staff of speakers, most of them experienced in the work, is being sent out, and a wide range of topics adapted to the various localities are to be discussed. The design is not that the delegation occupy all the time, but rather to assist local talent. Some 181 meetings are arranged, compared with 137 last year. A good many supplementary meetings will be held subsequently. Considerable new territory seems to have been worked up, and delegations are going into some northern points, where their visits will, we feel sure, be greatly appreciated.

DIVISION I.

Deputation—Prof. J. H. Reed, Guelph, Ont. (Q); G. C. Caston, Craighurst, Ont. (X), (alternate with Prof. Reed); Simpson Rennie, Milliken, Ont.

- Q. Milverton..... January 7th.
Q. Listowel..... " 8th.
Q. Clifford..... " 9th.
Q. Mildmay..... " 10th.
Q. Walkerton..... " 11th.
Q. Paisley..... " 13th.
Q. Port Elgin..... " 14th.
X. Durham..... " 15th.
X. Holstein..... " 16th.
X. Moorefield..... " 17th.
X. Drayton..... " 18th.
X. Arthur..... " 21st and 22nd.
X. Auburn..... " 23rd and 24th.
X. Kincardine..... " 25th.
X. Brussels..... " 27th and 28th.

DIVISION II.

Deputation—Prof. J. Hoyes Pantou, O. A. C., Guelph, Ont. (Q); Thomas McMillan, Seaford, Ont.; A. H. Christian, B. S. A., (O. A. C.) Guelph, Ont.; J. E. Meyer, Kossuth, Ont. (X), (alternate with Prof. Pantou).

- Q. Brucefield..... January 7th.
Q. Exeter..... " 8th.
Q. Parkhill..... " 9th.
Q. Wyoming..... " 10th.
Q. Petrolia..... " 11th.
Q. Brigidon..... " 13th.
Q. Inwood..... " 14th.
X. Napier..... " 15th.
X. Coldstream..... " 16th.
X. St. Mary's..... " 17th and 18th.
X. Thorncliffe Station..... " 20th.
X. Dorchester Station..... " 21st.
X. Ingersoll..... " 22nd.
X. Embro..... " 23rd.
X. Innerkip..... " 24th.

DIVISION III.

Deputation—Prof. Geo. Harcourt, St. Ann's, Ont.; Wm. Rennie, O. A. C., Guelph, Ont. (X); D. Z. Gibson, Willow Grove, Ont.

- X. Glencoe..... January 7th.
X. Kent Bridge..... " 8th.
X. Chatham..... " 9th.
X. Harrow..... " 10th and 11th.
X. Canard River..... " 13th.
X. Paquette Station..... " 14th.
Highgate..... " 15th.
West Lorne..... " 16th.
Shedden..... " 17th.
Aylmer..... " 20th and 21st.
Delhi..... " 22nd.
Victoria..... " 23rd.
Port Rowan..... " 24th.
Waterford..... " 25th.
Norwich..... " 27th.

DIVISION IV.

Deputation—H. L. Hutt, B. S. A., (O. A. C.) Guelph, Ont. (Q); T. G. Raynor, B. S. A., Rose Hall, Ont.; M. Pettit, Winona, Ont. (X), (alternate with Mr. Hutt); Mungo McNabb, Cowal, Ont.

- Q. St. George..... January 7th and 8th.
Q. Burford..... " 9th.
Q. Brantford..... " 10th.
Q. Caledonia..... " 11th.
Q. Cayuga..... " 13th.
Q. Attercliffe Station..... " 14th.
X. Humberstone..... " 15th.
X. Marshville..... " 16th.
X. Welland..... " 17th.
X. Beamsville..... " 20th and 21st.
X. Stony Creek..... " 22nd.
X. Ancaster..... " 23rd.
X. Waterdown..... " 24th.
X. Freelon..... " 25th.

DIVISION V.

Deputation—A. McNeil, M. A., Windsor, Ont.; R. Harcourt, B. S. A., (O. A. C.) Guelph, Ont. (X); W. S. Fraser, Bradford, Ont.

- X. Nelson..... January 7th.
X. Milton..... " 8th.
X. Brampton..... " 9th and 10th.
X. Camilla..... " 11th.
X. Shelburne..... " 13th.
X. Markdale..... " 14th.
Owen Sound..... " 15th.
Hillsburg..... " 16th.
Elora..... " 17th.
Hespeler..... " 20th and 21st.
Guelph..... " 22nd.
Hawkesville..... " 23rd.
Berlin..... " 24th.
New Hamburg..... " 25th.

DIVISION VI.

Deputation—G. E. Day, B. S. A., (O. A. C.) Guelph, Ont. (at meetings marked X); L. Patton, Oxford Mills, Ont.; James Sheppard, Queenston, Ont.

- X. Weston..... January 7th.
X. Woodbridge..... " 8th.
X. Cookstown..... " 9th.
X. Creemore..... " 10th.
X. Duntroon..... " 11th.
X. Meaford..... " 13th.
X. Thornbury..... " 14th.
Midhurst..... " 15th.
Orillia..... " 16th.
Midland..... " 17th.
Elmvale..... " 18th.
Churchill..... " 20th.
Aurora..... " 21st and 22nd.

Ayrshires!

PURE-BRED, of different ages, and both sex. No inferior animals. Write for particulars.

A. McCallum & Son, Spruce Hill Dairy Farm, DANVILLE, QUE. 22-y-o

Prize-Winning AYRSHIRES FOR SALE.

I have at present one of the largest and best herds in Ontario, which has been very successful in the Prize ring. They are deep milkers and of a large size. Bulls, cows and heifers for sale always on hand.



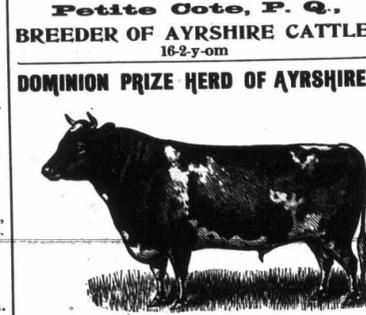
JAS. McCORMICK & SON, ROCKTON, ONT. 20-2-y-o

J. YULL & SONS, MEADOWSIDE FARM, Carleton Place, Ont.

Breeders of high-class Ayrshires, choice Berkshires, and Shropshire Sheep. Young stock always for sale, at reasonable prices. Our Ayrshire herd is the largest and oldest in Canada. Write for prices. Parties met at Queen's Hotel, Carleton. 20-y-o

DANIEL DRUMMOND, BURNSIDE FARM, Petite Cote, P. Q. BREEDER OF AYRSHIRE CATTLE. 16-2-y-om

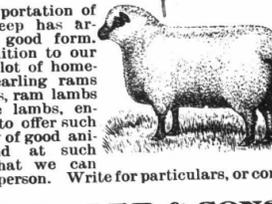
DOMINION PRIZE HERD OF AYRSHIRES



We have the oldest established, largest and best herd of Ayrshires in Canada. Choice young stock for sale at liberal prices. Satisfaction guaranteed. JAMES DRUMMOND & SONS, Petite Cote, Montreal, P.Q. 8-2-y-o

SHROPSHIRE

Our importation of show sheep has arrived in good form. This addition to our splendid lot of home-bred shearing rams and ewes, ram lambs and ewe lambs, enables us to offer such a variety of good animals and at such prices that we can suit any person. Write for particulars, or come and see.



JOHN MILLER & SONS, Brougham, 12-2-y-om Ontario.

BELVOIR STOCK FARM.

FOR SALE—Shropshire Sheep and Improved Yorkshire Swine of winning strains, and bred up to the highest type. Prices as low as such breeding and quality will permit.

RICHARD GIBSON, 19-d-om Delaware, Ontario.

W. S. Hawkshaw, Glanworth, Ont.

IMPORTED SHROPSHIRE LEWES and their lambs for sale; singly or by car lots. Glanworth Station. American Mammoth Bronze Turkeys for sale. 14-2-y-o

SHROPSHIRE FOR SALE.

One and two-shar Rams and Ram Lambs, descended from the best English flocks. My stock are all of No. 1 quality, and the rams offered are strong, lusty fellows, with fine quality of wool and extra well covered. Write me at once for prices if you wish to secure a bargain. 18-2-y-o JAS. F. DAWSON, Odessa, Ont.

