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WINDSOR

The Farming World

For Farmers and Stockmen

VOL. XXI.

SEPTEMBER 30th, 1902

Educational Attractions at Fairs

HE success of the Model Fair at Whitby last week, a report of which appears elsewhere in this issue, is another proof of the wisdom of putting purely educational features to the front at the local fall fair. For years the side show, the horse race and the vaudeville entertainment have held full sway at the majority of our fall shows. To such an extent has this been the case that many of these shows have been nothing more than a circus performance with a little distribution of prize money on the side to give it an exhibition tone and to enable the managers to draw the government grant. a reaction has set in, and it looks as if the high kicker and the trapese artist will have to give way to the more valuable and more elevating influence of attractions that are purely educational in their nature. And right well they should. The people of this country have not sunk to such depths that it requires a menagerie or circus attraction to secure their attendance at a fall fair. Where the edu-cational attraction has been tried, as in the butter-making competitions at Toronto and London this year, it has proven a very strong drawing card indeed. So much so that Fair Boards may well consider the advisability of securing these or similar features, if for no other purpose than to bring the people out.

The Whitby Fair was this year operated as a purely educational exhibition with a view to demonstrating what could be done in this direction. It has succeeded admirably, and there need now be no sceptics as to the drawing powers of educational features at fairs.

So far as gate receipts and providing entertainment for the people are concerned the educational at-traction has proven itself equal to if not superior to any other form of entertainment that might be provided, while it has the great advantage of giving practical information that should aid in greatly improving the products of the country and increasing the wealth of its

A feature of the Whitby Fair that should commend itself to fair managers was the experimental plot of clovers, grasses, corns, roots, etc. It proved most instructive and attracted as much attention as any other part of the show. People were eager to find out the uses for the various plants grown and how they might best be adapted to their own conditions. Such an experimental plot could be conducted on every fair ground in the country at comparatively small cost and we are sure the Agricultural College or the Central Experimental Farm would be glad to supply the seed and to assist in laying out and caring for the plots during the summer.

But the Whitby Fair is not the only one where these educational features are being tried. Over fifty of the local fairs in the province have been grouped into divisions by the Supt. of Fairs and expert judges are now at work making the awards and giving the reasons for their decisions. It is hoped in time to have every fair in the province brought under the same system, when they will become im-portant factors in imparting information of practical value to every farmer in the country. When that time arrives every local agricul-tural society will be fulfilling the objects for which it was originally instituted and giving some adequate return for the government money which it receives.

The Argentine or Canada?

The proposal of the Hon. Mr. Hanbury, President of the Board of Agriculture for Great Britain, to accept the assurances of the Argentine Government in regard to foot and mouth disease having already been eradicated from that country, and that the restrictions which had to be imposed on the Argentine to be imposed on the Argentine stock trade in the spring of last year must be withdrawn forth-with has aroused strong opposi-tion in Britain from those interested in removing the embargo against Canadian cattle. At a meeting a few weeks ago of the Scottish Chamber of Agriculture, the directors spoke out with no uncertain sound on the Argentine question. So strong appears to be the opposition that it is doubtful if the Hon. Mr. Hanbury will have the courage to remove the restrictions against Argentine cattle coming into Great Britain.

The discussion has waxed warm and the champions of Canada have more than held their own. They have reasoned thus: No one can say that disease was ever spread in Great Britain by Canadian imported stock; whereas it was only eighteen months ago that the Argentine live stock importation trade had perforce to be closured on account of foot-and-mouth disease having been spread in Britain by affected Argentine cattle being landed at British ports. And still in the face of this evidence the British Board of Agriculture would

accept the assurances of the Argentine Government that there was no disease in all that wide unsettled country, while they flouted the assurances of the Canadian Gov-ernment that this loyal British colony was absolutely free from disease. It would seem as if the word of a foreigner counted far more in the home land than that of a citizen of the Empire. Perhaps there is some other motive behind it all. If so what is it? Unless there is something we know not of, there seems no good reason for raising the embargo against the Argentine and not against Canadian cattle.

Is Egg Production Decreasing?

The exports of eggs from Can-ada have fallen off very materially during the present season and many in the trade are becoming concerned lest the farmer may permanently reduce his egg produc-At a conference held last tion. week between Prof. Robertson and the poultry and eggs branch of the Montreal Produce Merchants' Association, the President and members represented that owing to the attention that was lately being given to chicken fattening, they feared that farmers were fattening and killing a large number of pul-This practice, if followed to any great extent, would result in a large falling off in the production of eggs. They advised, therefore, that farmers be encouraged to fatten only cockerels and to rear as many as is practicable of the good pullets for supplying eggs during the summer and winter. The egg men further advised that farmers be encouraged to kill off the cocks after the first of June in order that the eggs collected during June and later would be infertile and would therefore have better keeping qualities during the summer.

Canadian eggs have won a good reputation in England, so much so that many English dealers are repacking eggs from the continent, notably from Russia and Austria, into cases similar to Canadian standard egg cases, holding thirty dozen each. While these eggs are not labelled or sold as Canadian eggs, they are sold as eggs in Canadian cases and to that extent they may lead people to believe that Canadian eggs are similar to these continental eggs in size, quality and condition.

The egg merchants petitioned the government to assist them to sesure a large number of ventilated cars for the carriage of eggs on the railways.

Mould on Butter.

Complaints have been received that a lew lots of Canadian butter have been delivered in Great Britain somewhat spotted with mould on the butter paper and between the box and butter. This has occurred on sathless butter.

curred on saltless butter.

Mould is a tiny fungus plant, and

Model is a tiny lungus plant, and butter makers and butter dealers should make themselves lamiliar with the means for prevention of its growth on butter packages, butter paper, or on the butter itself. The Department of Agriculture at Ottawa gives the following regarding the prevention of mould

on butter:

"Mould can only come from preexisting mould or from spores, which serve the purpose of seed or fruit for its reproduction. If the spores are destroyed mould cannot begin to grow. The conditions favorable for its growth are a certain degree of dampness and a moderately low temperature-that is to say, a temperature below 60 degrees. Some forms of mould grow at temperatures as low as 32 Some forms of mould degrees Fahr, or the freezing point of water. Formalin is an effective fungicide, that is to say, it is a destroyer of fungi and of the spores of fungi. A weak solution of for-malin is effective for the destruction of spores of mould. A good course for the butter-maker to follow is to prepare a strong brine of salt, adding one ounce of formalin to one gallon of the brine. The butter paper should be soaked in this solution. The inside of all butter packages should also be riused with it. The butter paper while still wet with the brine containing formalin should be placed inside the butter box and butter packed in it immediately. The brine containing the formalin will destroy all spores of mould on the butter paper and on the inside of the box.

The brine can be used for a long
period. It should be boiled once period. a week, and as the formalin evaporates during the boiling, it will be necessary to add one ounce of formalin to every gallon of brine after it is boiled and cooled. For the protection of the butter, which is to be shipped to the United Kingdom it is important that the butter be cooled to a temperature under 38 degrees Fahr, from the second day after it is made. When butter is allowed to remain at a high temperature changes begin, which spoil its delicate flavor and fresh-made aroma. Each cream-ery should have a cold-storage room at a temperature under 38 degrees Fahr. Only refrigerator cars should be used for the carriage of butter, and it should be put in cold-storage compartments on the steamships and carried at a temperature under 25 degrees. A temperature of twenty degrees Fahr, is still better."

During the Whitby Model Fair a couple of public meetings were held, particulars of which will be given next week.

Western Cattle for Chicago

A Trial Shipment from Canadian Ranches—Sugar Beets in Alberta.

By Our Western Correspondent.

Winnipeg, Sept. 22nd, 1902. Parliamentary visitors from the East are now becoming as common as they were once scarce. Almost every week we have the distinguished honor of entertaining an M.P. for some Eastern Canadian constituency. Many of these are constituency. now visiting the prairie provinces for the first time, and their naive expressions of wonder and surprise are a striking commentary on their former lack of information. It is pleasing to note this awakened interest in Western Canada. Only by such visits can there be built up a strong national, (as opposed to a local or provincial) sentiment. We believe that every one of these parliamentary gentlemen will be better fitted to transact business at Ottawa from a national standpoint as a result of his visit. Indeed so important is a thorough knowledge of the country that we would be inclined to advocate such a trip for every member and senator, even if the expense had to be borne by the government.

Your correspondent has mentioned from time to time the efforts made in Manitoba to grow sugar beets. Such efforts are doubtless a mere waste of time and money, but we are pleased to know that our brethren in Alberta have been more successful in their efforts. News is at hand of the or-ganization of a company to build a beet-sugar factory at Raymond, near Lethbridge, in Southern Alberta. It is said that a commencement has already been made in the construction of a plant to cost half a million when complete. The climate of southern Alberta is certainly mild enough for successful sugar beet culture, and they have the same large proportion of bright sunlight that has kept alive the spark of hope in the breasts of Manitoba's experimenters in beet culture. Their moisture, secured by irrigation, is constant and controllable. All this points to suc-cess. There only remains the labor question as an impediment to profitable beet growing. We hope that this too will be overcome and that Alberta will reap the benefits that must inevitably follow the establishment of an industry where the profits are equitably divided between farmer and manufacturer.

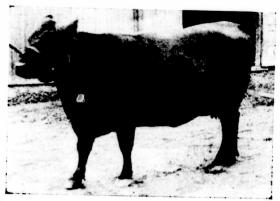
The case of Maw vs. The Massey-Harris Co., for infringement of patent, was tried here during the past week. The plaintiffs, J. Maw & Co., affirm that they are the owners of the sole right to sell the Hancock disc plow in Canada and that defendants are selling a plow which is copied from their patterns.

The inventor Col. Hancock states in his evidence that he was in negotiation with the defendants and during the negotiations intrashed them with full information concerning his invention. This information, he says, they made use by the having a plow manufactured by the Verity Plow Co., which is a clear infringement of his patents. The Massey-Harris Co. entered a defence on technical grounds, Judgment will be delivered this week.

Fat cattle from the Western ranges are passing through here bound for old country markets at the rate of about 2,000 per week. They are in prime condition and fetching good prices. A correspondent at Lethbridge writes last Monday: "The stockyards here have presented a scene of unwonted acpresented a scene of unworted ac-tivite during the past week. With-in the past three days over a hundred cars of beef and mutton have been shipped. Of this the nave been simpled of this the greater portion is destined for the British market, but some will be left off at Winnipeg. There has been some talk of taking advantage of the present high prices at Chicago by sending a trial ship-ment to that market." Similar news comes from Raymond with the following: "The stock from the ranches is now moving freely. The grass remained soft much later than usual owing to the continued rain, consequently cattle and sheep were not in condition for shipment as early as usual. The warm weather of the past few weeks has hardened them up and they are now in the finest condition. Prices are a trifle higher than last year. Mackintosh of Montreal, has just purchased 300 head of steers from the Knight ranch and 1,000 sheep from the Alberta Land and Stock Co., and has contracted for much larger deliveries next month. Knight & Sons expect to sell 1,000 cattle and 10,000 sheep this fall and the Alberta Land & Stock Co. have an equal number of sheep for market."

Reports from all parts of the province state that harvesting, threshing and marketing are proceeding rapidly. Almost all threshing outlits are working shorthanded owing to the scarrity of men. A couple of days' rain during the past week delayed operations in a few localities.

The spectre of a car shortage, or grain blockade is ever with us, and the present weather, making rapid marketing possible is likely to produce just that result. If farmers can restrain their eagerness to get their grain turned into cash the trouble may be averted.



Tenemera 50540, First Prize Two-year-old Aberdeen-Angus Heifer, Toronto Industrial Fair, 1902. Owned by John Richards, Bideford, P.E.I.

The Whitby Model Fair

A Great Success; Educational Features Draw Crowds.

The model fair held at Whitby, Ont., on Tuesday, Wednesday and Thursday of last week, must be characterised as a distinct success. This fair, which is known as the Durham and Ontario County Exhibition, was taken hold of this year by F. W. Hodson, Dominion Live Stock Commissioner, and G. C. Creelman, Supt. of Fairs for Ontario, with a view to making it a fair that others could copy from in their endeavors to eliminate the so called special attraction and take show from the local fall fairs. The Whitby Fair was managed along educational lines. Experts were present to give addresses and explain the nature of the different exhibits and wherein one lot excelled another lot. In all the judg-tie the judges, when required to, gave the reasons for their decigave the reasons for their decisions. This feature proved to be most instructive and of great value to the onlooker. The attendance was good and everybody seemed to be enthusiastic over the new order of things which made it possible to combine practical instruction along agricultural lines with the pleasure and profit that may be derived from examining the display at a local country fair. There were no take shows of any kind, not even a horse race. Even a patent medicine man, who began to dispose of his wares in the usual haranguing style, was given his walking ticket. The only special feature before the grand stand was a short series of athletic events confined to the young men and boys of the district. This proved to be most attractive and we believe created more real interest humpty-dumpty, or any vaudeville show that might be put

A GATHERING OF NOTABLES.

In their endeavors to provide the best of authorities to judge the exhibits and address the people, the management solicited the help of the Agricultural College, and the

Dominion and Provincial Departments of Agriculture which responded most nobly. Some were there to judge and others, perhaps, there to judge and others, pernaps, to judge the judges. The College was represented by Dr. Mills, Prof. Dav. Prof. Dean, Prof. Hutt, Prof. Zavitz, W. R. Graham, Poultry Manager, and Mr. Good of the Chemical department; the Dominion Department of Agriculture by Dr. Fletcher and Prof. Grisdale, of the Central Experimental Farm; F. W. Hodson, Dominion Live Stock Commissioner, and Mr. A. McNeil, Chief Fruit Inspector, and the Ontario Department of Agriculture by the Hon. Mr. Dryden and Supt. G. C. Creelman. There was surely talent to burn. It was all, however, put to a useful purpose and showed that the leaders in agriculture in this country recognize the importance of this new feature in agricultural shows and were desirous of aiding it as much as possible by their presence and help. An interested visitor was Mr. C. H. Hadwin, of Victoria, B. C.

OPENING CEREMONIES.

