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A Paper for Farmers and Stockmen

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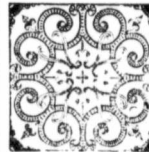
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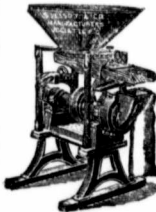
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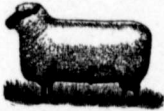
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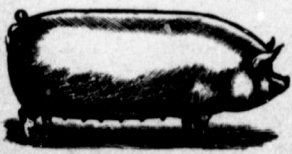
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# The Farming World

For Farmers and Stockmen

V L XVIII

JANUARY 1st, 1901.

No. 18

## Western Live Stock Trade

The Mainstay of the Eastern Breeder



ELSEWHERE in this issue appears an article dealing with the live stock trade in western Canada and especially that portion of it centering in the district around Medicine Hat. Of the imports of pure-breds

by that district during the past year and which were 537 horses, 7,248 cattle and 196 sheep, it would be interesting to know how many came from Ontario. We believe we are within the mark when we state that not more than one fourth of these imports, if that many, came from this province. The question then naturally arises, "Where were the others obtained?"

From present appearances the lucrative American trade with Ontario in pure-bred live stock, and probably in stockers has received a severe check and from indications it may sooner or later be stopped altogether. Under these conditions should not every effort be made to develop inter-provincial trade throughout the Dominion. Some years ago when F. W. Hodson, then Secretary of the live stock associations, first advocated this policy, even some of the largest Shorthorn breeders opposed his proposition. The wisdom of his recommendation can now be seen and THE FARMING WORLD respectfully calls the attention of the Hon. Mr. Fisher, the Hon. Mr. Dryden, the Live Stock Commissioner and the officers of the Provincial Live Stock Associations to the great importance of doing everything in their power to maintain and extend trade, more particularly in live stock, between the provinces. Unless a trade with outside countries, such as the United States and the Argentine, can be worked up, this is about the only course open to our breeders and no stone should be left unturned towards developing a market in the Canadian West for our pure-bred stock. The Medicine Hat district is but a sample of many sections in the West which will find it more profitable to import largely stockers and pure-bred males from Ontario than to breed them on the Western ranches. The requirements of the West are very large and the capabilities of Ontario are likewise great, but it requires a strong hand and a clear head to develop this trade to the utmost.

We were glad to notice that a few months ago, through the instrumentality of the Dominion Department of Agriculture and by the co-operation of the Ontario Provincial Live Stock Associations, that a shipment of pure-bred live stock was made to British

Columbia. This shipment was sold at public auction and realized very satisfactory figures, so satisfactory, in fact, that the Dairymen's Association of British Columbia is now having bought in Ontario for Western shipment two car-loads of pure-bred live stock for breeding purposes. These will be sold at auction as soon as they arrive at Vancouver. We understand that they are to go forward in a few days.

In establishing these provincial auction sales every effort should be made to encourage Western buyers, nor should Eastern breeders be neglected. The great railroad lines will find it greatly to their interests to treat the proposed sales in a liberal manner, both as regards freight and passenger rates. To us it seems rather strange that clever business men such as are at the head of the great railroad companies should need so much urging in order to make them understand the necessity of fostering such enterprises as the proposed sales and the Provincial Winter Fair. It would have been utterly impossible to have made this show what it is to-day without the co-operation of the railroad corporations and it will be likewise impossible to establish and maintain provincial auction sales of pure-bred live stock and make them as successful as they should be without the hearty sympathy and co-operation of the great railroad trunk lines. The railroads as well as the farmers are interested in the development of the live stock interests.

## County Councillors Support the Auction Sale

The auction sale of pure-bred live stock which is to be held at some point in the Ottawa district next February is evidently attracting a good deal of attention among the leading farmers and stockmen of eastern Ontario and Quebec. The various county councils seem very much alive to the advantages that will accrue to their respective counties by having this opportunity of selecting pure-bred sires from a large collection of first-class animals and at market value.

The Lanark County Council was recently waited upon by a strong deputation of those interested in the progress of the sale movement, and asked to make a grant to be offered in prizes to encourage the farmers of the county to purchase pure-bred male animals at the approaching sale for the improvement of their own and their neighbors' herds. Mr. W. C. Caldwell, M.P.P., who was the first of the deputation to address the council, described how over two years ago a resolution was passed at a Farmers' Institute meeting in Lanark village approving of the holding of a sale of stock in the county. This resolution, he said, was afterwards approved of by the county council, which passed a motion asking that an auction sale of

surplus stock from the Ontario Agricultural College should be held at Carleton Place. Continuing Mr. Caldwell explained that the sale now to be held will be on a much larger scale than was at first proposed.

Mr. Hodson, the Dominion Live Stock Commissioner, he said, is hard at work in the matter and he felt sure the sale could hardly help proving a success. Mr. Caldwell dwelt on the good that will be accomplished by the sale and on the importance of the farmers being encouraged to attend and purchase good stock.

Mr. Alex McLean and Mr. Joseph Yull, of Carleton Place, also spoke along the same lines; Mr. McLean incidentally advocating the holding of the annual exhibition of the Eastern Ontario Poultry Association and a sale of poultry in connection with the other sale.

The members of the council expressed themselves as much impressed with the benefits that would result from having such a sale in the district, and showed their appreciation by making a grant of one hundred dollars, to be given in prizes to purchasers of male animals. These prizes will be distributed under the direction of the county council and the North Lanark Agricultural Society to farmers resident in the county, who purchase rams, boars or bulls to be kept for service. Not more than fifteen dollars will be paid to the purchaser of a bull, nor more than five dollars to the purchaser of a boar or ram; and each recipient of a prize must obligate himself to keep the animal in service in the county for a period of two years.

The council of Pontiac County, Quebec, has also taken up this matter, and with the approval of the farmers' clubs and agricultural societies of the county has made a grant of seventy five dollars to assist farmers to purchase good stock at the sale. Considering the fact that many sections of the county are not as yet thickly settled, such a grant from the Pontiac Council is equal to a much larger sum from most counties in Eastern Ontario. Fifty dollars of this money is to be divided into five prizes of ten dollars each, to be given to the five purchasers from the county buying the five highest-priced bulls, and twenty-five dollars is to be divided into five prizes of five dollars each, to be given to the five purchasers from the county buying the five highest-priced boars. Those who receive these prizes must agree to keep the animals in the county for two years, and to charge a service fee of not more than two dollars for bulls and one dollar for boars.

Several other counties in the Ottawa Valley are expected to take similar action in the near future, and the outlook for the success of the sale and for the improvement of the live stock of the district seems very bright.

## The Live Stock Industry in the West

The following extract from one of our Western exchanges contains food for serious thought on the part of Eastern breeders and farmers: The season of 1900 has been a most favorable one for the ranchmen. All classes of stock have kept in good condition and thrived; the seasons have been suitable for stock grazing; the turn-off of ranch products was the largest in the history of the district; the prices obtained for live stock have been highly satisfactory; in fact everything has combined towards successful business. The range has been comparatively free from disease. Stock of all kinds entered the winter in good condition. In November there were twelve days of cold weather with snow. Since Nov. 30 no snow has fallen and the temperature has been more like October than De-

ember. River and creeks are running open. It is in such weather that cattle hold their own on the open prairie, and, no doubt, as last year, there will be beef shipments all winter. Hay was a good crop last summer, although peculiarities of the season made hay harvesting difficult for a short time. An abundance of hay was put up, but ranchers hope that much of it will not be required. About half the cattle disposed of in this district were sold by weight, and the prices realized were highly satisfactory.

The following tables have been prepared for us by Mr. Bray, stock inspector, Medicine Hat, and comprise the figures from his district:

### STOCK IMPORTS.

	Horses	Cattle	Sheep
Medicine Hat, west.....	20	1240	...
Medicine Hat, centre.....	26	3000	59
Medicine Hat, east.....	487	1957	...
Walsh.....	4	1051	137
	537	7248	196

### STOCK EXPORTS.

	Horses	Cattle	Sheep	Wool
Medicine Hat, west.....	14	2404	.....	.....
Medicine Hat, centre.....	164	491	960	40810
Medicine Hat, east.....	79	3580	669	.....
Walsh.....	20	172	2001	78000
Driven out on foot.....	83	.....	.....	.....
	360	6647	3630	118810

Eighty-three of the cattle shipped from Medicine Hat West were thoroughbred Galloway bulls. The table of imports includes thoroughbred stock of all kinds, a large number of sizes being imported this year.

The value of Medicine Hat's cattle shipment, at \$40 a head all round—a low value this year—would total up to \$265,889. To this should be added the value of some 700 head of cattle killed for home consumption \$28,000, or about \$300,000 from cattle returns alone. Add to this returns from horses, 360 head, at an estimate of \$70 a head, \$25,200, 3630 head of sheep at \$4.50 per head, \$16,425, and 118,810 lbs. of wool at 11c. pound, \$13,069, and with hides and other ranch products it is safe to say that close to \$400,000 went into the pockets of the ranchers of this district this year. The average price we have put upon the cattle this year, will be admitted to be a low average price.

## Co-operation in the Shipment of Produce.

It is a bad thing to begin with an apology, but I must confess that after I had promised to give an address to-day upon the question of "Co-operation in the Shipment of Fruits," I was sorry that I had done so. The question of the systematic marketing of our produce is, perhaps, the most important practical question before the people of Ontario to-day. As the Hon. Mr. Dryden said last night in this hall, the export problem cannot be tackled by individuals acting separately. The only solution lies in co-operation. We have now to discuss how this can be done and the subject is so broad that it is impossible for me to attempt to deal fully with it in the short time at my disposal.

Co-operation in the shipment of fruit at once brings to our minds the orange groves of southern California, whereas you all know, the marketing of fruit has been developed into a science and has been made a most remarkable success.

\* An address delivered before the Ontario Fruit Growers' Association at Brantford, 20th Dec., 1900, by Mr. Ernest Heaton, managing director of the Canadian Exporters' Association of Toronto, Limited.



A few years ago I paid a visit to that country, when I had occasion to study closely the orange industry, and I could not help feeling then that if only we gave the same care to the culture of our fruit orchards in Ontario as the people of California give to their orange groves, and if we were only half as systematic in the marketing of our fruit, we should have no cause to envy the fruit growers of the Pacific slope.

There are always two kinds of growers in every community, the people who want to sell for spot cash and the people who prefer to consign their stuff in the hope of making a larger profit. With both of these California does better than Ontario. Here the buying of fruit has been left open to any inexperienced, irresponsible man who likes to enter into the business with the assistance of an advance from an English broker. We know the result! Dishonest packing and the discrediting of the apple business of Canada.

In California the business is almost entirely in the hands of a few large firms—like the Earl Fruit Company and Messrs. Porter Bros., who have a permanent staff of experienced buyers and trained packers, and who ship their fruit in their own refrigerator cars. Their brands are known all over Canada, the United States and Great Britain, and they have succeeded in pushing the sale of Californian fruit each year further and further afield.

But it is for their method of consigning fruit that Californians are chiefly remarkable, and it is to this that I wish particularly to draw your attention today. I do not pretend to say that we could duplicate the system here, but I am quite sure that there are some of its features that could be adopted in Canada.

#### CO OPERATION IN CALIFORNIA.

The growers form themselves into associations. There are local associations, and a Central Exchange. The members can sell outside of their associations, but if they do they are bound to pay a forfeit of ten cents a box. The local associations employ skilled hands to grade and pack the fruit, and they ship the fruit to the Central Exchange as they receive orders. The Central Exchange has agents at the different market centres, who telegraph market reports and receive the fruit for sale by private contract, or by auction, as they deem best. When a shipment is received from the local association it is forwarded to the market, which, according to the received reports, promises best at the time. The shippers receive dividends from the Central Exchange. A portion of the proceeds of each shipment is retained. If any shipper suffers a loss from the damage or decay of the fruit, all the members of the association contribute to make it good. After this sum is deducted an average is struck of the proceeds of the shipments, according to the different grades; the actual cost of the management of the Central Exchange is charged up and a final dividend is declared at the end of the season. The Central Exchange also fulfils a useful function by buying wholesale and distributing to the local associations the material for the manufacture of the boxes for packing fruit. The popularity of this organization is constantly increasing and to-day the Fruit Associations of California market 35 per cent. of all the citrus fruit grown in the country.

This, of course, is all very interesting, but the question that concerns us in Canada is, can we learn any useful lessons from the people of California? Is it possible to apply the principle of local associations here?

Each local association should own or lease a cold storage warehouse, packing house and evaporating plant. If a number of responsible men would club

together to lease such buildings for a term of years, there would be no difficulty in securing the capital to erect them and the Government would help.

I know there are a good many people who say it is impossible—co operation involves an absence of jealousy, and a willingness to give as well as to take, which is generally supposed to be rare amongst us here. Our people, it is said, are not built that way. In answer to this, we may point out that there is a local association already existing at Burlington, framed on co-operative lines, for the exportation of fruit, and if co-operation has been successful in the manufacture of cheese, why not in the marketing of fruit? Again it is said, what may succeed in an established fruit district like Burlington, cannot be successful in more scattered communities where orchards are smaller and further apart, and it would not pay to bring apples to a packing-house to be graded. There is something in this objection; but it is a matter of degree, and there is no reason why portable grading machines and expert packers should not be employed in the less thickly populated sections of the country.

For a Central Association controlled by shippers there is a great field for usefulness, even if local associations are likely to be slow in formation.

#### WHAT A CO-OPERATIVE ASSOCIATION COULD DO.

Such an association would not be restricted to any particular market, and there is no reason why it or the local associations should be confined to fruit. It might with economy embrace all kinds of produce, for the services required by different kinds of shippers are in many points identical. Its functions would be to give instructions how to prepare produce for the different markets, to furnish to its members the latest information respecting market prices and sailing dates of ocean vessels. To arrange for railway transportation, to look after shipments at the seaboard, to control and direct shipments so as to regulate prices by preventing a glut in any particular market, to receive produce at the port of destination for sale either by auction or private contract, and generally to push the sale of Canadian produce wherever a market can be found.

It must be borne in mind when we are organizing our agencies abroad that we cannot succeed in selling our fruits in the British market unless we dovetail our machinery with the established channels of trade.

Through an association of this kind special contracts could be made for the raw material to be used in the cases and wrappings used for export; special rates could be made with ocean steamship lines, and pressure might be brought to bear upon the brokers in Great Britain to make a straight commission charge covering their commission and all charges *ex quay*. This would overcome the objections that have been raised to the alleged excessive charges of commission merchants.

It will be said perhaps that all this should be undertaken by the Government. I do not think so. The work must be given to business men, chosen for their ability, not to politicians as a reward for party services. But governments, like Providence, help those who help themselves. Such an association will have a potent voice in formulating the policy of the Government, or let us say, in giving them backbone in any forward policy they may adopt, and, Heaven knows! there is room for such a force. Some people imagine we have made great progress in the development of cold storage, and cold storage means a great deal to the people of this country, but if we look at Australia we can see where we stand. At present

there is engaged in the Australian trade a fleet of 114 steamships fitted with mechanical refrigeration, while Canada has only 23 vessels trading from Montreal, and two of the Australian vessels have more cold storage capacity than all the Canadian vessels put together. So far as cold storage is concerned, we have reason to be ashamed of ourselves. We have only tinkered with the question.

ONLY AT THE BEGINNING OF THE EXPORT TRADE.

