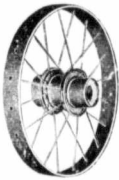


The Farming World

A Paper for Farmers and Stockmen

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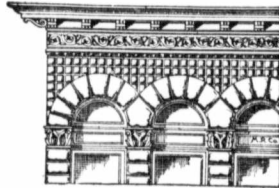
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WE think this just a little beauty. It would be an ornament in any room in any home. It will give good service as a time-keeper—that we guarantee. It possesses a stop hand, which can be used in many useful ways. It will serve as an egg boiler. If the good housewife has put on some dish at a given hour, and wants to make sure that it is taken off within a specified time, this clock will mark the hour so that there need be no mistake. The principle of the "stop" watch that is so valuable is applied to this clock. We anticipate a very large call for it.

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THE FARMING WORLD

Confederation Life Building, Toronto

The Farming World

For Farmers and Stockmen

VOL. XVIII.

OCTOBER 2nd, 1900.

No. 5

Live Stock Judging from the Learner's Point of View

Live stock judging as well as other exhibits at the autumn shows the educational feature should not be lost sight of. The great mass of farmers and farmers' sons who annually attend these fairs go there to learn something. It may be to find out the best type of cow for dairy purposes, the best kind of animal for the beef cattle trade, or perhaps the type of hog best suited to the bacon trade and so on. No doubt the majority of the farmers who visit the fairs, generally speaking, know the breeds of cattle adapted to dairy purposes and also those best suited to the beef trade. But this is not sufficient. To become an expert dairyman or a successful producer of beef cattle the farmer must know the individual animal best suited to either of these purposes. The great lack in the country today, especially in connection with the development of our export cattle and bacon trades, is that the average farmer is not sufficiently familiar with the individual types of animals required for successfully pursuing these lines to make proper selections when he goes to buy. Very often an animal of one of the so-called beef breeds or a hog of one of the recognized bacon breeds is purchased without any regard to the individual qualities of either with the hope that successful results will follow. These not being forthcoming in a measure in which he has been led to expect, the purchaser becomes discouraged, reverts back to the old order of things and naturally concludes that pure-bred stock is not what it is cracked up to be.

In the face of this condition of affairs it may well be asked if the methods of awarding prizes at our fall fairs are best suited to educating our people as to the types of animals required for successfully developing the beef cattle, bacon, or mutton trades as the case may be. If they are not, they are very much lacking in one essential and important feature. No doubt an exhibit of show cattle well brought out, no matter what the methods of judging are, has a certain educational value, which is all right as far as it goes. But this is not enough. It is possible to so judge the exhibits of live stock at every fair as to make it a great educational factor along the lines we have indicated. Where this is not done our exhibitions fail in one essential feature, and lose a splendid opportunity for making their influence felt upon the community for good. But are the present methods of judging, and those which have been practised for the past few years, the best that could be adopted for educational purposes along the lines we have indicated. From careful observation during the past few years of their working and effect upon the onlooker we

are led to the conclusion that they are not. But if they do not fill the bill, what is the remedy? We recognize the difficulty. It is very often much easier to find fault than it is to suggest methods of improvement.

However this may be, there are one or two particulars in which present methods are lacking, and which we think are capable of being improved upon. In present methods of judging there is a great lack of uniformity and system. There is no definite plan laid down for judging in the different classes. The exhibitor, when he brings an animal into the ring, cannot rely upon any systematic plan being followed in making the awards. If there is a new judge a new method is usually followed, and too often a new type put forward just as it suits the training and experience of the judge. In this way the onlooker sees one type of animal put forward as the ideal one year, and the next year some different type, and he goes away somewhat muddled as to what is the ideal, and which is the animal he should take as his model if he desires to make a purchase. Of course the judge is not always to blame in the matter. He is put there to do the best he can according to his ability and training, and it is only right to say that the majority of those who judge at our larger fairs are fair and honest in their methods. But this is not the point at issue. The question is, what effect has such a variation in methods or lack of system upon the learner, who is endeavoring to find out what is the ideal type of any particular class?

Not only is there a lack of uniformity in the methods followed year by year at one exhibition, but there is hardly any uniformity at all as between the methods of awarding prizes at one large fair and those of another held the following week. For instance, it frequently happens that an animal awarded first prize at the Industrial will, the following week, be put down to second or even third place at the London Fair. What is the onlooker to do in such a case—and we are discussing this question entirely from the onlooker or learner's point of view? Is he to take the first prize animal at Toronto or at London as his ideal? Are both right or are both wrong? These are questions which we will leave our readers to answer.

All this variation comes from lack of uniformity or system in methods of judging. To overcome this, would it not be possible for our exhibition associations to co-operate, and adopt some standard or type for each breed or class, to be used as a guide by the judge in making the awards? This would necessitate the use of a score card, which, in our opinion, would be a distinct advantage in many cases. And if upon this score card a photograph or diagram of the ideal type of animal for each breed or class could be given, it would greatly assist in bringing about more uniform methods in judging.

The appointment of judges at the larger fairs is now practically under the control of the breeders, as they recommend the judges in the different classes, and who are invariably selected by the fair managers. We have no special fault to find with this plan. It has been suggested, however, that the practice of selecting judges at the breeders' conventions in the open meeting is not the best one to follow. Better results might be obtained if a special committee were appointed to recommend a set of judges to the members. Often a person is nominated for judge in the open meeting, to whom, because he is there in person, no one cares to raise any objection, though he may have good grounds for doing so.

If it were possible to select some thoroughly competent and reliable individual with no axes to grind or interests to serve but the welfare of the exhibition and its influence upon the masses as an educational institution, who could be relied upon to act for several years in succession, this lack of uniformity in methods of judging might be largely overcome. And in addition, if every judge would give his reasons for making the different awards, the fair could be made of greater educational value to the onlooker and the person seeking information.

We have dealt with this question at greater length than we at first intended, but not too great considering the importance of the question from an educational point of view. The educational feature of the fall fair must predominate if the exhibition is to grow and fill the place it is designed to fill in the community. Unless this is kept to the front the fall fair is apt to degenerate into a mere distributor of prize money to successful exhibitors. This whole question is worth discussing, and we would be glad to hear from interested parties in regard to it.

The Apple Trade

There has been some difference of opinion expressed this season as to whether Ontario has a large apple crop or not. From what we learn of the prices being offered at country points for winter fruit there cannot be much doubt as to this question. Ontario has a good crop of apples and an extra big one at that. When, however, from 40 to 75c. per bbl. are the ruling figures for good sound winter fruit it is safe to conclude that the farmer's orchard is well loaded and that an abundant supply must be forthcoming. One dollar per barrel is considered an extra high price this fall, whereas last year the average price for the fruit in the orchard was about double that figure. But then apples were few and far between on the trees last year, while this season the very reverse is the case.

Many farmers are, no doubt, asking themselves the question, will it pay to bother with the fruit at these prices? The best way to find this out is to make a little comparison. Suppose, for example, a tree that yielded one barrel of good, sound fruit last year will yield three this season. Then we have about an equality in the total cash receipts from each tree and if it paid to sell apples at \$2 per bbl. last year it should pay this season when the yield is three times greater even at about 70c. per bbl. But if the apples are not sold at this lower figure to the packers, what is to be done with them? It will never pay to allow all this good fruit to go to waste. Something must be done with it, and we believe that the more of it that can be exported at this low figure, providing the sample is good and no frauds have been practised in the packing, the better. If we can send over to Great Britain this fall a large supply of good sound fruit properly packed that can be sold at a low figure it will serve to introduce Canadian fruit to a wider circle of consumers and help to enlarge the market for the future.