ADVERTISE IN THE ADVOCATE

O. & E. WOOD, Locust Lodge, Freeman P. O., Breeders of high-class LEICESTER SHEEP AND POLAND-CHINA SWINE.



THE GLEN STOCK FARM Shropshires

We will sell at moderate prices a number of Yearling Rams and Ram Lambs, also a choice lot of yearlings and two-year-old Ewes and Ewe Lambs. Our herd of Ayrshires are in splendid form, and parties in need of young stock of either sex will do well to see what we have to offer before purchasing elsewhere. WHITESIDE BROS., 7-y-om INNERKIP, ONT.

The MARKHAM HERD OF IMPROVED Large White Yorkshires

A choice assortment of young stock now for sale; all sizes and ages; either sex. Pairs and trios not skin. Only first-class stock shipped to order. Prices to suit the times. Correspondence solicited. Shipping G.T.R. and C.P.R. 18-2-y-o



JNO. PIKE & SONS, Locust Hill, Ont.

MARYSVILLE STOCK FARM

R. G. MARTIN, Marysville, Ont. breeder of choice Yorkshire and Berkshire swine, Leicester and Shropshire sheep. Young stock of the above always for sale, of the best quality and breeding. All stock guaranteed to be as represented. Write for prices and particulars. 18-2-y-o

IMP. LARGE WHITE YORKSHIRES FOR SALE

I am now prepared to supply young pigs of this noted breed at had times prices. Orders booked for young pigs due Oct. 1st. Write me for prices and particulars. Mention "Advocate." 18-2-y-o



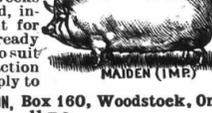
WM. TEASDALE, Dollar. A Specialty of Large White Yorkshire Swine.



Over 250 pigs of different ages on hand of the most desirable type. Quality of stock guaranteed as described. All stock delivered free of express charges. J. E. BRETHOUR, Burford, Brant Co., Ont. 3-y-om

LARGE IMPROVED YORKSHIRES

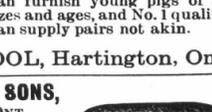
A choice lot of young pigs from four weeks to six months old, including boars fit for service and sows ready to mate. Prices to suit times. Satisfaction guaranteed. Apply to



WM. GOODGER & SON, Box 160, Woodstock, Ont. 11-y-o

IMPROVED LARGE YORKSHIRES

FOR SALE—of the best type and breeding. Young boars fit for service and sows fit to breed. Can furnish young pigs of all sizes and ages, and No. 1 quality. Can supply pairs not akin. 18-2-y-o



E. DOOL, Hartington, Ont.

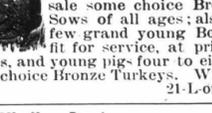
H. GREGG & SONS, SALFORD, ONT. Breeders of Berkshires and Chester White Swine. We have for sale young stock of either sex, and any age, at prices to suit the times. 8-2-y-o Correspondence solicited.

BOARS FOR SALE.

We have a grand lot of Berkshires and Yorkshire boars fit for service, which we will dispose of cheap, as we are overstocked. 12-2-y-o W. R. BOWMAN, Mount Forest, Ont.

MODEL BERKSHIRE HERD

D. A. GRAHAM, Parkhill, Ont., Importer and breeder of Berkshire Pigs, offers for sale some choice Brood Sows of all ages; also a few grand young Boars fit for service, at prices to suit the times, and young pig-four to eight weeks old, and choice Bronze Turkeys. Write for prices. 21-L-om



ISRAEL GRESSMAN, New Dundee, IMPORTER OF Large - English - Berkshires 4-y-om

DIVISION VII.

Deputation—Prof. A. E. Shuttleworth, O. A. C., Guelph, Ont. (Q); A. H. Pettit, Grimsby, Ont.; James McEwing, Drayton, Ont. (X), (alternate with Prof. Shuttleworth).

- Q. Whithy..... January 7th.
Q. Oshawa..... " 8th.
Q. Columbus..... " 9th.
Q. Blackstock..... " 10th.
Q. Bethany..... " 11th.
Q. Mill Brook..... " 13th.
Q. Lakefield..... " 14th.
X. Peterborough..... " 15th.
X. Lindsay..... " 16th.
X. Fenelon Falls..... " 17th.
X. Bobcaygeon..... " 18th.
X. Oakwood..... " 20th.
X. Beaverton..... " 21st.
X. Uxbridge..... " 22nd.
X. Unionville..... " 23rd.
X. Agincourt..... " 24th.

DIVISION VIII.

Deputation—David McCrae, Guelph, Ont.; D. W. Beadle, M. A., 303 Crawford St., Toronto, Ont.; J. J. Ferguson, Smith's Falls, Ont.

- Bowmanville..... January 7th.
Orono..... " 8th.
Baltimore..... " 9th.
Rosneath..... " 10th.
Trenton..... " 11th.
Frankford..... " 13th.
Bloomfield..... " 14th.
Demorestville..... " 15th.
Shannonville..... " 16th.
Stirling..... " 17th.
Madoc..... " 18th.
Tweed..... " 20th.
Norwood..... " 21st.
Warkworth..... " 22nd and 23rd.
Keene..... " 24th.

DIVISION IX.

Deputation—C. A. Zavitz, B. S. A., (O. A. C.) Guelph, Ont.; T. H. Mason, Strathfordville, Ont.

- Harrowsmith..... January 7th.
Kington..... " 8th.
Lansdowne..... " 9th.
Mallorytown..... " 10th.
Lyn..... " 11th.
Delta..... " 14th.
North Augusta..... " 15th.
Spencerville..... " 16th.
Morrisburg..... " 17th and 18th.
Cornwall Centre..... " 20th.
Williamstown..... " 21st.
North Lancaster..... " 22nd.
Vankleek Hill..... " 23rd and 24th.
Moose Creek..... " 25th.
Odessa..... " 28th.
Newburg..... " 29th.
Centreville..... " 30th.
Napanea..... " 31st.

DIVISION X.

Deputation—Prof. H. H. Dean, O. A. C., Guelph, Ont.; David McCrae, Guelph, Ont.

- Perth..... December 2nd.
Smith's Falls..... " 3rd.
Merrickville..... " 4th and 5th.
North Gower..... " 6th.
Manotick..... " 7th.
Metcalfe..... " 9th and 10th.
Almonte..... " 11th.
Pakenham..... " 12th.
Renfrew..... " 13th and 14th.
Cobden..... " 16th.
Westmeath..... " 17th.
Stella..... " 19th.
Emerald..... " 20th.

DIVISION XI.

Deputation—I. W. Steinhoff, Stratford, Ont. A. P. Ketchen, Brucefield, Ont.

- Bracebridge..... January 7th.
Port Carling..... " 8th.
Utterson..... " 9th.
Aspden..... " 10th.
Emsdale..... " 13th.
S. S. No. 2, Foley..... " 14th.
Perry Sound..... " 15th.
Hemlock..... " 16th.
McKellar..... " 17th.
Dunchurch..... " 18th.
Magnetawan..... " 20th.
Burk's Falls..... " 21st.
Sundridge..... " 22nd.
Powassan..... " 23rd.
Sault Ste. Marie..... " 25th.
S. S. No. 1, Laird and McLennan..... " 37th.
Richard's Landing..... " 28th.
Marksville..... " 29th.
Thessalon..... " 30th.
Sowerby..... " 31st.

Iron Bridge..... February 1st. Manitoulin Island, Gore Bay, Long Bay, Mendemoya, Kogawong, Green Bay, Little Current, Tehkummah, Manitowaning, Sheguandah, from February 3rd until completed.

When not otherwise stated, the delegates will assist local talent to hold afternoon and evening meetings, except in the case of a two-day meeting, when they will assist at a morning meeting the second day as well as the afternoon and evening of the first and second days. Afternoon meetings will commence at 1 p. m., and the evening meetings at 7.30 p. m.

The address of Messrs. J. G. Snell & Bro., has been changed from Edmonton to Snellgrove, Ont.

IT PAYS TO ADVERTISE FARMER'S ADVOCATE - AND - HOME MAGAZINE. If you have anything to sell, SEND AN ADVERTISEMENT TO The William Weld Company LONDON, ONTARIO.