In the enforced absence of the Hon. Mr. Fisher, through illness, the Model Fair was formally opened on Wednesday afternoon by Dr. James Mills. He was introduced to the crowd in the main building by President Mowbray. Others on the platform were the Hon. Mr. Dryden, Dr. Hare, of the Ontario Ladies' College, and Supt. Creelman Dr. Mills stated that every agricultural fair should have two objects in view: First to encourage people to exhibit the best they produce by giving prizes and second to impart knowledge that would be helpful to farmers and others in an educa-tional way. While the first object had received every attention from fair managers, the second one had to a large extent become dormant. He was very glad to see therefore that there was a movement in the country to develop the educational

side. The program provided for the Whitby Fair was well planned for that purpose. There should be more done in this country in the way of special education along practical lines.

THE MAIN BUILDING.

This was well filled with a lot of interesting exhibits, including fruit, flowers, vegetables, cheese, butter, grains, roots, jellies, jams, iancy work, poultry fattening crates and everything to be found at a county fair. In addition, there was a special exhibit from New Ontario, with the log cabin shown at Toronto in evidence, an exhibit of seed grains and sugar beets from the Ontario Agricultural College and a fine display of grasses from the Experimental Farm Ottawa. There were also shown in this building cream separators, pianos, organs, sewing machines, cutters, buggies, etc., the whole making an attractive exhibit, the building being nicely decorated inside by bunting and flags. A display of wild flowers and grasses by three of the schools in the vicinity was most interesting and instructive. Dr. Fletcher who judged these exhibits commended the children for the good work they had done. The first prize went to the Kinsale school for a very large collection, though the prize was not awarded on that account. The seand the third to the Brooklin school for a small but very compact selection. There was a fair exhibit of insects from Dumbarton and a collection of woods from the Kinsale section. The exhibit of woods was especially fine.

As to the general exhibits they were on the whole well up to those of other years. The show of fruit was not as large as one would expect to see in a fruit growing section like Whitby. The quality was fairly good, however, the aim of the management being to secure an exhibit of good quality rather than an extremely large one of inferior quality. Some good roots and vegetables were shown. An interesting contest was the naming of varieties of apples by the children. Special prizes were donated for this by Elmer Lick, Oshawa. Mr. McNeill and Prof. Hutt selected a number of varieties from the exhibits for the naming. There were only three competitors, two boys and one girl. The two former did well naming correctly 17 out of the 20 selected by the judges. There should, however, have been more children entered. It is a valuable educational feature that might well be copied by other shows.

LIVE STOCK

There was an especially good show of live stock especially of Shorthorn cattle and Clydesdale horses. There was an especially good show of young horses and colts, many animals being present that would have shown up well at Toronto. Mr. Hogate's stallion Cornerstone, sold recently to Mr. Groat, of

Oshawa, was there and got first in his class. The lighter classes were well filled though the feature of the horse exhibit was in the display of Clydes. In Shorthorns some very good animals were out, several being winners at Toronto and London Fairs this year. The special feature was the show of bull and heiter calves and Prof. Day, who placed the awards, had no light task in picking out the winners. When asked, he gave the reasons for his decisions, which were much appreciated. In grade cattle there was a good showing. The sheep and swine classes were also well filled, there being some very fine long wool sheep shown and also very good bacon hogs. The dairy cattle exhibit which was judged by Prot. Dean was very small there being very few animals to face the judge while the quality was nothing to boast of. Some education along dairy-cow lines is evidently very much needed in the Whitby district. In beef cattle in excels but in the dairy animal it is lacking. There was a small though very good show of poultry.

STECHT PLATORES

The special features as we have already stated were of an educational character. A most interest-ing leature was that of chicking plucking by Mr. Graham. This took place in the main building immediately after the opening cere-Before beginning the operation Mr. Graham gave some information as to the market for dressed poultry. We can produce the kind required for both the home and British markets. A medium sized chicken, plump and fat weighing from 4 to 5 lbs. is what is reing from 4 to 5 ms. is black or quired. For fattening in crates chickens must have a good constitution. Good, short, thick, plump, blocky birds are associated with a short head, short, broad beak, short comb, and bright, clear eye. The breast bone should not be deep. A fault of the majority of Canadian chickens is that they are too deep in the breast bone. A chicken should stand up well on its legs to fatten properly. There are two methods of killing, by bleeding and by wringing or pulling the neck. The latter method is to be preferred as the chicken will keep longer. Chickens should not be killed until the crop is empty. After killing the bird should be placed with its head hanging down so as to allow the blood to run to the head. Mr. Graham then killed, by twisting its neck, one of the chickens he had on the platform to illustrate his lecture and afterwards explained in a practical way the method of plucking.

In addition to judging the fruit Mr. McNeil gave some practical illustrations in apple packing which were both instructive and entertaining. The apples were packed and pressed in the barrel exactly as they are required for the export trade. Mr. R. F. Holtermann, Brantford, gave several practical talks on bee culture, which were earnestly listened to. He had a hive of bees in an enclosure sur-

rounded by netting and from there showed the people how bees ought to be handled and cared for.

The South Ontario Women's Institute had a tent on the grounds in which practical cooking demonstrations were given from 2 to 5 p.m. during the fair. The demonstrators in this branch were, Miss Agnes Smith, Hamilton, and Miss Ida Hunter, Toronto. The tent was crowded at each demonstration so eager were the ladies to see and hear all that was going on.

THE EXPERIMENTAL PLOT.

Perhaps the most valuable and interesting feature of the show was the experimental plot located on the grounds. In this was planted varieties of clovers, grasses, corns, roots, etc., to show the people the characteristics of the different varicties and what they were espefields and what they were especially adapted for. The plot was laid out by Prot, Harcourt, of the Agricultural College last spring and was placed in charge of Mr. George Sterriker, of Whitby, Ont., who evidently gave it his very best attention as the whole plot compared most favorably with the experimental plots to be seen at the College or the Experimental Farm. The plot was neatly ienced and well laid out for inspection. We are informed that the total cost of the plot and the work connected therewith during the season was only from \$40 to \$45. It is therefore within reach of any agricultural society or fair organization in the country and we would strongly advise similar plots for next year's exhibition.

Mr. C. A. Zavitz, explained the various plats and gave any information asked for relating thereto. The clover plats were not as well advanced as they will be next season. The soil was of a light sandy nature and therefore the exper-iment was valuable as showing the kind of plants best adapted to that kind of soil. Among the grasses were the Awnless brome grass and the orchard grass. Some fine samples of Japanese millets were grown. These are well adapted to this climate and though they give a thick stock and the plant coarse throughout it is easily utilized for feeding. They give a large amount of seed. Kaffir corn and milo maize were grown, but, as the plats showed, these plants are not well adapted to this country.

The corn plats were of great interest. Three or four varieties were grown and along side of them a plat of sugar cane which evidently can be grown successfully for fodder purposes and the Whitby district seems to be well adapted therefor. The plat of Wisconsin's Earliest White Dent corn was very good indeed and well eared. It was hardly matured sufficiently for the silo. It will not mature sufficiently for grain except in the southerly portion of Ontario. The yellow Dent grown along side of it also looked well. This corn will mature in almost any portion of Ontario.

tario as will also Compton's Early another variety shown.

Plats of the hairy vetch and the ordinary vetch were grown. The former is a good fodder crop and also good for pasture. The seed, however, is very expensive and therefore it is not much grown. Eiforts are being made to grow this vetch for seed and if they succeed it will likely become one of our important fodder crops. The plat of grass peas was not as good as we have seen in the country. pea, which is proof against the pea weavil is being grown by many place of the common pea. It makes very good hay when cut green. Two plats of soy beans were grown One of these, the medium Green Sov bean showed a great quantity of fodder. It is the best for use in Ontario and if put with corn silage will help to balance it as a food. The plat showed that a large crop of this bean could be grown here. For grain the early yellow is the best. A plat of cow peas was grown. This variety is not much grown. good for Ontario. A good plat of Dwarf Essex Rape was grown. This is the kind that should be grown for stock. When sown about the middle of June it comes in early in Sept. If sown after the fall wheat is off it will give a lot of good pasture for fall feeding.

Several kinds of turnips were sown. The three varieties of Swedes that give the best results according to experiments conducted at the College, are, the Kangaroo, Sutton's Magnum-Bonum and Hartley's Bronze Top. In fall turnips the Greystone and Cow Horn are the best. A plat of what is called Kohlrabi was grown. This is like a turnip somewhat and can be used for table and for stock, chiefly sheep. It, however, does not give anything more than the ordinary turnip will give for feed-ing purposes. In mangels Evans' Improved Mammoth Sawlog gives good returns as also does Carter's champion yellow an intermediate variety.

An interesting part of the experiments was the sugar beet branch. Several plats were grown to show the method of thinning and cultivating at different stages of growth. The beets were sown on May 9th, June 14th and July 30th. So that there were plants with full growth some just thinned and others just ready to be thinned. As compared with ordinary roots the plants are not so wide apart in the rows and consequently; though the individual root is not so large the sugar beet crop will approach closely to that of other root crops in total yield.

A MODEL

With this brief and necessarily condensed note of the field plats we close our report of the first model fair. It was indeed one well worth copying by other shows in this province. We cannot have too much of the educational and when it is put in an attractive form it proves to be as good a drawing card as any so-called special attraction.



Highland Cornelia 2529, First Prize and Sweepstakes for the best Holstein Cow, any age, Industrial Fair, 1902. Bred by Fisher Bros., Ohio, and owned by Rette Bros., Norwich, Ont.

Horses, Cattle and Sheep at London

(Continued from last week.)

HEAVY DRAUGHT HORSES.

These were mostly Canadian bred and this class was open to heavy horses of any breeding. Not many stallions were shown. Ed. Poole, London, had the winning aged horse and George Dale, Clinton, had the three-year-old that got first. Two year olds were a full class and a lot of fairly good ones. Jas. Malcolm, Lakeside, John M. Niven, Kippen, and Wm. Johnston, St. Mary's, were the winners in the order named. Yearlings were headed by a Shire, a promising one owned by Morris & Wellington, Fonthill. Alex. Campbell, Alvinston and Nelson Wiley, Wisbeach, had second and third. Jas. Malcolm's two-year-old was awarded the sweepstakes ribbons as best of any Bawden & McDonnell had the winning mare a good big bay Clyde bred with a nice foal at foot. James Smellie, Inwood, and W. Hogg & Son, Thamesford, were second and third. For fillies Wm. Fleming, London West, and Geo. Dale, Clinton, won with Bawden & McDonnell getting the yearling prize with a get of Belshazzar. For the teams, D. A. Murray, Bennington, was first with the third prize team at Toronto. John McIntosh, Maplewood, second and H. Pelton, Bennington, third. This was a good class, and the general purpose teams were not far behind them. R. Purch, Anderson, was first with a fine pair of chunky bays by Bold Boy, a well-known Clyde sire. They are three and four years old, a very handsome team. Eph. Meadows, Brookside, was second and Eph. Brookside, was second and r.pn.
Butt, Clinton, third with a good
serviceable farm team. H. Hanlan, Rayside, had first and third
for brood mares and E. Butt got second place and first for foal, with H. Hanlan second and third and Also first for yearling filly. Jas. Henderson, Belton, had first for two year old and C. E. Trebilcock, London, first for three-year-old.

Cattle

Shorthorns were a much smaller class than at Toronto. Many of the large herds had gone home, such as W. D. Flatt, W. C. Edwards & Co., J. & W. B. Watt, A. J. Watson, and McDonald Bros., but the show here was still a good one with the herds of J. A. Crerar, Shakespeare, Capt. T. E. Robson, Ilderton, and Goodfellow Bros., Maxville, and with these came D. C. Douglas & Son, Strathroy, and a number of local breeders. In aged bulls Crerar was again first with Geo. D. Fletcher, Binkham, second, as they were at Toronto, and third place James Gibb, Brooks-dale, For two-year-olds Capt. Robson was first with his roan Vanguard, unplaced at Toronto, with W. Fleming, London West, second and T. C. Douglas third. In yearlings Goodfellow was first with his Toronto winner, Shining Light, Capt. Robson second with Bonnie Lad. In bull calves Robson was first with Valiant Lad, a red, and

James Leask, Greenbank, second with Moneyfuffel Knight a red and white. Douglas had the third and fourth prizes. In cows Crerar had the winner in his Gem of Bellechin, bred in Scotland; Goodfellow had second and third. In three-year-olds Goodfellow had first, Crerar second, both roans imported, and Douglas had third. In two-yearolds Crerar's Gem 2nd again won, with Douglas second and G. D. Fletcher, of Binkham, third. Water Lily won for Goodfellow in the ter Liv won for Goodienow in the vearlings with Robson second and Crerar third. Robson had first and second for calves with Good-fellow third and fourth. Shining Light had the sweepstakes ribbons for the bull and Gem 2nd for the temales. For aged herd Crerar was first and for young herd Capt. Robson had first with Goodfellow second for both. Douglas won for calves with Fletcher second while Crerar had first for bull and four of his get with Fletcher again se-

HEREFORDS.

There was a good show of Herelords, H. D. Smith, Compton, Que, W. H. Hunter, Orangeville, and J. O'Neil, Southgate, London, were the exhibitors. There was not much change in the awards as made at Toronto. O'Neil won second for aged bull, first for vearling heifer and second and third for heifer calves, in the sweepstakes for both males and iemales and for the best herd, while Hunter won at Toronto. Smith captured all the three here with the same animals competing.

POLLED ANGUS.

Walter Hall, Washington, Ont., W. R. Stewart, Lucasville, Jas. Bowman, Guelph, and F. W. Phillips, Oakville, were the exhibitors. John Richards, of Bideford, P.E.I., who had the winning herd at Toronto, had gone east to the Maritime shows. There was not much change in the classes for bulls, but in the females there were several. Walter Hall again won with Lady



Count of Maple Hill 2253, First Prize Yearling Holstein-Friesian Bull, Toronto and London Fairs, 1902. Bred and cwned by G. W. Clemons, St. George, Ont.