We are not without a precedent for the development of a trade in this way. The very large demand at the present time for Canadian cheese is to no small extent due to the fact that in the earlier history of this industry there were seasons of plenty when our factories were compelled to sell their

output at such low figures as to enable old country dealers to dispose of it at rates away below its real value. This had the effect of introducing Canadian cheese into the homes of people who had never tried its good qualities. But being cheap they gave it a trial and have been more or less regular customers ever since.

So an abundant apple crop may be of distinct advantage in enlarging the market in Great Britain for Canadian fruit if it is properly managed. But to accomplish anything definite in this line only honest and careful methods of packing should be followed. The fruit should be selected, graded, branded and put up in the best possible condition for export. If this is done and the fruit placed upon the British market at a price at which more people can afford to buy, it will serve to introduce our apples to a larger circle of consumers and have a wholesome effect in retrieving to some extent the reputation we have lost for honesty and fair dealing in our fruit trade. Here is an opportunity for our fruit growers and dealers to show what they are made of and to greatly extend the export market for Canadian fruits.

But even if there were nothing to be gained by making a special effort along the lines we have indicated, it will pay to pick, handle and pack this year's crop as carefully as possible. There are not wanting signs to show that the situation may improve somewhat later on. Large shippers are working very cautiously at the present time, and will likely do so until an approximate estimate of the crop can be formed. Some, who are reported to be good authorities, claim that this season's crop in Canada has been greatly over-estimated. Then the big wind-storm has lessened to some extent the supply of good winter fruit. It is estimated that in the Eastern States and Canada the severe gales have robbed the orchards of from 10 to 15 per cent. of their sound fruit. All this must have some effect on the market for good sound fruit later on. It is expected that the winter crop this season will be about two weeks late.

A factor that is working against higher prices for winter fruit just now is the very disastrous accounts sales that are arriving from shipments of early fall fruits. We hear of shipments that no more than paid freight and commission, and others netting from 25c. to 35c. per barrel. One or two lots of very fancy brands of fall fruit have netted \$1.25 to \$1.50 per barrel, but these are the exceptions, and the other cases mentioned are nearer the mark. The hot weather at the time of shipment and careless methods of packing are responsible for a large share of the failures in shipments of fall fruits. Returns of this character for fall fruit have been so common of late years that it is worth while to consider whether it would not be better to discontinue all shipments of early apples and confine our efforts wholly to winter varieties. It is certain that fall fruit arriving in bad condition has an injurious effect upon the sale of Canadian winter apples later on.

Two Expert Opinions

"Your Exhibition number was admirable and I am sure should do much to convince the farmers of the country of the value of 'The Farming World.'"

**Dr James Fletcher,
Entomologist and Botanist,
Central Experimental Farm, Ottawa.**

"Your Exhibition number contains a great deal of interesting and attractive matter and your effort will, I feel sure, be greatly appreciated by our leading agriculturists."

**Professor Frank T. Shutt,
Chief Chemist, Dominion Experimental Farms,
Ottawa.**

Maritime Agriculture

We publish in this issue a comprehensive article dealing with the agricultural situation in the Maritime Provinces, specially prepared for these columns by W. W. Hubbard, secretary of the Maritime Stock Breeders' Association. The article is well worth a careful perusal by Ontario Agriculturists. The writer treats the subject in an historical way and shows clearly the trend of agriculture in the provinces down by the sea since before confederation. For a long period things seemed to drift along with very little in the general outlook to cheer the weary tiller of the soil. Occasionally there were rifts in the clouds that seemed to forebode brighter days; but it was not until 1890, when Prof. Robertson appeared with his plans for developing dairying, that anything like permanency was given to methods for bettering the condition of the Maritime farmer. Mr. Hubbard's outline of what co-operative dairying has done in that section of the Dominion, especially in Prince Edward Island and New Brunswick, reads something like a romance.

It is in regard to live stock that the Maritime Provinces are specially weak at the present time, and consequently the advent of the Dominion Live Stock Commissioner has been received with confident hope by the breeders down by the sea. There is certainly much to be done in this connection. With large areas of rich grazing lands and climatic conditions suitable for stock raising of all kinds, our Maritime friends should certainly be doing more than they are now in the way of producing good cattle, good sheep, and good swine. In this field the new commissioner will undoubtedly find ample scope for his best energy and skill.

The opening sentence in Mr. Hubbard's article is most reassuring. That the closing year of the century has brought a brighter day for agriculture in all parts of the Dominion is quite evident. It is most gratifying, however, to know that our brother farmers down by the sea, after so many years of discouragements and seeming failures have reached a point from which they can look forward with so great a degree of hopefulness. We wish them every success and trust that the influences now at work will make for progress and prosperity all along the line. And we are not altogether unselfish in our good wishes. Though varied conditions may prevail and varied needs may be characteristic of the different provinces of this great Dominion, the success or failure of any one portion must react upon the rest. While a certain amount of rivalry between the various provinces cannot but be wholesome, yet Canadian agriculture, as a whole, cannot be said to prosper unless this prosperity reaches out to all parts of the Dominion. We, therefore, welcome a brighter day for the Maritime agriculturist, a reflex of better things for Ontario and the other provinces of Canada, though there has not been much to complain of the last year or too.

Weaning the Foal

The weaning of the foal is not so difficult a process as many imagine, if gone about in the right way. The process should be a gradual one, and should begin almost from the time the colt is born. If during the first five or six months of his life the colt is given a little grain, and trained to eat and to remain away from his mother for short periods, when the time for weaning arrives he may be taken away altogether, and not feel the separation to any appreciable extent. There should always be a transition stage leading up to the weaning time, and a preparation of the colt for the separation. Unless this is done it will be found a somewhat difficult matter to wean the foal, and keep up his condition of flesh and heart.

The too general practice with most horse raisers is to shut the colt away from his mother some fine day, and leave him to make the best of the feed thrown to him, and to do the best he can without the maternal care and milk. Such a plan always results in positive injury to the foal, who loses

flesh rapidly, and by the time he has been thoroughly weaned is so reduced in condition as to require extra care in order to pull through the winter. Besides, such a plan is really cruel. The better way is to make the weaning process a gradual one, and so accustom the foal to eat and be tied up for short periods, that when the time for separation from his mother arrives it can be made without any loss of flesh or injury to the colt. The great trouble at weaning time is the empty stomach. If the foal is changed abruptly from his mother's milk to feeding on grain alone, he is sure to have an empty stomach, unless trained to eat grain, etc., beforehand. Some breeders advise adding cow's milk to the feed at weaning time, while others strongly oppose it. It would hardly be necessary if the colt is thoroughly prepared beforehand for weaning.

Fattening Qualities of Different Crossbred Chickens

At this season of the year farmers will be interested in knowing something of the fattening qualities of various crossbred chickens. A series of experiments along this line were conducted at the Central Experimental Farm, by A. G. Gilbert, Poultry Manager, and throw considerable light on this subject. The experiments were conducted with the following crossbred chickens: 9 White Plymouth Rock and White Leghorn crosses; 1 Light Brahma and Barred Plymouth Rock cross; 1 White Wyandotte and Light Brahma cross and 1 Audalusan cross.

The object of the experiment were to note the amount of flesh that could be put on crossbred chickens in a certain time, with no specially prepared food, or effort, beyond cooping them up.

The birds were fed three times a day on the ordinary mash given to the other chickens. Each chicken was placed in a separate coop with feeding trough in front, and was given all it could eat.