I would impress upon you, gentlemen, that it is most important that this subject should be thoroughly discussed at the present time, if there is anything at all in the suggestions I have made; for we are as yet merely at the beginning of things. Prof. Robertson is responsible for the statement that of the twelve principal food products wheat, living animals, dressed meat, cheese, butter, eggs, lard, raw fruit, condensed milk, potatoes, poultry, and game, imported by Great Britain, Canada could readily supply thirty-three per cent., whereas at the present time she only makes a paltry contribution of seven per cent. Professor Robertson's statement means, if it means anything at all, that the only thing that prevents the quadrupling of Canadian trade with Great Britain in these articles is the want of aggressive, systematic effort, and we must not forget that Great Britain is not our only market. This is the time to formulate the lines upon which our energy shall be expended. And what about the future? We will not build castles in the air, but I would like to point out that in some respects we are the most favored people upon earth. Not only are we, by virtue of our geographical position, in the very centre of the British Empire, but like the chosen people of old we too have our Balaams who come to curse and remain to bless. There was a time when the young men of this country went whining after the United States. They could hear nothing but the eagle's scream. They did not see the opportunities that lay before their eyes, and they forgot that God had placed them in this country to develop its resources. At that time President McKinley thought that he would clinch matters, and with a hostile tariff bring the people of Canada to their knees, to become hewers of wood and drawers of water for the United States. He did not know the stuff we are made of. He put us upon our mettle. With our backs to the wall, we set to work at once to find independent markets for our products and our manufactures, and we set to work to perfect the machinery of our export trade, with the result that we are now upon our feet. The scales have fallen from our eyes. We know that we can be independent of the United States; we know that our young men can find at home all the fortune that they want, for all we have to do to obtain riches is to develop the potential wealth that lies at our feet. And now the people of the United States will be anxious for our friendship, for it is worth having.

There was a time when England did not recognize the duties that she owed to her brothers in the Empire, when no difference was made by the masses of the English people between the Canadians and the citizens of the United States, when all were called Americans, and in the general term Canadians were forgotten. It was Paul Kruger who changed all that. The tumult and cheers which within the last few weeks have greeted our Canadian boys in the leading cities of Great Britain are a sign of the change in the attitude of English people towards Canada. These cheers have their counterpart in the world of business. To day the business men in England are only too anxious to assist the Canadian people in developing trade within the Empire. If sentiment goes for anything, the trend of trade and of capital from Great

Britain will be to Canada in preference to the United States. We must not neglect any market. But now is the opportunity to develop our Imperial trade. Our soldiers have done well, our statesmen have done well, and good work is being done by men like Dr. Parkin, Col. Denison and others, who by voice and by pen advocate the broad principles of Imperial Federation. It rests with the practical business men of Canada to provide a complement to their work by an aggressive system of co-operation in the development of Canadian export trade throughout the British Empire.

## Ontario Fruit Growers

(Continued from last issue)

In addition to what we gave last issue, other valuable addresses were given at the annual meeting at Brantford. Mr. M. Pettit, Winona, presented the report of the San Jose Scale Committee, which was adopted. It was brief, emphasizing the tremendously rapid spread of the pest. Large orchards in which a few isolated infested trees were found during the inspection of 1898 were now entirely covered with the scale, and much of the fruit was worthless. It instanced several cases where growers were about to destroy whole orchards. Speaking of remedies, Mr. Pettit said spraying with whale oil soap or petroleum had proved effective in checking the scale, but not in exterminating it. The whale oil soap made in Toronto was not so good as that brought from Ohio, and neither was as effective as petroleum.

The committee recommended that the system of general inspection be continued, and that as the scale cannot now be exterminated, instead of wholesale destruction of the trees, an endeavor should be made to control it, and that such treatment be made compulsory upon individual growers, under supervision of the Department of Agriculture, both as to material and the carrying it out. It was recommended also that the department be urged to relax no effort in the matter, and that a committee be appointed to confer with the Minister as to the methods to be put in operation during the coming season. "Your committee believe," the report concluded, "that a serious mistake was made by the large number of owners of infested orchards who offered determined opposition to the carrying out of the original intention of the act, and that if public opinion had supported the Minister in his efforts the scale to-day would be almost if not entirely exterminated. We desire also to place on record our appreciation of the efforts of Hon. John Dryden in behalf of the fruit industry of this Province."

### SIZE OF FRUIT PACKAGES.

The following sizes were adopted on the recommendation of Secretary Woolverton: Apples—barrel, staves, 28½ inches long, head 17¼ inches, circumference at bilge, 64 inches; box, 22x10½ inches, inside measurement, ½ inch sides and ¾ inch ends. Pears and peaches—box, 18x11x5½ inches, with ¼ inch sides and ¾ inch ends. Grapes—Crate, 16x16x4½ inch, with 12 inch ends and ¾ inch slats, and containing four veneer baskets. The barrel adopted holds 96 51 imperial quarts, while the old one contains 103.

Mr. A. M. Smith, St. Catharines, read a paper on wind brakes, in which Norway Spruce was recommended. Forestry for farmers was treated in a most interesting way by Mr. S. B. Rice, of Michigan. He urged the present necessity for reforesting the older parts of the Province. This was followed by a paper on forestry for fruit-growers by Prof. Hutt.

He advised the planting with nut trees and other timber of high commercial value. While one-fifth of the lands should be in forests, in some counties the proportion was as low as five per cent. Co operation in the shipment of produce was dealt with by Ernest Heaton. A full report of this address appears elsewhere.

An interesting and practical address on the cold storage problem was given by the Hon. Mr. Letchford, Minister of Public Work, Toronto. It was largely scientific and dealt with the nature and causes of decay in fruit and its prevention by the use of cold storage. Cold storage to be practical must be economical. He illustrated the principle of the Hanrahan method by a model car. Other interesting addresses followed, among them being one on the San Jose scale by Prof. Lochhead who held that the scale could not now be exterminated without a great expense, but that it could be kept in check by proper treatment with whale oil soap, and especially crude petroleum and pointed out that the ineffective results in the past from their use were due to inefficient work in the spraying of the trees. He strongly advised legislation to compel every grower to spray his trees and that inspectors be appointed to watch for the pest in what were now uninfected districts. Mr. Geo. Fisher, San Jose scale inspector, stated that the scale was confined to the Essex, St. Catharines and Niagara districts, but in those districts it was much more prevalent.

#### HONEST FRUIT-PACKING.

On the last day the Bill before the Dominion Parliament to regulate the packing and branding of fruit was again discussed which showed a distinct line of cleavage between growers and packers. A special committee appointed to consider the bill submitted it redrafted.

As redrafted the principle of the bill was sustained. It was made to apply to all fruit instead of only to apples and pears. Instead of providing for three grades of apples and pears it provided for two, while not prohibiting others. The two provided for were "A No. 1" and "No. 1," and it was provided also that every package of any fruit should bear the name "Canadian" as well as the name of the packer. To be grade "A No. 1" ninety per cent of the apples or pears in a package had to be free from scabs and worm holes, while "No. 1" grade had to have eighty per cent. free from scabs and worm holes. On each package is to be stamped the minimum size of the fruit contained in it. Fraudulent packing is designed as that which makes more than fifteen per cent. of the fruit in a package of worse quality than is indicated by the brand or than is shown in the face when opened. The Bill is made to apply only to closed packages and a closed package is defined as one in which the fruit is concealed and which to examine causes injury to the fruit. A packer is defined as the person on whose behalf any fruit is packed. Otherwise the Bill remains as it was. There was considerable discussion of the report and a resolution was passed requesting the Government when it appointed inspectors for the enforcing of the Act to consult with the association.

#### OFFICERS ELECTED.

The officers were elected as follows: President, W. M. Orr, Fruitland; vice-president, G. G. Caston, Craighurst; directors, W. A. Whitney, Iroquois; R. B. Whyte, Ottawa; Harold Jones, Maitland; W. Boulter, Picton; Thomas Beall, Lindsay; Elmer Lick, Whitby; A. M. Smith, St. Catharines; J. S. Scarff, Woodstock; J. S. Graham, Vandeleur; T. H. Race, Mitchell; Alex. McNeill, Walkerville; C. L. Stephens, Orillia.

The next convention will be held at Cobourg.

## The Poultry Exhibit at the Winter Fair

Every department of the Winter Fair recently held in Guelph was a brilliant success, but none more so than the poultry exhibit. It afforded striking evidence of the increased attention that is now being given to this important branch of farming industry.

Not only was the exhibit large and well shown, but the quality of the birds was in most breeds of the very highest class, the utility breeds being exceptionally fine.

The entries in all classes exceeded two thousand. Of these fifteen hundred and ninety-three were of fowls, the great majority of them being representatives of the utility breeds, in which are included Brahmas, Plymouth Rocks, Wyandottes, Leghorns and Dorkings. Of these last, however, there were only thirty-three exhibited which seems to show that they have gone out of favor; they are however good birds and very useful for crossing on the coarser breeds for the production of table fowls.

In point of numbers the Plymouth Rocks stood highest, with two-hundred and ninety-eight specimens, one hundred and thirty-one being of the barred variety, which shows that this favorite farmer's fowl is receiving the attention it deserves. The birds shown were a particularly fine lot and must have been difficult to judge. In this class Messrs. A. H. Lake, McCormack & Son, and W. McLeod carried off the honors for their respective entries, and the awards were well deserved. The White and Buff P. Rocks were also good classes.

Next to the Plymouth Rocks in number came the Leghorns with two hundred and twenty-four entries. Of these the single comb white stood the highest, with sixty-eight entries, and the single comb brown next with forty-seven, the other varieties being fairly evenly divided. It was rather surprising to find the Leghorn in such force when one remembers that they are egg-producers only and are not likely to be of any very great assistance in building up the poultry export trade to Britain, this grade requiring better bodied birds than the Leghorns can be expected to make.

The Wyandotte classes produced one hundred and eighty-eight entries of splendid quality, the golden variety heading the list with fifty-two representatives, the buffs running them close with forty-eight, with the others about evenly divided. In the golden class Messrs. Wray Bros. and Mr. J. H. Magill carried off the chief honors with some very handsome useful-looking birds.

Amongst experts the Plymouth Rocks and Wyandottes and their first crosses find special favor just now, as they seem to furnish the best bodied birds for export, and they are also excellent layers and very hardy. Some other breeds may possibly be as good for all-round purposes, but certainly there are none better than these two.

All the other classes, both utility and fancy, were well represented and made a splendid display creditable alike to the management of the association and the breeders of the birds.

The show of turkeys was very good, the exhibit of bronze birds by Mr. W. J. Bell, of Angus, being particularly fine. The coops, however, containing these beautiful birds, were rather badly placed, being so low down that no light reached them to show off their magnificent plumage to the best advantage.

Among the water fowl the exhibit of Rouen and Pekin ducks was the most noticeable, both these varieties being represented by birds of great size and grand coloring.

The dressed poultry competition brought out a nice display of carcasses, the turkeys being generally of good quality and fair size, while the fowls were remarkably good, the Plymouth Rocks and Wyandottes being the best, the dressing of the majority of the birds being well done.

The great and increasing interest taken in poultry was well demonstrated by the number of persons who visited the Winter Fair, the large department devoted to this exhibit being well filled with visitors every day during the continuance of the show, while the attendance at the poultry dressing competition which took place just before the closing of the fair was immense, every point from which a view of the proceedings could be had being packed with interested spectators.

C. W. N.

## Building Cement Houses

Some time ago we received a letter from a subscriber in Bruce county asking for detailed information in regard to the building of a house with cement. We submitted the letter to a few parties interested in this question and have received the following replies, which we publish for the benefit of our readers.

Isaac Usher & Son, Queenston, Ont., write:

"Cement concrete makes a cheap and durable house. Gravel free from soil is used. It is not necessary to get sand as good gravel will have sufficient sand in it. The proportion is usually five to one. A considerable quantity of small stone may be used, thereby saving gravel and cement. The walls for first story of ordinary sized house should be 12 in. thick and balance 10 in. thick. For full instructions in building write to manufacturers of cement."

Mr. A. E. Hodgert, Exeter, Ont., sends us the following:

"In answering your request for information on how to build a cement concrete house, I would say that the first thing to do is to dig out the cellar to the desired depth. Then start with a foundation 18 in. wide by one foot in height. Commence on the centre of this, leaving three inches inside and three inches outside, with a 12-inch wall for the cellar as high as required, then begin the 10-inch wall for the second story and follow with an eight-inch wall for the third story. I use plank inside and outside and bolts to keep the planks together instead of uprights and wedges. Good clean gravel from the size of mustard seed to the size of hen's eggs is the best gravel one can get. Do not use any sand. One can use stone as large as will go into the wall so long as they are kept back two inches from the edge. By using stone one can build a cheaper wall.

"The proportions I use of gravel such as I have mentioned are one of cement and six of gravel. If finer gravel were used one of cement to five of gravel would suit better. In regard to lathing and plastering, I would advise lathing as one will have a more substantial house. A house may be built as fast as one can get the mixture ready. By using a Model Cement Mixer one has no trouble in preparing the mixture as it only takes three minutes from the time one starts to put the stuff into the mixer until it is ready for the wall to mix a whole batch of cement. As to the cost, cement is cheaper than any other material one can build with. By plastering the wall on the outside with cement and blocking it off it can be made to look better than any other material. The proportions I advise using are for Battle's Thorold Cement. With other kinds more cement for the same amount of gravel might or might not be necessary.

## CORRESPONDENCE

### Some Notes on the Winter Fair

Editor THE FARMING WORLD:

As it is your wish that farmers should correspond with you on items of interest to the farming community, I might say a few words on the Fat Stock Show lately held in Guelph. You may put me down for a grumbler. However, I must give you my impressions. This show is called the Provincial Fat Stock Show. Why, then, was it run in the interest of the Breeders' Associations? Breeders and feeders of grade cattle could not exhibit without becoming members for the present year, which is nearly run. Is it the breeders that furnish the beef cattle for the home or foreign markets? By no means; only some of their scrubs they cannot sell for breeding purposes.

In this county we fatten a great many cattle for export, and I think that we should have had a class at the show, if it is to be a source of education, as it ought to be. A great many cattle are shipped not in proper condition for the British market, which lowers our standard as beef-producers. I don't mean to have our cattle finished for export like the prize animals at Guelph. I consider them unprofitable to producer (barring the fortunate prize-taker) and consumer. The days of very fat meats seem to be numbered with the past. It makes a show in a butcher's stall or shop, but a great part of it is unsaleable except for soap grease. See what a revolution has taken place in regard to pork. Thick fats are no good. Cattle ought to be judged from a butcher's standpoint, and export cattle by successful exporters such as Mr. Dunn and others who know by experience what suits the British markets; 1,300 to 1,500 lbs. are their favorite weights. I think a good showing of such cattle would have been a lesson to many who were there from the back townships, who pretend to fatten cattle, and put them on the markets in an unfinished condition. I was not an exhibitor at the show. I had two steers entered, but as they were sold they had to be shipped to St. John at the time of the show. I fatten a good many cattle for export.

We are trying to get a cold storage building at Fergus, in order that we may be able to send the chilled meat instead of the live animal to market. Whether we succeed or not, I am sure it will come to cold storage, and I think the meat would be in better condition than the live animal after such a voyage. There is a considerable amount of stock subscribed, and we are in the centre of the beef cattle section of the country. A great number are shipped annually from Fergus and Elora. I never wrote to the press before, so I don't pretend to write for publication, but I might give you some points to help your editorials. I hope the show may be made a success, but I have heard a good deal of feeling about it, and even a rival show is spoken of at Fergus, and outside assistance offered in abundance. So there will have to be several amendments. The Fat Stock Club at Guelph, the fathers of the show, were nowhere in it. Perhaps you could open up a discussion on fat cattle, when they are in proper condition for the butcher, etc. I send along my subscription. Wishing you every success, I remain,

Yours truly,

JAMES GREEN.

Fergus, Ont., Dec. 20, 1900.

Look up the premiums in this issue. There are books among them that every farmer should have. They can be had for a little canvassing.