Large English Berkshires for Sale

A number of very fine young Berkshire Boars fit for service; young sows fit to breed, and younger ones of all ages, either sex, of choicest breeding. All stock guaranteed to be as represented. Write me for prices, or come and see my stock. W. J. SHIBLEY, HARROWSMITH, ONT. 18-2-y-o

LARGE ENGLISH BERKSHIRES

My herd are imported or bred from imported stock, and have carried winnings at leading shows for years, including sweepstakes over all breeds at last Guelph Fat Stock Show. Pigs of all ages for sale, pairs supplied not akin. GEO. GREEN, Fairview, Ont. 9-7-om

Maple Cliff Stock and Dairy Farm, HINTONBURG, ONT.

FOR SALE:—Choice Young Berkshires and Tamworths of No. 1 breeding, at farmers' prices. We are making a special offering the next thirty days, as we wish to reduce our stock before winter. Write for prices. R. REID & CO. 20-2-y-o Farm one mile from Ottawa.

BERKSHIRE Chester White, Jersey Red & Poland China Pigs. Jersey, Guernsey & Holstein Cattle. Thoroughbred Sheep, Fancy Poultry, Hens and House Dogs. Catalogue. S. W. SMITH, Cochransville, Chester Co., Pa. 17-y-om

SIPRILL & CARROLL, Carholme P.O., Ont. BREEDERS OF

BERKSHIRE SWINE AND LEICESTER SHEEP

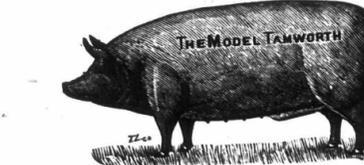
We guarantee our stock to be of the best quality. Our Leicesters are bred from the noted stock of Kelly, Whitelaw, and Nichol, and our Berkshires of a desirable type. Correspondence solicited. 12-2-y-o

M. J. DAVIS, Woodstock, Ont., Breeder of Short-horn Cattle, Imp. Large White Yorkshire and Berkshire Swine. Some very fine young bulls of good color and breeding, from 12 to 18 months old, for sale. Also a number of Yorkshire Boars of splendid quality, fit for service, and a good lot of Yorkshire sows ready to breed. Berkshire boars of the right stamp fit for service; also sucking pigs of both breeds for sale at moderate prices. Inspection invited, or write for description and prices. 8-y-om

Large English Berkshires!

Our Berkshires made a clean sweep of all the first (11) prizes offered for Berkshires at the late Toronto Industrial Exhibition, including 1st and 2nd prizes for herd of boar and two sows, boar and four of his get, and sow and four of her produce. We now have a fine lot of young pigs for sale from two to three months old, also boars and sows about five months old. Write for prices. J. G. SNELL & BRO., Edmonton, Ont. Brampton and Snelgrove Sts. 2-y-om

TAMWORTHS & SHROPSHIRE



Have an extra choice lot of young pigs. Sows in pig and ready to breed. Also a few of the choicest Shropshire Ram Lambs at reasonable prices. JOHN BELL, Amber P. O. Shipping at Agincourt, C. P. R. or G. T. R. 10-2-y-o

ISAAC HOLLAND, SPRUCE GROVE FARM, CULLODEN P. O.

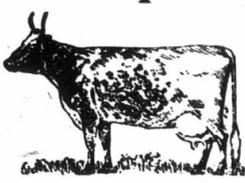
Breeder of Guernsey Cattle and Tamworth Swine. I have for sale a choice two-year-old or a four-year-old Guernsey bull of heavy milking strain. Also young Tamworths, either sex. Correspondence solicited. 8-2-y-o



If you want a first-class Pig, at your own price, either Imp. Chester White or Duroc Jersey, from 2 to 12 months old, sired by prize-winning and imported stock, write for descriptive price list. Our herd won more first prizes and sweepstakes in 1894 and 1895 than all competing herds combined. Fifty first-already this year. WM. BUTLER & SON, Dereham Centre, Ont. 7-y-om

ADVERTISE IN ADVOCATE

Keep Milch Cows In Good Health



IT PAYS.—It is useless to expect a lean, run-down cow to have a good flow of milk, though she will eat more than an animal in good flesh. The difficulty is the nutrient is not all extracted from the food because her digestion is out of order.

Dick's Blood Purifier

will strengthen the digestion and make the food produce milk. It will cost but fifty cents to try it on the poorest cow you have and you will get back your money with interest in a few weeks.

For sale by Druggists, at general stores or sent post paid on receipt of 50 cts. Dick & Co., P. O. Box 482, Montreal.

PURE OLD PROCESS

Ground Linseed Oil Meal.

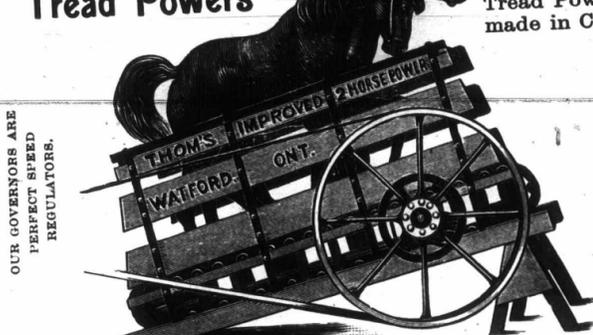
The Best and Cheapest STOCK FOOD in the World!

Most SATISFACTORY, because it preserves healthy action at all times. Most ECONOMICAL, because it fattens the quickest. Most PROFITABLE, because best conditioned stock are secured.

MANUFACTURED BY THE NATIONAL LINSEED OIL COMPANY, Works: West Ganson Street, BUFFALO, N. Y. 12-y-o

Send for CIRCULARS and PRICES.

Thom's Improved Tread Powers



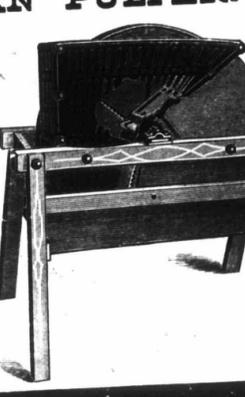
THE best General-purpose Farm Power; also the Upper Feed Cutter, worth a dozen of common knife machines for dry feed. CORN SHELLER, ETC. Send for Testimonials. THOM'S IMPLEMENT WORKS, Established 1875. WATFORD, ONT. 13-a-o

TWELFTH ANNUAL ONTARIO PROVINCIAL Fat Stock and Dairy Show

TO BE HELD IN THE CITY OF GUELPH, on December 10, 11 & 12, '95, Prize List can be obtained from the Secretary, HENRY WADE, Toronto.

THE COLEMAN PULPER.

"It is now the season for purchasing Root Pulpers, Grain Crushers, Straw and Ensilage Cutters, and Tread Powers. We have the finest. Get prices from your local agent; or write direct to The Estate of T. T. Coleman, Seaforth, Ontario, Canada."



STOCK GOSSIP.

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

At the dispersion sale of Mr. E. Moore's "Clover Hill" Holsteins, Cameron, Mo., the herd averaged about \$110, including a lot of young things, prices running as high as \$250.

At the dispersion sale of the late Col. Moberley's Shorthorns 9 bulls sold for \$1,855, an average of \$206.11; 60 females sold for \$7,190, an average of \$119.83; 89 animals sold for \$9,085, an average of \$131.60.

Friends of the FARMER'S ADVOCATE are giving us their enthusiastic support in all parts of Canada this season by working to increase its circulation. Our campaign has been for good stock and good farming—a paying combination that always goes together. An extra effort just now greatly extends the influence of the paper for good.

Alex. Galbraith, Jamesville, Wis., Secretary of the American Clydesdale Association, writes us that the 17th annual meeting will be held in the Sherman House, Chicago, on Nov. 26th, when matters of great importance to the stockholders will be dealt with. Mr. Galbraith adds that any suggestion calculated to advance Clydesdale interests will be gladly received.

Mr. J. H. Pickereil, Springfield, Ill., Secretary, advised us that the annual meeting of the American Shorthorn Breeders' Association will be held in the Great Northern Hotel, Chicago, on Nov. 20th, 7.30 p.m., for the purpose of electing three Directors to serve three years, and one to fill the vacancy caused by the decease of the late Col. T. S. Moberly to serve one year, and other business.

In our report of the Aberdeen-Angus cattle class at the Ottawa Exhibition Mr. James Bowman, of Guelph, Ont., should have had the credit for taking the diploma for bull of any age, that trophy being captured by his bull calf Bonnie Lad. "I may say," observes Mr. Bowman, "we took all the medals and diplomas for the breed at Toronto, Montreal, and Ottawa," which must be regarded as a very good indication of the success attending Mr. Bowman's efforts as a breeder of the comely Doddies.