The greatest progress in four weeks was made by the Light Brahma and Barred Plymouth Rock cross, which showed a gain of two pounds and one-half ounce. The next best was a gain, in the same time, of 1 pound 7½ ounces by a White Plymouth Rock and White Leghorn cross.

The White Wyandotte and Light Brahma cross showed development of 1 pound 5 ounces in the same time.

The gain in other cases was 1 pound 7 ounces, 1 pound 1¼ ounces and 1 pound 1 ounce.

From time of hatching out till five months and seven days of age Nos. 4, 7 and 9 of the White Plymouth Rock and White Leghorn cross weighed respectively 5 pounds 5½ ounces, 5 pounds 4¾ ounces and 5 pounds 5 ounces, or a weight per pair of 10 pounds 10¼ ounces and much heavier than the ordinary market fowls. At six months and five days the Light Brahma and Plymouth Rock cross weighed 6 pounds 6¾ ounces.

It must be borne in mind that the above were first crosses and are not to be confounded with the nondescript of the barnyard. Experience of many years has proved that the nearer the thoroughbred heavyweight the better the result. The moral is obvious.

The Maritime Situation

As Discussed from an Agricultural Standpoint, by W. W. Hubbard, Sussex, N.B.

Agriculturally speaking there has probably never been a period in the history of the Maritime Provinces when the signs of the times pointed to a better condition among the farmers than in this closing year of the century. There have undoubtedly been times, long ago, when farm produce sold higher and when particular sections of these provinces were much more prosperous, but never a time when

taking a view of the whole three provinces, the farmers were upon a better basis than at present, and when the outlook was more full of honest business hopefulness than at the present moment.

There are many reasons for this, of which space here will not allow a complete analysis, and we may only mention a few of the factors in bringing about this condition.

Before the confederation of Canada, and when the different provinces enjoyed a free entry into the United States, a country then suffering from the effects of civil war and the enforced idleness of its farm lands, splendid prices were got for all kinds of farm products and horses, cattle and sheep. Especially were the horses valuable, and any old coloped that could stand up would bring his owner from \$100 to \$200. Potatoes brought from \$1.50 to \$2.50 per barrel from the field, and other products were almost in like proportion. Our own cities and towns were then only supplied by our own farmers, and except in years of unusual plenty prices in the home market ruled fairly high.

When the reciprocity treaty with the United States was abrogated and the farmers of that country themselves began again to farm, and the Western Middle States were opened up, the United States market failed us. Then a few years later, when railway communication was opened to Montreal, under specially favorable long-haul arrangements, down came the second-class products from Ontario, and our unfortunate markets were made the dumping ground for carload after carload of country store butter, low-grade cheese and of the second and third quality of meats, lard, etc. As this trade grew, hundreds of thousands of dollars went, and still go, annually from our largest cities to Ontario points for beef cattle, dairy products, dressed meats, pork and pork products.

Our farmers were discouraged, and loud and deep was the wailing all over the country. This condition had dire effects. It started thousands upon thousands of our best young men and women out of the country, it caused the desertion of hundreds of the outlying farms, and dried up the courage and quenched the enthusiasm of a people whose breeding and training had given them no small share of these qualities.

Your Ontario readers will perhaps enquire how the country was kept up at all under such circumstances, but the answer is not so hard as it might seem, for lumber, fishing, shipbuilding and mining were giving not only a living but large profits to thousands of our people. It was perhaps to these varied resources that our backward agricultural condition was most attributable. Our people had not turned, and did not feel that they must turn, their attention to agriculture. The provincial governments of the day, though always solicitous for agriculture, did not feel, any more than the people they represented, the imperative need of agricultural development; and so matters drifted till well along in the eighties, when the result of organization among the leading farmers began to manifest itself in increased interest in farm matters. Some farmers' meetings began to be held. In 1887 Dr. Twitchell, a well-known agriculturist of Maine, was brought into New Brunswick by the New Brunswick Government and addressed a few meetings. In 1888-9 he and Mr. Z. A. Gilbut, another good Maine farmer, were brought in by the officers of the Provincial Farmers' Association, and a series of some twenty-five local meetings addressed. The expense of these meetings was paid entirely out of the pockets of the officers of the association.

In Nova Scotia and on P. E. Island earnest men were at work, and an agricultural paper was started at Sackville, N.B., and conducted by two different Maritime graduates of the Ontario Agricultural College. It was afterwards dropped through the death of its editor and proprietor. P. E. Island farmers had, during the years of which we have been speaking, occupied a somewhat different position to their mainland brethren. Agriculture was their main dependence, and they had, through their attention to it, greatly increased the production of their farms. Their Government and some private individuals had imported some very excellent horses and good cattle and sheep, and

they went into horse raising as a speciality. For many years after they enjoyed a trade in horses which only died with the tremendous slump in the horse market in the early nineties, and even then would not have died had the men kept up a supply of choice quality and not, as many of them did, gone out of breeding entirely.

With the agitation that had been started, things were ripe for action when the Dominion Experimental Farms were established and considerable attention was given the public utterance of Dr. Saunders and Colonel Blair when they appeared among us in charge of the experimental work.

DAIRYING.

In 1890 Professor J. W. Robertson appeared as Dominion Dairy Commissioner and received a hearty welcome at the various conventions. He at once inspired enthusiasm in the prospects for dairy farming. Acting in concert with him the Provincial Governments encouraged the starting of cheese factories and creameries and the New Brunswick Government appointed dairy superintendents who performed much the same work as is done by the inspectors of the Ontario Dairy Associations.

In Nova Scotia Prof. Robertson's department under the efficient charge of Mr. J. E. Hopkins has carried on all the inspectorial work, and while the dairy work is not there growing quite as rapidly as in other provinces, the foundation is well laid, and if the great fruit and hay interests did not receive so much attention more rapid advance would be made. It was upon P. E. Island that the most notable progress was made. Under the Dominion department, with Mr. T. J. Dillon as superintendent in charge, the growth of the dairy department was there most phenomenal. The first factory was started at New Perth in 1892, and in 1897, only five years later, when Prof. Robertson withdrew from the control of the factories there were thirty cheese factories and five creameries with some twenty-four of the cheese factories starting into winter butter-making. Many are the farmers upon P. E. Island to-day who bless Prof. J. W. Robertson. Last year, just seven years after the starting of co-operative dairying on the island, there were thirty-four cheese factories which turned out 3,745,468 pounds of cheese and paid the farmers for the milk supplied \$304,186.16, an average price of 78.12 cents per hundred weight.

In New Brunswick, for the same year, there were fifty-five cheese factories in operation and twenty-five creameries and skimming stations. The cheese factories turned out 1,657,953 pounds cheese which sold for \$157,505.53. The creameries made 303,905 pounds butter which sold for \$58,494.40.

In Nova Scotia the figures were last year twenty-one cheese factories and creameries making 287,998 pounds cheese and 298,519 pounds butter, which sold for \$98,497.

The encouragement given by the Dominion Department of Agriculture to cold storage facilities, both in warehouse and in transit on cars and steamers, has greatly assisted the sale and shipment of butter.

While none of these figures are very large they indicate a good start and with our almost unrivalled natural resources for dairy farming and the good market which is meeting our butter and cheese the number of farmers who are expressing faith in the profits of dairy farming is rapidly increasing.

FRUIT GROWING.

The apple-growing interests of the Annapolis Valley of Nova Scotia can be reckoned among our most important industries and the immense possibilities of fruit growing in all three provinces are practically only limited by the outlet for the products of orchard and garden. The region from Windsor to Digby, or perhaps to Yarmouth, is certainly the best natural fruit belt, but experience shows that in all but a few localities apples, plums and small fruits can be grown with ease and success all over the three provinces. Pears, peaches and the most tender winter fruits have only so far been a commercial success in the Annapolis Valley.