## Studies in Nature

## A Monthly Review of Insect and Bird Life on the Farm

Edited by C. W. Nash

## BIRD NOTES.

So far but very few of our usual winter visitors have put in an appearance. In a long trip I have just made through the eastern counties of the province and up the Ottawa Valley I only saw one flock of snow buntings. The red polls, crossbills or grosbeaks seem to have arrived, although the weather has been rather chilly and the ground there was covered with sufficient snow to make fair sleighing. Food is probably plentiful in the north, and it so this may be an off year with us for winter birds.

At this season fruit growers should endeavor to encourage the downy and hairy woodpeckers, chickadees and nuthatches to resort to their orchards, for they are the most effective checks upon borers that exist; besides which they destroy immense quantities of the eggs from which the tent caterpillar is produced, and also the pupae of the codling moths. When you see these little birds scrambling about the trunks and branches of your trees, peering sharply into every crevice of the bark, it is these insects they are looking for. Insects that at this season are generally so well hidden that only the birds' sharp eyes can detect them. They do, however, find enough of them to supply their wants, and thereby save the trees from much damage next season.

The best way to induce the birds to remain in and about an orchard is to hang up among the trees a few bones with some fat on them, or a few lumps of fat tied to the branches here and there will have the desired effect, the birds will soon find them out and if the supply is kept up will remain in the neighborhood all the season, feeding on this will not prevent their insect hunting but will obviate the necessity for their wandering over too much ground and they will concentrate all their efforts upon the trees where they are sure of finding food.

A remarkable example of the benefit that may be derived from the presence of a flock of chickadees has been recorded by Mr. E. H. Forbush in a bulletin of the Massachusetts State Board of Agriculture. In a certain orchard in Massachusetts canker worms had deposited great numbers of eggs upon the trees. Pieces of meat, bone, or suet were fastened to the trees early in winter to attract the chickadees. The birds came and remained about the orchard nearly all winter. They were carefully watched it being found that they were feeding on the eggs of the canker worm moth. A few birds were killed to determine the number of eggs eaten. Between

two and three hundred canker worm eggs were found in the stomach of each of these birds. In the spring the female moths of the spring canker worm were also devoured by these birds. The result was that the chickadees, assisted in spring and early summer by some other birds, saved the orchard from any serious injury by the canker worms.

## Insects.

## THE HESSIAN FLY.

Several correspondents have written me stating that the Hessian Fly is abundant this season, and asking me to give the reason for its abundance, and if possible to suggest some method by which its attacks may be prevented in the future.

Owing to the terrible destruction worked by this insect to the wheat fields of America, a great deal of attention has been paid to its life history with the object of ascertaining the best means of preventing its ravages. The result of these investigations shows that the Hessian fly, like all other insect pests, can be kept under control if the farmers will only adopt a systematic method of doing it.

The Hessian fly is a small, dark-colored, two-winged fly or gnat, about one-eighth of an inch long, and the wings expand about one-quarter of an inch. It appears on the wing in May and June when the female deposits her eggs on the upper surface of the leaves near the stem. They are generally arranged in the depressions between the ridges of the blade and sometimes exceed thirty in number. Their appearance is that of very small reddish points or spots, their form is cylindrical. The young maggots hatching from these eggs make their way to the outside of the straw beneath the leaf sheath to or near one of the lower joints where they become stationary and fixed in the soft part of the stem and do not change their position until they assume a form somewhat resembling a flaxseed, which is known as the flaxseed stage. They usually remain in this condition in the straw and stubble until August or early September when the flies emerge at dates varying with the latitude to deposit their eggs on early-sown wheat. The eggs of the autumn brood are hatched within a week from the time they are laid if the weather be warm, if the weather be cold they may remain unhatched for a longer period, the young maggots as soon as hatched pass down the leaf between the sheath and the stem until they reach the first joint, when they go through their transformation to the flax-seed stage, in which they pass the winter to emerge the next spring and repeat the process.

When the autumn maggot has arrived at its full growth its outer skin at the approach of winter becomes detached from the body and serves first as a larva and ultimately a pupa or chrysalis case. The outer skin acquires a tough consistency and a dark brown color somewhat similar to a flax seed in appearance, hence the name of this state of the insect. The maggot remains in this protecting case throughout the winter months without any change of form until at the advent of spring it assumes the pupa or chrysalis state, still remaining within its case, which has now become quite brittle. After remaining in this condition for above ten or twelve days, it works its way up to light and air and takes the form of the fly to live its life for about ten days more.

The maggots appear to live wholly by suction. They do not penetrate the stem or make any apparent incision; they produce, however, a depression caused by the obstruction they offer to the growth of that part of the plant where they are seated. When young autumn wheat is attacked the infested shoots will be seen in the following spring to be withered and dead. If two or more shoots proceed from the crown of the root those only to which the maggot is attached will wither and die. In young plants death of the part affected is produced by the abstraction of the nutritious juices which would otherwise be appropriated to the nourishment of the shoot. The increased power of absorption and assimilation of food possessed by the plant when the spring brood appears enables it to resist to a great extent the attack of the maggots whose attachment is then generally made to the second, or sometimes the third joint, but the effect then is to greatly weaken the stem and render it liable to be broken down by the wind and rain.

The manner in which the maggot of the spring brood affects the stem in the early summer months seems to arise from its presence preventing the deposition of the necessary amount of silica or flint immediately at the point of attack. It is well known that the great strength of the stem of the wheat plant is due to the large amount of silica it contains, and where there is a deficiency of this strengthening material the stalk is unable to support the weight of the ear; were the usual amount of silica present the small reduction in the diameter or dimension of the stalk at the point where one or more of the maggots are hiding would not materially interfere with its strength the absence of silica seems to be the chief cause of its liability to be broken down.

It is well known that those varieties of wheat which produce strong, flinty stalks do not suffer much injury from the presence of the spring maggot, while on thin stemmed varieties the growth of infested stems is often altogether arrested by fracture. But although there are these strong, flinty stemmed resistant varieties, there are none that are fly proof.

Since the injury occasioned by the larvæ of both broods of the Hessian fly is produced in the first instance upon the stem whether above the crown of the root in young wheat or at the first, second or third joint of that which is further advanced, it necessarily follows that a more or less healthy condition of those parts of the plant will enable it to resist to a corresponding degree the attacks of the insects. A strong and vigorous littering growth in the fall and spring is required to maintain a condition or comparative health under the attacks of one or two of the maggots until maturity is attained. Hence the reason why vigorous, well-grown, flinty stemmed varieties survive and yield a fair return, while weak and sickly plants or thin-stemmed varieties fail, no new shoots or stacks being formed in the fall or early spring, when the infested ones die, and in the early summer the weak stems which have survived sink under the heavy drain of the spring broods. So far, then, the depredations of the Hessian fly, when not present in overwhelming numbers, may be greatly lessened and, in part, overcome by good cultivation and a careful selection of seeds of good resistant varieties.

Wheat, rye and barley are all attacked by the fly, and nothing will be gained by substituting the two latter for wheat. The Hessian fly cannot live on any other grains and on none of the grasses so far as is now known.

As I have stated, the life history of the Hessian fly has been thoroughly worked out, and effective methods of avoiding its attacks have been discovered and published many times. Yet, in spite of this, careless and unobservant farmers will sometimes not only ruin their own chances for obtaining a wheat crop but, by their mismanagement, prevent any one else in their locality from raising one. We cannot, of course, in all seasons obtain entire immunity from the attacks of this insect, but where good farming prevails, we can so far diminish their depredations that they will cease to be regarded with anxiety, though we shall be at all times liable to temporary invasions from quarters where a careless or ignorant system of cultivation is carried on, and also when seasons particularly favorable for insect multiplication occur. These contingencies need only compel that degree of watchfulness which every farmer should continually exercise upon all natural phenomena.

This insect was introduced into America about 1776, in which year it

was first noticed in the State of New Jersey. Since then it has spread all over the continent, wherever wheat is grown, and has caused greater loss than any one other insect pest we have. During this last year (1900) the wheat crop of the State of Ohio alone has been damaged by it to such an extent that a careful estimate shows that the loss caused by its ravages amounts to \$16,800,000. This loss, or the greater part of it, could in all probability have been avoided if the farmers of that State had properly observed the weather conditions and their effect upon insect life in the fall of 1899 at the time the wheat was being sown.

The best means of eradicating the Hessian fly and preventing losses from its ravages is the adoption of a uniform safe period for sowing wheat in each section of the country; this is of the greatest importance, for if a part of the fields in any locality are sown for wheat before the date of disappearance of the fly and suffer from the fall brood, the swarms emerging from such fields the following spring will be carried by the wind or migrate to the late sown fields and do serious mischief. It is in this way that wheat sown during the safe period is sometimes injured in the spring. It is therefore necessary that all the wheat in each section should be sown sufficiently late to prevent the flies during the period of their flight in the fall from finding any wheat upon which to deposit their eggs.

The normal habit of the wheat plant is governed by the same natural laws as those which govern its natural enemy, the fly. This is shown by the fact that in regions favorable for the growth of fall wheat only the fly is double brooded, one attacking the wheat in spring and the other attacking it in the fall and passing the winter in the growing plants, while in regions favorable for growing spring wheat alone, there is but one destructive brood of the fly which attacks the growing wheat in the spring and passes the winter in the stubble, and the same weather conditions that will prevent the germination of the seed and growth of their food plant, retard the development of the Hessian fly.

The proper time to sow wheat to ensure safety for the crop is about six or seven days after the usual date for the disappearance of the fly. This must be determined by observations made in each locality, as the date of the insect's disappearance differs with the latitude, being later in the South than in the North in the proportion of about one day for each quarter of a degree of latitude.

In ordinary seasons (that is in seasons in which we have the usual amount of rainfall) it is generally safe to sow wheat in Southern Ontario between latitude 43° and 44°, after the twentieth of September, but in exceptionally dry and hot seasons such as are un-

favorable for the germination of seed, it is necessary to defer sowing until a later period, because in seasons of drouth the development of the fly will be retarded until after a heavy rainfall. It is these exceptional cases that require the exercise of the best judgment of the farmers, combined with careful observation. As a dry and warm season will cause a late appearance and disappearance of the fly, so a wet and cool season will have the contrary effect and cause the flies to pass through the perfect stage and disappear earlier than usual.

When a rainfall occurs at or about seeding time, after a very dry season, and the presence of the fly is suspected, it is not safe to sow immediately after the rain. At least ten days should be allowed to elapse before seeding, so that the danger period may pass before the plants shoot above the ground.

While late sowing is the most effective and the easiest remedy that can be resorted to for the extermination of the fly, there are some other methods which have been recommended for preventing losses from its ravages.

Burning over or ploughing under the wheat, barley and rye stubble is sometimes practised and is a valuable remedy if the parasites of the Hessian fly have not attacked it in strong force. If they have it is generally better to leave them alone, or more harm than good may be done. In any case, wheat land is generally seeded down with clover or grass, which would be badly damaged if burnt over.

If a few strips of land be sown with wheat about the middle of August all the flies in the vicinity will be attracted to them and there retained. These strips should be allowed to remain until the time for sowing the main crop, when the trap strips should be ploughed under and the eggs and maggots burned. All self-sown wheat, barley or rye should be destroyed so that the flies shall have no food plants but those in the trap strips upon which to deposit their eggs.

The Hessian fly is largely kept in check by its natural enemies. The swallow tribe and the bats devour enormous numbers of them when they are flying in the spring; and several species of minute parasitic flies deposit their eggs, either in the eggs of the Hessian fly or the bodies of its larvæ. By such means nature prevents this pest becoming unduly multiplied. If, then, we assist nature by adopting such remedial measures as good farming, a proper rotation of crops, and, above all, being careful not to sow wheat in the fall until after the flight of the fly is over, we need seldom fear a serious attack from this insect. No one must suppose that any remedy will ever be so put in general operation as to exterminate any of our insect foes, but we can, by careful observation and prompt action, so far diminish their depredations that they will cease to be regarded with anxiety.

X

# The Agricultural Gazette

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

## THE DOMINION CATTLE, SHEEP, AND SWINE BREEDERS' ASSOCIATIONS.

Annual Membership Fees:—Cattle Breeders' \$1; Sheep Breeders', \$1; Swine Breeders', \$2.

### BENEFITS OF MEMBERSHIP.

Each member receives a free copy of each publication issued by the Association to which he belongs, during the year in which he is a member. In the case of the Swine Breeders' Association this includes a copy of the Swine Record.

A member of the Swine Breeders' Association is allowed to register pigs at 50c. per head; non-members are charged \$1.00 per head.

A member of the Sheep Breeders' Association is allowed to register sheep at 50c. per head, while non-members are charged \$1.00.

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 mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, and 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 cattle he must be a member of the Dominion Cattle Breeders' Association, to advertise sheep he must be a member of the Dominion Sheep Breeders' Association, and to advertise swine he must be a member of the Dominion Swine Breeders' Association.

The list of cattle, sheep, and swine for sale will be published in the third issue of each month. Members having stock for sale, in order that they may be included in the Gazette, are required to notify the undersigned by letter on or before the 25th 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 data will be published in the most condensed form.

A. P. WESTERVELT, Secretary.  
Parliament Buildings, Toronto, Ont.

## Report of Provincial Winter Fair.

Owing to going to press earlier, on account of New Year's Day, we are unable to give the promised report of the winter fair, with the exception of the dairy department. The report will appear next week.

## 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 farm or dairy, is requested to forward his or her name and full particulars to A. P. Westervelt, Secretary, Live Stock Associations. In the case of persons wishing to employ help, the following should be given: particulars as to the kind of work to be done, probable length of engagement, wages, etc. In the case of persons wishing employment, the following should be given: experience and references, age, particular department of farm work in which a position is desired, wages expected, and where last employed.

These names when received together with particulars will be published FREE in the two following issues of the "Agricultural Gazette" and will afterwards be kept on file. Upon a request being received the particulars only will be published, the names being kept on file.

Every effort will be made to give all possible assistance, to the end that suitable workers, male or female, may be obtained. Every unemployed person wishing to engage in farm or dairy work is invited to take advantage of this opportunity.

## Help Wanted.

Capable and reliable man wanted for general farm work in Central Vermont. Must have best of references. Wages \$200 a year and board. No. 633. a

Wanted by February 1, on yearly engagement, unmarried man to look after a herd of Shorthorn cattle, do milking, and general farm work. Wages \$200 and board. No. 634. a

Reliable married man wanted, at once, by year, to board himself. Must be able to do general farm work, but his special duty will be milking and looking after a team. House, fire wood and garden fur-

nished. Liberal wages to good man. No. 635. a

Wanted on farm in Manitoba where stock is kept, reliable young man. Address F. W. Brown, Portage La Prairie, Man.

Good man wanted to work farm on shares. Soil is sandy loam and is near Port Rowan. All implements and machinery, except a binder, furnished. No. 636. a

Two single men wanted on stock farms at once. Must be steady and careful and have no bad habits. Good wages paid to suitable men. No. 637. a

Single man, used to Down breeds of sheep, wanted at once as shepherd. Apply to W. H. Gibson, Pointe Claire, Que.