The joint sale of Capt. T. E. Robson, Ilderton, and J. T. Gibson, Denfield, was quite a success. Some good Shorthorns changed hands at reasonable figures. The sale of Lincoln was especially satisfactory to the gentlemen holding the sale. Opportunities such as are thus afforded should not be allowed to pass unimproved. It is just as easy to feed and care for good animals, that are always a source of satisfaction to the farmer, as scrubby, inferior ones, of which their owners feel ashamed and from which they receive no paying returns.

J. S. Smith, Maple Lodge, Ont.: "We have recently sold to the Wakefield & Jacksonville Agricultural Society, New Brunswick, an excellent young bull from one of our best milking cows, and sired by British Flag—1858—our son of Old Brampton Hero. We have eight more young bulls sired by British Flag, and we are very much pleased with them. They are very level, smooth-fleshed calves, with lots of soft, silky hair. We never had better calves. Then, we have one from Jocelyn, a son of Vice-Consul; one from Abbottford; and one by San Mario. This latter calf is very wonderfully well bred in good Shorthorn milking strains. His dam, and her dams for six generations in line, have given us 50 lbs. milk or over per day, and made from 12 to 16 lbs. butter per week, and similarly with the dams in line on the sire's side for five generations; and, besides, he is a very handsome calf. Along with the bull the Society also purchased two very fine ram lambs and two Berkshire pigs. Upon their receipt (and they went through per C. P. R., nearly 1,000 miles in about 32 hours) Mr. Slipp, the Secretary, writes us: "The stock arrived in splendid condition, and we are well pleased with them. Our sheep sales have been very numerous, and the purchasers all report themselves very well pleased with their purchases."

CANADIAN HORSE BREEDERS' ASSOCIATION. As our readers will remember, a preliminary meeting for the organization of the Canadian Horse Breeders' Association was held in Toronto last September, when provisional directors and officers were chosen, as reported in our issue of October 1. In connection therewith a meeting of horsemen will be held in the Albion Hotel, Toronto, on Thursday, Nov. 21, at 2 p. m., to adopt a constitution and elect officers for the coming year. Mr. Robt. Davies is provisional chairman and Mr. Hy. Wade provisional secretary.

SHORTHORNS FOR BRITISH COLUMBIA.

We had an opportunity of inspecting the large shipment of registered Shorthorn bulls for British Columbia spoken of in our last issue. The number desired was easily secured within a comparatively small radius of London, Ont. They go to the Western Cattle Ranch Co., who own an immense range and herd in that Pacific Maritime Province. The following are the names of the breeders from whom the purchases were made: A. M. Dickie, Hyde Park; Donald Campbell, Lobo; John Scott, Lobo; Peter McGregor, Caradoc; E. A. Bateman, Caradoc; John Kennedy, Ilderton; Peter Toles, Caradoc; A. McGugan, Caradoc; John T. Gibson, Denfield; T. Ireland, Adelaide; Geo. Lewis, Adelaide; H. K. Fairburn, Theoford; Capt. T. E. Robson, Ilderton; T. Douglas & Sons, Strathroy; John Paterson, Denfield; Wm. Thompson, Denfield; Dennis Erskine, Denfield; Graham Bros., Ailsa Craig; H. Graham, Denfield; Wm. Hogg, Thamesford; Simmons & Quirie, Ivan and Delaware; Wm. Coldie, Thamesford; S. B. Gorwill, Fanshaw; Shore Bros., White Oak; R. & S. Nicholson, Sylvan; J. G. Chapman, Coldstream; W. H. Taylor, Parkhill. Along with the shipment went a trio of Yorkshires from the herd of J. A. Ackland, Komoka, and a pair of Berkshires purchased from John Shipley & Son, Komoka.

Out of the sixty bulls, ranging from six to twenty three months old, was a large proportion of really superior animals, as might be expected from the character of many of the herds represented. Some, however, were thin in flesh and commonish; but a winter of good feeding in the range will make a vast improvement in their appearance. Such a clearing out at this season augurs well for the spring demand that is sure to come.

STOCK GOSSIP.

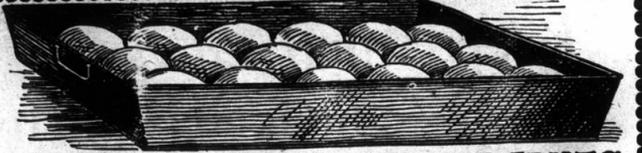
In writing to advertisers please mention the Farmer's Advocate.

HUGH M'OUTCHEON'S DUROC-JERSEYS.
A couple of miles from Glencoe, Ont., is the farm of Mr. Hugh M'Outcheon, who recently founded a herd of this American breed of swine by a selection from the well-known prize-winning herd of Tape Bros., Ridgeway, and others descended from the same herd. Among the herd we were particularly pleased with the yearling sow, Queen of Mosa -77-, a typical Duroc of splendid quality and a fine, smooth finish, got by Highgate Lad -3345-, dam Duchess of Oxford. Queen of Mosa has won first wherever shown this year, and was suckling a litter of fine youngsters at the time of our visit. Glencoe Beauty -95- from the Duchess of Kent is also a grand thirteen-months-old sow, also winner of first in the aged class for Polands, Yorks, Chesters, and Durocs, at the different local fairs. She is due to farrow Dec. 7th. These two sows, with the Duchess of Mosa -32- by Royal Dan, are the best breeding sows of the herd. Pride of Glencoe -21- is the stock boar in use. He is a strong, useful animal by Nabob -11-, dam Ro-y 9118. A fine young boar was recently purchased from Tape Bros. to replace the old stock boar. He is by an imp. sire and dam and had for his grandsire Old Norway Chief, the first-prize boar at the World's Fair at New Orleans. Mr. M'Outcheon is offering a few young sows ready to breed and a boar of same age by Pride of Glencoe and from Duchess of Mosa.

MESRS. BERDAN & McNEIL'S DUROC-JERSEYS.
Our next visit was at the farm of Berdan & McNeil, near Strathbarn, Ont., where some forty head of high-class Durocs are to be seen, and on looking them over we were under the impression that if they had been highly fitted and brought out to the large fairs they would have made a hard fight for some of the best prizes, and no doubt another year will see them out in full force at Toronto and other large fairs. This herd was also founded from the Tape Bros. herd. One of the stock boars now in use is Lord Howard -13-, as fine a boar of this breed as we have yet seen: lengthy, deep-ribbed, a capital back, and well-boned. He had for his sire the Duke of Kent, and for his dam the Duchess of Kent. In another pen was None Such -20-, an eighteen-months old boar, (imp.), of rare quality and an exceptionally good getter. He was bred by E. H. Small, Norwood, Ill., and was got by old Norwood King, 38974, a boar noted as a producer of some exceptionally fine stock. Among the sows, probably the best is Middlesex Maid -73-, bred by Tape Bros., and sired by the Duke of Kent -10-. She is now nursing a litter of ten very fine youngsters by the imp. boar None Such. Lady Havelock -42-, also bred by Tape Bros., is a fine type of a Duroc; also suckling a litter of fine pigs by None Such. These two sows were winners of first wherever shown this season, and we might also add that Messrs. Berdan & McNeil won first in every class in which they showed this season. Jersey Queen, by Royal Winner, and a daughter of Lady Havelock, is also a good one; bred some time ago to None Such. Messrs. Berdan & McNeil have lately purchased a five-months-old boar from Wm. Butler & Sons, Dereham Centre; a grand pig in many respects, and winner of first at Toronto and elsewhere. By the use of this boar they will be able to furnish pigs non-related. A number of particularly handsome young boars and sows were seen, five and six months old, full of quality and filling the requirements of a typical Duroc probably as nearly as anything we have seen. The proprietors claim that nothing but first-class stock will be sent out, and the young sows now ready to breed, and a few choice boars which they are offering, should certainly give satisfaction, as also should the younger ones.

LIVE AUSTRALIAN CATTLE AND SHEEP FOR ENGLAND.