Prof. Robertson's pioneer work in shipping soft fruits,

tomatoes, etc., to the English market has been watched with much interest here and we hope soon to participate in the trade.

BAIT FREEZING.

While referring to Prof. Robertson we should not omit to mention his service to the shore fishermen and the deep sea fisheries as well as in working up cold storage warehouses where bait may be held and kept constantly on hand for passing vessels. These warehouses are now being established all about our coasts and by next season we will, no doubt, see much money put in circulation among the men who catch the herring for bait and also see the deep sea fisheries made more profitable through the steady supply of bait which will be obtainable.

POULTRY RAISING.

Nor should we omit to mention the great encouragement which both he and Mr. A. G. Gilbert of the Experimental Farm have lent our poultry industry. The work done at the poultry fattening stations here last autumn bore fruit concurrently with their operation, in inducing a number of men to fit their fowls for market and they were all pleased with the result. This year several men will feed poultry for the local markets where there is abundant room at present for all the well-fleshed birds that will come forward. As a result of Mr. Gilbert's work, coupled with that of the fattening stations, we are informed that there are five chickens upon Prince Edward Island to-day for every one that there was there at this time last year. We look confidently forward to a large export trade in both poultry meat and eggs.

SEED GRAIN COMPETITION.

The Seed Grain competition provided for through the liberality of Sir William McDonald and carried out by Prof. Robertson is also attracting much attention and a large percentage of the competitors are taking an intelligent interest in their work and will carry it out with great advantage to themselves and their neighborhoods. Several gentlemen have been visiting these young people and from their reports to Prof. Robertson we glean these facts. The change in the regulations governing the competition whereby the test may be made upon $\frac{1}{4}$ acre instead of a whole acre will lead a number who would not otherwise do so to enter the three-year competition. When these competitors and their friends once see the benefit of selecting the best grain from the best plants for seed, it will work a great change for the better in the yield of grain for these provinces.

LIVE STOCK.

When we come to speak of the live stock of the Maritime Provinces we cannot at present do very much boasting. We have a few choice dairy herds that will hold their own pretty well with anything in the Dominion, and some four or five beef herds are excellent; but taken as a whole our stock is not producing cheap and good beef nor are our cows sufficiently large producers to make dairying as profitable as it should be.

The Maritime Provinces are an excellent sheep country and now have a pretty fair market for all the lamb and good mutton they can raise. Boston shippers are now contracting for lambs at $3\frac{1}{2}$ cents per lb. live weight, provided the lambs weigh 90 lbs. or over, and the home market is always pretty good for a good article. Had our sheep growers any protection from dogs this business would increase by leaps and bounds.

In connection with dairying pork raising would be here a very profitable branch if we were able to sell our pigs in a satisfactory market. At present, unless we ship to Montreal, there is practically no market for pigs on foot and the local packers in buying dressed pork all take such advantage of weather conditions and a flush of supplies that the prices they pay are usually below standard market quotations and are discouraging to pig growers. There is a packing house at Charlottetown, P. E. I. which buys pigs on foot, but the pigs do not seem to suit the packers and

prices are cut for that reason. The farmers have attempted, by consultation with the proprietors of the packing house, to learn the kind of pig required, but so far the information has not been given and the packing house and the farmers are drifting farther apart.

THE LIVE STOCK COMMISSIONER.

We hope that our new Live Stock Commissioner, Mr. Hodson, will be able to assist us to a better system of marketing pigs. The work that has already been done in Ontario if carried out down here would be of incalculable benefit. In all other departments of the live stock business there is plenty of scope for his energy and we are looking to him for much practical advice and assistance. In his recent trip down here he made everywhere a most favorable impression, and all of our leading men seem disposed to work heartily with him in furthering the objects he has in view. If he can arrange with our Provincial Governments to have our local educational meetings put on the same good basis as prevails in the Ontario Farmers' Institute system and get our breeders and live stock men generally to rally round live stock associations it will be a great step in advance.

Mr. Hodson's experience and great success in his native province makes him a very suitable leader for the movement down here. Undoubtedly our organizations should be inter-provincial as one set of officers could very well administer the work for the three provinces, and so save a great deal of expense that separate organizations in each province would involve.

Several of our live stock men a few years ago realized this fact, and also that the existing provincial organizations were not fully serving the interests of breeders of pure-bred stock, and they formed in December, 1896, the Maritime Stock Breeders' Association. This association has since been endeavoring to create a sentiment for better stock, and trying to assist its members in the purchase, sale and transportation of their animals. This year the Provincial Governments have given it some assistance, and a number of meetings have been and will be held in the furtherance of its objects.

Mr. Hodson came down at the invitation of this association, and was introduced in the different localities by its officers, and they hope with his help to carry out a programme of meetings and some other practical work, which will help to stimulate the live stock interests. We hope soon to have him back again to complete arrangements.

Lack of space in a single article forbids the extension of this discussion. We can in the last decade see great agricultural advancement in these provinces, and looking forward we can see room for more. There are many factors at work among us, such as the Sussex Dairy School, our Provincial Exhibitions, our annual farmers' conventions, and the work of our Agricultural Departments, as well as the individual influence of the departmental officers. These should all be recognized, and they all have a bearing upon the outlook. Wise and harmonious action is hoped for among all of them.

EXHIBITIONS.

This season we are to have three Interprovincial Exhibitions. One opening at St. John, N.B., on the 10th September, one at Halifax, N.S., on the 12th Sept., and the third at Charlottetown, P. E. Island, on the 24th. It is unfortunate for our live stock interests that the exhibitions at St. John and Halifax are upon the same dates, and it is presumed that our stockmen will see that this mistake does not occur again.

Several cargoes of the supplies needed for the British troops in South Africa have been shipped from St. John, and this has afforded an outlet for hay and canned products that has helped out several of our dealers very materially. It is rumored that further shipments will be made from St. John at an early date.

THE CROPS.

The crops for the present year can be put down as about

an average. Hay has been below, and in some districts almost a failure. Grain went in the ground very late, some of it very badly on account of the cold wet spring, and the acreage is small. Early sown grain is now being harvested, and is generally good. The later grain will also be good if it is not frosted. Potatoes are rusting in some sections, and if the weather keeps damp they will undoubtedly rot. But very few farmers use the Bordeaux mixture as a blight preventive. Roots are small in acreage, but doing well.

Pastures have been much better than usual, and this fact, with the good prices for cheese and butter, is wonderfully increasing the output of the factories and the faith of our people in dairy work. Taken altogether, the present year is a good one for the Maritime Provinces, and we can look forward with hope to rapid growth in our agricultural development.

IMMIGRATION AND MARKETS.

As a result of the energetic policy of the New Brunswick Government, a number of very desirable English people have reached this province with the idea of farming—some of them with considerable capital to invest. We welcome these men. We have millions of acres of good farm land yet unoccupied, and we have as good a chance to export our products as has any country. A short sea voyage carries us either to the West Indies and to South America, or to Great Britain, and all these countries need our products. We feel that we are now upon a better and broader basis than when times were so good years ago, and that we have the whole world for a market if we will but export the produce that is demanded.

OUR NEEDS.

Our principal requirements to-day seem to be more technical education in agriculture, more hearty co-operation among our people through good organizations as well as in a business way, better transportation facilities, and more faith in the country and in ourselves.

Live Stock at the Ottawa Fair

(Specially Reported.)