Gladstone, a very nice animal, and he had second with a cow not placed in Toronto. Bowman's second at Toronto, Bowman's se-cond at Toronto falling back to third. The three year old heiters were changed. Hall's Queen of Scots 2nd, not placed at Toronto, was here first with Bowman se-cond and Stewart third. The other awards were much the same as Toronto.

GALLOWAYS.

D. McCrae, Guelph, and Shaw & Marston, Brantford, had their Gal-loway herds here. The former had tather the best of the awards but the latter had first for three-yearold heifer, Flora McEvin and and first for yearling bull Duke of York by Chanteris. His bull Viceroy is also a capital animal of a low down beef type but was second to the Champion, Cedric IV. D. McCrae had in his lot four heilers and a voung two year old bull recently imported. The bull Royal Ensign is a good one but is not in show The heifers are a good lot. form. The heifers are a good lov. Nellie 12th, a two-year-old, was the and Cedric IV. champion female male champion. The calves were a very good lot.

TERSEVS.

There were five exhibitors of Jerseys. B. H. Bull & Son, Brampton, were here with their herds shown at Toronto and several local breeders sent in animals. G. Laidlaw, Wilton Grove, showed a herd and won first for three-yearold cow and five seconds. He had in these both aged bull and cow, four year and upwards, two year old heifer and heifer calf. E. Edmunds & Son, London West, had second for bull call, for three-yearold cow and had also two thirds. D.G. Hanmer won for two-year-old bull and Jno. Trott, London West, third for aged bull. Bull & Son got all the ribbons for the sweepstakes prizes. There were no Guernseys shown .

HOUSTEINS

From Toronto there came two herds, those of Rettie Bros., Norwich, and G. W. Clemons, St. George, and there joined them Andrew Cameron, Westwood, who had one second and three third prizes. Rettie Bros. had eight first prizes and four second while G. W. Clemons had five firsts and four seconds. In the aged bull class there was a change about of the Toronto awards. In aged bull class where Rettie had a one, two, three win in Toronto he had but the first here, second and third going to Clemens and Cameron. Clemens had the sweepstakes for bull and for four calves and Rettie won for female and for best herd.

AVRSHIRES.

Only one of the Quebec herds came to London, that of W. Watson Ogilvie, Lachine Rapids, Que. This was the winning herd at Toronto and was contesting here with W. Stewart & Sons, Menie, N. Dyment, Clappisons, and R. H. Henderson, Rockton. Out of the 13 first prizes Ogilvie captured nine and had five seconds. Stewart had

one first, one second and four third. Henderson had first for bull calf and Dyment had first for yearling bull and also for two-yearold heifer and third for three-yearold cow and for heifer calves. aged bulls Stewart was placed third, moved back a point, while Ogilvie had first and second as against first and fourth at Toronto. Stewart who won first for vearlings at Toronto had only third here. The show of Avrshires was very good.

Shropshires were a good show. There was another close contest between John Campbell, of Woodville, and D. G. & J. G. Hanner, Mt. Vernon with Teller Bros., Paris, and a new firm of exhibitors, Pullet & Clarkson, Sweaborg, taking a turn in some of the sections. There did not seem to be much hange till lambs were shown. Here Telier Bros, captured first with Hanner second and Campbell third, Hanner won for aged ewes and also for pair of shearlings. Campbell got first for ewe lambs with Hanner second and Puller & Clarkson third. Hanner won for the pens and Campbell the ribbon for ram anv age

Oxford Downs were shown by J. H. Jull, Burford, and R. J. Hine, Dalton. The latter had the best of it winning eight first and three seconds to Jull's three firsts and three seconds. The awards were much the same as Toronto.

Southdowns had but three flocks but they were good ones. F. E. Caine, of St. Andrew's N.B., won all the firsts but one and that for best pen of lambs was captured by Telier Bros., Paris, as they had to be bred by the exhibitor. Telier Bros. had also three seconds and three thirds. Robert McEwen, Byron had to be content with three third prizes and he had some good sheep. The downs make a fine show this year.

Dorset Horns were shown by Lt .-

Col. J. A. McGillivray, Uxbridge, and R. H. Harding, Thorndale; both have good flocks. In ewe lambs Harding won in Toronto and here had but third place, at former shows it was for a single sheep and here it was for best pair.

Lincolns were shown by J. F. Gibson and no one else cared to enter against him. The judge pronounce it the best flock of the breed he had ever seen in London.

Leicesters. Only two flocks competed, J. M. Gardhouse, Highfield, and John Kelly, Shakespeare, the former had much the best of the contest having eight firsts and three seconds as against Kelly's three firsts and two seconds. The latter had the best lambs and he won for the pen. Gardhouse had all the other pen prizes and sweep-stakes. There was only a pen prize for the Hampshire Downs which went to John Kelly with Telfer Bros., Paris, second. They were a nice lot.

Cotswolds. The flocks at Toron-to were all here and there was quite a change in the awards made. John Park, Burgessville, and his son Elgin F. Park were opposed by J. C. Ross, Jarvis. At Toronto, Jno. Park won out of eleven, seven firsts, Elgin F. Park three and Ross but one first. Here out of twelve offered Ross had nine firsts and John Park had but three, while Elgin F. Park got no more than four third prizes. At Toron-to William Thompson, Uxbridge, was the judge and here it was W. G. Laidlaw, Wilton Grove. One seldom sees such a radical change in judging as between these two. Both flocks were good. Park won for aged rams an immense sheep fully fitted and for aged ewes the ram winning the sweepstakes. All the other firsts went to Ross.

For fat sheep John Campbell won for wethers and W. H. Beattie, Wilton Grove, for ewes; for best export sheep W. E. Wright, Glanworth, was first and W. H. Beattie



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The Varieties of Apples in Nova Scotia

Over twenty years ago, Mr. R. W. Starr published in the report of the Nova Scotia Fruit Growers' Association a descriptive list of the nine principal kinds of apples grown in that province. This list was as follows: Gravenstein, Ribston Pippin, Blenheim Pippin, King of Tompkins, Baldwin, Nonpariel, Northern Spy, Yellow Belleflower and Golden Russet. The same authority recently gave a list of the ten best commercial varieties in Nova Scotia. The new list is the same as the one of twenty years ago with the exception that the Stark and Fallowater are substituted for the Yellow Belleflower, a very slight change in so long a time.

A Nova Scotia fruit expert, in considering this revised list, which he states comes very tlose to being the ten most popular apples among Nova Scotia growers to-day, points out the defects that several of these varieties possess.

"Some of the most obvious are these: The Gravenstein, though all that could be desired for quality and growth, comes so early that prices are low and the demand limited. The Ribston has a serious tendency to dry rot and is almost wholly a dessert apple, so that the market is limited. The Blen-heim dry rots and the King is often a shy bearer and apt to be affected with "collar-rot." The Gold-The Golden Russet is a very irregular bearer, with a few growers giving good and regular crops, but more often and regular crops, but more often being a light, shy bearer. The Baldwin is, we believe about as popular as any variety grown, though its tendency to overbear every other year and "under-bear" in between is against it. The Spy is all right except that it is too slow in coming into bearing, and the Stark is very popular just now, but has not been grown very ex-tensively, is not of high quality, and those who know it best say that it is seriously liable to a browning of the skin, akin to the dry-rot of the Ribston. The Fall-awater is excellent in most respects, but is very liable to attacks of "collar rot," while the Nonpariel, though an ideal apple in many respects, is not of high quality and is developing, in the western part of the Annapolis Valley, a most alarming tendency to cank-

This would seem to indicate that the ideal varieties have not yet been produced, at least in any great numbers. Many of these defects might be overcome, but the tendency at present, to introduce new varieties will be welcomed by many Nova Scotia growers. Just now the Red Russet, which is said to be a cross between the Baldwin and the Roxbury Russet, is coming into favor. The Ben Davis is being largely grown and such varieties as the Ontario, McIntosh Red, Gano, North Star and Ohio Nonpariel are claiming more or less at-

tention as new and promising sorts for general planting.

Corn Silage.

The corn silage question is a matter with which the large majority of our farmers are familiar. However, the following from Bulletin No. 92 of the New Hampshire Agricultural Experiment Station giving the results of several years study of corn silage will serve to refresh our minds as to several of the more salient points requiring attention in silage making:

The greatest weight of green fodder was obtained when the plant was cut while in full bloom, i.e. tassels and silk formed, but more nutrients were obtained when the corn had fully formed ears at the roasting stage. This was because the plant at the earlier stage contained more water and the practical effect of harvesting at these two stages was that it would take sixteen tons of corn fodder in bloom to equal twelve tons when the ears had filled out. This is a point on which the experiments of different stations in different sections of the country with different varieties uniformly agree.

A variety of corn which reaches this stage of maturity is therefore better for the silo, than a variety which has to be cut before the ears are much developed.

The results of using different quantities of seed showed that the standard of one-half bushel of seed per acre, gave best results on the whole in composition and quantity together. One and two bushels of seed respectively per acre, produced an inferior quality of fodder, while increasing the total weight of the crop.

The most prominent change ocurring in the crop after putting in the silo, is the destruction of the sugars in the fodder during the fermentation. The sugars are most abundant in the corn plant while the ears are forming, but change to starch as the kernels fill out. Starch suffered little change in the silo.

This makes an additional argument for allowing corn to become fairly mature before harvesting for the silo. Not only is there more water at the earlier stages; but on account of the higher proportion of sugars, at those periods, there will be greater losses after storage.

The First-class Butter-maker.

A strictly first-class, up-to-date butter-maker should be of mature age and have some experience and considerable dairy education. He should be possessed of a good head, strong arms and willing hands, and be honest and upright.

of mature age, so that he will attend strictly to business and act like a mature person should. Of experience, that he may avoid the mistakes sure to overtake the inexperienced often. He should have

considerable dairy education, that he may be able to apply the experience of others and disseminate the necessary knowledge among his patrons. Possessed of a good head that he may do at least a part of his own thinking and apply it practically, as well as being competent to manage a business requiring exceptional judgment. Strong arms and willing hands that he can and will do the work thoroughly and completely. Honest and upright, that he can and will treat all his patrons as well as the association or company fairly, and always do the proper work at the proper time. He should have some knowledge of arithmetic, engineering, machinery, carpentering, bacteriology and chemistry, be an expert with the Babcock test, and be clean, neat and accurate in all things. He should be a good judge of milk and use his judgment in taking it in, so that he may not impair the quality of his goods. His aim should be to produce the largest quantity and the finest quality of butter at the least possible cost, and the nearer he approaches this standard, the more valuable are his services, and so far as he is concerned the nearer perfection has modern butter-making become. Most anybody can make good butter some of the time, but few can produce perfect butter at all times.

Geo. Dunford.

Conference of Plant Breeders.

Dr. Wm. Saunders has been selected by the Minister of Agriculture to represent the Dominion Department of Agriculture at the International Conference of Plant Breeding and Hybridization to be held at New York on Sept. 30th and Oct. 1st and 2nd. Representatives from all the leading European countries will be present and an important gathering may be looked for. Dr. Saunders will be accompanied by W. T. Macoun, Hor-ticulturist, Central Experimental Farm, and Dr. C.E. Saunders, each of whom will present papers to the conference. The Canadian Experimental Farms have been conducting most important lines of work for many years in plant breeding, especially in cereals and fruit, which have given to these institutions an international reputation for useful original work in agricul-

A Pioneer Agricultural Writer

There died suddenly at Guelph last week one of the old timers in agricultural newspaper work in the person of the Rev. W. F. Clarke. He had reached the advanced age of 78 years. For many years he was a frequent contributor upon agricultural topics his specialty being bees and the advantages of clover culture. He was a contributor for many years to the now extinct Rural Canadian and latterply to the Montreal Weekly Witness. Many will recall his energetic labors in the years gone by in the interests of higher agriculture.

The Sugar Beet World

Devoted to Sugar Beet Culture in Canada and Allied Industries. Specially Representing the Farmers' Interests

Edited by JAMES FOWLER



Ontario Sugar Beet Exhibit, Industrial Fair, 1902. Arranged by Prof. R. Harcourt, O.A.C., Guelph. For particulars see Sugar Beet World of Sept. 16th.

Beet Sugar at the Trans Mississippi Commercial Congress, St. Paul.

(Continued from last issue.)
FULL ACREAGE TONNAGE.

The full tonnage of beets, planted 8 inches apart, in rows 18 inches wide, is 38 tons per acre and the Hon. the Secretary of Agriculture informs me that time and again he has raised 28 tons per acre on his lowa farm. Yet the average tonnage last year in the United States was 9.6 tons. All this will be rapidly rectified as our farmers become familiar with the culture.

In the vicinity of Magdeburg, Germany, beets are grown on land worth \$800 to \$1,200 per acre, land where the rent is high, and where fertilizers to the value of \$12 to \$15 per acre must be added each year, and still the beets are sold at a profit at \$4 to \$4,50 per ton. So anxious are the farmers to raise this most profitable crop that the factories are obliged to limit the beet acreage of each farmer.

BEETS AND DROUTH.

The sugar beet will stand more drouth on the one hand, or more excessively wet weather on the other, than it will almost any crop that the fariner can raise, hence it is a safe crop, which is sold in advance at a fixed cash price.

BEETS IN ROTATION.

As a rotater the sugar beet is far above any other ordinary crop. The opinion formerly prevailed that the sugar beet rapidly exhausted the soil, but this is not the case, if properly rotated.

Let me read to you a report from one of our German consuls:

"A German farm of 625 acres produced, before the introduction of beet culture, yearly, 9,736 bushels of grain in ten years' average. After beet culture was introduced, with 125 acres yearly to beets, the average yearly grain crop from the remaining 500 acres was 9,870 bushels, or 134 bushels increase. Another farm in the province of Saxony, also of 625 acres, produced before beet culture was introduced, in ten years' average, 13,-879 bushels of grain. When five years afterward 135 acres were planted with beets, the grain crop of the remaining 490 acres was 14,-365 bushels average, and afterward when yearly 220 acres of beets were planted, the average grain crop from the remaining 405 acres was 14,397 bushels, or 518 bushels more than from the whole 625 acres before beets were raised. Thirty-five other farms of 500 to 1,000 acres each in the province of Saxony showed the following result:

Average crops per acre in lbs.