If Australia does not succeed in securing a portion of the British market for every agricultural product that she can raise successfully the failure will not be due to a lack of effort on her part. On July 19th, the S. S. Southern Cross left Sydney for England, where she landed over two months after with what remained of 550 bullocks, 488 sheep and 29 horses. Her losses on the way comprised 51 bullocks, 80 sheep and one horse. Six of the bullocks on being landed were accused of being affected with pleuro-pneumonia, which the British authorities claim is prevalent in that colony. The cattle lost weight very considerably during the voyage, and owing to the heat of the vessel lost great patches of hair, which gave them a very ragged and emaciated appearance. A good portion of the bullocks were full and three-quarter bred Shorthorns, and with some Hereford-Shorthorn crosses, and a few Herefords. The ages of the bullocks apparently ran from four to seven years. The sheep are said to be a rough lot of Merino grades, not worth sending to a country where Southdowns and other fine mutton breeds can be had. The best of them would not dress more than from 64 to 65 pounds per carcass. Although this experiment has proved a financial failure, it is thought that further shipments will be sent forward, which will be given more care in handling, and may yet be made a means of disposing of Australian surplus stocks. We are inclined to the opinion that Canadians have little to fear in this new competition, owing to the time required to transport the animals from that distant land to market. It is estimated that the expenditure involved in fitting up the vessel amounted to £1,100. The amount of food taken on board for the animals was from 600 to 700 tons, and 300 tons of water, which would be supplemented by means of the ship's condenser. The cost of the fodder for the trip was about £2,000. It was expected that the animals would gain weight on the voyage, but in this the shippers were very much disappointed. The actual freight was £3 per head for cattle and horses, and 10s. 6d. for each sheep; but the fodder, the insurance, and the proportionate cost of attendance, increased these amounts to £11 for sheep. It is estimated the loss on the cattle and sheep alone was not far short of £1,000, and many of them sold at less than the cost of feeding and freight on the voyage. It may be well for us if the next shipment proves just as disastrous.



BAKE A BATCH OF BISCUITS

Sift one quart of flour, two rounding teaspoons of baking powder, and one teaspoonful of salt into a bowl; add three teaspoonfuls of COTTOLENE and rub together until thoroughly mixed; then add sufficient milk to make a soft dough; knead slightly, roll out about half an inch thick, and cut with a small biscuit cutter. Place a little apart in a greased pan, and bake in a quick oven for fifteen or twenty minutes. These biscuits should be a delicate brown top and bottom, light on the sides, and snowy white when broken open.

The secret of success in this recipe, as in others, is to use but two-thirds as much Cottolene as you used to use of lard. Cottolene will make the biscuit light, delicious, wholesome. Better than any biscuit you ever made before. Try it. Be sure and get genuine Cottolene. Sold everywhere in tins with trade-marks - "Cottolene" and steer's head in cotton-plant wreath - on every tin.

THE H. K. FAIRBANK COMPANY, Wellington and Ann Sts., MONTREAL.



W. H. Ward.
A LIFE SAVED
BY TAKING

AYER'S CHERRY PECTORAL

"Several years ago, I caught a severe cold, attended with a terrible cough that allowed me no rest, either day or night. The doctors pronounced my case hopeless. A friend, learning of my trouble, sent me a bottle of Ayer's Cherry Pectoral. By the time I had used the whole bottle, I was completely cured, and I believe it saved my life." - W. H. WARD, 8 Quimby Ave., Lowell, Mass.

Ayer's Cherry Pectoral
Highest Awards at World's Fair.
Ayer's Pills the Best Family Physic.

To Smokers

To meet the wishes of their customers The Geo. E. Tuckett & Son Co., Ltd., Hamilton, Ont., have placed upon the market

A Combination Plug of

"T & B"

SMOKING TOBACCO.

This supplies a long-felt want, giving the consumer one 20-cent plug, or a 10-cent piece, or a 5-cent piece of the famous "T & B" brand of pure Virginia Tobacco. 5-y-om

The tin tag "T & B" is on every piece.

DUROC-JERSEY SWINE

We have the best and greatest prize-winning herd in Canada. Write for what you want. We have everything.

TAPE BROS., Ridgeway, Ont. 18-2-y-om

ADVERTISE IN THE ADVOCATE

IF YOU ARE IN WANT OF IMPROVED

Chester White Swine or Dorset Horn Sheep of first-class quality, at rock-bottom prices, write to

R. H. HARDING, IMPORTER AND BREEDER,
20-y-om Mapleview Farm, THORNDALE, ONT.

IMP. CHESTER WHITE and TAMWORTH SWINE.

Having again won the sweepstakes for the best boar and two sows of any age at the Industrial Exhibition (Toronto) of 1895, we offer for sale 60 choice young boars and sows from four to six months old, not akin, from the choicest blood in Canada. Prices away down for next 60 days to make room for winter quarters. Pedigrees furnished. Reduced rates by express. Drop a card for prices before buying elsewhere. H. GEORGE & SONS, Crampton, Ont., Middlesex County. 7-y-om

OHIO IMPROVED CHESTER WHITES.

My herd are imported or bred from imported stock, and have been winners at the leading shows for years. Pigs of all ages (both sexes) for sale. Pairs supplied not akin. Correspondence solicited. Inspection invited.

D. DeCOURCEY, 4-2-y-om Bornholm.

CHESTER WHITES AND BERKSHIRES

Young pigs now ready for shipping, and young sows in pig to imported boars. All are held at reasonable figures. Can supply pigs at all ages. Orders by mail filled with care, and correspondence cheerfully answered. Write for prices, stating what is wanted. 18-om J. H. SHAW, Simcoe, Ont.

THE ISLINGTON HERD OF ESSEX SWINE

I am now prepared to supply choice young stock, any age and either sex, of this class. This breed produces pork of the first quality; are of a quiet disposition and easy feeders; I am also breeding pure-bred Foxterriers. Correspondence solicited. Selling at farmers' prices.

A. B. COOPER, 18-2-y-0 ISLINGTON P. O., ONT.

IMPROVED SUFFOLK SWINE, THOROUGH-BRED HORSES, DURHAM CATTLE AND SOUTHDOWN SHEEP.

A grand lot of Suffolk Pigs, all ages, for sale at prices to suit the times. A. FRANK & SONS, The Grange, four miles from Cheltenham Stn., C. P. R. & G. T. R. 2-2-y-om

R. B. McMULLIN, GOLDSMITH, ONT.

Importer, Breeder and Shipper of REGISTERED POLAND-CHINA SWINE

Stock of all ages for sale at low prices. All stock guaranteed as represented. Write for prices. Registered pedigrees furnished. Mention Advocate. 24-2-y-om

R. WILLIS, JR., Glenmeyer P. O., BREEDER AND IMPORTER OF CHOICE Poland-China Swine.

Young stock of the best quality always on hand. A couple of young sows bred, and also some young boars fit for service to dispose of at right prices. Correspondence solicited. Mention Advocate. 12-2-y-0

W. H. JONES, Mount Elgin.

Ont. Our herd took first place at the largest Fairs in Canada. It is headed by DARKNESS QUALITY, who took first prize over 41 entries at the World's Fair in Chicago, 93. Our stock is LARGE IN SIZE, FINE IN QUALITY, well adapted for the trade. Young stock for sale at all times. Prices reasonable. 15-y-om

CANADA: WILKES

Over 100 head - all ages, sexes and different families. About 50 tons hay and straw for sale, cheap.
Write for description and prices. CAPT. A. W. YOUNG, Tupperville, Ont. 17-y-om

MYERS' ROYAL HOG POWDERS
FOR CHOLERA & ALL OTHER DISEASES

4-y-om MYERS & CO., Niagara Falls, Ont.

FOR SALE! Barred Plymouth Rocks

FROM IMPORTED STOCK.
For prices, W. C. SNEARER, Bright, Ont. 22-2-d-om

JOHN J. LENTON, Park Farm, Oshawa, Ont., sells Bone Cutters and Pure-bred Poultry of the best quality at low prices. Send to him for catalogues, etc. 22-y-om

FOR SALE - Silver Wyandotte Cockerels, bred from cockerel first at Toronto in 1894; also White Leghorns, Plymouth Rocks, Pyle Games, and Pekin Ducks. These birds are all bred from prize winners and will be sold cheap. Correspondence cheerfully answered. J. C. LYONS, Lucknow, Ont.

Feathers! We buy them!



We buy all grades: Goose, Duck, Hen, and Turkey. We give highest market price, and we pay cash. General stores will find it to their advantage to collect for us. Write us for shipping instructions.