HORSES

The horses at the Ottawa show this year were no improvement, as a general show, on those out last year. The numbers were probably much the same, and while in some of the classes, notably high-steppers and saddlers, animals were shown that were better than the same classes formerly, yet on the whole the horses could not be considered in advance of last year. The Russell District Stock Improvement Company showed the two blood sires, Sleight-of-Hand, a fine chestnut, and June Day, a beautiful bay. They had first and second and the diploma. Third place went to John Marquette, Smith's Falls, Ont. There were no good stallions, and few females, in the thoroughbred class. Hugh Alexander, Ottawa, had a fine chestnut brood mare with foal by her side, and she won for best brood mare, any age. For stallion and his get, the Russell District Stock Co. were the winners. There was a fair display of carriage horses. A. A. Blythe, Ottawa, was first and F. Brunet, Morse Creek, second in the aged classes. W. C. Percival, Nepean, had the winner for three-year-olds, and G. C. Boyd, Eastman's Springs, had second for two-year-olds, with D. P. Cameron, Crysler, first in that class. G. W. Bennett, Richmond, was adjudged to have the best yearling, with Noah Sigward, of Marvelville, second. W. C. Edwards & Co. got second for a fine brood mare and first for a foal. They had also the winning two-year-old filly. The winning brood mare was owned by Thos. Fairbairn, Billings Bridge.

HARNESS HORSES.

In the harness classes there were a lot of horses of good quality, well brought out. Mr. Cunningham, Ottawa, had about a dozen, Mr. Skead nine head, and Crow & Murray v string up into the teens in number.

In the carriage class, 15¾ hands and over, a nice pair of bays, shown by Crow & Murray, were first. They are bred on trotting lines, with Wilkes blood. Second went to Walter Cunningham, Ottawa, and third to H. Bristow, Ottawa, who had a very nicely stepping team.

For pair under 15½, Crow & Murray had a fine pair of chestnuts that won, with the Skead stables second and Crow & Murray third. For single carriage horse the prizes went in the same order: First and third to Crow & Murray and second to Mr. Skead, Ottawa; while for the single harness carriage horse under 15½ hands, Crow & Murray had first and second, and C. A. Parker, Ottawa, third. Mr. Skead won the gold medal in this class.

In the special for high steppers the exhibit was a capital one, Crow & Murray winning first in all the classes. The pair shown by this firm were a fine turn-out of high-acting hackney breeding. South Africa, the winner in Toronto, won again here. The four-in-hand team shown by Crow & Murray were beautiful bays. This was one of the best turn-outs ever seen in Canada, and had never before been shown together. The same exhibitors won first and second for tandems, while the Anglo Saxon Tea Co. turned out the second-prize four-in-hand. There was a very small show of standard-bred trotters. J. B. Hogate, Woodstock, had first with a flashy-stepping chestnut, with Crow & Murray second. Dr. C. E. Church, Carp, Ont., had a three-year-old filly, and John Tweedie, Papineauville, had a brood mare and foal. These five made up a very small class. The roadster class was rather larger, but not nearly filled. John McCandlish, Ottawa, had first for a chestnut stepper of good style. Second went to Arthur Plant for a bay with a good, fast gait. J. H. Skuse, Carleton Place, had the best three-year-old stallion. John McCandlish was given the diploma for his stallion. Hugh McGuire, Ottawa, had the only three-year-old filly. W. C. Edwards & Co., Rockland, showed two pairs of roadster mares, and won first and second. For single roadster there was a good field. Crow & Murray won with a good harness type; W. A. Robertson, Kingston, second. Crow & Murray got the gold medal for the best pair.

HACKNEY AND SADDLE HORSES.

In the hackney class R. Beith's Squire Rickell was put before Dr. Watson's chestnut, and the same exhibitor got all the prizes in this class for mares and fillies. For the special silver medals offered by the American Hackney Horse Society, Crow & Murray won both with a pair of splendid high-steppers.

In saddle horses and hunters Geo. Pepper, Toronto, had an even dozen, and won all the hunter classes with those he had at Toronto. For best saddle horse there was but one class, and in that he was beaten by Mr. Skead's chestnut by Golden Lake, a very nicely-gaited saddle horse. In ponies, the winner of the single class was a nice little, well-bred Welsh bay. For pair of ponies, Anglo Saxon Tea Co. had first with a good pair; W. T. Clelland, Haysville, second. For pony, 12 to 14 hands, Robt. Beith, M.P., Powmanville, had first with a fine specimen that went very well.

GENERAL PURPOSE HORSES.

In the class for general purpose horses there were a lot of very good animals entered. It was one of the best-filled classes on the ground. W. R. Wilson, Manotick, was the winner for stallions, with James Clelland, North Gower, second. For brood mare Andrew Rowat, Manotick, was first, with Mr. McClelland again second. For best team James Magee, North Gower, was the winner, and they also won the gold medal for this class.

HEAVY DRAUGHT.

Ottawa has always had a good class of heavy horses, and this year the show was a fairly good one. Graham Bros., of Claremont, had a good lot out in fine bloom, and they won in several of the classes. First for aged stallion, first and fourth for two-year-old, gold medal for best pure-bred heavy stallion, any age. They had second for brood mare, second for three-year-old filly. This was the winner at

Toronto, but she was beaten by Wm. McLatchie, of Gatineau Point, with a mare of excellent quality, slightly down in condition. They had first and second for two-year-old fillies, and first for foal. They had also the winners of the special gold medals—one for mare of any age, and the other for stallion and 's get. T. H. Hassard, Millbrook, got second place in aged stallions, and J. B. Hogate & Co., Woodstock, had third and fourth. In three-year-olds, Thos. Good, Richmond West, was first, and Robert Ness, Howick, Que., second. Mr. Ness had also second and third for two-year-olds, and first for yearling stallions; first for brood mare, first for yearling filly, and second for filly foal. Thos. Good had the third prize mare and the third prize foal. James Bowman, Guelph, got third for a two-year-old filly. Strangely enough there was not a heavy draught team on the grounds. There were but two shire horses shown, and no mares. Phineas Lane, Lachute, got first, and J. R. Robinson, Marion, had second. For heavy draught, Canadian-bred, J. G. Clark, Ottawa, was first for stallions; W. Harten, Twin Elms, first for three-year-olds, with Robert Harris, Gatineau, first for two-year-olds. For brood mare Graham Bros. won first, and also won the medal in the female class. Robert Harris got the special gold medal for his two-year-old stallion as best any age, and Thos. Good for horse and his get. There were but two French Canadian horses shown. One was a dapple bay, very fat, but a chunky, gay horse, shown by Stanislaus Lecanier, second went to a younger black, with light bone, shown by Louis Sylvestre.

CATTLE.

The display of cattle at Ottawa was an extra good one. The competitions at Toronto and London had left but the best to come to Ottawa, leaving the second and third winners to go to local shows in Western Ontario, where in special cases the prizes were quite equal in money value to those offered at the Central Canada. In the female cattle classes the prizes here are very small. Cows four years and over are grouped with three-year-old cows and then the prize money for a two-year-old heifer drops to \$10 and \$8 and \$6 for yearlings and calves, and with no money prizes for herds leaves small margin for even a successful exhibitor to cover his expenses at this show. In most things the show is rather in advance of London, but in this particular they are away behind. A herd with active competition in London would win as much money as could be taken at Ottawa with no opposition whatever. Hence in so many classes there was but the winning herd at other shows brought out here.

BEEF BREEDS.