Young man wanted, on a yearly engagement, for general farm work. Not much milking, as steers are mostly kept. No. 620. b

Wanted, at once, a young married Canadian for general farm work. Steady employment by day or year. No. 621. b

Young man required for general farm work. Wages \$150, board and washing. No. 622. b

Steady young man wanted by the year on a farm. No. 623. b

Young man wanted on a farm in Huron Co. to do general farm work and chores and cutting wood in winter. Must have no bad habits. Wages, \$160 a year. Also servant girl wanted on a farm where family is small. Wages, \$6 a month in winter and more in summer. No. 624. b

Wanted, married man, with wife and son able to milk. Man to draw milk to Toronto. Good wages and free house to a suitable man. No other need apply. Everything convenient. No. 625. b

Single or married young man wanted for general farm work, either by month or year. Would engage now or on April 1. No. 626. b

Would engage a man by the year. Must be used to all kinds of farm work and be good with horses. Wages, \$150 a year. No. 627. b

Married man required as farm manager where stock is kept. No. 628. b

Respectable young man can get a place on a farm in Renfrew Co. No. 629. b

Wanted a first-class man, good at tending stock, handy with machinery and tools, and of steady habits. Will engage by the year and pay fair wages. If a man is single he will get board and washing; to a married man a house will be furnished. Must have no children. Work to commence about January 1. State wages wanted. No. 630. b

## Domestic Help Wanted.

Woman wanted to take charge of farm house where two or three men are kept in the winter and three to six during spring and summer. Other duties would be to make butter for the house. References required. Applicant must be a strong, healthy woman. No. 631. a

General servant or housekeeper wanted on a farm. Wages \$10 a month. No milking. Must be steady and reliable and kind to children. No. 632. a

## Situations Wanted.

Situation wanted by a single man of good habits, aged 40, who has been used to farming all his life, is a good ploughman and has had five years experience in dairy farm work. Has been used to delivering milk in cities. Good references. No. 465. a

Married man, with one child, wishes position as manager of a farm or would work on shares. Has had good experience with cattle. No. 466. a

Young man, twenty years old, of good character and habits, wants a place. Has had good experience in farm work and with farm machinery. Good references. Wages asked, \$200 a year and board. Can start at once. No. 467. **a**

Position as herdsman wanted, where beef cattle are kept, by young married man. Reasonable wages asked. No. 453. **b**

Married man, good plowman, wants a place. No. 464. **b**

### Farmers' Institutes.

Under this head the Superintendent of Farmers' Institutes will each week publish matter relating to Institute work. This will include instruction to Secretaries and other officers, general information about Institutes 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 Stations of Canada and the United States. In this way he hopes to give Institute members some valuable agricultural information which they might not otherwise receive, on account of not having access to the original publications. If any member at any time desires further information along any of the lines discussed, by applying to us he will be put in direct communication with the Institution that has carried on the work.

G. C. CREELMAN,  
Superintendent Farmers' Institutes.

### Improved Agriculture.

An Excellent Address by Professor Roberts.

FIRST, TILLAGE; SECOND, TILLAGE; THIRD, TILLAGE.

The feature of the two days session of the Union was the address delivered by Prof. I. P. Roberts, of Cornell University, on "Improved Methods of Agriculture." The Professor opened with a touching reference to the old days when he and four others came here to talk dairying. "But," said he sadly, "of those four I alone am left. I remember," he continued, humorously, "the last time I was here. That was in 1886, and I

came to attend a dairy convention at Belleville. On that occasion I managed, although it was all intended for a joke, to twist the lion's tail. The result was an awful roar, and from that day until this I have never received an invitation to repeat my visit.

"But I am glad to be here again, at this, the close of the nineteenth century, and to find on this occasion so much good feeling—to find Great Britain, the United States and Canada all animated by a spirit of common brotherhood.

"There is," continued Prof. Roberts, as he took up his subject proper, "nothing so difficult as the study of agriculture. I can go home, and, by a year's study, become a fair lawyer, because I can talk. But here I am, after forty or fifty years' study, under exceptionally favorable circumstances, of the nature of the soil, and yet I can to-day take up a handful of that very soil and find in it a dozen problems for which I am powerless to state a solution.

"The place to begin farming is in the field between fences. Let the fences and buildings stand, and if you get the most out of your soil, these will take care of themselves.

### Farm Wanted.

Wanted, to purchase, on time only, or to rent, a fully-equipped and stocked dairy and poultry farm. Must be in good order and have plenty of accommodation for poultry and be near good markets. Send full particulars to W. B., care of A. P. Westervelt, Parliament Buildings, Toronto.

N.B.—Where no name is mentioned in the advertisement, apply to A. P. Westervelt, Parliament Buildings, Toronto, giving number of advertisement.

### The Dairy Test at the Provincial Winter Fair.

Pie	NAME OF COW AND OWNER'S ADDRESS.	Total lbs. of Milk in 48 Hours.	Lbs. Fat.	Lbs. Solids not Fat.	Number Points c. Fat.	Number Points for Solids not Fat.	Points for Days in Milk.	Total Points.	Cost food for 48 hrs.—Average of 7 1/2 days' feeding.	Cost of Food for 100 Pounds.	1ST TEST.			2ND TEST.			3RD TEST.			Lbs. Feed consumed by each cow for 7 1/2 days.							
											Milk.	Per cent. Fat Test.	Amount of Fat.	Milk.	Per cent. Fat Test.	Amount of Fat.	Milk.	Per cent. Fat Test.	Amount of Fat.	Clover Hay.	Turnips.	General Oil Cake.	Pea Meal.	Ground Oats.	Ensilage.	Bran.	Herbage.
st.	SHORTHORN COW, 36 MONTHS AND OVER. A. W. Smith, Maple Lodge—Roan Blanche, 25854.	102 13 3 43	9 47	68 64	37 88	106 52	53 2 50 19	34 7 3	1 04	33 37	3 5	1 2	34 06	3 5	1 192	26 5	20 7	13 23	5 45	235	48 3						
	AYRSHIRE COW, 36 MONTHS AND OVER. N. Dymont, Clappison's Corners—Briery Banks Cora, 2846.	94 03 3 46	8 31	69 20	33 24	1 3	103 74	29 9 28 8	31 06	3 8	1 18	31 37	3 8	1 12	31 6	3 7	1 16	5 5	43 5	16 5	15	232	34				
1st.	N. Dymont Clappison's Corners—Nellie Gray, 2907	56 19 2 14	4 84	42 8	19 36	10	72 16	29 3 40 6	17 75	3 6	64	10 47	4	78	18 97	3 8	72	5 34	16 5	14 5	14	256	35 5				
	rd.	Wm. Stewart & Son, Menie—Jean Armour, 2058	58 49 9 22	5 30	44 56	21 20	10	75 76	33 1 43 6	19 7	4	79	19 87	3 8	75	18 12	3 8	68	73 5	12	11	34	280	26 33			
5h.	N. Dymont, Clappison's Corners—Briery Banks Susie, 2917	48 77 1 8	4 32	36 10	17 28	10	63 38	27 7 43 7	16	3 8	61	16 4	3 6	59	16 37	3 7	60	5 5	25 5	14	11	14	260	38			
	h.	Wm. Stewart & Son, Menie—Sprightly, 1210	58 81 2 35	5 59	47 12	22 36	5	69 48	33 47 5	20 6	4 2	87	19 81	3 8	75	18 4	4	73	71	12	11	34	280	26 33			
1st.	AYRSHIRE COW, UNDER 36 MONTHS. W. M. & J. C. Smith, Fairfield Plains—Gurta Osborne, 1096	49 12 1 98	4 61	39 64	18 44	6 8	64 88	21 8 33 6	16 3	4	65	16 6	4 2	70	16 22	3 9	63	8 9	1 5	4	18 5	296	31				
	nd.	W. M. & J. C. Smith, Fairfield Plains—Angeline, 9008	47 09 1 88	4 32	37 60	17 28	7 6	62 48	21 7 34 7	15 6	4	62	15 87	3 9	62	15 62	4 1	64	8 9	1 5	4	18 5	291	31			
rd.	N. Dymont, Clappison's Corners—Briery Bank Lola, 3300	46 93 1 63	4 28	32 76	17 12	6 4	56 28	28 3 50 3	15 5	3 3	51	15 9	3 8	60	15 53	3 4	53	6 5	36 5	14 5	10	14	246	39 5			
	th.	Wm. Stewart & Son, Menie—May Mitchell, 9237	41 27 1 44	4 12	28 80	16 48	10	55 28	28 6 51 7	14 65	3 3	48	11 12	3 6	51	12 5	3 6	45	63 5	12	11	30	206	21 33			
1st.	HOLSTEIN COW, 36 MONTHS AND OVER. Rettie Bros., Norwich—Highland Cornelia, 2529	91 94 2 85	7 74	57	30 90	8 4	96 36	19 3 20 0	30 2	3	91	31 4	3 1	97	30 34	3 2	97	5					350	41			
	2nd.	Rettie Bros., Norwich—Aalje Posch, 4th, 65	114 67 4 28	10 81	85 6	43 24	11	128 84	29 2 22 6	39 37	4	1 57	37 8	3 6	1 36	37 5	3 6	1 35	5 12	13	22	1	277	51			
1st.	HOLSTEIN COW, UNDER 36 MONTHS. Rettie Bros., Norwich—Artis Mink Mercedes, 1942	86 60 2 5	6 90	50 18	27 6	2 1	79 88	19 2 24 0	27 8	3	83	29 15	2 8	82	29 65	3	86						283	39			
	2nd.	Rettie Bros., Norwich—Aalje Posch, 2343	84 51 2 45	7 54	49	30 16	11	79 16	21 8 27 5	28 3	2 6	74	28 06	3 1	87	28 15	3	84						287	37 5		
	GRADE COW, 36 MONTHS AND OVER. A. McDougal, Guelph—Utopia	101 27 3 38	8 80	67 7	35 2	6	106 5	36 34 7	33 93	3 3	1 12	36	3 4	1 2	31 34	3 4	1 06	24 5	106	2	23 5	52	240				



## NO WORN-OUT SOIL.

"People talk of worn-out soil. There is no such thing as worn-out soil. The potential wealth of mother-earth is almost beyond computation. Within eight inches of the surface there are 3,000 lbs. of nitrogen, 4,000 lbs. of phosphoric acid, and 16,000 lbs. of potash to the acre. And still," continued Mr. Roberts, sarcastically, "although we have this enormous amount of wealth in the soil, we go to Germany to buy potash from the mines. It is about as sensible as it would be to go to the town to buy condensed milk while the cow in the stable was running milk from her udder.

"But this does not end the store of wealth. In the second eight inches below the surface there are 4,000 lbs. of nitrogen, 1,800 lbs. phosphoric acid, and 6,800 lbs. of potash. We do not even have to dig down to bring up this fertility. All we have to do is to send the roots of the clover down into the soil. We can sit on the fence and whistle while the root does the work.

## WEALTH NOT AVAILABLE.

"How is it with all this fertility stored in the soil that we fail to get a full crop, and often fail to get half, a third, or even a quarter yield? It is because sufficient plant food is not immediately available. The physical condition of the soil may be at fault, or it may be a lack of moisture. It may be because the ground is so tough or dry that the seed is not comfortable in the soil.

"Wheat is one of the most exacting crops we can grow. The average yield of wheat in the United States this year was 14 bushels to the acre. I am ashamed to report such a yield from a country with more than half a hundred agricultural colleges and experimental stations. In order to get an average of 14 some raised 20 bushels. What will be the destiny of the hindmost man who raised six, seven or nine bushels to the acre? The best thing that can happen to him is for the sheriff to take him from his farm and put him selling peanuts in the town, where he may make 27½c. per day.

"Wheat, as I have said, is one of the most exacting crops. But how much fertility does wheat take from the ground after all? The average crop of wheat in the United States takes less than 30 pounds of nitrogen, less than 9½ pounds of phosphoric acid, and a trifle over 13½ pounds of potash, or say 53½ pounds of fertility all told. Why this paucity of crops when there is

such an enormous wealth of fertility in the soil? It is because this fertility is not made available.

## WHAT CULTIVATION WILL DO.

"At Cornell, on land that had not been manured for six years, we have raised from 26,000 to 31,500 pounds of green fodder to the acre. There, also, we have raised this year 300 bushels of potatoes, and this in the worst season for drought we have experienced for over 26 years. Why were we able to do this? Because there the plant food in the soil was made available by cultivation.

"I was up in the Red River district this year, and found land absolutely reeking in wealth of soil, and still giving only seven or eight bushels of wheat to the acre. True, this is what they call a bad year, but man is here to correct bad years.

"It has been said that tillage is manure. It would be better to say that it may partly take the place of manure. The trouble is that we do not plow deep enough."

The reference to plowing deep caused a very large smile among disciples of the apostle of shallow cultivation.

Proceeding, Professor Roberts said "the tendency of soil is to harden so that the water and air cannot percolate through. Where land is in this condition, instead of the plant food becoming more available, it becomes less so.

## BREAK THE CLOUDS BY UNDER-DRAINING.

"Break up the clouds. It is humiliating for a man to go on year after year breaking up clouds, and at the end of 60 years to have these same clouds thrown on his own grave. It would be better if he put in only ten rods a year of under-draining.

"There are three great principles in farming: First, tillage; second, tillage; third, tillage. Plow so frequently that the plow share will get hot. Keep the hot plow share going and the end will be a mulch on the surface that will make available plant food, there will be a conservation of moisture and the plant seed will be rendered comfortable.

## THE MOST IMPORTANT THING OF ALL.

"To get humus in the soil is the most important element in crop production. If there is anything that should be emphasized it is this. To this end always have the ground covered with some growing crop. As soon as one crop comes off put another in its place. Have two growing at once. In our country we have practised sowing crimson clover in the corn with

the last cultivation, but we found that this clover drew so much nitrogen from the sub-soil that the subsequent crop of oats was too rank in the straw. We are now sowing rape with the last cultivation of corn, as this plant does not draw nitrogen, but it does bring up phosphoric acid. In any case keep the ground covered with a crop of some kind. Sow mullen seeds, anything rather than have the land left bare.

"The whole thing boiled down is this. Put up the plow as the emblem of all that is good in agriculture. Use the plow to thoroughly pulverize the land. So many plows are made as if they were intended to go through eggs without breaking them. Another important matter is the proper application of manure. Apply thinly on the surface where plants are growing. If it is too dry, wet it. Finally see that there is a cover crop everywhere and all the time. Get an abundance of humus into the surface of the soil, and have the surface thoroughly pulverized."

## SHALLOW OR DEEP PLOWING.

Wm. Rennie, ex-farm superintendent, agreed with Prof. Roberts that there was no such thing as a worn-out soil. "The sub-soil," said he, "is as rich as it ever was." We here do not agree with the view expressed by Prof. Roberts of bringing this sub-soil to the surface. We prefer to let the roots of the clover bring the fertility from the lower to the upper soil. We use one crop to bring up food for another crop, and the results of this system have been marvellous. Prof. Harrison has told us there are millions of germs in the surface soil performing work of the greatest benefit to man. I am afraid Prof. Harrison would shed tears if we buried these millions of germs and brought the sub-soil to the top. In England, I am told, they are getting best results from their steam plows by not plowing with them. They use these to loosen the sub-soil to a depth of 20 inches or more, but do not bring this sub-soil to the top. They allow the air to get down below the surface, but they keep the surface soil always at the top."

Prof. Roberts said he did not advocate bringing up the sub-soil from the bottom. In the United States, however, he said, too many farmers plowed to a depth of 4 inches, where it would be better to plow to a depth of 8 to 10 inches. "I would rather have an inch of cream than half an inch of cream. I would rather have 8 or 10 inches of good soil on the surface than 4 inches. Still, it is not wise to turn the milk pan upside down." W.L.S.

# The Farm Home

## The Dying Year.

The feast is over, the guests are fled ;  
It is time to be old, it is time for bed.  
The wind has blown out every light,  
And the pleasure garden is turned to blight ;  
The trees like puffed out candles stand,  
And the smoke of their darkness is over the land.

Heavily hangs the drowsy head,  
Heavily droop the lashes ;  
To bed, to bed ! Let prayers be said,  
And cover the fire with ashes.

How the pipers piped and the dancers flew  
(Their hearts were piping and dancing, too),  
Wine of the sun and surge of the stream,  
Birds in an ecstasy, flowers that team,  
All gone by. Now the quiet sky  
Looks down on the earth where the snow  
must lie.