THE ALASKA FEATHER and DOWN COMPANY, Ltd., 10 ST. SACRAMENT ST., MONTREAL. Manufacturers of household pillows, sofa-cushions and bed-comforters.

HATCH CHICKENS BY STEAM

Excelsior Incubator. Simple, Perfect, Self-Regulating. Thousands in successful operation. Guaranteed to hatch a larger percentage of fertile eggs at less cost than any other Hatcher. Lowest priced first-class Hatcher made. GEO. H. SPAHL, 114 to 122 S. 6th St., Quincy, Ill. 19-n-om

NOXALL INCUBATOR.

Are used in every State in the Union. Incubator and Brooder self-regulating. Catalogue Circulars free. GEO. W. MURPHY & CO., Quincy, Ill. 0-m

\$5 Hand Bone, Shell, and Corn Mills for Poultrymen. Daisley Bone Cutter. Power Mills. Circular and testimonials free. WILSON BROS., Easton, Pa.

TRY US. We sell your Poultry, Veals, Fruits and all produce at highest prices. DAILY RETURNS. For stenils, prices and references, write F. I. SAGE & SONS, 183 Beede St., N. Y.

W. M. WILLIAMSON, Box 58, Brampton, Ont., general agent for the Joliet Feed Mill, adapted for horse, wind or steam powers, and adopted by grist millers. Have also a choice stock of Tamworths and Duroc-Jersey hogs. Correspondence solicited. 22-2-y-0

\$3 A DAY SURE SEND your address and I will show you how to make \$3 a day absolutely sure; I furnish the work and teach you where you live. Send me your address and I will explain the business fully; remember I guarantee a clear profit of \$3 for every day's work, absolutely sure; write at once. Address: IMPERIAL SILVERWARE CO., BOX D 3, WILSON, ONT. -om

ADVERTISE IN THE ADVOCATE

Buy the Greening's
Steel Wire Cow Chains



MADE OF COLD DRAWN STEEL, IN OPEN AND CLOSE RING, AND THREE CHAINS. THE LIGHTEST, STRONGEST, CHEAPEST AND BEST TIE IN THE MARKET. EVERY TIE GUARANTEED. ASK YOUR HARDWARE DEALER FOR THESE GOODS, AND TAKE NO OTHER TILL YOU HAVE SEEN THEM.



THE GREAT CLEANSER
REDUCED TO SIX CENTS
ALL GROCERS

The EXCELSIOR LIFE INSURANCE CO.
HEAD OFFICE, TORONTO.
Subscribed Capital, \$350,000.00
Policies and Bonds the most liberal and attractive issued. Sure protection. Profitable investment.
E. F. CLARKE, PRESIDENT and MANAGING-DIRECTOR.
AGENTS WANTED.

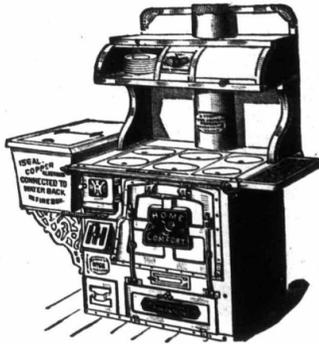
GALVANIZED STEEL WIND-MILLS
For POWER and PUMPING with PATENT ROLLER and BALL BEARINGS.

THE CELEBRATED "Maple Leaf Grinder"
Ten reversible plates, Relief Springs, Ball-bearing Plates, Shake Feed, grinds fine and fast.
GOLD SHAPLEY & MUIR CO. LTD.
BRANTFORD CAN.
Send for Circulars, and mention this paper.

HOME COMFORT

ROLL OF HONOR.

- THREE GOLD and ONE SILVER MEDAL THE WORLD'S INDUSTRIAL and COTTON CENTENNIAL EXPOSITION. NEW ORLEANS, 1884 and 1885.
- HIGHEST AWARDS NEBRASKA STATE BOARD OF AGRICULTURE, 1887.
- DIPLOMA ALABAMA STATE AGRICULTURAL SOCIETY, At Montgomery, 1888.
- AWARD Chattahoochee Valley Exposition, Columbus, Ga., 1888.
- HIGHEST AWARDS 25th ANNUAL ST. LOUIS AGRICULTURAL & MECHANICAL ASSOCIATION, 1889.
- SIX HIGHEST AWARDS WORLD'S COLUMBIAN EXPOSITION CHICAGO, 1893.
- HIGHEST AWARDS WESTERN FAIR ASSOCIATION, LONDON, CAN. 1893.
- SIX GOLD MEDALS MIDWINTER FAIR, San Francisco, Cal., 1894.



STEEL HOTEL AND FAMILY RANGES. CARVING AND STEAM TABLES, BROILERS, MALLEABLE WATERBACKS, ETC., ETC.

Above Style Family Range is sold only by our Traveling Salesmen from our own wagons at one uniform price throughout Canada and the United States.

Made of MALLEABLE IRON and WROUGHT STEEL and will LAST A LIFETIME if properly used.

SALES TO JANUARY 1st, 1895, 299,327.

ABOVE HONORS WERE RECEIVED BY WROUGHT IRON RANGE CO., MANUFACTURERS OF Hotel Steel Ranges, Kitchen Outfittings and "Home Comfort" Hot-Air Steel Furnaces.
OFFICES, SALESROOMS AND FACTORIES, 70 to 76 PEARL STREET, TORONTO, ONTARIO, and Washington Avenue, 19th to 20th Streets, ST. LOUIS MO., U.S.A.
Founded 1864. Paid up Capital, \$1,000,000.



"Famous" Baseburner!

The Handsomest and Best Working Stove of this class in America.

THE construction of the flues gives it a greater heating capacity than any other. ENTIRE BASE RADIATES HEAT. Made in two sizes, with and without oven. Oven is made with three flues same as a cooking stove. Double heater attachment by which heat can be carried to upper rooms. Beautifully nickeled.

A Triumph of Art and Utility.

THE McCLARY MFG. CO.,

LONDON, MONTREAL, TORONTO, WINNIPEG, VANCOUVER.

If your local dealer does not handle our goods write our nearest house.

THE RAZOR STEEL, SECRET TEMPER, CROSS-CUT SAW.

We take pleasure in offering to the public a Saw manufactured of the finest quality of steel, and a temper which toughens and refines the steel, gives a keener edge and holds it longer than by any process known. A Saw to cut fast "must hold a keen cutting edge."
This secret process of temper is known and used only by ourselves.
These Saws are elliptic ground thin back, requiring less set than any Saw now made, perfect taper from tooth to back.
Now, we ask you, when you go to buy a Saw, to ask for the "Razor Steel" brand. Steel, Secret Temper Saw, and if you are told that some other Saw is as good, ask your merchant to let you take them both home and try them, and keep the one you like best.
Silver steel is no longer a guarantee of quality, as some of the poorest steel made is now branded silver steel. We have the sole right for the "Razor Steel" brand.
It does not pay to buy a Saw for one dollar less, and lose 25 cts. per day in labor. Your saw must hold a keen edge to do a large day's work.
Thousands of these Saws are shipped to the United States and sold at a higher price than the best American Saws.



SHURLY & DIETRICH, CALT, ONT.

ADVERTISE IN THE FARMER'S ADVOCATE.

STOCK GOSSIP.

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

SHROPSHIRE MEETING—CHANGE OF DATE.

Mr. Mortimer Levering, Secretary of the American Shropshire Association, writes us:— "Since naming date of annual meeting, the Live Stock Society of America have arranged to hold a Fat Stock and Breeders' Show, from Nov. 25th to 30th, in Madison Square Garden, New York City. A large number of members have urged a change of the date of our meeting to that time. The annual meeting will now be held on Tuesday, Nov. 26th, at 10 o'clock a. m., at Holland House, 5th Ave. and 30th street, in New York City."

W. P. HUFF'S TAMWORTHS.

The writer recently called on W. P. Huff, of Chatham, Ont., who has been quietly breeding up a herd of Tamworths which now numbers some sixty head of the choicest breeding. The foundation of the present herd was laid by a selection of three sows and a boar from the Grant & Co. importation. Amber Luther, a very lengthy, smooth boar, bred by John Bell, of Amber, now heads the herd, and has left some very fine stock. Mr. Huff now has a considerable stock on hand, which he will ship to order and guarantee satisfaction. Young stock can be furnished of all ages, ranging from seven months down, bred from two grand stock boars—Long Jim, a boar of Grant & Co.'s breeding, and Amber Luther. We were much pleased with the quality and type of this stock, a number of young sows, six and seven months old, being a particularly fine lot.