In Durhams this kept all the best of the Western herds at home and left the competition to local and Eastern men, the only Western herd coming being that of Goodfellow Bros., Macville, who had no competition in the cow classes and not enough animals out to fill the lists. For two-year-olds W. C. Edwards & Co., Rockland, on the Ottawa, had out their imported roan two-year-old Marquis of Zenda, of the Missie tribe. He was bred by W. S. Marr, Upper Mill, Aberdeenshire, and was awarded the diploma as best Durham bull of any age. The same exhibitors had the best herd of four calves under one year old, bred and owned by the exhibitors, a prize of \$25, part of \$100 given by the Dominion Shorthorn Breeders' Association. Hon. M. H. Cochrane, of Hillhurst Farm, Compton, Que., had the winning herd headed by the roan yearling, Duthie bred bull, Joy of Morning, by Pride of Morning. He had all the yearling heifer prizes and also the best female any age. Goodfellow Bros. had second for yearling bull, second for bull calf and first for heifer calf, with the aged cow classes as already mentioned.

In Galloways there was only one exhibitor, D. McCrae, of Guelph, but this lot, winners both at Toronto and London, showed well for the long-haired blacks, so popular on the ranches of the Northwest. He turned out for the judging test four females. "Cast," as one of the competitors remarked, "all in one mould." The most uniform lot brought out by any of the breeds.

In Herefords H. D. Smith, Ingleside Farm, Compton, Que., had the winning herd of the year for the beefy, white-faced beauties, and James Bowman, of Guelph, had the northern blacks, and while he had harder competition than the Galloway and Hereford breeders in the former shows, he has a good lot of the smooth-skinned blacks. Devons, which have been dropped by Toronto and London out of the prize list, had none forward.

Grade cattle are at this exhibition separated into two lots. For beef purposes James Leask had his winning herd, the best of the year, and they were very much admired. In yearling heifers, however, he was beaten here by a local man, Gabriel Dowler, of Billing's Bridge, who had a very good one that won first for her owner.

DAIRY BREEDS.

The Ayrshires seem much the most popular breed for the dairy if one can judge by the number and quality of the animals shown and the great interest shown about the ring when the animals were being judged. Of the herds which have been hard in the fight both at Toronto and London there were here—W. W. Ogilvie, of Lachine Rapids, Wm. Stewart & Son, Menie, and Robt. A. Ness, Howick, Que. The winning bull was Ogilvie's imported Scotch winner placed third at Toronto but both at London and here going easily to the front against the same animals.

The Lachine herd had also the winning cow, 1st and 2nd for two-year-olds, diploma for the best female and both the herd prizes. W. F. Ness came well to the front in several classes. His Barcheskie bred imported two-year-old headed his class as he has done right along. Mr. Ness had also first for yearling heifers and for young calves, and second for young herd. The class for yearling bulls was a fine one, one of the best classes in the show. Wm. Stewart & Son, of Menie, had their deep-ribbed red and white placed first. Robt. Roford was second with a fine level fellow with a good deal of white, third went to a black and white or rather a white with dark spots shown by W. W. Ogilvie. R. B. Angus, of Montreal, won second for two-year-old bulls with a fine specimen of an Ayrshire that might have won had he not had such an one as the Barcheskie entry against him. The same exhibitor had first for best dry cow with a fine specimen of an Ayrshire. There were besides these a number of Ayrshires out for the first time this year. Wm. Henry, City View, Ottawa, had the second prize aged bull. J. G. Clark, Ottawa, had the third prize two-year-old, and fourth for bull calf, also third for two-year-old heifer and second and third for aged cows. Robert Hunter, Maxville, had second for yearling heifer and third for young herd, a very creditable effort for a new herd in such good company. Altogether the show of Ayrshires at Ottawa was an excellent one.

The Grade cattle for dairy purposes were nearly all Ayrshire grades, in fact, no other breeds made any show in the class. The Shorthorn-Ayrshire crosses that for several years made a remarkable record at this show were absent this year and were missed by many. Most of the winners were high-grade Ayrshires. R. R. Ness had the best of the prizes. First and second for cows, second for two-year-olds and three-year-olds, first for yearlings and calves as well as first for herd, which was an excellent record for any herd. H. G. Whittaker, of North Williamsburg, was next with the winning three-year-old, and the sweepstakes for best female, any age, as well as second and third for yearling heifers and third for two-year-olds. R. Reid & Co., Hintonburg, made a good display and were awarded first for two-year-old heifer, third for cows both aged and three-year-olds and second for dairy herd.

Holsteins had C. J. Gilroy & Son, Glen Buell leading with best two-year-old bull, second for aged and also for yearlings, first and third for young bull calves, first for both aged and young cows, second for two-year-old and for yearling heifers and first for best female, also winning gold medal for herd and diploma for young herd. Geo. Rice, Currie's Crossing had the sweepstakes for his aged bull, second for herd, second for bull calf, first for two-year-old heifer and some mixed prizes. W. W. Brown, Lyn, Ont.,

had the best yearling bull, second for cows, second and third for three-year-olds, first for yearling heifers and second for young herds, a very good showing.

John A. Richardson, South March, had third for his bull, second for bull calf and same for heifer calf. Gabriel Dowler, Billing's Bridge, had second for two-year-old bulls and first for bull calf. There were no Guernseys shown. This year they have not appeared at any of the shows, a circumstance which will tend to keep this breed in the background.

Jerseys were not in large numbers. Messrs. B. H. Bull & Sons, of Brampton, who had been both at Toronto and London, were out with their herd containing a lot of excellent young things. They had first for aged bull, for yearlings first and second and first for bull calves, for yearling heifers, two-year-olds, three-year-olds and calves and second for herd. Louis Simpson, Hull, P.Q., had second for aged bull, first and sweepstakes for two-year old, first for young bull calf, first and second for cows, for females any age and for herd. E. P. Ball, "Lee Farm," Rock Island, Que., had third for yearling bull, second for young bull calf, third for three-year-old cow and second for two-year-old heifers.

Canadian cattle were pronounced an excellent class and amongst them were some splendid specimens of dairy cattle. Farm herds were shown. They had met before at Sherbrooke and here many of the decisions were reversed, the first prize cow at Sherbrooke being only third here, but the change was commended by good dairy judges. Arsene Denis, of St. Norbert, Que., won for best herd and for best bulls in three classes as well as the sweepstakes. Louis Thorn, Repentigny, Que., had the bulk of the second prize tickets and a first for heifer calf. Joseph Dugas, St. Jacques, Que., won both classes for bull calves and first for two-year-old heifer. Louis Sylvestre, Actonville, Que., had the third prize bull and third for calf, as well as first for cow and third for three-year-old. The race are dark colored, almost black, with a dark red tinge on some of them. They are rather short in the quarter, but otherwise show good dairy points and are worthy of a good place amongst our dairy breeds. They are said to be descended from the earliest importations from Normandy and Brittany in France.

SHEEP.

The sheep, for numbers, were well represented and for quality were hard to beat. The long-wooled, massive Cotswolds came first with A. J. Watson, of Castleberg, adding to his former well-won laurels. He won all the first prizes offered and his rams, both shearlings and aged, were very fine animals and much admired. Arsene Denis, of St. Norbert, was his competitor, but the quality was much below that of the Castleberg flock and the sheep had not had the care and careful feeding of their rivals.

Leicesters saw a close contest between two first-class flocks, John Kelly, Shakespeare, and J. M. Gardhouse, Highfield. Honors were fairly even, but the latter got the diploma for best pen with a fine lot. The former was beaten for the aged ram shown at London by Whitelaw Bros., of Guelph, by one of his sons. He had first for shearling ewes and for ewe lambs. The latter won first for aged ewes with a very good pair.

Lincolns were represented by John T. Gibson, Denfield, who had a fine lot of the celebrated long wools. A few minor prizes went to Arsene Denis, St. Norbert, who also showed Cotswolds.