Sefore be culture.	After bee culture.	Increase i	Per cent.
Wheat 1,848	2,292	444	24
Rye1,456	1,672	216	14.8
Barley 1,672	2,094	422	25.2
Oats1,355	1,918	563	41.5
Peas 985	1,834	849	86
Pot's6,716	13,500	6,874	102.3

The average beet crop of these farms was 17 tons 400 pounds per acre."

The above demonstrations show what a boom the culture of beets will be to our farmers, who are the backbone of our national wealth. The Secretary of Agriculture states that in order to get the benefit of beets as a rotater, and to get the pulp to feed to his cows the farmer could actually afford to furnish the factory the sugar from his beets free, and then would be only selling the air, for the sugar in beets comes wholly from the air.

Professor Powell, formerly of the Smithsonian Institute, makes the statement that in semi-arid America there is enough rich tillable land and enough water that the two, once married, would support in allbuence 70,000 one of people

in affluence 70,000,000 of people. I am familiar with nearly all of our arid country, and I can form no other conclusion than that from an agricultural standpoint our most productive land has been left to the last, an inheritance for future generations.

REFINING VERSUS MANUFACTURING SUGAR

The refining of imported raw sugar yields but little to American industry, and should be abandoned as soon as possible. According to the figures furnished the United States Industrial Commission by the sugar refiners, American industry secures but \$6.72 out of the refining of one ton of imported raw sugar. In producing a ton of sugar from American-grown beets, American industry receives a trifle over \$80, based on the present average cost of about 4 cents per pound to produce. Some American factories are now producing beet sugar at less than 3 cents per pound, and when the cost of production gets down to 2 cents per pound, American industry will still receive \$40 per ton by manufacturing our own sugar, as against \$6.72 per ton by refining the imported article.

The proposition of refining as compared to manufacturing sugar could well be compared to iron, steel, copper, wheat and corn. Suppose it was proposed, that we shut down out iron mines and import our iron in the shape of pigs or ore, simply using American labor to work it over into shapes, or import our wheat and corn and grind it here. The cases would be parallel and in favor of manufacturing our sugar and importing our corn and wheat, for the farmer makes a greater profit in raising beets than in raising either of the other crops.

Another thing about the beet sugar industry is, that it is impossible to make a trust out of it without taking the farmers into the deal, and the factories must be scattered; whereas, the refineries are all located on the coast, and virtually all in a trust, which arbitrarily fixes the price which 76,000,000 of Americans shall pay for an article of daily consumption.

The material results of fostering the beet sugar industry will be the retention at home of from \$100,000,000 to \$125,000,000 which we now annually send abroad, cheaper sugar, better farming, more grain per acre, less competition, a boon to the dairy and stock interests, besides many minor advantages.

LOCAL BENEFITS.

One more thought on the practical lines of this subject and I will close.

Desirous of obtaining accurate information concerning the average beneficial results brought about locally by the establishment of beet sugar factories throughout the United States, I recently wrote to the local bankers, county assessors and post-masters where each of our sugar factories is located and to the sugar companies as well, inclosing a blank on which were some 31 questions to which I request-ed answers. Not all of the blanks have been returned, but I will give you the benefit of those already received. I will state at the outset that not a word of discouragement was expressed in any answer, in any report.

1 asked: What gross proceeds per acre are your farmers able to secure in beet culture?" In most instances they gave me the range from the lowest to the highest. The lowest was \$25, the highest \$180,

the average of all 69.40 per acre.
The next question was: "And how does this compare with what they obtain in raising other crops? Among the replies were: "One hundred per cent. higher." "Beets best crop we can grow." "Favorable." "Very much in excess of other crops." "About 300 per cent." "An increase of 80 per cent." "An increase of 80 per cent." "A decided improvement." "About three times as much."

Then I asked: "As the farmers become familiar with beet raising, are they more, or are they less anxious to raise beets?" All replied that they were more anxious; that interest was increasing, and, in all but one case, that the acreage was being extended.

I next asked: "Have larm mortgages increased or decreased since the erection of the factory, and to what extent?" All but two stated that they had decreased, some materially, some 25 per cent. some 30 per cent. one that very few farms were now mortgaged. Two stated that farm mortgages had increased owing to the fact that renters were becoming able to buy on partial payments.

then asked for: "The average price for agricultural lands prior to the location of the factory and at the present time?" Two gave no price before the factory was erect-ed, the land being a desert and of little value; land in one of those sections now being worth \$100 per acre, in the other \$150 per acre. Of the others, the smallest increase was 20 per cent. the greatest 250 per cent. The average price of all was \$34.28 per acre prior to the location of the factory, and \$75.55 per acre at the present time. The average increase in value was 124

The next question was: "What effect has the erection of the faceffect has the erection of the fac-tory had on the prosperity of the farmers?" Here are some of the re-plies: "Glorious." "Profits double." "They are paying debts and renters are buying farms." "Good"

"Much interest shown." "Diversity "Enables them to buy of crops." land and build home." prices and demand for produce of all kinds." "Greatly increased."

I think this pretty accurately sizes up the situation as to the farreaching, beneficial effect of the erection of a beet sugar factory on surrounding farmers.

But this is only part of it. Merchants and real estate men are affected; in fact, the whole commu-I called for the assessed valuation of all town property before the erection of the factories and at the present time, the same information as to population, average price of residence lots, and of business lots. The replies show the average increase to be as follows:

Assessed valuation, increase 139 per cent.

Population, increase 891/2 per cent. Average value of residence lots. increase 59 per cent.

Average value of business lots,

increase 188 per cent.
Rocky Ford, Colo., is a fair sample of what a beet sugar factory does for even a good town. Two years ago Rocky Ford was a prosperous town of 1,500 people, largely engaged in raising the cele-brated "Rocky Ford melons" for the Eastern market. The American Beet Sugar Company erected

a factory there for the 1900 campaign. Rocky Ford's population during these two years has jumped from 1,500 to 3,000, her assessed valuation from \$327,608 to \$645,-344, the price of average residence lots from \$50 to \$200, of average business lots from \$750 to \$2,000. Over 400 buildings have been constructed at an expense exceeding \$400,000, and 40 more were in course of construction at the time my blanks were filled out.

All these results are directly and wholly attributable to the erection of beet sugar factories. I put another question: "Wnat effect has the erection of the factory had on the prosperity of your merchants?"
Here are some of the replies:
"Greatly increased." "Business
doubled." "Profits doubled." "Many new stores." "Prosperous."
"No failures." "Increased cash "No failures." "Increased cash sales." "Increased the business a thousand per cent." "Neither mer-"Neither merchants nor prosperity before.'

The question is, do we want 600 more such towns, each surrounded by a thousand or more prosperous farmers' families, or will we by changing existing tariff conditions run the risk of selling the birthright of the American farmer for a

mess of pottage?

Truman G. Palmer. St. Paul, Min., August 20, 1902.

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The Agricultural Gazette

The Official Bulletin of the Dominion Cattle, Sheep and Swine Breeders' Association, and of the Farmers' Institute System of the Province of Ontario.

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The name and address of each member, and the stock he has for sale are published once a month, Over 10.000 copies of this directory are maited monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident in canada, the United States and elsewhere.

A member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs; that is, to advertise stock he must be a member of the Dominion Cattleton to which he belongs; that is, to advertise collection.

The list of cattle, sheep, and swine for sale will be published in the third issue of seach month. Members having stock for sale, in order that they may be included in the Gazette, are required to notify the underspined by letter on or before the 8th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The clast will be Aller and the supplication of the sale will be animals. All the Westerker List was a supplication of the sale will be a supplication of the sale will be a supplicated by letter on or before the 8th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The clast will be a supplicated by letter on or before the 8th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue.

FARM HELP EXCHANGE

The Farm Help Exchange has been started with the object of bringing together employers of farm and domestic labor and the employees. Any person wishing to obtain a position on a farm or dairy, or any person wishing to employ help for name and full particulars to consider the order of the ored order of the order of the order of the order of the order of t

Domestic Help Wanted

Wanted.—A housekeeper in a farm house of a family of two. Must be able to milk, churn and be a good cook. Small girl no objection. No. 137.

Wanted.-A housekeeper on a farm in Grey County. Family consists of a mother and son. Apply stating wages expected. No.

Help Wanted.

Wanted .- Man to work on a farm by year. Either single or mar-ried. Steady job and good place. No. 131.

Wanted .- A good stockman with considerable experience with beef cattle, sheep and hogs and capable of taking full charge of stock. Englishman preferred. Must supply references. Yearly engagement to proper person. No. 132.

Wanted .- By a married man, aged 38, a position of trust on a poultry or fruit farm. Could take full management. Good gardener and thoroughly understands farm work; also a good rough carpenter. No. 609.

Situations Wanted.

Position wanted in the West by a young man 20 years of age on a farm where he can gain more experience in dairy work. Can give good references as to character and ability. No. 608,

Wanted .-- A man by the year on stock farm, twenty-five miles north of Toronto. Must be good hand with horses and willing to do anything there is to do. Good wages and permanent situation to first class man. No others need apply. No. 133.

Wanted.-A teamster for farm and factory teaming. Must be and factory careful hand with horses. Will engage for a year. Good wages to first class man. Commence immediately. No. 134.

Wanted .- A married man, with whom a young man could board, to work on a dairy farm. Wages depend on man; good wages to sa-Hired by the tisfactory person. year. No. 135.

Wanted .-- A married man to work on a farm in Haldimand County. Man with family preferred. Must be sober and reliable. House, garden and wood furnished. Cow kept if desired. State age, experience and wages desired. To a suitable person would let the farm on shares. No. 136.

N.B.—Where so name is men tioned in the advertisement. apply to A. P. Westervelt, Parliament Buildings, Toronte. giving number of advertisement.

Farmers' Institutes.

Under this head the Superintendent of Farmers
Institutes will each week publish matter relating
to accretaries and other officers, general information about institute and Institute work, suggestions to delegates, etc. He will also from time to
time review some of the published results of experiments conducted at the various Agricultural
Colleges and Experiment Fattions of Canada and
Experiment Fattions of Canada and
Institute cuembers some valuable agricultural information which they might not otherwise receive, on secount of not having access to the
original publications. If any member sharp time
desires further information along any of the line
desires further information along any of the line
desires further information to the Superintendent besituation that has carried on the work.

Superintendent Farmers' Institutes

The Farm Home.

BY MISS FANNY KNIGHT, SAULT STE. MARIE

Each and every person listening to me to-night has a home, and with what pleasure we turn our steps homeward, after an absence from it. There we see the familiar faces of father, mother, brothers and sisters, and every object seems like an old friend to greet us on our return.

Why is home so dear? Is it because of beautiful houses, fine lawns and shade trees, modern conve-niences and everything up to date? By no means. It is because those that love us are there, whether it be mansion of wealth or cabin of poverty.

I believe the most important factor in farm life is the farm home. Who can appreciate the comforts of an evening spent in the society of his wife, and family more than the busy farmer, who has toiled from early morn till the setting of the sun, in the open air cultivating the soil and doing the numberless tasks which fall to his lot? The merchant, banker and the majority of men working at a trade, are confined to closed rooms during the day thus making it necessary for them to spend a part of the time in the evenings out of doors in consideration of their health, but not so with those whose work makes it necessary for them to spend a large portion of their working hours out of doors.

How can we make home attractive? The wife, the mother and the sister are the home-makers, and sister are the there is one place where woman has her rights, and where alas many fail to live up to their privileges. Hers is the right to cheer the tired husband, father or brother with bright smiles, a good dinner and a neat room; hers the right to sympathise in sorrow or joy, and interest herself in the evening pursuits and pleasures of the boys. She it is who holds the sacred right of influencing and thus having a share in the moulding of the characters of those around her. If every woman used her influence as the precious gift which God intends it to be, the result would be such a change in the lives and actions of men that we would scarcely recognize this as the same world, in which we are now living.

I fancy I hear some woman say: "Oh, yes that is all very well in theory, what about practice? It is not always easy to have bright smiles and a good dinner when you have to spend half the morning acting as chore-boy around the farm, or waiting on the men, who seldom can find anything they want without calling to their want without calling to their wives for assistance. Then when the missing article is found and peace once more prevails out-ofdoors, to hurry into the house to

find the fire out, the house in a state of dire confusion, and dinner time coming as fast as the clock can tick the minutes off"-Here is where the man's part comes in. Do your own work and don't expect your wife to do two people's work. You have labor-saving machinery to do your work-Get her the modern conveniences to do hers, and don't be afraid to spend a little time and money on beautifying the home. Plant shade trees, make walks, dig up earth for flower beds ever so many-and if the women in your house fail to plant the seeds, or to be a ready helper in all your plans for the improvement of the vards and gardens, there must be something wrong somewhere. Make home just as beautiful as your means and abilities will allow.

Don't be afraid to give a half holiday to the boys, and to take one yourself, when a pic-nic or other pleasures present the oppor-tunity. You will work better your-self and get better work from all in your employ for the change; and life will not be a steady grind of work, work day after day, making the boys wish for a chance to see more of the world, and thus driving them away from the farm as soon as they can manage to go. Let every one, especially the wives and sisters, endeavor to make home pleasant in its outward appearance, its social life and its surroundings; and one of the farm problems, "How to keep the boys on the farm," will be solved. will be a great point gained, for the free, unrestrained life of a country boy gives him the best foundation for future greatness, viz., a strong body and a pure mind, ready to grasp and retain that which will make him a great and good man.

Food in its Relation to the Body

BY MISS AGNES SMITH, HAMILTON

Before we can study the question of food, we must know something about the body to be fed. The body is made up of organs each having its own particular function. The various materials composing the organs are called tissues. We have bone tissue, muscular tissue, nerve tissue, and so on. The tissues are built up of cells and each kind of tissue is composed of cells of a similar kind. For example, if we examine a grain of wheat we find the starch cells are quite dif-ferent from the bran cells. They are different in structure because they differ in function. So it is in all the higher forms of life, some have one function, some another. We might compare a yeast cell to a man living all alone, doing every-thing for himself, being his own tailor, carpenter, etc. A human body is like a nation in which some are farmers, some manufacturers, some merchants; and just as the merchant does not understand farming, nor the man who raises wheat know how to make it into flour, so a cell of one kind cannot do the work of another. As for example, in lung tissue the cells are

adapted for absorbing oxygen, and in the retina of the eye for receiving light.