Heavily hangs the drowsy head,  
Heavily droop the lashes ;  
To bed, to bed ! Let prayers be said,  
And cover the fire with ashes.

—*Ethelwyn Wetherald.*

## Forest Flowers.

"While others do the gardens choose,  
Where flowers are regular and profuse,  
Come, then, to dell and lowly lea,  
And call the wild flowers all with me."  
—*The Ettrick Shepherd.*

A tree is a grand object in the scale of creation ; but a little forest flower, though not grand, is beautiful. In almost every attribute it is the reverse of the tree ; but nevertheless it is as perfect in all its parts, as delicate in its organization, and displays with equal force and clearness the transcendent skill of that Mighty One whose minutest work is as perfect as His greatest. The little forest flowers give an additional charm and variety to our forests ; they nestle snugly at the roots of some giant tree, or sprinkle the woodland path with various hues, or cover the sides of some little dell, or spring up in rich profusion by the sides of a mossy bank, or grow in luxuriance beside some forest streamlet, which prattles along "singing a quiet tune" to the woods and flowers.

The young recollections of most of us are interwoven, not with garden, but with wild flowers.

It was beautifully said by Campbell :

"Ye field flowers ! the garden eclipse ye, 'tis true,  
But wildings of nature, I dote upon you,  
For ye wait me to summers of old ?  
When the fields gleamed around me with  
fairly delight,  
And daisies and buttercups gladdened my  
sight,  
The garlands of silver and gold !"

There are few of us who cannot echo the same sentiment, and few to whom the sight of "the flowers of the forest," will not bring up similar recollections.

Among the first of the flowers that appear in the forest, are the daisy, the

violet, and the primrose. What can make a more beautiful trio ? All three are fragile and delicate, modest and retiring ; but they star the banks and woodland with a glorious tricolor of white, violet and yellow. How simple looking they are ! and yet take the little daisy and examine it carefully, and you will see in the flower an organization, so complicated, and yet so harmonious, that man, with all his skill, never can come near." And the little sweet-smelling violets, what universal favorites they are ! It is delightful to sit on a primrose bank, and, overshadowed by some tree, to pull one of the flowers to pieces, and examine "how curiously and wonderfully it is made." And yet there are many who pass a primrose by, to whom Wordsworth's lines are well applicable :

"A primrose on the river's brim,  
A yellow primrose is to him,  
And it is nothing more."

At the roots of trees and in shady nooks is found that beautiful little white flower, the wood anemone. Its leaves are very like those of the geranium, with a similar flower, though different in color. Few, however, are found except in the beginning of "the season." Charlotte Smith correctly describes the localities it chooses :

"Thickly strewn in woodland bowers,  
Anemones their stars unfold."

There is another pretty little flower that appears early, called the wood sorrel, or by botanists, *oxalis acetosella*. It grows on banks and about the roots of trees, and is about the size of a buttercup. Its color is white, but the interior of the flower is streaked in the most delicate and lovely manner with parallel pink veins. This is a medicinal plant. The taste of its flower and leaf is very acid. A salt is prepared from the whole plant, which takes ink stains out of linen ; and the leaves are often used as poultices. Waving its blue bells, whether there is a breeze or not, we catch here and there a glimpse of the hyacinth, very different looking indeed from those we see at flower shows. Again, we find the little modest hare-bell waving on its hair-like stalk. Goethe has two beautiful stanzas about this pretty little flower :

"A little blue-bell  
Peeped up from the ground,  
And cast his blossoms  
Of beauty around.

A little bee came,  
And he nestled therein ;  
The two for each other  
Were fashioned I ween."

We must not overlook the wild strawberry, though it is very apt to be passed by unnoticed. It grows in almost all our woods, trailing along the ground just as it does in gardens.

The flower is white and of the roseaceous type : and at particular periods it bears both fruit and flowers. The fruit is considered fine, though, of course, not so large as that grown by man. The nettle is a very common forest flower. "What ! the nettle a flower," some one exclaims ; "that nasty, ugly, poisonous thing ; it surely cannot be a flower." We are not, however, speaking of the poisonous rascal, though he, too, was made for a purpose, and serves a certain end in creation, but we speak of the dead nettles that do bear flowers, some white and some pink, and that do not sting.

Though outwardly looking like their vicious neighbor, yet their leaves will be found to have quite a different feel, and the flowers are a most interesting study. Each resembles the mouth of an animal gaping, and somewhat reminds one of the awful mouth of a shark. Inside the flower there are four stamens, but instead of being, as usual, of equal length the two at the outside are long, and the inner two are short. The showy orchis is not likely to miss the traveller's eye. It is a curious flower, growing to a considerable height, with a long, spike-shaped head of very curious flowers. In "the language of flowers," an unspoken tongue with which some young ladies amuse themselves, the orchis represents "a belle," a title to which its showiness, perhaps, gives it some claim.

The wild, or brier rose, is a universal favorite, be it white or red, despite its prickles and its fragile flowers. It is generally found in woods, hedge-rows, shady lanes, etc. It grows in plenty on the banks of the Doon, near the monument to Burns ; and Fitz-Green Halleck, in his address to the "Wild Rose o' Alloway," that he there plucked and carried across the Atlantic to the "green woods of the West," has consecrated the wild roses there by the highest earthly power—that of genius. Very different from the wild rose is the foxglove, with its curious-shaped pendent red flowers, its great heavy leaves, and its repulsive smell. Poisonous though it is, medicine derives great benefit from its use. There is a white variety as well as a red.

A. KIRKWOOD, Toronto.

## Hints by May Manton.

Woman's Breakfast Jacket, No. 3683.

The comfort of a jacket that slips on with ease, is not tight-fitting, yet is tasteful and suited to wear at the breakfast table, is recognized by every woman and requires no urging. The admirable model illustrated combines many advantages and has a really smart appearance, if well made, at the

same time that it allows perfect freedom. As shown, the material is French flannel in rouge red, with stitching of black silk and small black buttons, but eider-down is excellent when greater warmth is required, and both cashmere and Henriettes, plain and embroidered, are eminently suitable.



The back fits smoothly to the figure and includes side backs, under-arm gores and a centre seam. The fronts are arranged in box plaits that are stitched at their under folds to below the bust line and fall from the pointed yoke in Empire style. The sleeves flare slightly at the hands in bell style. At the neck is an unstiffened turnover collar that can be worn with a simple brooch or necktie, as preferred.

To cut this jacket for a woman of medium size  $3\frac{3}{4}$  yards of material 27 inches wide, 3 yards 32 inches wide, or  $2\frac{1}{2}$  yards 44 inches wide, will be required.

The pattern No. 3683 is cut in sizes for a 32, 34, 36, 38, 40 and 42-inch bust measure.

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

**Pretoria Pudding.**

Weigh two or three eggs and take their weight in flour, two-thirds weight in good clarified dripping or butter, sugar to taste; add a teaspoonful of baking powder, two ounces of finely-chopped candied peel, and a little milk, stirring baking powder into flour. Well grease a mould or basin. Thoroughly mix all ingredients but the eggs, putting the butter and sugar in

together after creaming them in basin separately. Stir over all lightly then beat the eggs and add candied peel last.

Pour all into buttered mould and steam from two to three hours. Serve with sweet sauce.

**Butchering Season.**

Where is the farmer's wife who does not dread unspeakably the job of rendering lard, making sausage, head cheese and mincemeat, pickling hams, bacon, side pork and tongue? It is at best a greasy, unpleasant task, and when added to all the other work the housekeeper is called upon to perform, it seems quite overwhelming. But when the work is well done the results are very satisfactory; and when one remembers the good things stored for future use one feels amply repaid for all the hard labor and disagreeable odors which will find their way to the remotest corners of the house in spite of every precaution. But never mind, the house can be thoroughly aired, and the unsightly grease spots can easily be removed by using the scrubbing brush vigorously together with a strong solution of salsoda water.

Many careful, saving housekeepers waste not only time and labor, but much of the finest lard is sacrificed each year by not knowing how to economize in these things. They trim the rind from the sausage meat to be used for soap grease, when if washed and placed in dripping pans and baked until the rinds are crisp, great would be the surprise of the average up-to-date housekeeping to find such an amount of fine, clear lard. We have a recipe for seasoning sausage meat, the product generally suiting the taste of the epicure. We also have one for pickling hams which is very satisfactory, as the meat is very sweet and tender and of fine flavor after being properly smoked. These recipes will be given at the close of this article.

After the sausages have been seasoned and packed in jars, cover them and place in a hot oven from three to four hours according to the oven and size of jars. This method draws the grease from the meat to all sides and to the top, and when opened for use the meat will be found completely enveloped in lard. This is cheaper and far better than pouring melted lard over it, as it is too greasy in itself. A plate with a weight should be placed over it when taken from the oven. Half-gallon jars are best for a small family, as it will not keep long after being opened and exposed to the air. I know of one housekeeper who slices and

fries it slightly, and again packs in jars, pouring melted lard over to keep air tight.

**Pickle for Hams**—For each one hundred pounds of meat use two pounds of brown sugar, three ounces saltpetre, eight pounds salt, five gallons water. Place over fire and bring to a boil. Skim, and when perfectly cold pour over hams which have been packed closely as possible.

**For Sausage**—Use for each pound of meat one teaspoonful of salt, one-half teaspoonful of black pepper and sage.—*Celeste.*

**Rural Free Delivery.**

One of the phenomenal successes in the development of the United States postal system has been the extension of rural free delivery. This was begun two or three years ago, with an appropriation of perhaps \$300,000. It has been extended by degrees and with good judgment, and wherever it has reached, if reports are to be credited, it has been a very considerable success. The Postmaster-General now estimates that the system can be extended over such parts of the country as may use it to advantage at an approximate cost of \$20,500,000, and he urges all kinds of reasonable economy in the administration of postal affairs in order to be able to ask for fuller appropriations in this direction. The estimate for maintaining free delivery in the next year on plans already formed is placed at \$3,500,000.

**Weight of Eggs.**

There is a big difference in the weight of eggs of pullets and hens and of those laid by different breeds. Poultrymen who sell by count and not by weight do not always get full value for their product. An English authority gives the following differences: S C Brown Leghorn pullets 17 1/2 oz. per doz., hens 21 1/2 oz.; Light Brahma pullets 23 1/2 oz., hens 28 1/2 oz.; Black Langshan pullets 24 oz., hens 28 1/2 oz.; Pekin ducks 35 1/2 oz.

**FREE** We give this beautiful Gold Finished Ring, set with magnificent imitation diamond, for selling only 10 sets of **Facsimile Gem Pins** (no. 402). They are put up in sets of 5, are prettily engraved and enamel set, and finished in gold. At 10c. a set you can sell them like hot cakes. Mail us this advertisement with your name and address and we'll send you the Pins. Sell them, return the money, and we will mail you this beautiful Ring absolutely free. Dominion Novelty Co., Box 3002 Toronto, Ont.

When writing to advertisers please mention **THE FARMING WORLD.**



**FREE CAMERA** Complete with outfit and instructions. Takes a picture 2x2 1/2 in., and any per-  
 son can learn to do it in a few hours by following the instructions. Outfit consists of 1 Camera, 1 box Dry Plates, 1 pkg. Hypo., 1 Printing Frame, 1 Developing Tray, 1 pkg. Developer, 1 set Directions, 1 Toning Tray, 1 pkg. Fixing Powder, 1 pkg. Silver Paper, 1 pkg. Ruby Paper. Camera and outfit neatly packed in a neat box and sent all charges paid for selling only 10 Scarf Pins at 10c. each. These Pins are beautifully Gold finished, in different patterns and set with very fine imitation Diamonds, Rubies and Emeralds. They are fine value, and for that reason very easy to sell. Send this advertisement, with your name and address, and we will forward the Pins. Sell them, return the money and your Camera will be sent, all charges paid. **The Gem Pin Co., Box 3002 Toronto, Can.**

# The Farming World

A PAPER FOR FARMERS AND STOCKMEN.

Managing Director, . . . D. T. McAINSH  
Editor, . . . J. W. WHEATON

The Farming World is a paper for farmers and stockmen, published weekly, with illustrations. The subscription price is one dollar a year, payable in advance.

Postage is prepaid by the publishers for all subscriptions in Canada and the United States. For all other countries in the Postal Union add fifty cents for postage.

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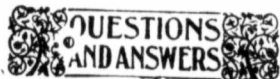
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Discontinuances.—Following the general desire of our readers, no subscriber's copy of THE FARMING WORLD is discontinued until notice to that effect is given. All arrears must be paid.

How to Remit.—Remittances should be sent by cheque, draft, express order, postal note, or money order, payable to order of THE FARMING WORLD. Cash should be sent in registered letter.

Advertising Rates on application.  
Letters should be addressed:

THE FARMING WORLD,  
CONFEDERATION LIFE BUILDING  
TORONTO



## DYEING SKINS.

A subscriber at Spring Bay, Ont., writes: "Can you give, through the columns of your valuable paper, a recipe for dyeing skins, pelts, etc., a brown or black color?"

In the material we have at hand we have not been able to find any definite information in regard to the dyeing of skins. The following information in regard to coloring wool a tan brown may be of value: The wool is mordanted by boiling it for an hour with one per cent. of its weight of bichromate of potash; it is then washed and transferred to the dyeing vessel with the following per centages of its weight of materials: madder, 3.2; fustic, 4.8; camwood, 2; baswood, 1.75; sumach, 2.1; with these materials it is boiled for two hours.

Common black colors upon wool are dyed chiefly with logwood and iron galls. The wool and logwood are heated together for some time and then sulphate of iron is added to the dye bath.

We do not know whether these recipes would answer in the case of skins or not, but give the above for what they are worth.

## Oxford Fat Stock Show.

The nineteenth annual show of the Oxford Fat Stock Club took place at Woodstock on December 19, and was a success. The show was the best held in recent years. All classes were well filled and the quality of the

exhibits was up to that of recent shows.

The show, though now under the auspices of a County organization, is open to the province. Among the prominent outside exhibitors were Brethour & Saunders, Burford, Ont., who won everything they entered for in the Yorkshire classes, including 1st and 2nd prizes for bacon hogs and sweepstakes.

The chief winners in the cattle classes were Messrs. Farrington, Wm. Smith, John Smith, Wm. Donaldson, Jno. and James Donaldson, J. F. Wilson, R. W. Burk and T. Hopkins, and in the sheep classes, Park E Sons, Jno. Hopkins, D. Lillico, Jno. Smith, Wm. Donaldson and H. Woodrow. The last named also won most of the prizes in the poultry classes.

At the sale held at the conclusion of the show all the stock was sold at good figures.

## Canadian Hogs Kill Well.

Among those who exhibited largely of their fine Yorkshires at the great International Stock Show at Chicago early in December were Messrs. Brethour & Saunders, Burford, Ont. This firm entered in both the live and the dressed carcass classes winning high honors. All the hogs in the carcass classes were purchased by the large Chicago packing house of Swift & Company, who write Messrs. Brethour & Saunders, of date Dec. 12, as follows:

"Referring to the six-month-old Yorkshire bacon hog, which we understand was raised by you, and which took first prize in the dressed carcass contest at the recent International Live Stock Exposition, which hog was shown in the catalogue as No. 499½, class 111 and number 14 in the killing contest, beg to say, it gives us great pleasure in writing you to advise that the quality of meat in this hog was far superior to that of any other hog in class among the exhibition hogs which we cut up this week. The lean meat seems to be exceptionally fine grain and tender, while the fat is very white and unusually firm and hard. In fact the latter quality is developed to a most unusual degree."

The carcass referred to in the above competed with representatives of the various breeds, winning first-prize in strong competition. This is another testimony to the value of the Yorkshire as a first-class bacon hog.