Southdowns were out in force with a new lot of fine specimens of the beautiful, hardy downs. Hon. G. A. Drummond, Point Clair, had the winning pen and as fine a lot as one could wish to see. Several imported ones added much to the appearance of the pen. Of these some were from the flocks of the Prince of Wales. Robt. Shaw, Glanford, had first for aged ram and second for ram lambs, as well as second for both classes of ewes.

Shropshires were disappointing considering the excellent showing they usually make. There were no aged rams on exhibition. J. Yuill & Sons, Carlton Place, had first for

shearling ram with A. M. Stewart, Dalmeny, second. In ram lambs Hon. M. H. Cochrane was first with A. M. Stewart again second. The ewe classes fell to John Campbell, Woodville, except a third on shearlings to A. M. Stewart. The special for Canadian bred fell to A. M. Stewart.

The Oxford, Suffolk and Hampshire Downs, were put together. Smith Evans with Oxfords won for aged rams, second for ram lambs and second and third for ewes. Mr. Cochrane had first for shearling ewes and first and second for ewe lambs. John Kelly, of Shakespeare, had with Hampshires second for aged ram, first for ewes, second for shearlings and third for lambs. The diploma went to Mr. Cochrane.

The Dorset Horned were fairly well shown. John A. MacGillivray, of Uxbridge, had first and second both for aged rams and for shearlings, as well as the ewe classes. M. H. Empey, Napanee, had first and second for both ram and ewe lambs, while James Bowman, Guelph, had two thirds for shearling and ram lambs and John A. Richardson, South March, a third for aged ram. The class was a good one and contests close.

Merinos were shown by Robert Shaw & Son, Glanford Station, and Wm. & J. C. Smith, Fairfield Plains. The prizes were pretty well divided between those two exhibitors.

In fat sheep the long wools went to J. T. Gibson and the short wools to John Campbell.

SWINE.

There was an excellent display of swine. The Improved Berkshires headed the list, and the blacks were out with a lot of long-bodied beauties. Snell & Lyons had the best of aged boars, and won here with animals not put to the front at Toronto, but which the owners thought deserved their place. Both in aged boars and those under a year they had good ones shown. In sows over six months and under one year they had first, second and third places. T. A. Cox, Brantford, had also a good lot out. He won for young boars first and third, and first for boar under six months. In yearling sows he had first, second and third. A. W. Ross, Douglas, had several prizes, and R. Reid & Co., Hintonburg, had the winning sow, a very fine one, long-bodied and well made.

In Improved Yorkshires, Louis Sylvestre, Actonville, had the best boar, and had also first for young sows in two classes. A. W. Ross, Douglas, had the largest number of prizes of any exhibitor in this class, and he also won the diploma for the best pen. R. Reid & Co. had second for sow over six months.

In Chester Whites H. George & Son, Crampton, had out his fine herd, and naturally got the greater number of awards. Robert Clark, Cooper street, Ottawa, had a few good ones, and got first for young litter and three second prizes. Poland Chinas were largely represented by Wm. & J. C. Smith, Fairfield Plains, with R. Reid & Co., Hintonburg, winning two or three prizes—specially first for boar under six months, second for yearling boar, and firsts for sows both over and under six months.

In the red-sided Tamworths, R. Reid & Co. again took a good place. They had four firsts and diploma, as well as three seconds. Louis Simpson, of Hull, P.Q., had three firsts and the same number of thirds. Jno. A. Richardson, South March, also won several prizes in this class. Duroc Jerseys were largely shown by W. N. Tape, Bent Path, Ont., who took nearly all the prizes, a few minor ones falling to the Messrs. Smith, of Fairfield Plains.

MILK TEST.

The usual milk test was held at Ottawa, and, as at all other tests of this kind held in Canada, only Holsteins competed. Six cows entered the competition, but two dropped out before the completion of the test. The test extended over forty-eight hours, and was in charge of G. G. Publow, Perth, Ont., Instructor for the Eastern Ontario

Dairymen's Association. The following is the result of the test :

Rack.	Name of Cow.	Owner.	Address.	Lbs. of Milk.	Lbs. of Solids.
1	Inka Sylva	C. J. Gilroy & Son	Glen Buell	144.	16.1122
2	Winnie R.	G. Rice	Currie's, Ont.	132.75	14.1883
3	Juanita Sylvia	C. J. Gilroy & Son	Glen Buell	121.75	13.6847
4	Empress Josephine of Brookside	W. W. Brown	Lyn	122.25	13.3313

CORRESPONDENCE

The Idea a Good One

Editor THE FARMING WORLD:

I think the idea of encouraging fairs, more particularly with a view to Auction Sales, is a good one, but why should not our present township shows not add this feature to their Annual Exhibitions? At present all we hear of them is a prize list to be got up once a year, and a great display of stock and field produce. with a growing department of ladies' needle work and pillow shams, and that's the last till twelve months hence. All very well as far as it goes, but I think the directors of our agricultural societies might go a little farther and take the matter in hand. It would improve the cattle interest and indeed all live stock, bring buyer and seller together, and probably could be done twice a year.

JOS. OSBORNE.

Secretary East Lambton Farmers' Institute.
Wyoming, Ont.

Manure and How to Apply It

Editor THE FARMING WORLD:

Every little while some one gives his opinion on the use of commercial materials in manuring. The fact, generally evident or admitted that they have had no experience in the matter, seems to be quite ignored by them. Occasionally some one who has been manuring on the "hit or miss" plan launches out vigorously against some "stuff" which failed to achieve for them remarkable results. Another, whose worldly experience has taught him caution simply says "it is too expensive."

The latest I have noticed is from our friend, Mr. Duncan Anderson, who in giving your readers the benefit of his thought and experience in handling his land and manures, gets a crack at the "commercial" article. He says "superphosphates and artificial manures are of benefit to the experimentalist, but the farmer who has to make a living from the soil will find that the cheapest and best manures are those that he manufactures on his farm." What on earth is meant by that sentence I am quite unable to say.

What does the experimentalist use manures for? For pastime or for the purpose of instruction to benefit the country which supports him? Is he, therefore, merely wasting time in using anything beyond what can be produced on the farm? What is a "superphosphate," and what are "artificial manures"? Again, he thinks that only "market gardeners living near some large manufacturing or commercial centre wanting to make the most out of a small piece of land may profitably use them."

I do not know what experience Mr. Anderson has had of "commercial fertilizers," as he does not use them, but with your permission I will offer my opinion, backed by many years of practical experience in the use of all kinds of manures, home-made and commercial, and careful research on the question of "soils, crops and manures." I believe first that the best methods of cultivation suitable to the respective soils and climate must be adopted.

Every effort must be made to conserve and return to the soil any and all manurial material the farm affords.

The organic refuse material, such as dung, urine, straw,

grass roots and crops grown for manure only, must be freely returned to the soil to there be converted into humus when it becomes stored up plant food on nature's plan.

This humus must then be balanced to give the best quality and greatest quantity of crop for if we get a large quantity of *unbalanced* humus in the soil we produce crops with abnormal development in one respect or another, or we even fail to produce crops at all. We have evidence of this in clover manuring without properly balanced conditions.

We find that ordinary farm crops get 93 or 94 per cent. of their make-up from the atmosphere, and in the case of clover 95 or 96 per cent. as it can secrete nitrogen from the air. The balance of six or seven per cent. is of the mineral elements of the soil and of this probably a third is silica. Apart from the water and actual air taken by the plants then, all this matter must be organized in the soil in some form to afford food for plants, and humus we find the most acceptable form. To be balanced, this humus must contain correct proportions of nitrogen, potash, phosphate and perhaps even silica, just the same as the food of our cattle must be properly balanced to produce the best results in beef, mutton, butter, milk or wool.