The millions of different cells in our bodies have all to be fed, but they are not able to lay hold of food as it enters the body. It must be prepared for their use in a special way, in short, we say it must be assimilated. The digestive juices produce their effect upon it and it is absorbed and carried into the blood. The blood then carries it in the form of nourishment to the minutest parts of the body. It is not till our food becomes blood that the body is able to derive nutriment from it. If we thought oftener of the wonderful house in which we live, it would keep us from doing many things that we now thoughtlessly practise. Many of us are more careful of our sewing machines than we are of our The body has been called bodies. bodies. The body has been cancer a machine; let us see in what this analogy consists. A machine requires fuel and water for action; so does the body; but there is one great difference,—man is a selfbuilding and repairing machine, or at least he ought to be. Too often we have to shunt into a repair shop and lay up for a week or two. This is usually the result of care-

lessness or ignorance.

The body asks of the food fuel for action, also material to build it and keep it in repair. We find there are two great classes of foods corresponding to these two requirements,—the body builders and the

fuel foods.

During the period of growth the body builders form the tissue, and all through life they keep it in repair and in working order. Tissue builders may be divided into three parts, first water; second, mineral waters, and third, nitrogenous foods. Water is necessary for health, and few of us really recognize its importance. Good water is a prime requisite. Modern science has shown us how disease may be transmitted by water. In towns and cities the sanitary conditions of water supply is carefully looked after by competent authorities, but in the country it is an individual matter. There are three conditions to be considered when thinking of the water supply: first, source of supply; second, position of well, and third, construction of well. If satisfactory answers can be given to these questions we may feel quite safe. If, however, we are doubtful about the purity of the water, there are some sim-ple household tests that may be used. First, boil some of the water and if a disagreeable odor is given off it is not as pure as it should be. Second, evaporate some of the water in a small dish and if the residue is dark and viscid it contains organic matter and should not be used. Third, another test for the presence of or-ganic matter in water is the bleaching of permangate of potash.

We found when considering the body that all digested food was carried by the blood to its different parts. The liquid part of the blood is 90 per cent. water, and so is a great factor in conveying nourishment. It also aids in carrying away the waste of the body into its proper channels. Water also keeps all the fluids of the body in the proper state of dilution. It actually enters into the chemical composition of the tissues. When we understand that 3-5 of the entire body is water, we see what an important part this fluid plays.

The second division of the body builders, as we have classed them, is the mineral water found in food. This is found in large proportions in the bone, teeth and hair. It may be laid down as a general principle that the tissue building materials are derived from foods of animal and vegetable origin such as milk and fruits. The roots of plants go down into the earth laying hold of the mineral matters stored there and working them into their own structure. This prepares them in a form ready for man's use.

The last class of body builders, the nitrogenous foods, is the most important. Nitrogenous foods contain albumen, which is the most complex of organic substances. Albumen is found in both the animal and vegetable world. Such vegetables as peas and beans contain a large percentage of this tissue-former, but that found in the animal kingdom is much more easily and thoroughly assimilated, that is, made into life. This is quite in accordance with the economy of na-ture. The ox and sheep in their abundant leisure, prepare grass and grain into a concentrated food for use. The other class of foods. for use. The other class of 1000s, the fuel foods, may be divided into first, starches and sugar; and second, fats. Starch and sugar are very similar and have the same chemical composition. It is possible by means of heat to convert starch into a kind of sugar, as in the toasting of bread. Starch is a vegetable food; it is formed and stored by the growing plant as food for the young shoots of the next year, or to be used in time of adverse circumstances. In the body it is converted into fat to make heat or energy, or may be stored as a reserve supply of ener-

Fat, our other fuel food, is principally of animal origin, although some nuts and seeds are rich in fat. It is a much more concentrated food than starch. It is able to be stored as a reserve supply of energy much more easily than starch, to be called upon in the case of sickness or starvation. Starches and fats are the fuel of the body. Just as an engine produces heat from the fuel with which it is supplied, and part of this heat is changed into energy, so these foods keep up the body heat and enable it to do the work required. To a certain extent the nitrogenous foods are able to replace the fuel foods for they can act as fuel, but these foods are always more expensive than the regular fuel foods and are needed for other pur-poses. It is, however, impossible

for the fuel foods to build tissue; while a nitrigenous diet may sustain life, a person confined to fuel foods would soon waste away and

We have found what every class of foods does for us and that we need every class to carry on our life processes to the best advantages. But what does this mean for the everyday housekeeper? It means that she should familiarize herself with the composition of the common foods so as to be able to make suitable combinations. This knowledge of the composition of foods makes it quite clear to us, that food is not necessarily nutritious in proportion to its cost. When it is necessary we can substitute cheap foods for more expensive ones and get the same food value.

Country Gentleman at the Industrial Fair

Country Gentleman, which was specially represented at the Industrial, in its report on the Fair

says:
"The Toronto Industrial is an exposition of which Canada may well be proud. A finer site could hardly be found than the beautiful park by the lakeside, in which the buildings are widely scattered to leave room for stretches of lawn and handsome trees and a pond full of water-lilies. In the buildings and about the grounds there are so many exhibits besides the agricultural that in speaking of it from an entirely agricultural standpoint one hardly does the show justice. Toronto is in an excellent horse country, and the show brought out many fine ones, both in the breed-ing and harness classes. Apart from live-stock one of the most interesting features of the exhibition was the new Dairy Building with its fine theatre, in which butter-making contests took place every morning."

Feeds Which Gave Best Returns

Director Curtiss, of Iowa Experiment Station, last year undertook an experiment for the purpose of in the fattening of steers. Two hundred and twenty steers were put in eleven lots of twenty each, each lot containing fifteen grade Shorthorns, four grade Angus, and one grade Hereford. No allowance was made either for the value of manure on the one hand or cost of labor on the other, but allowance was made for the pork produced from hogs that fed on the drop-pings from the steers. The largest profit was made on the lot fed corn and gluten meal, an average of \$17.99 per steer; the next best average, \$17.60, was made on corn and gluten feed; and the third best, \$15.36, on corn and dried blood. On corn and oil meal the average profit was \$14.85, and on corn alone \$14.49.

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JOB 23, 24, 25, 26,

This is a most beautiful and perfect copy

Job's innocency. CHAPTER 23. Heb. my

THEN Job answered and said,
2 Even to day is my complaint bitter:
my stroke is heavier than my groammg.
3 Oh that I knew where I might find
am! that I might come even to his

3 Oh that I knew where I might find an I that I knew where I might come even to his eat would order my cause before him 4.

4 I would order my cause before him 6.

5 I would know the words which he is not have a would assy unto me.

6 Will he plead against me with his great power? No; but he would put strength in the righteous might dispute 1. There the righteous might dispute 1. There the righteous might dispute 1. There is should I be delivered for ear from my judge.

8 Of the left hand, where he doth work.

9 On the left hand, where he doth work.

(Exact

Judgment for the wicked.

B.C. 1820. clothing, and they take away the sheaf from the hungry:

I How it is a sheaf the sheaf in the sheaf from the hungry:

I Which make oil within their walls, and tread their winepresses, and suffer the sheaf from the sheaf

and tread their winepresses, and suffer thirst.

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ADDRESS

THE FARMING WORLD

TORONTO

The Farm Home

Common Sense.

O Common Sense! No diadem is thine,

And on thy plain, unsentimental face

There is no brilliancy nor hint of grace;

And yet I love thee and would make thee mine,

Because thou art essentially divine. Thou only through life's labrinth canst trace

The true, safe path for our distracted race.

Ever to follow thee, my heart incline!

Once on the wilderness of waters wide

Brooded the Spirit, and the lands uprose, And Chaos saw sweet order

then commence.
Such is thy power; and where thou

dost abide

Each moon and planet straight

and stately goes; Heaven-born, earth-saving Com-

mon Sense!
-Kate Upson Clark.

A Woman's View of the Western Fair.

One wonders how many readers of The Farming World paid a visit to the Western Fair. We noticed a representative of that paper in the Machinery Hall, with an abundant supply of sample copies. The farm implements this year were not very plentiful and the laborsaving devices for the housewife were fewer than ever. Wortman and Ward, of London, had a good exhibit of churns and butter workers in the Dairy Building, and we saw, also, some of their washing machines. There was a splendid machines. There was a splendid assortment of cream separators, also, in the Dairy Building. One looked in vain for the washing machine, which will do the work machine, which will be a swell and with less labor and time than does the hands of the machanism of the specific control of th grounds were well filled with various farm machinery at work and at rest. Now their place is pied by the midway crowd. Now their place is occuare of really no benefit to the agricultural class, and are simply a means of taking the few cents of the foolish without giving any lasting benefit.

We followed the crowd and listened to the din of the trumpets and cow-bells. Saw the painted girls group themselves in front of the tents for the purpose of drawing the crowd. One could not help wondering why young and good-looking girls could be so foolish as to follow the example of the aborigines of this continent and plaster paint on their faces, blacken their evebrows and eyelashes and make themselves disagreeable in their attempt to beautify. Cleanliness

and youth are always attractive. Daubed faces are not clean, consequently are disgusting. Quite near this row of dime-catchers is the Dairy Building, where five girls and two boys show the picture of cleanliness and health, working at light, pleasant, health-giving work and making one of our most use ful articles of food. This room, to me, seemed the most attractive of the many special attractions of the show. The majority were dressed in pure white costumes, including cap, aprons and a towel pinned to the girdle and they were so neat and careful in their work that after wearing the suits through four churnings they were still presentable. In an hour and a half from the time the cream was brought in each competitor had churned, salted, worked and put up in one pound parchmentcovered bricks about ten pounds of butter and had scoured, scalded, etc., all utensils, both before and after using, and had wiped the floor. Who would not be the dairymaid on the farm if she were provided with a full set of untensils, a suitable dairy with easy access to hot and cold water?

In the Main Building there was the usual fancy work, expensive as to material and time and less attractive than the display in the art room, where in addition to the regular display of oil, water, crayon, charcoal and other pictures, there was a good collection of amateur photographs, depicting many beautiful scenes. Who would not rather go out with a camera than sit in doors doing needle work?

Other exhibits, which were attractive to the housekeeper, were the furniture displays, the bathroom fittings, the food preparations, which the dainty waiters were serving to the interested tasters, and "the other articles too numerous to mention."

M. E. Graham.

Six Things a Boy Should Know.

1. That a quiet voice, courtesy, and kind acts are as essential to a gentleman as to a gentlewoman.

2. That roughness, blustering, and even foolhardiness are not manliness. The most firm and courageous men have often been the most gentle.

3. That muscular strength is not health.

4. That a brain crammed only with facts is not necessarily a wise one.

5. That the labor impossible to a boy of fourteen may be easy to a man of twenty-one.

6. That the best capital for a boy is not money, but a love of work, temperate habits, simple tastes, and a heart loyal to his friends and his God.—South Dakota Educator.

Promises.

Once when I was very sick,
And doctor thought I'd die,
And mother couldn't smile at nee,
But it just turned to cry,
That was the time for promises;
You should have heard them tell
The lots of good things I could
have,
If I'd get well.

But when the fever went away,
And I began to mend,
And begged to eat the goodies
That Grandma Brown would
send,
They said beef tea was better,
And gave my grapes to Nell,
And laughed and said: "You're
mighty cross
Since you got well."
—Augusta Kortrecht, in the
August Century.

Methods of Inducing Sleep.

Dr. Steiner observed in Java method employed to induce sleep. It consists in compressing the carotid arteries. The operator sits otid arteries. The operator sits on the ground behind the patient, whose neck he seizes with both The index and middle fingers are then pushed forward into the carotids which are compressed toward the spine. The patient's respiration becomes more rapid and more profound and his head relaxes backward. The method is absolutely harmless, anæsthesia is rapidly obtained and the patient wakes promptly with no symptoms of nausea or malaise.

Dr. Steiner declares the method to be well known in Java, where it is used to relieve headache, sleeplessness, etc., and points out the fact that the carotid artery was known to the ancients as arteria soporifera, and that its name in modern Russian is "artery of sleep." He does not seem to know that the method is widely practised in India. Kipling's "Kim," for example, is put to sleep by a process of the sort. Dr. Steiner experimented upon 30 Javanese and was successful in all but five cases. He sat in front of the patient placing his right hand on the left, his left hand on the right side of the patient's neck. When the ends of his fingers met at the back of neck his thumbs back of and a little below the angles of the lower jaw. The beating of the carotid was felt, and then a moderate pressure toward the spine was applied. The loss of consciousness was complete and, in one case, an abscess was lanced without sensation on the patient's part.—New York Sun.

Of course the conductor never knew why she giggled when he remarked: "Careful, miss; always get off the car with your face in front!"—Baltimore News.

THE FARMING WORLD

Hints by May Manton.

WOMAN'S SAILOR BLOUSE, NO. 4107

To be made with Round or Square Collar.

Sailor blouses are always attractive and suit the greater number of figures to a nicety. The smart model shown is made of white linen with shield and trimming of white dotted with blue and makes part of a costume, but the design suits odd waists equally well and is adapted to all washable fabrics, to flannel, albatross and waisting silks.



4107 Sailor Blouse 32 to 40 bust

The blouse is cut with fronts and back only and fitted by means of shoulder and under-arm seams. To its open neck is seamed the big sailor collar that can be cut in round or square outline as preferred. The shield to which the short collar is attached, is buttoned round the neck and fastened to the waist beneath the collar. The sleeves are in the new bishop style with deep pointed cuffs.

To cut this blouse in the medium size 4 yards of material 21 inches wide, 3½ yards 27 inches wide, 3 yards 32 inches wide or 2 yards 4; unches wide will be required, with ½ yard for shield and stock collar.

The pattern 4107 is cut in sizes for a 32, 34, 36, 38 and 40 inch bust measure.