## The Farmers' Opportunity.

The inventive genius of the management of the Central Canada Exhibition Association at Ottawa seems to be unlimited as the latest addition to their already mammoth prize list will show. The addition in question is that of a series of substantial prizes for the care and keeping bestowed upon all kinds of agricultural machinery by the owners thereof. The list includes everything from a plow to a traction engine and the prizes offered will be

## British American Business College

New Term  
Opens Jan. 3,  
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## British American Business College

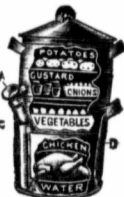
Y. M. C. A. Building, Cor. Yonge  
and McGill Sts., TORONTO.  
DAVID HOSKINS, Chartered Accountant,  
Principal.

It would be a blunder to spend the time necessary to secure a business education in a college where anything but the most thorough teaching is secured. This mistake is not made when a course is taken in this college.

—M. M. McTagar, a former pupil, says: "Having taken both a commercial and shorthand course in your college, I attribute my success in commercial work entirely to the efficiency of the staff of the several departments of the college."

## Agents Wanted

Good Salary easily earned selling the  
**IDEAL COOKER**



The advantages are so great and the price so low that it pays for its own use many times over.

By its use you will have no steam in the house, no offensive odors, no frosted windows, no damp walls, no crowded stove, no heavy meat, no heavy kettles, no burned food.

Write for agents' terms.

Sits on any stove.

U. S. SPECIALTY CO.

Adelaide St. East, - TORONTO, ONT.

## CANADIAN PACIFIC

### NEW YEAR'S RATES

#### GENERAL PUBLIC

Single First Class Fare, going Dec. 29, 30, 31, 1900, Jan. 1, 1901; returning until Jan. 2, 1901.

Single First Class Fare and One-Third, going Dec. 28, 29, 30, and 31, 1900, and Jan. 1, 1901; returning until Jan. 3, 1901.

#### TEACHERS AND STUDENTS

On surrender of Certificate signed by Principal.

Single First Class Fare and One-Third, going Dec. 8 to 31, 1900; returning until Jan. 20, 1901.

Between all stations in Canada, Port Arthur, Sault Ste Marie, Windsor, and East; to and from Sault Ste. Marie, Mich., and Detroit, Mich., and to, but NOT FROM, Suspension Bridge, N. Y., and Buffalo, N. Y.

A. H. NOTMAN,

Assistant General Passenger Agent,  
1 King St. East, Toronto.

**SOLID GOLD** We give this beautiful Solid Gold Ring set with a ruby and two pearls, for selling only 1000 Parisian Beauty Pins at 10c. each. These Pins are finished in gold and enamel, prettily engraved and neatly carried, three to a set. They are such splendid value for the money, and this beautiful return the money, and this beautiful Solid Gold Ring will be sent you by return mail, absolutely free. Dominion Novelty Co., Box 3601 Toronto, Can.





well worth striving for. Any machine which has been owned and used by any farmer for a period of not less than two years may be entered and judgment passed upon the excellence of selection, the amount of work accomplished therewith and the general condition of the machine at the time of exhibiting.

The management is determined to have an agricultural display notwithstanding the withdrawal of all manufacturers of this class of machinery from all the fall fairs. It is a recognized fact that such a display is of value, hence the willingness to pay for it, but in this case the prize goes into the pockets of the farmers instead of the coffers of a wealthy corporation. The scheme is of great value to the farmer as an incentive to take the best possible care of his machinery and should meet with a hearty support from the agriculturist.

#### Turkey Breeders Organize.

On Friday, Dec. 14, the turkey breeders at Guelph formed an association to be known as the "Turkey Breeder's Club of Canada." Mr. Beattie, of Wilton Grove, was elected president and W. J. Bell, of Angus, secy-treas. The club starts with a membership of 17 and prospects for a large number more are bright. The membership fee is only twenty-five cents for the first year and the Secy. will be pleased to have all breeders join. It is to their advantage to do so.

#### Minnesota Live Stock Breeders.

A joint annual meeting of the Minnesota State Fair Association and the Minnesota Live Stock Breeding Association will be held in the State capital, St. Paul, January 8 to 10, 1901, and will without question be one of the greatest live stock meetings ever held in Minnesota. There will be five day sessions and two evening sessions, devoted entirely to the discussion of subjects pertaining to agriculture.

The questions discussed will include Sugar Beet Culture, the Pan-American Exposition, Dairying in Minnesota, Influence of Feed on the Body of the Growing Pig, Wire Grass and its Uses, How shall the Minnesota Farmer Improve the Cattle upon the Farm, the Care of the Brood Sow and her Young, Fattening Sheep, Live Stock Markets, and the Kind of Cattle the Farmer should Grow. These questions will be discussed by men each one of whom is an expert in his line. On the afternoon of Wednesday an address will be given by Hon. J. H. Brigham, Assistant Secretary of Agriculture, and the evening of Wednesday, Jan. 9, will be given up to the discussion of various agricultural topics by the students of the Minnesota Agricultural College.

# HERE IS HEALTH

**These Four New Preparations** comprise a complete treatment for all **Throat and Lung troubles**, also a **Positive Cure for Consumption**. The Food-emulsion is needed by some, the Tonic by others, the Expecto-rant by others, the Jelly by others still, and all four, or any three, or two, or any one, may be used singly or in combination, according to the exigencies of the case. Full instructions with each set of four free remedies, represented in this illustration.



This is a Positive Cure for all Throat and Lung Troubles, also

## CONSUMPTION THESE FOUR REMEDIES

Represent a **New** system of medicinal treatment for the **weak**, and those suffering from **wasting** diseases, **weak lungs**, **coughs**, **sore throat**, **catarrh**, **consumption**, and **other pulmonary troubles**, or **inflammatory conditions of nose, throat and lungs**.

The treatment is **free**. You have only to write to obtain it. By the system devised by DR. T. A. SLOCUM, the specialist in pulmonary and kindred diseases, the needs of the sick body can be condensed into his treatment by four distinct preparations.

Whatever your disease, **one** or **more** of these four remedies will be of benefit to you.

According to the exigencies of your case, fully explained in the treatise given free with the free medicines, you may take **one**, or any **two**, or **three**, or **all four**, in combination.

The four together form a panoply of **strength** against disease in **whatever** shape it may attack you.

## THE FREE OFFER.

To obtain these four **FREE** invaluable preparations, illustrated above, simply write to THE T. A. SLOCUM CHEMICAL CO., LIMITED, 179 King Street West, Toronto, giving post-office and express office address, and the free medicine (The Slocum Cure) will be promptly sent.

Sufferers should take instant advantage of this generous proposition, and when writing for them always mention this paper.

Persons in Canada seeing Slocum's free offer in American papers will please send for samples to the Toronto laboratories.

Let no previous discouragements prevent you taking advantage of this splendid free offer before too late.

**National Butter-Makers.**

The next annual convention of the National Butter-Makers' Association of the United States will take place at St. Paul, Minn., on February 18-22, 1901.

**Curing Pork.**

In different localities, country folks have their own way of curing bacon. We give the Scotch method in *Scottish Farmer*: The chief points to be observed are (1) perfect cleanliness, (2) thorough salting of the whole flesh, (3) proper storage.

Dry curing.—1. Lay your flitches of bacon on a stone floor or on stone scones, in a cool, airy, sunless, but not damp apartment. Rub them on both sides with common salt, leave for a day, then rub it off. Then prepare a mixture in the following proportions: Four pounds common salt, one and one-half pounds bay salt, one and one-half pounds brown sugar, four ounces saltpetre. Be sure not to overdose with saltpetre or the flavor will be injured. Spread a thin layer of this mixture on each side of the flitches and let them lie in it for a month, turning and rubbing them every day, giving more of the salt mixture when necessary. Be careful to rub well into the folds, ends, etc., and examine daily to see if there are any spots turning, mouldy, and clammy, when these must be removed. At the end of a month hang up to dry in a cool, airy room, or smoke for a week.

**Mating Turkeys.**

A late bulletin of the Rhode Island Experiment Station told of a party who bought two Western gobblers to mate with the native turkey hens. They estimate that the number of turkeys raised was enough more by buying such good stock, than they would have made money if they had paid \$50 each for the gobblers, which they did not. There is also an improvement in the breeding stock for another year and barring accidents those birds will be good for several more years. We do not know how old a male turkey will be before he begins to deteriorate for breeding purposes, but we do know that he is better at two years old than at one, and as good at four as at two. While we have bred turkeys when male and female were but one year old, we did not expect to get as strong, thrifty poults as the next year. We would always begin to breed from birds one year old if we could not have male or female older, but would keep them as long as they or their progeny continued to be good. There is a loss by the habit of selling off all the old fowl and keeping young ones to breed from every year, yet many follow it, perhaps from fear of having unsalable old birds if they do not. And they are not even careful to save the best and most vigorous of the young ones to

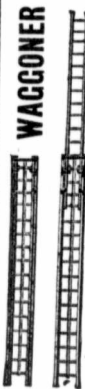
breed from, but take such as are not fit to dress for market. The turkey is not like the hen. They are nearer to the wild birds from which they originated, and, in fact, many of the Western turkeys are but one or two generations from a cross of the wild blood and they mature more slowly and will last longer than a bird that has been in a domesticated condition.

**Sugar Beets on Prince Edward Island.**

Some effort is being made to develop the beet-root sugar industry on Prince Edward Island. Sugar beets were grown the past season by six different farmers in separate sections of the province, and samples of these were submitted to F. T. Shutt, Chemist to the Dominion Experimental Farms, for analysis. The six samples showed analyses ranging from 12.04 to 15.52 per cent., giving an average of 13.92 per cent. This result was obtained under very unfavorable conditions, the seed not being sown till June 20, when it requires to be sown as early as possible. The land on which the seed was sown did not receive the cultivation necessary to produce a high sugar content. However, considering the fact that the soil of Prince Edward Island contains such a high percentage of sugar-beet producing qualities, it seems safe to conclude that the growing of the beet, if properly attended to, could be carried on very successfully.

**EARN!**

This lady's Watch, a beauty, with polished nickel case, ornamented dial, gold hands, stem wind and set movement, by selling only 3 dollars and 50 cents. The rarest and best sold article in the market. Everybody wants them, they are so pretty. Mail us this advertisement and we'll send the Horsehoes. Sell them, return the money, and your Watch will be sent you absolutely free. **The Dix Co., Box 3060 Toronto.**



**Extension Ladder**

Light, Strong, Convenient and Cheap.

From the Montreal Electric Power Co.

The Waggoner Patent Extension Ladder which we purchased of you has given us entire satisfaction, and we advise all others doing similar work to use these ladders.

For stacking, or for picking apples, and for general use about the farm the WAGGONER LADDER is unequalled. Made in all lengths. Write for catalogue and price-lists.

Ask your local Hardware Merchant for our goods.

**The Waggoner Ladder Co., Limited,**  
LONDON, ONT.



We give a handsome Watch with polished nickel case, ornamented dial, hour, minute and second hands, keyless wind, American Lever Movement, for each iron/steel/daily good and silver finished Horsehoe Ring at 10c each. Mail this advertisement and we'll send the Horsehoes. Sell them, return money, and your Watch will be sent you, absolutely free. **The Dix Co., Box 3060 Toronto.**

**A Timely Book for Farming World Readers**

By special arrangement with the author we are enabled to offer Professor W. A. Henry's excellent work, "FEEDS AND FEEDING," as a premium to THE FARMING WORLD.

This book should be in the hands of every stock feeder in the country. Professor Henry is the first to combine science with practice, and gives us a work that will be of value alike to the student who is seeking the principles underlying feeding, and to the practical farmer who feeds. When the enquiry is made for a work thoroughly exhaustive of this subject, he can be referred with safety to Professor Henry's book. The book is in one large volume, substantially bound in cloth, and published at \$2.00.

- Will be sent free to any present subscriber sending
- four new yearly subscriptions to THE FARMING
- WORLD at \$1.00 each, or to any present subscriber,
- not in arrears, for \$2.00.

Address all letters, and make cheques, money orders or drafts, payable to

**THE FARMING WORLD**

Confederation Life Building, Toronto

# MORE HOME KNITTERS WANTED



We want a few more workers in this locality, at once, and in order to secure your co-operation without the delay of correspondence, we herewith explain our full plan in this advertisement. The work is simple and the machine is easily operated, and with the Guide requires no teacher. If you wish to join our staff of Workers let us hear from you promptly with the Application Form for Stock and Machine filled out and remittance, and we will allot you stock and send you machine and outfit to begin work at once.

## THE PEOPLE'S KNITTING SYNDICATE

Incorporated by Provincial Charter under the Ontario Companies Act.

Authorized Capital Stock, - - - \$180,000 LIMITED.

HEAD OFFICE, - TORONTO, CANADA

The Syndicate is Offering a limited amount of Stock at \$1.00 per share in lots of twenty shares. (Each subscriber of the twenty shares to be furnished a twenty-dollar knitting machine free to work for the Syndicate and to share in the net profits of all goods made.)

The Syndicate has been formed for the purpose of manufacturing knitted goods cheaper than any existing company, to keep down prices, and to oppose the large knitting Combines and Companies which have joined hands to raise prices. To do this successfully it is necessary to get yarn at first cost and to manufacture goods with the least possible expense. Therefore—

1. The Syndicate supplies its own yarn and machines.
2. The Syndicate pays for all properly made goods at once upon receipt of same, and besides paying for the work when sent in will semi-annually divide with its working shareholders the net profits from the sale of all goods made by its shareholders.
3. The Syndicate pays for all goods made by its working shareholders.
4. The Syndicate sells all goods made by its working shareholders.
5. To each subscriber of twenty \$1.00 shares the Syndicate gives free a twenty dollar Knitting Machine to keep, and also supplies each working shareholder, free of charge, full directions, samples and yarn to make the goods.

To become a shareholder, a worker, the owner of one of the machines, to be paid for the work you do, and also to participate in the equal division of the net profits, you have only to become a member of the Syndicate and take twenty \$1.00 shares which will cost you twenty dollars. It is to supply its own yarns and knitting machines to its shareholders, FREE. By this plan it can readily be seen that the Syndicate not only benefits its shareholders by way of dividends, but is the source of a regular employment and income at their homes. The Syndicate is fully prepared to keep its shareholders supplied with yarns for doing the various kinds of work required, and it is also in a position to dispose of all goods knitted from these yarns through large jobbers and to the general trade as fast as it can be sent in by its shareholders.

It will be seen that to manufacture goods on so large a scale it would be necessary to have a number of knitting factories, which would mean the investment of thousands of dollars, besides taxes, insurance and interest on same. We can, therefore, not only manufacture goods cheaper and in larger quantities, but pay our shareholders dividends semi-annually.

**THE MACHINE** The Syndicate furnishes a high speed family seamless knitting machine, and will last a lifetime with ordinary usage. In fact the machine for twenty years. It will knit from the finest of imported yarns to the coarsest of Canadian wool yarn the same as hand work, but eighty times faster. In fact a pair of socks or bicycle hose in twenty minutes. With each machine a full outfit is sent together with a supply of yarn to commence at once. The guide accompanying the machines is so plain and the operation so simple that anyone of ordinary intelligence can make any of the knitted goods required by the Syndicate, such as Gents' Socks, Ladies' Stockings, Golf and Bicycle Hose, Knickers, Leggings, and Toggles for Children.

**THE PRICES** the Syndicate pays for knitting these goods are:—Socks, \$5.00 per 100 pairs; Ladies' Stockings, \$10.00 per 100 pairs; Gents' \$5.00 per 100. All these goods are quickly made on the machine and at these prices any person willing to work can make good pay, much more than clerking in store, working in shop or laboring on farm. Shareholders can devote all or part of their time knitting, but at all times they are expected to work for the interests of the Syndicate.