JNO. C. NICHOL'S TAMWORTHS.

At Hubrey, a few miles south of London, Ont., is the home of Mr. Jno. C. Nichol, who some three years ago laid the foundation of his present fine herd of Tamworths by a selection from the importation of Jas. L. Grant & Co. The herd now numbers some forty head, and a number were brought out this fall, in good shape, at London and St. Thomas fairs, where they succeeded in winning a fair share of the prizes. At the head of the herd is the aged boar, Rob Roy—144—, a lengthy, useful boar, by Buffalo Bill—143—, dam Daisy—147—; and Elm Dale Lad—279—, a good yearling, bred by H. Revel, Ingersoll, and got by Revel's Boar (imp.)—144—; this boar won first at London (imp.)—144—; a couple of fine young boars, and St. Thomas. A couple of fine young sows, about seven months old, were seen; one by Elm Dale Monarch—62— (imp.), and from Maud—236—, one of the best brood sows; this boar won first at London, his mate getting third, sired by Rob Roy, and from Elm Dale Queen. A couple of other young boars of the same age, and by Rob Roy, were seen; also good useful pigs. The brood sows comprise some individuals of fine breeding, such as Elm Dale Queen—82— (imp.), bred by Egbert De Hamel, Middleton Hall, Tamworth, England, imported by Jas. L. Grant & Co., Ingersoll, and sired by Middleton Monarch—1161—, dam Middleton Magnolia—2036—, Elm Dale Queen has been shown four times, and won three firsts and one second; she is now nursing a fine litter by Elm Dale Lad. Maud—236— is another fine breeding sow that won first in the under six months class for Durocs and Tamworths last year at London, over the first winners at Toronto; at the time of our visit she was suckling a good litter by 100%. Ruth, bred the same as Maud, was also suckling a fine, strong litter by Elm Dale Lad; and the sow Goldfinch—137— has also done good service in the herd; she was bred by Jas. Grant, and was sired by Revel's Boar (imp.)—101—, dam Curly (imp.)—134—. A number of young sows are now ready to breed, two being full sisters to the best boars, two by Rob Roy, and one from Elm Dale Monarch. Parties wanting well-bred Tamworths should write at once to Mr. Nichol, as his stock is sure to go at the prices quoted.

AYRSHIRES AT MEADOWSIDE FARM.

A short drive northward from Carlton Place, on the C. P. R., County of Carleton, is Meadowside Stock Farm, the property of Messrs. Jos. Yuill & Sons. It is now some thirty years since Mr. Yuill made his first purchase of Ayrshires. Perceiving that the Eastern part of the Province was liable to become the center of a great dairy industry, and as their district was peculiarly adapted to the business, after due consideration it was decided that the Ayrshires would best fill the bill for their interests, and an importation was the result, which formed the basis of the present large stock. Fresh blood has been added from time to time, and the herd soon grew to be one of the largest in the Province, and during the past few years drafts from the Meadowside herd have won many laurels and enviable awards at the Columbian, and many of the leading shows of Canada. The present year this herd was only represented at Ottawa and the Gananoque Dairy Show, where they succeeded in winning their share of the awards. The best bulls obtainable have been used on the herd from the first, embracing such noted ones as Carrick Lad, gold medal bull at the Centennial, Philadelphia; Sultan, a son of Carrick Lad; McNeil, from one of the best cows ever owned in Canada; Baron Mansfield, the sire of Leonard Meadowside, a two-year-old now in the herd, winner of first this year at Ottawa and Gananoque, and first as a calf at the Columbian. The females are a useful lot, good performers at the pail, and possess tests of good length—a feature which should recommend them. Shortness of tests is certainly an objection in not a few cows of this breed—a point on which breeders show an endeavor to improve. Among the females may be seen such cows as Lady Meadowside—2080—, winner of second premium at Chicago as a two-year-old. A calf from this cow was a first winner at Ottawa, and she is again due to calve soon by Leonard Meadowside. Lilly of Meadowside—137—, by Rob Roy of Oxford, is one of the best dairy cows on the farm, giving her weight of milk in nineteen days, Effie Meadowside—1746—, by Sultan—189—, Pride of Meadowside—1737—, by Rob Roy of the females possess remarkably good dairy points. The young stock which they are now offering are mostly by two splendid bulls—Stanley and Leonard Meadowside. A good Stanley Berkshire swine is also bred at this farm, and good individuals can be furnished. Either Berkshires or Ayrshires quoted at prices that certainly must attract buyers.

BREEDERS' DIRECTORY.

Cards up to six line space inserted under this heading, one issue a month, \$3 per line per annum; every issue, \$5 per line. Payable in advance.

A. ELLIOT, Pond Mills, breeder of Collie Dogs, Tamworth and Duroc-Jersey pigs, Oxford Sheep & sweepstake strain B. Turkeys.

ALEX. HUME, Burnbrae, Ontario, Importer and Breeder of Ayrshire cattle and Yorkshire hogs.

BRONZE TURKEYS FOR SALE.—An extra fine lot of Bronze Turkeys (from prize-winning stock at Toronto) at prices to suit the times. If desired, can furnish pairs or trios not akin. JAS. TOLTON, WALKERTON, ONT.

D. G. HANMER & SON, Mt. Vernon, Ont., Importers and Breeders of high-class Shropshire Sheep and Berkshire Pigs. 22 y-om

F. S. WETHERALL, Cookshire, Q., breeder of Jersey Cattle, Shropshire Sheep, W. H. Fox, Irish and Scotch Terriers, and Beagles.

H. I. ELLIOTT, Danville, P. Q., breeder of Scotch Shorthorns & Southdown sheep

JOHN LAIDLAW, Crosslee Farm, Wilton Grove P. O., Ont., breeder and importer of Border Leicester Sheep. Satisfaction guaranteed. 4-2-y

JOS. CAIRNS, Camlachie, Ont., Breeder of Pure-bred Chester White Swine. 4-y

J. P. PHIN, THE GRANGE, HESPELER, ONT., Breeding and Importing SHROPSHIRE SHEEP a specialty. 22

MATTHEW HOWSON, Ashgrove P. O., Ont., breeder of Cleveland Bay Carriage-Horses 12-2-f

T. GUY, Oshawa, Ont., Breeder of Ayrshire Cattle—prize winners at the World's Fair.

THOMAS IRVING, North Georgetown, Que., breeder of Clydesdale Horses and Ayrshire Cattle. 8-2-y

THOS. SCOTT, Glenmorris, Ont., breeder of Reg. Jerseys, St. Lambert and St. Helier strains. Young stock for sale. 12-2-y

W.M. SMITH, M.P., Columbus, Ont., breeder and importer of Clydesdale Horses, Shorthorn Cattle, and Cotswold Sheep. Stock for sale. Terms and prices liberal. 2-2-y

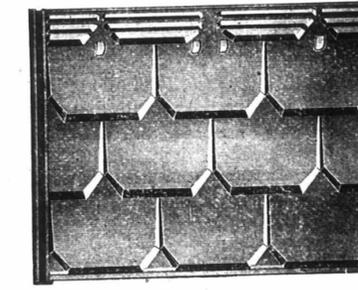
ONTARIO VETERINARY COLLEGE

Temperance Street, Toronto. The most successful Veterinary Institution in America. All experienced Teachers. Session begins October 16th. Apply to the principal, PROF. SMITH, V.S., Edin., Toronto, Can. 18-2-y

Windsor Salt

For dairy use is the best. Perfectly dry and white and no lime in it. Better Cheese and Butter can be made with it than with any other salt. It pays to use it.

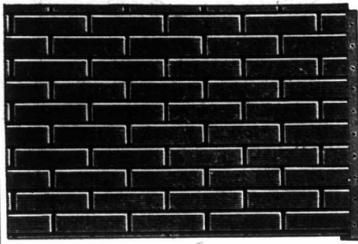
STEEL SHINGLES



THE "FASTLAKE"—the old reliable shingle that others try to imitate. The only original shingle with a cleat! Others are imitations. Cut out and send this advertisement for price list and catalogue.