The price of the above pattern post-paid is only 10 cts. Send orders to The Farming World. Confederation Life Building, Toronto, giving size wanted

How to Buy a Pair of Gloves

In buying gloves there are more important considerations than their color and the number of buttons to be considered. Black gloves are generally less elastic than white or colored ones, and cheap grades are dear at any price.

Dressed kid usually retains its freshness longer, and is more durable than suede. The best and most serviceable kid is soft, yielding and elastic.

A glove so small that it cramps the hands and prevents grace of motion gives poor service. Short fingered gloves are ugly, and certain to break soon between the fingers, if not at their tips.

The way in which a glove is first drawn on and shaped to the hands has much to do with both its beauty and durability. Unless you have ample time, do not have them fitted at the shop, but at leisure draw them on as here recommended, and, if possible, wear them half an hour without closing the fingers.

When the hands are at all moist, they should be powdered. Insert all the fingers and work them on evenly, leaving the thumb loose until the fingers are fully in place. Then insert the thumb and work the glove down smoothly over the hand.

In buttoning a glove, the greatest strain comes upon the first button, so before attempting to fasten this, button the others, commencing with the second one, then the others, lastly the first.

Do not begin at the tips of the fingers to pull them off. Turn back the wrists and draw them off inside out, but on no consideration leave them in this shape or roll them. Turn them right side out, smooth lengthwise, and put away by themselves with a strip of flannel under and between them.

A glove mender of wood, celluloid or silver in the shape of a finger should be in every sewing basket, as well as glove thread in a variety of colors and shades. The seams of gloves should be restitched as soon as a stitch breaks, using fine cotton, never silk.

To mend a tear, buttonhole stitch closely around the edges once or twice, as the size of the rent may require, and then join the edges together.

Save the buttons from discarded gloves to replace lost ones. They often match perfectly.—New York Journal.

Worn thin?

No! Washed thin! That's so when common soap is used.

SUNLIGHT SOAP REDUCES

WOOD FIGRAVING,
PHOTO PAING,
ENGRAVING,
HALF TONES
168 BAY ST
J.L. JONES TORONTO

WANTED over locality throughout Canada to introduce a special conspicuous places, also distribution small advertising matter. Commission or salary 50,00 per month and or exceed 32,00 per day. Steady employment. Steady with the constraint of the properties of the constraint of the

Teacher.—Johnny, can you tell me how iron was first discovered.

Johnny—Ves sir

Johnny.—Yes, sir.
Teacher.—Well! Just tell the
class what your information is on
that point.

Johnny.—I heard pa say vesterday that they smelt it.—Motherhood.

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A PAPER FOR FARMERS AND STOCKMEN.

D. T. McAINSH, J. W. WHEATON, B. A. -

The Parming World is a a paper for farmers and stockmen, published weekly, with illus-trations. The subscription price is one dollar a year, payable in advance.

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QUESTIONS AND

ANSWERS A CONTRACTOR CONTRACTOR CONTRACTOR

Ringworm on Cattle

R. P. asks: "Can you give me a remedy for ringworm on cattle and how to use it?"

Various remedies are prescribed for ringworm on cattle. With the exception of arsenical preparations, anyone of the numerous sheep dips may be used. The following may also be tried:—Put one wineglassful of Jeyes' fluid or Little's phenyle into one quart of cold soft water, mix well together, and rub well into the affected parts once every four or five days. Equal parts of paraffin oil and linseed oil mixed and applied as above at times answers well.

A Boys' Fair

There is located on Broadview ave., Toronto, what is known as the Broadview Boys' Institute where a number of city boys are being educated and trained in the growing of grains, roots, flowers, etc., and in managing small plots of ground with a view to producing the largest quantity and the best quality of farm products. On Saturday Sept. 20th, the Institute held its first fall fair. The attendance was so good that the event will likely be conducted upon a much larger scale next year. The fair opened at 10 a.m. and the children of the district were there the Hon. G. W. Ross dropped in and inspected the exhibits. The

Keep your eyes open and be sure the you ask for Perry Davis' Painkiller you go sat that and nothing else. Use it promptly to currenps, diarrhea and all other bowel complaints is

exhibits were shown in Strathcona Hall, and the dogs, pigeons, rab-bits and poultry were shown under canvas on the lawn. The agricultural display was exceedingly interesting. The products were grown on the miniature farms. Each boy has a farm and strives to outvie his co-workers in making it a success. Mr. C. A. Zavitz, Experimentalist, Ontario Agricultural College, was judge of the agricultural exhibits.

Hay Growing in British Columbia

BY G H. HADWEN.

Grand Prairie lies to the southeast of Kamloops, its nearest point on the Canadian Pacific R. R. being Duck's Station, distant about eighteen miles. There is in the valley some 10,000 acres of excellent land, the few pines (ponder-osa, a very handsome tree) giving the country a very park-like ap-pearance. The principal crops here are grain and hay, the former being irrigated, and the latter, to some extent, also. This year the yield will be very good, and an immense quantity of hay is being put up. Labor, however, is scarce and everybody is working short-handed. In view of the distance from markets, it is obvious that, apart from the considerations of good farming methods, greater attention will be turned to live stock. This district already enjoys the reputa-

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Farm in Township of Blandford, in the County of Oxford, 300 acres, brick residence and large frame outbuildings, about 200 acres cleared, 100 acres beautifully wooded, suitable for stock farm; part of old Vansittart Estate at Eastwood, four miles east of Woodstock; schools, church, post-office, stores and all conveniences in village adjoining, terms. Apply to Will be sold on easy

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BROWN Leghorns, Prolific early layers; Strain won at Pan-American. Stock for sale—Minor-cas, Barred Rocks, Choicest Strains, Eggs in season. IOHN B. PETTIT, Fruitland, Ont.

BUFF ORPINGTONS, imported this season from England, 8 birds cossing \$128. Solid buff eggs 53 per 13. Also breeder of Brown. Legharts, sous layers. Barred Rocks, E. B. Thompson's White toous layers. Barred Rocks, E. B. Thompson's White wyandottes, Indian Games, true blocky type for ex-port. I won leading prizes and sweepstakes at the Onland and Beartford shows. Incubator eggs \$2.50 per 159. J. W. Classe, Importer and Breeder, Onlandag, Ont.

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It possesses all the strong points found in other Cream Separators, while it is free from objection-able points that make other machines hard to run, and a source of trouble to those who operate and clean them.

The National is simple in construction, handsome in design, and finely finished; easy to operate, and few parts to clean; a perfect skimmer with a larger capacity than any other separator at the same price. Every machine guaranator at the same price. teed to do good work.

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Give the "National" a Trial.

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Creamery Supply Co., Guelph, for South-western Ontario. T. C. Rogers Co., Guelph, for Ontario North and East. Jos. A. Merrick, Winnipeg, for Manitoba and N. W. T.

The Raymond Mfg. Co. of Guelph, Limited GUELPH, ONTARIO.

Exhibit in Dairy Building, Toronto Exhibition.

tion of being a great hog raising country, and probably over 2,000 hogs are turned off here every winter from a comparatively small portion of the valley. Considerable improvement might be made here and better pigs kept, but even as it is, the pigs are well finished on peas, and there is no risk here of the animals being fishy, so that they are fairly well liked by the coast butchers. It would be a It would be a good idea to have an address on the bacon type illustrated by live and dead carcasses, either here or in Kamloops, as the industry is bound to develop considerably before long.

In the first place, clover makes, with the assistance of irrigation, excellent pasture; secondly, grain will be cheap on account of the long haul to market, and in some cases the industry might be assisted by the growing of rape on the

stubbles.

In regard to the hay, and this applies not only to Grand Prairie in particular, but includes the whole Thompson Valley and nearly all the irrigated portions of British Columbia, it may safely be said to be of exceptionally good quality.

Prof. Grisdale, of the Experimental Farm at Ottawa, while here last spring, inspected some hay going to South Africa, grown, I believe, at Shuswap. He told me "that he never saw better."

In the dry atmosphere the hay retains its color when well made, which makes it very attractive. The important question is to put it up as cheaply as possible, which means with the least possible amount of labor. At present, it seems to be the ordinary method to put it in large cocks, which takes up a great deal of time. So far, I have not seen either a hay loader or a delivery rake at work, and should consider it well worth while to make a trial of the system which includes the use of these implements.

In further explanation it may be said that the rake follows mower, leaving the hay in a small windrow. The loader is hitched to the back of the wagon, and going along the row picks up the hav and drops it on the rack. It will be seen that a little different arranging of the wagons and men will be required, and it will be necessary to follow the mower up closely every day, but it does away with the tedious and expensive hay cocking. In unloading, it is cocking. In unloading, it is claimed that two separate forks, one in each end of the load, and connected with the attachment for grain slings, and one sling laid on the bottom of the rack to clean up, will take off a load quicker than any other system.

In the absence of the side delivery rake a hay tedder should be used on heavy crops, especially in alfalfa or clover, as it is impossible economically to otherwise cure it evenly and save the leaves which are most nutritious parts.

On the road to Duck's are one

or two places recently taken up on higher ground, and good crops have been grown so far without irrigation, one of these, I am informed, taken up this spring on Dominion land, the land ploughed for wheat and seeded before being fenced, will yield 300 tons of wheat.

This and the remarkable crop grown on the commonage near Vernon, show that we have much to learn yet as to what the high lands of British Columbia can produce. The crops on the Bostock ranch and along the Thompson to Shusway are all very good, and there will be a large amount of hay, including a great deal of last year's, which there are not at present enough cattle to consume, nor is there likely to be much demand for the same unless there should be an exceptional winter.

Consolidated Rural School

first consolidated rural school for Ontario will likely be located in Pelham Township, Welland County. These schools have been made possible through the generosity of Sir Wm. C. donald. A public meeting addressed by Prof. Robertson and Hon. Mr. Harcourt was recently held in that district. At present the eight public schools at Pelham are at-tended by some 300 pupils, and it is believed that all of these can be gathered into one school. The cost of the school and its equipment and all extra charges above the present school rates will be borne by Sir Wm. C. Macdonald and in addition to the usual studies domestic science, nature study and manual training will be taught.

United States Apple Crop

The Official Crop Reporter, issued by the United States Department of Agriculture, in speaking of the conditions of the apple crop in the United States, says that of the States having four million trees and upwards in apples, 11 report an improvement in condition during August, and all but 6 of the apple-growing States report conditions ranging from 7 to 32 points above their tensers are says.

above their ten-year averages.

The State Weather Bureau reports that the outlook in New York is for considerably less than an average yield of apples.

Buyers are snapping up desirable apples throughout western part of York State. A Kenyon man has sold 2,000 barrels of bulk apples at \$2 a barrel; Albert Wood, Carlton, his orchard of 700 trees for \$7,000; the Pratt estate, Carlton, gets \$2.50 per barrel for firsts and seconds; an East Albion man, \$2 for everything barrelable; I. Cooper of Carlton, \$2,500 for a 9-acre orchard; several other orchards sold at from \$2,000 to \$3,000.

The Illinois Orchard Co., of Kankakee, Ill., has sold the apples in two orchards for \$11,500. These orchards total 125 acres, and are situated in Clay and Richland counties. The apples were of the Ben Davis and Jonathan varieties.

STOCK

DAVID McCRAE, Janefield, Guelph, Canada, Importer and Breeder of Galloway Cattle, Clydesdal-Horses, and Cotswold Sheep. Choice animals for sale

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Choice Young Bulls and Ram Lambs for sale. Write for prices.

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Scotch and Scotch-topped choice young cows and heifers for sale at moderate prices.

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ROCK SALT for horses and cattle, in ton and car lots. Toronto Salt Works, Toronto

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Humane Swine V, Stock Marker and Caif Deborner. Stops swine of all ages from rooting Makes Solifferntear marks, all sizes, with same blade. Extracts Horns. Testimonias fire. Price 91. 40 or send \$11 fortrial: if it works, send balance. Pat'd U.S. May 6, '02 for 17 yrs. Canada Dec. 17, '01, 18 yrs. FARMER BRIGHTON, Fulfield.





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PURE-BRED STOCK

NOTES AND NEWS FROM THE BREEDERS

These columns are set apart exclusively for the use of breeders of pure-bred stock and pouttry. Any information as to importations made, the sale and pur hase of stock and the condition of first and facts that is not in the nature of an advertisement will be welcomed. Our desire is to make this the medium for conveying information as to the transfer of pure-bred animals and the condition of live stock throughout the country. The co-operation of all breeders is sarnestly esticited in making this department as useful and as instructing as possible. The editor reserves the right to eliminate any matter that he may consider better suited to our advertising columns.

Horses

That the horse business in Canada is in the ascendant cannot be doubted. This is evident from the increased demand there is for improved breeding stock. A great many horses, chiefly stallions, were disposed of at the recent fairs for breeding breeding purposes. Among the more noted of these sales was one which transpired at the London fair and was made by Mr. J.B. Hogate, Sarnia, who sold his imported Clydesdale stallion, "Corner-stone" to Messrs. Chas. Groat and John Luke, of Oshawa, Ont., for the handsome figure of \$2,500. This horse and his mate, "Royal Success" were imported by Mr. Hogate this season with a number of others and though they were on exhibition at London, had only been out of quarantine a few days. They are an excellent pair of Clydesdales, dark in color and of the type that get the very best of colts. Cornerstone is a four-year-old, weighing about 1,900 lbs. and was bred by W. S. Park, Bishopton, Scotland. His sire is Carthusian and his grandsire Castlereagh. His dam is Bonnie Jean III and his dam's sire Prince of Fashion.

Cornerstone and his mate Royal Success were shown in the four-year-old and upwards class at London, and very strange to say did not figure in the list of awards as a large number of those who saw the judging done thought they should. But this was not all, as the following extract from the London Daily News of Sept. 19th, shows:

"Indignation is rife in the horse sheds at the Western Fair over a decision two of the horse judges gave on Tuesday. It appears that in the stallion class, 'Cornerstone' a magnificent animal belonging to Mr. J. B. Hogate, the great importer of Sarnia, was thrown out. The first prize was awarded to an

animal which was afterwards offered for sale at \$1,500. At the same time Mr. Hogate received an offer of \$2,500 for 'Cornerstone,' which was accordingly sold for that price. One thousand dollars difference in value between the first-prize horse and a horse which was thrown outside the prize money!"