**WHO CAN JOIN.** All persons willing to accept and honestly knit the yarn entrusted to them, and to return made goods promptly to the Syndicate.

**WHAT YOU MUST DO TO JOIN.** Each person desiring to become a shareholder of stock, participating in the semi-annual dividend, and to work for the Syndicate, receiving pay as fast as the work is sent in.—must cut out the following APPLICATION FORM, sign their name to it, fill in address and reference, and enclose it with Express or Post Office Money Order to the Syndicate.

### Application Form for Stock and Machine.

THE PEOPLES KNITTING SYNDICATE, LIMITED.  
130 YONGE ST., TORONTO, ONT.  
I enclose you herewith \$30.00 in FULL PAYMENT for 20 shares of stock (subject to no other call) in The People's Knitting Syndicate, Limited, which I wish allotted to me, and one of your \$20.00 machines free, same as you furnish your shareholders, together with free samples, instructions and yarn, which I wish sent to me as soon as possible to enable me to begin work for the Syndicate at once upon receipt of same. The said stock to entitle me to participate in the semi-annual dividends of the Syndicate in addition to being paid cash on delivery for all the Knitting I do for the Syndicate on my machine.

Name your nearest Express Office: \_\_\_\_\_ Your name \_\_\_\_\_  
 \_\_\_\_\_ Post Office \_\_\_\_\_  
 Toronto Farming \_\_\_\_\_ Name Reference, Mr. \_\_\_\_\_

(Please state how much time you can devote to the work and how you wish to be paid—weekly, monthly or as you send in the work.)

## 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 poultry. Any information as to importations made, the sale and purchase of stock and the condition of herds and flocks 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. In co-operation of all breeders is earnestly solicited in making this department as useful and as interesting as possible. The editor reserves the right to eliminate any matter that he may consider better suited to our advertising columns.

## Cattle.

In Thornton's quarterly record of Shorthorn transactions for the three months July 1 to September 30, 1900, the following are the sales made: To Africa, 3; to United States, 28; to South America, 236; to Australia, 2; to Canada, 232; to Germany, 15; to Japan, 1; to New Zealand, 2; to Russia, 26; and to Tasmania, 1. Note that Canadian importations for the quarter are within four of as many as those to South America. A few years ago the latter country was 200 or 300 ahead of us.

Mr. John H. Douglas, M.P.P., Warkworth, Ont., in sending along a change of advertisement, says: "My herd of Ayrshires have come into winter quarters in fine condition. I have a number of very promising heifers sired by 'White Prince' (imported). Sales during the past year have been good, and prices are looking up. My bull calves coming a year old are an unusually promising lot.

## Sheep.

Referring to the recent shipment, per S.S. "Persic" of the White Star Line, of 24 shearing ewes to Mr. James Gibb, of Melbourne, by Messrs. Alfred Mansell & Co., of Shrewsbury, which without doubt is the largest and most valuable selection of Shropshire sheep ever taken to the Antipodes, the following particulars are given. Eight beautiful ewes bred by Mr. Philo Laos Mills, including the Bath and West and Wensleydale and R.A.S.E. winners, sired by Joe Chamberlain 9520, a son of Odstone Conservative 8153. Odstone Peacemaker 10048, winner Birmingham R.A.S.E., Scotland's Hero 10116, winner R.A.S.E., bred by Mr. Buttar by Crested Knight 8057 (sire of Royal Record, sold for 310 guineas), and Royal Stuart 9665, by Lord Patriot 4627. Five ewes hailed from Mr. Buttar's noted flock, and were typical nice ewes sired by Crested Knight 8957 before alluded to, Corston Knight 9862, bred by Mr. Buttar by Crested Knight, and Hallyburton 9937, bred by Mr. Harding by The Constable of Chester 7754. Mrs. Buttar supplied 3 choice ewes, including a first prize winner at Leicester Show, and two others, all sired by Mr. Bowen Jones' 185 guinea Endon Four B's. Two extra good ewes had been purchased from Messrs. Evans' flock, one sired by Star of the Morning 10145, bred by Mr. A. E. Mansell by Dream Star 8977, and the other by Mr. Minton's 60 guinea Montford Monarch 10016, by the Royal winner Phenomenon 8680. Mr. A. E. Mansell supplied 3 nice typical ewes sired by Fortification 9498, the sire of Mr. Mansell's Royal winner sold at 240 guineas, Dream Star 8977 and E-nny Dreamful 9362. The remainder (3) came from Mr. Minton's celebrated flock, and were ewes of a beautiful stamp, two of which were sired by Phenomenon, winner R.A.S.E., and one by Odstone Pirate 10049, by Odstone Pilot 8662. The whole of these ewes had been served by the very best sires obtainable, amongst which may be mentioned Strong B one 10548, Mr. Fenn's 100 guinea ram in 1899. Substituted, an own brother to Mr. Tanner's 120 guinea ram sold to Mr. Barbury, of Tasmania, an 85 guinea ram bought by Messrs. Evans at Harrington, by Fortification 9498, Odstonian 10054, Black Watch, Mr. Mill's 80 guinea purchase at Mr. Buttar's sale; Milas, Mr. Mill's 52 guinea ram, purchased at Mr. Munzi's sale; Ontario 10468, Buttar's Reserve 9381, Corston Judge 10034, Montford Judge 10435, etc.

Special care had been taken in selecting these ewes to procure close, dense fleeces and nice cherry skins, and Mr. Gibb is to be con-

gratulated in obtaining such a well-bred collection from some of the leading breeders of this valuable breed of sheep. Messrs. Alfred Mansell & Co. personally attended to every detail of the shipment, and the sheep were sent out in charge of a junior member of the Mansell family.

Messrs. Alfred Mansell & Co., of Shrewsbury, have just received a letter from Mr. George Simonds, of Tasmania, which reads as follows: "My Shropshire shearing ram, bred by Messrs. Evans, to be known henceforth as 'Austral Star', arrived by the S.S. 'Paparoa' on the evening of October 29 in good order, and it will interest you to know that I am perfectly satisfied with the selection. The other sheep sent with the same vessel turned up in a most healthy condition, reflecting creditably on the arrangements made for the journey."

## Swine

Mr. L. Rogers, Weston, Ont., reports the following sales of Yorkshires: To Jos. Rhodes, Deer Park, one sow; C. P. Hawkey, Grimsby, one boar; B. Gumby, Carlisle, one boar; Jas. Dunlop, Hamilton, one boar; J. M. Murachy, Purpleville, one boar; G. Ries, Habermehl, one boar; F. C. Walton, Kettleby, one boar; J. G. Savage, Burnhamthorpe, one boar; W. Baldock, Mount Charles, one sow in farrow; F. Jackson, Meadowdale, one sow in farrow; I. Budge-row, Ballantrae, sow in farrow; K. H. Thomas, Tormore, sow in farrow; J. B. McDonald, Muir Kirk, one sow (this sow won first at Winter Fair last week); W. J. Burke, Weston, two sows; and to F. Watt, Toronto Junction, two sows.

## Poultry.

In an exhibit of 52 bronze turkeys it is no small honor to win the sweepstake prize for best bronze. This fell to the credit of W. J. Bell, of Angus, at Provincial Winter Fair, Guelph, 1900. Mr. Bell has 60 young birds bred from this bird and a son of the sweepstake male at Toronto, January, 1899, for sale. Speaking of the latter show, Mr. I. K. Felch, of Natick, Mass., said of turkeys, geese and ducks, "it was the finest exhibit he had ever seen." At that time Mr. Felch was president of American Poultry Association.

Peaches have fuzz to make us understand how nice they would be if they didn't have the fuzz.

There are people whose idea of a pleasant, moonlit church garden party is to get into a hot parlor and murder gospel hymns.

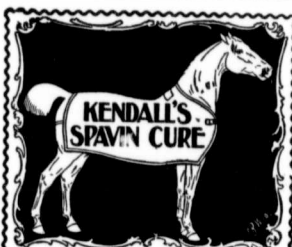
Summer undermines the morals; persons who yearned for hot weather all last winter now say they didn't do any such thing.

## BRONZE TURKEYS

30 pair bred from the sweepstake male at Guelph Winter Fair—52 Bronze on exhibition—and from son of sweepstake male at International Show, Toronto, Jan. '99; the two largest exhibits of turkeys held in Canada.

I BREED MY WINNERS

W. J. BELL, - Angus, Ont.



## The Old Reliable Remedy

for Spavins, Ringbones, Splints, Curbs and all forms of Lameness. The use of a single bottle may double the selling price of your horse.

Patent, March 6, 1899.  
Gentlemen—Please send me one of your "Treatises on the curable lameness." I do not use any other. I have successfully cured Shoulder Galls, Ringbone and Thrush.  
Yours with respect,  
DAVID McFARLAN,  
Metopola, F. C., Nov. 6, 1899.

Dr. R. J. Kendall Co.  
Dear Sirs—I am using your Kendall's Spavin Cure on a valuable mare with an enlarged hock joint, which came on by getting out in a barbed wire fence. I find it a perfect cure, and it is taking the enlargement all away. I cannot speak too highly of it. I notice you say, "Treatise on the Horse and his Diseases" are given to the Patron of Kendall's Spavin Cure, by sending a twenty-cent stamp. I enclose 5 cents for which please send me one of your books, and oblige,  
Very truly yours,  
A. R. WHEELER.

Thousands of men report equally good or superior results from its use. Price, \$1.50 per doz. As a Liniment for family use it has no equal. Ask your Druggist for Kendall's Spavin Cure, also "A Treatise on the Horse," the book free, or address  
DR. B. J. KENDALL CO., ENOSBURG FALLS, VT.

**BRANTFORD STEEL WIND MILLS**

19th CENTURY  
20th CENTURY

GAVANIZED ROLLERS  
BEARINGS

DEAR NEW FORGERS, THESE BOYS ARE

MY! WHAT A COMFORT THAT BRANTFORD MILL IS

OLD SHAPLEY POWER AND PUMPING MILLS.  
MUIR STEEL TOWERS AND FLAG  
CO. STAFFS, IRON AND WOOD  
BRANTFORD CAN. PUMPS, MAPLE LEAF GRAIN  
GRINDERS, BEE SUPPLIES.

## Advertising Pays!

IT IS POSSIBLE TO MAKE EVERY ADVERTISEMENT SO CONSPICUOUS :: IT WILL BE SEEN, SO READABLE :: IT WILL BE READ, SO CONVINCING :: IT WILL SELL GOODS.

TRY The Farming World

Look up our Premium Page.



# Market Review and Forecast

Office of THE FARMING WORLD,  
Confederation Life Building,  
Toronto, Dec. 31, 1900.

Trade during the past year has been good in most departments and the prospects for the coming year are bright. Payments on the whole have been good. There seems to be ample funds for all legitimate business. Money keeps steady at 5 to 5½ per cent, on call and 5 per cent, on time. Discounts keep steady at 6 to 7 per cent, as to nature of account.

## Wheat.

There is little improvement in the general trend of the wheat situation. With about 86,000,000 bushels of wheat in sight in the United States and Canada and on passage to Europe, consumers are not much worried about future supply. The export demand just now is slow and will likely continue so till after the holiday season. Prices just now seem very reasonable and the buyer would have no reason to complain should they advance a few cents. Most of the Ontario business being done is on millers' account and farmers are not delivering very freely. About 63c. is the ruling figure at Ontario points for red and white winter high freights. The market here is quiet with a firmer feeling noticeable. Local dealers quote red and white at 63½c. middle freights. Goose is quoted at 60 to 61c. On Toronto farmers' market red and white bring 67½ to 68c., spring fine 67½ and goose wheat 61½c. per bushel.

## Oats and Barley.

The oat market shows a steadier feeling, 25½ to 26c. are the ruling figures at Ontario points high freights. No. 1 white are quoted here at 27 to 27½c. and No. 2 at 26 to 26½c. middle freights. On Toronto farmers' market oats bring 29c. per bushel.

There is very little doing in barley except in fine malting grades. Prices here range from 37½ to 42c. as to quality offered. On the local farmers' market barley brings 41 to 43c. per bushel.

## Peas and Corn.

Peas are easier, and the market generally speaking is about 4c. lower. Quotations here are 61c. middle freights and 60c. high freights. On Toronto farmers' market white peas bring 62c. per bushel.

The corn situation in the United States seems to favor liberal marketing of corn. No. 2 American is quoted at Montreal at 46 to 47c. in car lots. No. 3 American is quoted at 43½c. on track Toronto.

## Bran and Shorts.

Ontario bran is quoted at Montreal at \$15 to \$15.25 in car lots on track, and shorts at \$16.50 to \$17. City mills here sell bran at \$14 and shorts at \$16 in car lots l.o.b. Toronto. At points west of here bran is quoted at \$13, and shorts at \$14.50 to \$15 in large lots.

## Eggs and Poultry.

The exports of eggs from Great Britain this year show an increase of 8,192 cases as compared with year previous. The market is still firm and fresh stock in large lots brings 20 to 22½c. at Montreal. Pickled stock is getting scarce. The market here is not quite so brisk. New laid, however, are in keen demand at 28 to 30c. in case lots, and select are quoted at 20 to 21c. On Toronto farmers' market boiling eggs bring 30 to 35c., and fresh stock 25 to 28c. per dozen.

The dressed poultry trade has been active. Advices from England state that some choice shipments of Canadian turkeys have realized 7d. to 7½d. per lb. Several car loads have been sent to British Columbia from Ontario, selling there at 10 to 10½c. per lb. dressed Boston style, that is entrails drawn, with head

off. Other sales are reported for the west at 9c. in the regular style, with heads on and undrawn. The chief demand in turkeys just now is for fresh killed, unfrozen stock.

Montreal quotations for fresh-killed stock are turkeys 9½ to 10½c.; chickens 7 to 7½c.; geese 6½ to 7c.; and ducks 8½ to 9½c. per lb. in round lots. There is very little poultry coming here just now and the demand is rather small. In a wholesale way turkeys bring 7 to 8½c., and geese 6 to 6½c. per lb., and chickens 20 to 45c., and ducks 40 to 70c. per pair. On Toronto farmers' market chickens bring 25 to 60c., and ducks 50 to 80c. a pair, and geese 6 to 8c., and turkeys 8 to 10c. per lb. Live ducks bring 45 to 70c. a pair.

## Potatoes.

There is little change in the potato market. At Montreal car lots bring 42 to 45c. Quotations here are 33 to 34c. per bag for car lots on track. On farmers' market they bring 35 to 40c. per bag.

## Hay and Straw.

Shipments of baled hay to Great Britain continue to be made and the market there is very encouraging, the only drawback being a scarcity of freight room. Since the roads have improved more hay is being marketed and farmers are receiving almost double what they received last year at this time, more especially in Quebec. Car lots of No. 2 are quoted at Montreal at \$9 to \$9.50, and clover at \$8.50. There is a good demand here but receipts are small. No. 1 is quoted at \$9 to \$10, and No. 2 at \$8 to \$9 in car lots on track. On Toronto farmers' market hay brings \$12.50 to \$14, sheaf straw \$12, and loose straw \$7.50 per ton.

## Fruit.

Prices for apples on the local markets keep good. Shippers lately have been doing better selling at Montreal, where really choice fruit brings \$2.50 to \$3 per barrel, than in shipping to England. Recent account sales show net returns at Ontario ranging all the way from \$1.35 to \$2. Some sales have been made during the week at \$2.50 l.o.b. at stations west of here, presumably for the Western States. There are some complaints from abroad as to inferior quality, due chiefly to fruit deteriorating in transit. On the local market here apples bring \$1 to \$2 per bbl.