Metallic Roofing Co., Ltd. SOLE MANUFACTURERS, TORONTO. 11-y-0

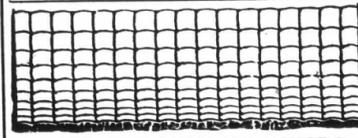
Sheet Steel Brick Siding.



AS WARM AS A BRICK WALL. CHEAPER THAN WOOD. ENTIRELY WATER, WIND, STORM, FIRE AND LIGHTNING PROOF.

We manufacture any kind of desirable Sheet Steel Sidings, Sheet Steel Roofing, and Sheet Steel Ceilings.

Get our prices and New Catalogues. THE PEDLAR METAL ROOFING CO. Office and Works: OSHAWA, ONTARIO. 4-y-0



FALL THE TIME TO FENCE!

A very successful farmer says that he has found it much better to put up fences in the fall, from the time when harvest is over until the ground is too solidly frozen to set posts. Posts set in the fall keep more solid than those set in the wet, spongy ground of spring. The rush of farm work is not so great as at spring seeding time. Then, if it is Page fence you put up, it will not drift snow during the winter as the old board or rail fence will. It will be a satisfaction to you to see how well your Page fence goes through the winter, when you compare it with the makeshift wire fences. Write for particulars to

The Page Wire Fence Co. of Ontario, Ltd., WALKERVILLE, ONTARIO.



The words of praise spoken of the merits of The Locked Wire Fence from the people that examined our exhibit at the leading fairs, also the testimonials that we have received from farmers and others that have the fence erected on their lots and farms, are very flattering indeed. And now, as the leading fairs are over, we are prepared to fill all orders that may be given us satisfactorily for lawn, farm and railroad fence. Our superior wire gates, which combine strength, lightness and durability, should be on every farm. Prices to suit the times. Agents wanted in unoccupied territory. Correspondence solicited.

THE LOCKED-WIRE FENCE COMPANY Ingersoll, Ont.

SASKATCHEWAN BUFFALO ROBES

Received Highest Award at World's Fair. HAVE HAD SIX YEARS' EXPERIENCE IN CANADA.



We guarantee every robe to be absolute wind, water and moth proof, and will not wear bare in spots like a skin robe. They will dry quicker and never get hard, are as strong as leather and far more durable and warmer than any cheap fur robe. The robe is made in three parts—the Fur Cloth, the Astrachan Lining and Rubber Interlining. All these parts are without seams. The increased sale of these Robes is the best evidence of their popularity. Others having noted the great sale and popularity of these Robes, have undertaken to imitate them. We would caution the public that none are genuine unless bearing this Trade Mark. Manufactured by

NEWLANDS & CO., Calt, Ont., AND AMERICAN BUFFALO ROBE CO., Buffalo, N.Y. 21-h-0

DRS. ANDERSON & BATES, Surgeon of the Eye, Ear, Throat & Nose, 34 North James St., Hamilton, and 5 Col lege St., Toronto. Sole agents for Prof. North's Earphone for the incur able deaf. A large assortment of artificial eyes on hand. 16-2-y-0

We want Every Farmer's Son or Daughter who desires to secure

THE Very Best,

BUSINESS EDUCATION to attend one of our Schools. CENTRAL BUSINESS COLLEGE,

STRATFORD and TORONTO, ONT. Unquestionably the leading Commercial Schools of Canada; advantages best in the Dominion. Catalogues free. Mention this paper. SHAW & ELLIOTT, Principals. 17-0

NORTHERN Business College

IS THE PLACE TO ATTEND if you want either a Business Education or a course in Shorthand. The best in Canada. Full particulars free. Address, C. A. FLEMING, Principal, Owen Sound, Ont. 0-

USE RAMSAY'S CELEBRATED FLOOR PAINTS.

The Improved KNITTER Will knit 15 pairs of socks a day. Will do all Knitting required in a family, homespun or factory yarn. SIMPLEST KNITTER on the Market.

This is the one to use. A child can operate it. We guarantee every machine to do good work. We can furnish ribbing attachments. Agents wanted. Write for particulars. Price, \$8.00. Dundas Knitting Machine Co., Dundas, Ont. 17-y-om

CHAMPION EVAPORATOR

For MAPLE, SORGHUM, CIDER, and FRUIT JELLIES. Has a corrugated pan over firebox, doubling boiling capacity; small interchangeable syrup pans (connected by siphons), easily handled for cleansing and storing; and a perfect automatic regulator. The Champion is as great an improvement over the Gook pan as the latter was over the old iron kettle hung on a fence rail. Catalogue Free.

THE G. H. GRIMM MFG. CO., HUDSON, Ohio, & MONTREAL, Quebec

W. & F. P. CURRIE & Co. Wholesale General Merchants, 100 GREY NUN ST., MONTREAL

IMPORTERS OF Scotch Glazed Drain Pipes, Chimney Tops, Vent Linings, Flue Covers, Fire Bricks, Fire Clay, Portland Cement, Roman Cement, Canada Cement, Water Lime, Whiting, Plaster of Paris, Borax, China Clay, etc., etc.

MANUFACTURERS OF BESSEMER STEEL SOFA, - CHAIR - AND - BED - SPRINGS A LARGE STOCK ALWAYS ON HAND. WM. CURRIE. 7-y-0 F. P. CURRIE.

PURE -- WATER -- FROM -- ARTESIAN -- WELLS. Write for particulars to WILLIAM SHARP, 184 Hamburg Ave., Toronto, Ont. Practical Well Driller. 4-2-y-0

BOYS FOR FARM HELP

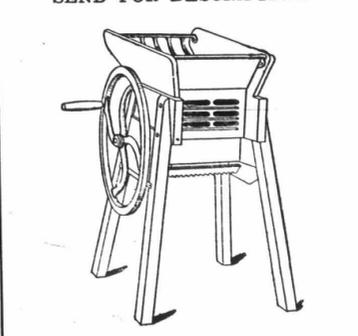
The managers of Dr. Barnardo's Homes will be glad to receive applications from farmers or others for the boys whom it is proposed to send out from England in several parties during the coming season. All the young immigrants will have passed through a period of training in the English Homes, and will be carefully selected with a view to their moral and physical suitability for Canadian life. Full particulars, as to the terms and conditions upon which the boys are placed, may be obtained on application to MR. ALFRED B. OWEN, Agent, Dr. Barnardo's Homes, 214 Farley Ave., Toronto. 4-y-0

STOCK RAISERS!

We manufacture a full line of

Root Pulpers and Slicers.

(Single or Combined and for Hand or Power.) SEND FOR DESCRIPTION.



DAVID MAXWELL & SONS, St. Mary's, Ontario. Mention FARMER'S ADVOCATE. 15-



HERRICK SEED CO., INCORPORATED, ROCHESTER, N. Y. PURITY AND QUALITY GUARANTEED. AGENTS WANTED.

FRUIT AND ORNAMENTAL TREES Shrubs, Roses, Grape Vines, Small Fruits, etc. First-class stock. Leading Varieties; true to name. Also 100 bushel Joannette Seed Oats. 1-y-om CROW & PAGE, Ridgeville, Ont.

NOW IS THE TIME

WHEN DEALERS SHOULD MAKE THEIR SELECTIONS OF GOOD PAYING AND GOOD SELLING ARTICLES FOR 1895.

If you want excellent returns write for particulars of our Com Steel Windmills, . . . Com Steel Towers, . . . Canadian (Steel) Air-motors, Halladay Standard Wind-mills, Haying Tools, . . . Iron and Wood Pumps, . . . Dust Collectors, . . . Saw Tables, etc., etc.

We manufacture a full line of pumping and geared Windmills, and the greatest variety of Pumps of any firm in Canada. Our Haymaker Car and Patent Steel Track is leading them all, and our prices are made to suit the times.

ONTARIO WIND ENGINE & PUMP CO., 9-y-om 367 Spadina Ave., TORONTO, ONT.

9 CORDS IN 10 HOURS

BY ONE MAN, with the FOLDING SAWING MACHINE. It saws down trees. Folds like a pocket-knife. Saws any kind of timber on any kind of ground. One man can saw 9 cords of timber with it than 3 men in any other way, and do it easier. 27,000 in use. Send for FREE illustrated catalogue showing latest IMPROVEMENTS and testimonials from thousands. First order secure agency. Address FOLDING SAWING MACHINE CO., 63-65 S. Clinton Street, Chicago, Ill. We manufacture in Canada. No duty to pay.

ADVERTISE IN ADVOCATE