Here we have the peculiar situation of a horse offered for sale at \$1,500 winning first place over another horse that sold afterward for \$2,500. It is certainly up to the judge to tell why he placed the lower priced horse first. The true value of an animal can always be gauged by the price it sells for in the open market and a judge should have some pretty good reasons for placing the lower priced animal ahead of the higher priced one. His reasons would certainly make interesting reading and we should be very glad to have them. They evidently did not have much weight with the gentlemen who purchased Cornerstone for \$2,500.

The North British Agriculturist dealing with a recent shipment of Clydesdales to Canada says: "Mr. Neil Smith, Brampton, On-

Arr. Nell Smith, Brampton, Ontario, shipped from Glasgow on Saturdav three useful horses purchased from Mr. James Picken, Kirkcudbright. One of these was the noted horse Right at Last, 8947, which, in the hands of Mr. John Crawford, Beith, on one occasion came very nearly winning the Glasgow prize. He was bred by Mr. James Walker, Malzie, Newton-Stewart, and, although now well up in years, is still fresh and active. The others were a twoyear-old and a yearling, both being straight, level, well-colored animals, with good feet and legs."

Stock Ads. in THE FARMING WORLD bring returns.



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The worst possible spavin can be cured in 45 minutes. Risplocas, Curbs and Splits just as quick. Not painful and never has failed. Detailed information about this new method sent free to horse owners.
Write today. Ask for pamphlet Na. 104
Frenies Bros. Hemistr. 36 Frant St. West, Torosto, Ost.



When an animal is all run down, has a rough coat and a tight hide, anyone knows that his blood is out of order. To keep an animal economically he must be in good health.

DICK'S BLOOD PURIFIER

is a necessity where the best results from feeding would be obtained. It tones up the system, rids the stomach of bots, worms and other parasites that suck the life blood

Nothing like Dick's powder for a run down horse.

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IT PAYS.
For full particulars address

THE MARITIME FARMER.

Sussex, New Brunswick

Live Stock Shipments

Statement of live stock ship-ments from Port of Montreal, for week ending Sunday, September 21st, 1902.

				Catt e	Sileri
Sept.	18	Montreal	London	312	1.060
	18	Lake Erie	Liverpoo	311	-
••	19	Lakonia	Glasgow	295	300
••	20	Cervona	London	426	1.112
••	20	Pomeranian	London	220	530
	20	Kingstonian, Quebec	London	147	
**	20	Numidian	Liverpool	213	
••	21	Montcalm	Bristol	220	160
					•
				2 144	3,162

The Hen as an Income Producer

The agricultural reports for some of the Eastern States, recently published by the Census Office, contain statistics of the production of eggs and poultry, which, while not to be taken as indicative of the conditions prevailing in other states or in the country as a whole, are full of significance and deserve careful attention.

In the states reported upon, the value of the poultry and eggs produced in 1899 was from about onetwelfth to one-sixth of the total value of all farm products, ranging from 8.1 per cent. in Maine to 16. per cent. in Rhode Island. Of the total value of all animal products, it formed from about one-fifth to one-third, ranging from 18.9 per cent. in New Hampshire to 37.2 per cent. in Delaware.

The ratio between the value of the poultry and that of the eggs produced during the year is worthy of note. The egg production was worth 68.1 per cent. of the value of both eggs and poultry produced in Maine, more than 60 per cent. in other New England States, 46.1 per cent. in New Jersey, and 45 per cent in Delaware.

A comparison may be made between the increase in the production of eggs during the ten years from 1880 to 1890 and the increase in the following ten years-1890 to 1900. The increase during the former decade in Maine was 33 per cent; in the latter 42 per cent. In New Hampshire: Former, 51 per cent.; latter, 39 per cent. In Massachusetts: Former, 36 per cent.; latter, 45 per cent. In Rhode Island: Former, 29 per cent.; latter, 59 per cent. In New Jersey: Former, 20 per cent.; latter, 49 per cent., and in Delaware, during the former decade, 56 per cent., and in the latter, 61 per cent.

It appears, therefore, that the increase in egg production in the east has been much greater than that of population, and is an ac-celebrating one. In the States mentioned, it is now sufficient to double itself in twenty years.

More Spirit .- A minister opened the Sunday School class with the well-known hymn, "Little drops of In water, little grains of sand." In the middle of the first verse he stopped the singing, and complained strongly of the half-hearted manner in which it was sung. He made a fresh start, "Now then," he shouted, "little drops of water, and for goodness sake put some spirit into it "

INTERNATIONAL STUD BARNS SARNIA, ONTARIO J. B. HOGATE. Proprietor



Our importation of Clydesdale and Shire Stallions and Spanish Jacks arrived Sept, 4th in fine condition. The Jacks range in age from 2 to 4 years old. The Stallions are bred from the best Sires and 1 mm of Scotland. We pay cash for our stock; that enables us to buy where we can buy the cheapest. We import larger numbers than any firm in Canada, therefore can save you money by seeing our stock before you buy.

Our Jacks range in height from 11½ to 13½ hands high. H. H. COLISTER, Manager and Salesman, Sarnia, Ont. I am prepared to make terms to suit purchasers.

Dispersion Auction Sale

Twenty-seven Ewes. REGISTERED SHROPSHIRE SHEEP Monday, October 13th, 1902

This flock has been shown at the beal fairs for the last three years, and have won their share of prizes. They won nineteen firsts at five fairs in 1901.

Floce consists of two-shear ram, imported, bred by Wm. Thomas; two two-shear rams, home bred; two shearling rams, home bred; sixteen ram lambs, sixteen breeding ewes, five shearling ewes by imported ram and six ewe lambs. Flock in excellent condition.

Farm is about ten minutes' walk from Streetsville Junction, C.P.R.; twenty-two miles west of Toronto, Trains raive from east, 841 a.m., north, 1903 a.m.; west, 1130 a.m. Trains leave for west, 5 p.m.; north, 6 p.m.; east, 8.45 p.m. Lunch at noon. Sole to commence at a o'clock sharp.

OHN SMITH, M.P.P., H. H. SWITZER. Auctioneer Streetsville, Ont.



FRED. RICHARDSON of SCHITH & RICHARDSON OF Columbus, Ont.

Will return from Scotland about August 20th with six Clydesdale Stallions, including "Hopewell" (11375), full brother of the great Glasgow winner, "Hiawatha," and "Lavender" (11349), out of the same mare as "Royal Cairnton," the Chicago three-year-old winner in 1901, and "Pioneer" (11131), sired by "Sir Arthur," owned by Whitby Clydesdale Association, and a pair of young mares for Mr. orge Gormley, Unionville.

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OAK LODGE YORKSHIRES



Years of CAREFUL BREEDING have made the OAK LODGE YORKSHIRES the Stand-ard of Quality for IDEAL BACON HOGS. The championship against all breeds has been won by this herd for 4 years at the Pro-vincial Winter Fair, on foot and in dressed carcase competition. J. E. BRETHOUR, Burford, One

Market Review and Forecast

Office of The Farming World, Confederation Life Bldg.

Toronto, Sept. 29th, 1902.

General business conditions continue favorable and the fall trade is opening up well. Money is still scarce in the country especially where farmers depend upon the grain crop for a revenue. Money is firmer and higher at 6 per cent, on call. This firmness, however, will likely only be of a temporary character and after the rush is over will return to normal again.

Wheat.

In the general tone of the wheat situation there is nothing very new. A more active movement in wheat is reported in the Western States and we may soon look for new Manitoba wheat coming this way. This wheat this year is said to be most excellent in sample and should advertise Canada in the world's market as never before. Speculators have been active at Chicago during the week chiefly in Sept. wheat which advanced for on Monday last to 85c. A pecu-liar condition of affairs, and it shows that the Chicago boom is entirely due to speculation, is that September wheat sold at 141c per bushel higher in Chicago than in New York. Outside of this there is no boom and prices have not advanced nor are they likely to to any great extent. The English market is quiet. The total amount of wheat and flour in sight is equivalent to 52,194,000 bushe's as compared with 65,840,000 bushels, the world's supply in sight at this

time last year.
Locally the market is quiet though steady at about last week's quotations or 66c for red and white east, and 65c to 65½c middle freights 62c for goose and 64c for spring file east. New No. 1 Manitoba hard is quoted at Winnipeg at 70c, and No. 1 Northern at 68c. On Toronto farmers' market red and white bring 69c to 73½c, goose 62c to 65c, and spring file 66c a bushel.

Oats and Barley.

The oat market continues on the downward grade, though it looks now as if it had about reached the level at which the bulk of this year's crop will be disposed of. New oats are quoted at Montreal at 32c afloat and here at 27½c to 28½c at outside points. On the farmers' market here oats bring 34c to 35c a bushel.

The barley market is quiet. 38c to 40c are the quotations here as to quality and point of shipment. On Toronto farmers' market barley brings 42c to 44c a bushel.

Peas and Corn

The pea market is quiet with a slight falling in price at Montreal for the new crop, where quotations are 77% to 77%. Here quotations are 68% to 71% at outside points.

Poultry and Eggs Wanted

OHIOMENS DUCKS TURKEYS GEDSE Empty crates forwarded on applica-

Highest market prices paid, Correspondence solicited.

Toronto Poultry and Produce Co.

T C Office 470 YONGE BT., TORONTO C De december of the production of the december of the decem

The corn market is quiet. Montreal quotations are 70½ to 71c for car lots in store. Canadian yellow is quoted here at 61c west, and American at 68c for No. 3 yellow in car lots Toronto.

Bran and Shorts

Ontario bran is quoted at Montteal at \$14.00 to \$14.50 and Manitoba bran at \$15.00 to \$15.50 in car lots and shorts at \$20.00. City mills here sell bran at \$15.00 and shorts at \$20.00 in car lots f.o.b. Toronto.

Potatoes and Beans

Potatoes are becoming more plentiful owing no doubt to a desire to get rid of supplies before rotting. At Montreal car lots are quoted at 65c to 70c per bag. Here car lots are quoted at 70c to 75c with lower values expected. On Toronto farmers' market potatoes bring 65c to 70c a bushel.

The bean market is quiet at \$1.35 to \$1.40 for primes at Montreal. The New York market is lower at \$1.90 to \$1.92% for choice.

Beede

The seed market remains unchanged. Montreal quotations bring \$14.00 to \$17.00 per cwt. for alsike, \$9.00 to \$10.50 for red clover and \$8.00 to \$9.00 for timothy.

May and Straw.

The hay market rules steady with a very good business doing. At Montreal No. 1 timothy is quoted at \$8.00 to \$8.50, No. 2 \$7.00 to \$7.50 and clover at \$6.50 to \$5.00 per ton in car lots. A quantity of loose hay has been delivered at \$6.00 to \$6.25 per ton. Here a good demand is reported at \$9.00 for No. 1 timothy in car lots on track and \$5.50 for baled straw. On Toronto farmers' market timothy brings \$12.00 to \$15.00, clover or mixed \$8.00 to \$9.00 and sheaf straw \$11.00 per ton.

Eggs and Poultry

Dealers complain that the export egg trade has been very disappointing this season owing to prices being too high on this side. Especially is this true of fresh stock. Exports have fallen off this season 58 per cent as compared with last year's and 70 per cent, as compared with year previous. The Montreal market is somewhat unsettled prices being as high at country points as in the city. No. 1 candled eggs are quoted at 16½ to 17c. Here firmness in selects continues at about 17c in case lots. On Toronto farmers' market new laid bring 18c to 19c and held stock 14c to 15c a dozen.

The demand for poultry is as vet only a local one. The weather is not yet cool enough to admit of bringing in dressed poultry in large quantities. Most of the supplies come alive and are killed and dressed here. Live chickens and ducks bring 50c to 70c and hens at 40c to 50c a pair, and turkeys at 11c to 12c a lb. in large lots. On Toronto farmers' market live chickens bring 50c to 85c, dressed 60c to 90c and ducks 60c to 90c and and turkeys 11c to 12c and geese 6c to 8c a lb.

Until further notice the Toronto Poultry and Produce Co., 470 Yonge street, Toronto, will for poultry and eggs pay the following f.o.b. at shipping point:

Chickens (this year's) per 10. 7c, chickens (last year's) per 10. 4c, turkeys (this year's) per 10. 8c, ducks per 10. 7c, geese 6c per 10., eggs per doz. 15c. Empty crates egg cases and butter boxes are supplied tree of charge, the outgoing charges being paid. The net express charges are paid on butter and eggs.

Fruit

In a jobbing way apples are selling at \$1.75 to \$2.00 a bbl. and peaches at 30c to 40c a basket at Montreal. At Toronto fruit market apples bring \$1.00 to \$1.50 a

100,000

CHICKENS, DUCKS and TURKEYS wanted for local and foreign market. We pay highest price, supply crates and remit promptly by P.O.O. Correspondence solicited

The Ontario Poultry Produce Co.
LIMITED
17 Carlaw Avenue
TORONTO

bbl. and peaches at 20c to 60c a basket.

Cheese

The cheese market has maintained its advance of a week ago and quoted values are a point or two higher. At the local markets during the week prices have ranged from 10 5-16 to 10 5 with the bulk selling at 10 5c. At Brockville on Thursday all the cheese offered was disposed of at 10% which would mean IIc at Montreal. Many believe that present prices will be maintained till next spring, but this remains to be seen. One strong factor in the situation is the comparativily small accumulation of stocks on both sides of the Atlantic. Cables are strong and higher though they have not advanced sufficiently as yet to make up for the rapid advance on this side during the past ten days. The total exports from Canada and the United States this season show a falling off of over 16,000 boxes as compared with the same period of 1901. The figures are:

	1901. Boxes	Boxes.
Montreal I New York Portland	124,781	1,235,080 206,498 161,945
Decrease	,587,495 16,028	1,603,523

Butter

The butter exports so far this season from Canada and the United States show an increase of 16,419 pkgs. the figures being as follows:

1902. 1901.