## Cheese

There is little or no change to report in the cheese market, a few orders for small parcels still being received from England, but buyers are very loth to advance limits. Holders, however, as a rule, are firm in their views, 11 to 11½c. being their ideas on finest Western. Easterns are quoted at 10½ to 10¾c., and some holders refuse to sell their finest goods under 11c. Sales, however, are said to have been made in one or two instances at below asking figures. The exports of cheese during the past week from Portland and St. John, N.B., were 10,963 boxes, against 45,616 boxes for the same week last year. Besides the above, 2,786 boxes went via Boston.

## Butter.

The Old Country demand has fallen off, and the demand is now almost exclusively for the local trade. The *Trade Bulletin* sums up the situation at Montreal as follows: "The receipts during the past two weeks have materially increased, but they have all been readily absorbed, and even more could have been placed. There was an easier feeling at the middle of last week, but since then prices have firmed up again, sales being reported this week in lots of 20 to 50 pkgs. at 22½c. and 23c. One lot of 63 tubs and boxes was sold to a local trader yesterday at 23c. A feature in the situation is the offering of goods on this market by exporters, which shows that prices here have advanced beyond

the export basis. The continued cold weather has caused a material shrinkage in the supply of milk to the factories, and receipts are expected to be light for a time. Second grades of creamery are taken at 20½ to 21½c. without much hair-splitting over quality. In Western dairy there is not much offering, but choice dairy packed has sold at 19c., and we quote 18 to 19c. as to quality. A lot of inferior sold at 17c."

Creamery keeps steady here at 22 to 23c. for prints, and 20 to 22c. for tubs and boxes. Dairy is quoted at 17 to 19c. for pound rolls, and 17 to 18½c. for large rolls in good sized lots. On Toronto farmers' market butter brings 20 to 22c. per lb.

## Cattle.

Trade generally has been quiet and will be so until after the holiday season. Good to prime steers sold on Friday at Chicago at \$5.25 to \$6 per cwt. At Toronto market on Friday the run of live stock was light, consisting of 252 cattle, 1,032 hogs and 66 sheep and lambs. The quality of fat was not good the bulk of both exporters' and butchers' being unfinished. There was both a light supply and a light demand for all kinds of stock. A few choice exporters' are wanted at prices quoted.

*Export cattle.*—Choice lots of these are worth from \$4.50 to \$4.75 per cwt. Light ones at \$4.25 to \$4.50 per cwt. Heavy export bulls sold at \$4 to \$4.50 per cwt. Light ones at \$3.50 to \$3.75 per cwt. Lots of good butchers' and exporters' mixed sold at \$4.25 to \$4.37½ per cwt.

*Butchers' cattle.*—Choice picked lots of these, equal in quality to the best exporters', weighing 1,000 to 1,100 lbs. each, sold at \$4.25 to \$4.37½ per cwt., good cattle at \$3.75 to \$4, medium \$3.30 to \$3.40, and inferior to common at \$2.40 to \$3 per cwt.

*Feeders.*—Heavy, well-bred steers from 1,000 to 1,150 lbs. each sold at \$3.60 to \$3.90 and other quality at \$3.40 to \$3.60 per cwt. Short-keep steers 1,100 to 1,200 in weight in good condition sold at \$4 to \$4.25 per cwt. Light steers, weighing 800 to 900 lbs., sold at \$3 to \$3.20 per cwt. Feeding bulls for the byres, 1,100 to 1,600 each, sold at \$2.75 to \$3.25 per cwt.

*Stockers.*—Yearling steers 500 to 600 lbs. each sold at \$2.25 to \$3 and off colors and inferior quality at \$1.75 to \$2 per cwt. Yearling bulls 600 to 900 lbs. each sold at \$2 to \$2.25 per cwt.

*Calves.*—These are higher and in more active demand at Buffalo, choice to extra bringing \$8 to \$8.25 per cwt. At Toronto market calves bring from \$3 to \$10 each.

## Cheese and Butter

Makers of these articles, in many instances, do not pay the necessary attention to the quality of the salt they use. Some people think that "salt is salt," and it does not matter where it comes from or who makes it. This is a great mistake, for it is essential that to produce the best Butter or Cheese nothing but the purest salt should be used.

The number of prizes obtained by users of

## "RICE'S OR COLEMAN'S" DAIRY SALT

at the various exhibitions is conclusive proof that these brands of salt stand unrivalled. For prices, etc., address

R. & J. RANSFORD,  
Clinton, Ont.

**Milk cows.**—These are worth from \$30 to \$50 each.

**Sheep and Lambs.**

Prices are higher for sheep at \$3 to \$3.15 for ewes and \$2 to \$2.50 per cwt. for bucks. Spring lambs sold at from \$2.50 to \$3.50 each and \$3.50 to \$4.25 per cwt. At Buffalo on Friday Canada lambs sold on a basis of \$5.40 per cwt.

**Hogs.**

Hogs have recovered and are at \$6 again. Quotations on Toronto market on Friday were \$6 for select bacon hogs and \$5.50 per cwt. for light and thick fats. Uncured car lots sold at \$5.70 to \$5.90 per cwt. The Montreal market is reported easier at \$6 for light bacon hogs and \$5.75 to \$5.85 for heavier grades. The Trade Bulletin's London cable of December 27 re Canadian bacon reads thus:

"Business stagnant owing to holidays, but prospects point to an improvement after New Year's. Canadian bacon 54s to 58s.

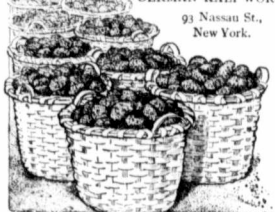
The Wm. Davis Co., Toronto, will pay \$6 per cwt. for select bacon hogs this week.

On Toronto farmers' market dressed hogs are quoted at \$7.50 to \$7.75 per cwt. for best quality.

**Two hundred bushels of potatoes remove eighty pounds of "actual" Potash from the soil. Unless this quantity is returned to the soil, the following crop will materially decrease.**

We have books telling about composition, use and value of fertilizers for various crops. They are sent free.

**GERMAN KALI WORKS,**  
93 Nassau St.,  
New York.



**Up**  
**With the**  
**Times...**

Progressive Cheese and Butter makers use : : : : :

**Windsor Salt**

because they know it produces a better article, which brings the highest price.

**THE WINDSOR SALT CO.**  
Limited  
WINDSOR, : : : : ONT.

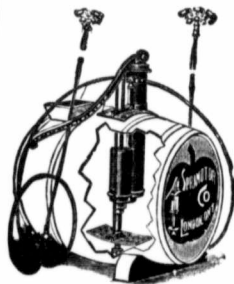
When a man and his wife are packing a trunk together in July, each should count fifty before saying anything.

To make corn pone, put one pint of meal into a bowl; pour over sufficient boiling water just to moisten it; it must not be wet. Cover, and when cool add a tablespoonful of shortening, melted, and two eggs lightly beaten. Add a pint of thick, sour milk to which you have added a teaspoonful of soda dissolved in two tablespoonfuls of water, and mix thoroughly. Turn into a shallow pan and bake in a moderately quick oven for half a hour.—*July Ladies' Home Journal.*

**Chocolate Creams.**—Two cups pulverized sugar, a half-cup of cream. Boil five minutes, take from the stove, flavor with teaspoonful vanilla and make into balls while hot.

Two squares of chocolate melted in a pan placed over a teakettle of hot water. Drop the balls, one at a time into the chocolate, roll over until covered. Lift out on to buttered paper and set away to harden.

**PAINTING BY MACHINERY**  
At One-Tenth the Old Price



If a reliable firm offered to paint your buildings at one-tenth the price your neighbor paid,

It's 10 to 1 you'd have it done. That's the situation exactly.

We'll send you the paint (a dry powder, only requiring the addition of cold water) and a machine with which you can paint your buildings, shingles and all, at one-tenth the old price.

Then you can whiten the interior of your buildings, and cellars, and paint your fences with a paint any color, that will not rub off, preserve your buildings, and make your outfit look double as well.

Then you can spray your potatoes, kill the wild mustard in the growing grain without injury to the crop, kill the horre fly and other insects that infest your stock—or fruit trees; disinfect and keep your

buildings pure, very much better, and in one-twentieth the time that you can do it in any other way.

The machine and paint both fully warranted. Don't you think this is worth your favorable consideration? It's every word true.

If you want more particulars, write

**SPRAMOTOR CO., 68-70 King Street, London, Canada**

Agents wanted. Catalogue and Treatise free. Write for it.

**FREE 51 GOLD WATCHES**

Do you take the "HOME MONTHLY." It's one of the brightest, best illustrated, and most readable of monthly papers. We ought to have twice as many subscribers and are determined to get them. To gain these new subscribers we offer, absolutely free, a magnificent 50 year Gold Filled Waltham Watch, of great size, open face or hunting case, as desired. The next 25 sending in correct answers will each receive a Gold Plated Hunting Case Watch, lady's or gent's size as desired, and should there be more than this number of correct answers, we will give in addition 25 Gold Filled Open Face Watches to the last 25 persons sending in correct answers, close on the last day of February, 1901, and all letters must reach us not later than that date. 2. With your answer you must enclose your subscription to the HOME MONTHLY MAGAZINE. 3. Money must be sent by Postal Note, Express Order or Registered Letter. Stamps not accepted. 4. All answers must be sent by mail, to insure perfect fairness. 5. Answers will be numbered in the order received, and watches sent to the successful competitors on the last day of February, 1901. Write today, for this is a special offer of a regular \$1.00 a year monthly Magazine for only 50c. HOME PUBLISHING CO., Box 3604 Toronto.

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Now for New Year Renewals

# PRACTICAL BOOKS

Premiums for FARMING WORLD readers

**3** Each reader of the FARMING WORLD does his duty to his favorite farming weekly an avalanche of subscriptions ought to reach the office within the next week. Many renewed before the old year expired, but a large number have overlooked the matter and allowed the new century to be ushered in before sending on their renewal subscriptions. Make it one of the first acts of the new century to at once sit down and enclose the amount due on subscription to FARMING WORLD, and mail promptly. Those who are getting up clubs ought to get their lists in with little delay so that subscriptions can start with the first numbers of the new year. The following are the list of premium books that we are giving at special prices to present subscribers when renewing, or that can be obtained without any outlay of money by the sending of one or more new subscriptions.

## SOILING CROPS AND SILO

An invaluable book by Thomas Shaw, Professor of Animal Husbandry at the University of Minnesota, and known to every Canadian farmer. This book is recognized as by far the most original and comprehensive on the subject of which it treats. Publishers' price is \$1.50.

Will be sent free to any present subscriber sending 3 new yearly subscriptions at \$1.00 each, or to any present subscriber, not in arrears, for \$1.50.

## THE STUDY OF BREEDS

This great work by Thomas Shaw, Professor in the University of Minnesota, is a recognized authority concerning the origin and history of all pedigree breeds of cattle, sheep, and swine now found in America, and deals with the subject in a manner of once brief, comprehensive and in regular sequence. Upwards of 400 pages, nearly 60 full-page plates, published at \$1.50.

Will be sent free to any present subscriber sending us 3 new yearly subscriptions at \$1 each, or to any present subscriber, not in arrears, for \$1.50.

## FORAGE CROPS

Invaluable book by Thomas Shaw. It has a practical ring about it from beginning to end that begets confidence in the reader as to the value of its contents. It is illustrated, substantially bound in cloth, and consists of about 300 pages. Publishers' price is \$1.00.

Will be sent free to any present subscriber sending two new yearly subscriptions at \$1 each, or to any present subscriber, not in arrears, for \$1.00.

## THE FARMER HIS OWN LAWYER

A new premium of the closing month of the old year is a valuable book entitled "Be Your Own Lawyer." This gives in condensed form the business laws of Canada—forming a practical and ready reference for Magistrates, Land Owners, Tenants, Builders, Contractors, Farmers, etc. The legal forms are all filled out in detail, signed and even sealed, thus serving as a model which any person can follow.

A copy of "Be Your Own Lawyer" will be furnished free to any reader of THE FARMING WORLD who will send two new yearly subscriptions.

## SUCCESSFUL FARMING

The fact that this book is written by Mr. William Rennie, Sr., late Farm Superintendent of the Ontario Agricultural College, is recommendation enough to many. Mr. Rennie always treats his subjects in a practical and useful manner. This is a book that should be in every farmer's library. Publishers' price is \$1.50.

Will be sent free to any present subscriber sending 3 new yearly subscriptions at \$1.00 each, or to any present subscriber, not in arrears, for \$1.50.

## HOME NURSING

This is a most valuable and practical book for home use on the farm. It is written by Eveleen Harrison an experienced trained nurse and in language that makes it easily comprehended by everyone. It brings to the farmer's wife information that will be of greatest value to her in time of need. An important chapter is devoted to preparations for a surgical operation at home and some hints as to the after care of the patient.

A copy of Home Nursing will be sent free to any subscriber of THE FARMING WORLD sending us two new subscriptions giving THE FARMING WORLD from present date to January, 1902; or to any present subscriber, not in arrears, for 50c.

## DOUBLE-BARREL BREECH-LOADING GUN

Any one sending a list of thirty new subscriptions to THE FARMING WORLD will have one of these guns sent to his own address, carefully boxed and packed, the recipient simply paying the express charges, or any subscriber to THE FARMING WORLD, not in arrears, for \$8.50, and thus save the straight \$3.50 on the transaction, express charges being paid by the subscriber.

Address all letters and make cheques, money orders and drafts payable to

# THE FARMING WORLD

Confederation Life Building, Toronto

# The Razor Steel

Secret Temp., Pat. Mrs. E. J. Saw  
1914, 1915, 1916



WE take pleasure in offering to the public a Saw manufactured of the finest quality of steel, and a temper which toughens and refines the steel, gives a keener cutting edge and holds it longer than by any process known. A Saw, to cut fast, "must hold a keen cutting edge."

This secret process of temper is known and used only by ourselves.

These Saws are elliptic ground thin back, requiring less set than any Saws now made, perfect taper from tooth to back.

Now, we ask you, when you go to buy a Saw, to ask for the Maple Leaf, Razor Steel, Secret Temper Saw, and if you are told that some other Saw is as good, ask your merchant to let you take them both home and try them, and keep the one you like best.

Silver steel is no longer a guarantee of quality, as some of the poorest steel made is now branded silver steel. We have the sole right for the "Razor Steel" brand.

It does not pay to buy a Saw for one dollar less and lose 25¢ per day in labor. Your Saw must hold a keen edge to do a large day's work.

Thousands of these Saws are shipped to the United States and sold at a higher price than the best American Saws.

MANUFACTURED ONLY BY

**SHURLY & DIETRICH**  
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## CHAMPION EVAPORATOR

For MAPLE SYRUP and SUGAR. Has a corrugated pan for fresh, doubling boiling capacity and saving fuel; small interchangeable syrup pans (connected by siphons), easily handled for cleaning and storage; and a Perfect automatic regulator, which secures rapid and shallow evaporation, and produces the best quality of syrup. The Champion is a perfect evaporator for



Catalogue Free.

SORGHUM,  
CIDER and FRUIT JELLIES.

**THE GRIMM MFG. CO.,**  
84 WELLINGTON ST., MONTREAL.

## VIRGINIA FARMS FOR SALE.

Good land; neighbors, schools and churches convenient. Mild, healthy climate. Low prices and easy terms. Write for free catalogue.

R. B. Chaffin & Co. (Inc.), Richmond, Va.

## EARN!

This beautiful gold finished ring, set with three magnificent brilliant-cut diamonds, by selling through the advertisement with your name and address also will send you the Five. Sell them, return the money, and we will mail you this beautiful ring, carefully packed in a handsome velvet lined case. Hamilton Novelty Co., Box 3911 Toronto, Can.



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OFFICE OF

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GILT-EDGED CREAMERY BUTTER

ARCH. RUSSELL, General Manager

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