Increase..... 360,282 343,863 16,419

The butter market has advanced be per lb. during the week and is firm at the advance. It looks now as if all of our Canadian fall butter will be wanted in England. The Trade Bulletin deals with last week's trade as follows:

"The exports during the past week were 32,219 pkgs against 32,-923 pkgs for the week previous, making 65,142 pkgs for the past two weeks and 100,981 pkgs during the past month. These heavy shipments have reduced stocks here very materially, and have been tak-en on the other side to fill the gap caused by the falling off in the Danish, Irish and Russian imports; and this together with the expected decreased shipments from Australia have induced more liberal purchases in Canada for English account. It looks now as if all our surplus make of fall goods would be want-ed, provided of course that prices are not hoisted too high, in which case the demand would of course soon be checked. After the active buying of the past few weeks the present quiet interim is only what might be looked for, caused no doubt by the recent advance in values. The United States has not been in the export swim, having put out only a few weekly driblets

that are scarcely worth noticing. Our shippers should do their level best to hang on to the demand. and not allow it to slip from them by maintaining too stiff an upper lip in the matter of prices as they have frequently done before. Today 21c is an extreme price for choice Eastern Townships creamery which shippers say they cannot pay and make a profit, except for an occasional pet factory. The great bulk of the best quality of creamery which has lately been marketed has averaged 20 1/2 to 201/c; and this morning a lot of about 120 boxes of choice Eastern Townships sold at 20%c, after the factoryman failed to obtain the top-notch of his expectations, namely, 21/c. Two lots of very fine Western creamery sold at 20c and 2014c. In dairy butter, sales of straight lots of Western sold at 13%c to 14c; but the demand for this class of common stock is slow. There has been some enquiry for selected Western which has changed hands at 15½c to 16c."

Choice creamery and good dairy are selling well here at 19c to 20c for creamery prints and 18c to 19c for solids and 15c for choice dairy tubs and pails, and 15c to 16c for lb. rolls. On Toronto farmers' market pound rolls bring 18c to 19c and crocks 15c to 17c a lb.

Cattle

The cattle market seems to have a downward tendency. On this point the Breeders' Gazette of last week says:

"Prices of beef cattle are undoubtedly trending downward. The demand is good enough to absorb the supply, liberal though that is, but there are too many cattle coming. That is the whole truth. For the official week closing last Saturday the run amounts to right at 64,000 of which some 22,000 were rangers. The market for prime beef was good as usual, all buyers having orders for thick-fat steers, but when it came to the 'prettygood' sorts it was different. In fact it may be said that the bulk of the grain-fed steers sold during the week for between \$6 and \$7. It is not thought that any cattle would now bring 9 cents a pound. Top for the week was \$8.65 paid for some Angus grades that did not scale 1,500 pounds apiece. The supply of rangers was disposed of but rather more slowly than last week. The top was \$5.50 for some 1,200pound Dakota steers which were very good. The demand for feeders was brisk as usual and absorbed everything from the range not fat enough to kill. Texas cattle were also in liberal supply and sold readily though at about 10 cents less money than last week. Native cows and heifers were slow sale all week, most of the good butcher stuff going between \$3 and \$4. Range stock of this sort seems to be preferred by buyers and the result is a rather slim margin on all grassy native stuff. A large volume of business was done in feeders during the week and it looks as though there would be plenty of finished beef after a while. The best feeders from the ranges meet with active competition and sell to very good advantage when compared with the killing steers."

At Toronto cattle market on Friday the receipts were: 1,500 cattle, 1,500 hogs, 2,000 sheep and lambs and 50 calves. The deliveries of live stock during the week totalled up to 300 cars. The quality of the fat cattle was only fair and trade was slow, the supply being greater than the demand. Space for exporters being limited for immediate shipment, these sold 25c to 35c per cwt. lower than on Tues-day. All classes of butchers' cattle sold at lower prices, from 15c to 25c a cwt. except for really prime quality. There were few outside buyers on the market. Dealers from other Ontario points who have been in the habit of coming to Toronto for their supplies have been absenting themselves of late so that the demand for the butchers' trade has been confined to the local dealers here. Should the run of cattle on Tuesday next be as large as on Friday existing prices may go still lower. Feeders of all kinds as well as stockers are 25c to 40c lower. Milch cows are firm and good veal calves are wanted at firm prices. The bulk of the export cattle sold at \$4.90 to \$5.35 per cwt.

Export Cattle.—Choice loads of heavy shippers are worth from \$5.25 to \$5.50 per cwt. medium exporters \$4.50 to \$5.00. Heavy export bulls sold at \$4.25 to \$4.60 and light ones at \$3.75 to \$4.00 per cwt., choice export cows

sold at \$3.75 to \$4.00 per cwt.

Butchers' Cattle.—Choice picked
lots of these, equal in quality to
the best exporters, weighing 1.075
to 1,150 lbs. each sold at \$4.65 to
\$5.00 per cwt. Choice picked lots
of butchers' heifers and steers 950
to 1,055 lbs. each, sold at \$4.25 to
\$4.60, good cattle at 3.75 to
\$4.20, medium at \$3.40 to \$3.65,
and inferior to common at \$2.40
to \$2.85 per cwt. Loads of butchers' and exporters' mixed sold at
\$4.20 to \$4.40 per cwt.

Feeders. — Steers, 1,000 to

Feeders. — Steers, 1,100 to 1,100 lbs. each, are worth \$4.00 to \$4.50 per cwt., and light feeders, 800 to 900 lbs. each, \$3.50 to \$3.75 per cwt.

\$3.75 per cwt.
Stockers.—Well bred young steers weighing 500 to 700 lbs. each, are worth \$3.00 to \$3.25, and of colors

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Dres all kinds of fruit
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THE GRIMM MFG. CO., 84 Wellington St., MONTREAL and those of inferior quality at

\$2.00 to \$2.75 per cwt. Calves.—At Toronto market good to choice calves bring \$3.50 to \$5.50 per cwt. and \$3.00 to \$10.00

Milch Cows.-These sold at \$35 to \$54 each.

Sheep and Lambs

Erick Bros., East Buffalo, in their circular to drovers of Sept. 25th in regard to Canada lambs

"Market has been weak and lower in the week-still, the close to-day was strong on the basis of \$5.25 to \$5.40 for good to choice lambs; the culls and buck lambs are being thrown out and sell generally at 5c a pound. The trade is closing firm with but few here and de-mand unsatisfied."

The run of sheep and lambs at Toronto on Friday was large. Prices for export sheep were well maintained but lambs were lower. Spring lambs sold at from \$3.00 to \$3.40. Sheep sold at \$3.50 to \$3.65 per cwt. for ewes and \$2.50 to \$2.75 for bucks.

Prices for hogs though receipts have been large, remain unchanged at \$7.00 per cwt. for select bacon hogs and \$6.75 for lights and fats.

For the week ending Oct. 4th, The Wm. Davies Co., Toronto, will pay \$6.87\% for select bacon hogs, \$6.62\% for lights and \$6.62\% for fats.

The Montreal market is easier. Packers there are paying \$6.75 to 6.87% per cwt for bacon hogs.

The Trade Bulletin's London cable of Sept. 25th, re Canadian bacon, reads thus:

"The market is firmer and higher with an advance of 2s. per cwt. for Canadian; and a fairly good de-mand is reported."

Horses

Business at Grand's last week was on the whole only fair. Good prices were got for the best horses chiefly for some high-class carriage horses from Quebec. A gelding 16 hands high and five years old sold for \$185, a brown gelding 15.3 hands high \$180, and a brown gelding 16 hands high for \$260. These were in the pink of condition, well bred with good action. Second hand horses sold low at from \$25 to \$75 each.

As announced on front cover this week a big sale of high grade Per-cherons and Shires will be held at Grand's next month. These comprise a breeder's outfit from this year's colts to brood mares, 200 in all. All are from imported or domesticated stock and are consigned by W. R. Dobbie, Pincher Creek, N.W.T.

"Pooh!" said Daisy, scornfully. "The idea of your being afraid of a poor old house-dog! Why, he eats out of my hand!" "I don't doubt it," replied Burroughs, dubiously, "but what I am afraid of is that he may take a notion to eat out of my leg."

.NEW FARM BOOKS..

HE SOIL: Its Nature, Relations and Fundamental Principles of Manage ment. By F. H, King, Professor of Agricultural Physics in the University of

303 Pages-45 Illustrations-75 Cents.

" A new book of first importance to every farmer. Its importance cannot be overestimated.

ERTILIZERS: The Source, Character and Composition of Natural, Home-Made and Manufactured Fertilizers; and Suggestions as to Their Use for Different Crops and Conditions. By Edward B. Voorhees, Director of the New Jersey Experiment Stations, and Professor of Agriculture in Rutgers Second Edition-335 Pages-\$1.00.

This book discusses the difficult questions of fertilizers in such plain and untechnical lang uage that those who are wholly unlearned in chemistry can use it. There are no elaborate tables. The book instructs upon the fundamental principles of the use of fertilizers, so that the farm er is able, when he reads it, to determine for himself what his practice shall be. It is not an advocate for commercial fertilizers, but tells simply and directly what the truth is respecting their

THE PRUNING BOOK: A Monograph of the Pruning and Training of Plants as Applied to American Conditions. By L. H. Bailey, Professor of Horticulture in the Cornell University.

Third Edition-545 Pages-331 Illustrations-\$1.50.

Until the appearance of this book, there had been no complete and consistent discussion of pruning. Professor Bailes considers fully the philosophy of the subject, showing why we should prune, with such statements of experience and observation as will enlighten the reader. It states principles; such that the the various practices of pruning are considered in full detail, and a wast fund of car chilly collected data is uade serviceable to the reader. The illustrations are numerous and remarkably convincing.

MILK AND ITS PRODUCTS: A Treatise upon the Nature and Henry H. Wing, Assistant Professor of Dairy Hurbandry in the Cornell University.

Third Edition—311 Pages—33 Illustrations—\$1.00.

In this volume the whole field of dairying is intelligently considered. The production and character of the lacteal fluid are first discussed, and then in order are taken up the marketing of milk, the production and handling of butter, cheeve, and all the products of the dairy. Although the book is up to care in its science, it is none the less a complete guide to modern dairy practice. The illustrations serve to point the practical recommendations of the text. No recent work or dairying has been so well received as this.

THE FERTILITY OF THE LAND: A Summary Sketch of the Relationship of Farm-Practice to the Maintaining and Increasing of the Productivity of the Soil. By I. P. Roberts, Director of the College of Agriculture, Cornell University.

Third Edition-421 Pages-45 Illustrations-\$1.25.

This work, written by one who has been termed "the wisest farmer in America," takes up the treatment of the soil from the standpoint of the farmer rather than that of the scientist. It embedies the results of years of careful experimentation and observation along practical lines, and will be found helpful and inspiring to a marked degree. No other one book could be so heartily recommended to the progressive farmer as this fresh and interesting series of talks—for Professor Roberts seems to be personally addressing the reader.

THE PRINCIPLES OF FRUIT-GROWING. By L. H. Bailey Professor of Horticulture in the Cornell University.

Third Edition—516 Pages—120 Illustrations—\$1.25.

There have been manuals and treatises on fruit-growing, but this volume is the first consistent presentation of the underlying principles affecting the growth of the various faults. It is thus unique, and it occupies a field of the greatest importance. It joins science and practice, for it not only discusses the reasons for certain operations, but presents the most approved methods, who is willing to have his brain direct and supplement the work of his hands, and to acquire a knowledge of principles rather than a mere memorandum of their application.

ARDEN-MAKING: Suggestions for the Utilizing of Home Grounds. By L. H. Bailey, aided by L. R. Taft, F. A. Waugh, and Ernest Walker.

Fourth Edition-417 Pages-256 Illustrations-\$1.00.

Here is a book literally "for the million" who in broad America have some love for growing things. "Every family can have a garden. If there is not a foot of land, there are porches or windows. Wherever there is sentlight, plants may be made to grow; and one plant in a tin-can may be a more helpful and inspiring garden to some mind than a whole acre of lawn and flowers may be to another." The literature of the supplementation.

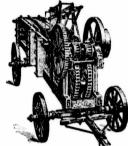
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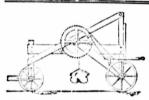
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What use has the world for a man who has not the courage to face the battles of life? Such courage comes from a system greatly endowed with the vital force of electricity. You cannot afford to let weakness stifle your ambition and mar your future. If you are not the man you should be at your age, if you have wasted your strength, if you feel you are losing your youthful vigor, do not hesitate.

WHAT A DIFFERENCE

between this class of men and the strong, manly young fellow who has not abused naturely gift, who is in full possession of the gift of manhood that nature bestowed up on that roll of it. I wan not apprehate house the characteristic of every young man. He is the envy of his fellow-men. His superiority is evident in his every action, because he feels the confidence and strength of his manhood. Do you wonder why some young men yearn for the power that they have wasted through their early indiscretions! "To err is human," and that is why nature has provided a remedy for the evils that come to the young fellow who has disobeyed the laws of nature. There is a lack of electrical force in the nerves, and this can be restored by supplying electricity to the system. To do this, and do it thoroughly, is what is given to

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After using your Belt for thirty days the pain in my back was entirely gone, and it ad bothered me for about ten years; I also now sleep well. **JOHN NICHOLSON**, lantagenet. Ont.

I am highly satisfied with the Belt. I think a person would be very foolish to suffer when a remedy such as your Electric Belt is within reach of all J. ALEX MURRAY, Woodstock, Oat.

I have been wearing your Belt now for three months. Instead of losing weight, as I used to every summer. I have put on a few pounds. The losses are stopped and I do not have that tired feeling. FRANK HABNIKK, Seaforth, On.

I was not able to walk across the floor; now my rheumatism is entirely cured. ur Belt is a grand thing. WILLIAM HASLETT, Malachie, Que.

I now feel like a new man, without a pain or an ache and have gained eight pounds. CHAS, TEMPLE, Masonville, Ont.

Thave not given your felt half a chance, since the first time I used it my back has not bothered me, and I had been troubled with it since ISG. ARTHUA COOK, Rainy Riser, Ont.

It not only restores vigor and increases nerve power, but it cures Rheumatism. Pains in the Back and Kidneys, Indigestion and Constipation, and all troubles which result from weakness of any vital organ.

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