If then the farmer can maintain the proper balance by manure that "he manufactures on his own farm" there is no necessity of going outside for them, but if not, he must purchase the balancing material elsewhere as he does the mill feed and the oil cake and the cotton seed. Let us see! We will take the average composition of the grain crops, and the dung of the general run of farm animals.

We find nearly 90 per cent. of the phosphoric acid, and 75 per cent. of the nitrogen, taken by the crop are removed in the ripened grain, while nearly 90 per cent. of the potash remains in the straw and roots. The loss then in grain production is largely in phosphoric acid and nitrogen.

Nearly 90 per cent. of both the nitrogen and the potash fed to the stock returns in the dung and urine, but, taking it all through, very little over 10 per cent. of the phosphoric acid, as it is kept by the animal, or passes off in milk production.

In addition we can make more manure by fixing nitrogen from the atmosphere through growing (?) clover, if our soils are not already suffering from clover sickness or phosphatic poverty, so we can pretty well meet the nitrogen requirements of the grain.

But how can we meet this constant phosphatic drain? How can we balance the humus food for our crops?

The only logical answer is by purchasing suitable phosphate, and either applying it to the growing of clover, or adding it to the humus in the soil, there to combine with it and give the plainly required balance.

I hear someone say that by applying the manure fresh, or plowing down fresh green clover to "rot" in the soil, the insoluble phosphates of the soil will be reduced to solubility by the acids of the manure. This is against experience, and anyway is illogical when our aim is to obtain balanced humus to apply as our plants' food.

If we return such an abundance of nitrogen we must balance it with the minerals. We do so pretty well as far as potash is concerned, although it is much more abundant and more easily set free from the soil than is the phosphate. Then we have a preponderance of nitrogen and potash so as to get heavy straw or wood, but we are actually short of phosphoric acid, and the small amount we can set free from the soil phosphate is too infinitesimal to provide a balance.

Result—we never reach either the maximum crop or the highest feeding quality in our produce.

Now when is it practical to utilize the potash and nitrates in commercial form? When we have secured a "maximum" quantity and quality of crop by producing a rich balanced humus, we can then, like the market gardener, obtain an "excess" yield by adding a properly balanced "complete fertilizer," in a highly soluble and very pure form, or we can buy phosphate of potash, phosphate of ammonia, and nitrate of potash, and apply in correct proportions.

T. C. WALLACE.

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' \$1

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 2,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

A member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs; that is, to advertise 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, and to advertise

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 15th 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.

The New Building for the Provincial Winter Fair.

Something of Interest to Intending Exhibitors and Visitors.

The Provincial Winter Fair, on account of its hitherto movable character, has frequently had to put up in the past with accommodation and buildings of a very unsuitable nature. Now, however, that it has been decided to locate it permanently at Guelph, this serious drawback to the success of the Fair will be entirely removed by the erection of a modern and up-to-date building, fitted up with every convenience that can be suggested for the comfort of the animals and poultry, the prompt and satisfactory slaughtering and handling of the cattle, sheep and swine entered for the block tests, and, above all, special attention has been given to the providing of every facility for those, who are present, to see in comfort all the exhibits, take in all the lectures, and thus carry home with them the lessons which it is the main object of this exhibition to teach.

THE CAPACITY OF THE BUILDING.

The new building which is being erected in Guelph lies directly west of the city hall. It is in the form of an L and is 310 feet long. In breadth it is 118 feet as far as the commencement of the foot of the L, which is 210 feet from the top. The foot of the L is 100 x 180 feet. On the ground floor, in the space 210 x 118 feet, will be the stalls for fat cattle, sheep and swine, and also four rings for judging the sheep and swine.

The cattle ring, which will be 60x40 ft., is taken out of the centre of the wider part of the building, directly adjoining the cattle stalls. Round this ring will be placed seats for the accommodation of visitors, who can thus view the judging in comfort. The

space from the floor to that of the upper story is 15 ft.

WHERE THE POULTRY WILL BE FOUND.

The upper story is reached by two flights of stairs. It is 310x50 ft., and will be found very commodious for the live and dressed poultry exhibit, which will occupy it entirely. The headroom here is 12 feet, and the nature of the roof, which is a trussed one, doing away with posts, gives ample space for storing away coops. In addition to the stairs there is provided a hoist for the easy conveyance of the birds on their arrival and when being re-shipped.

THE KILLING AND CARCASE ROOMS.

The whole building will be of stone, and will be lighted with gas or electric light as may be deemed most advisable. On the ground floor a large boiler, capable of heating the whole building, is being put in, and this will also supply hot water for use in the block tests. The slaughter room adjoins the boiler room. It is 45x50 ft., and is furnished with movable fittings. An overhead track runs from here to the room set apart for dressed carcasses, the floor space of which is 85x60 ft.

A sufficient number of switches and tracks, 6 in number, for the accommodation of the carcasses, connect with the overhead track. There is also a track run to the lecture room, which is immediately to the north of the carcass room, so that selected carcasses of different breeds of live stock can be easily brought before the audiences for the purpose of illustrating points in the lectures. As live animals will also be required by the lecturers for illustration purposes, a platform will be built on which these may stand in full view of those present. The lecture room will seat 300 persons without crowding.

Comfortable, warm rooms are provided for the directors and also for those exhibiting. Both of these adjoin the lecture room.

A WARM HOME FOR THE DAIRY COWS.

The dairy department of the Fair has been well looked after. Sufficient stalls are being put in to accommodate 65 head. This part of the building will be well heated, so that no animal will be prevented by cold from doing her best in the tests. The room for testing the milk is located conveniently near the dairy cattle. Near the centre of the front of the building facing north will be found the secretary's office, with the ticket office a short distance away.

SPLENDID RAILROAD FACILITIES.

As regards railroad facilities for the unloading and loading of stock, they cannot be excelled. The Grand Trunk Railroad Company's yards are in touch with the building at two points, between which will be found the platform for unloading, so that all animals brought by this road will merely have to walk out of their cars and into the building. Nor will shippers by the Canadian Pacific Railroad be at any disadvantage, for, although this road does not run so close to the building as the G.T.R., by arrangement with the Guelph Electric Street Railway Company all C.P.R. cars will be hauled alongside of the Fair building over the tracks of the street railway, and thus exhibitors by either road are placed on an equal footing.

It will thus be seen that everything is being done to make the coming Winter Fair the most successful, from every point of view, that has ever been held on this continent. The attendance, too, which has always been a weak point, promises to be very large. A large number of Institutes are taking advantage of the liberal terms offered as regards admission to the Fair, and have promised to send numerous representatives. This is as it should be. Every person interested in live stock breeding and feeding should be present. None of us are too old to learn. Most valuable information was given at London last December, but how few were there to hear it and reap the benefit derived by putting it into practice! As an educational medium the Provincial Winter Fair is unexcelled, and we bespeak for the coming show the earnest attention and presence of all who wish to make a success of raising and feeding any of the breeds of live stock to be found there.

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.

Butter Making.

By Miss Alice Hollingworth, Beatrice, Muskoka.

(Continued from last issue.)

PASTEURIZING TO PURIFY THE CREAM.

It is very easy to give the cream a flat, cooked taste. However, if your cream is tainted with any objectionable flavor it is well to know that this can be removed by pasteurizing, which is simply setting the cream can in hot water which must not exceed a temperature of 180°F. Stir the cream constantly (to prevent cooking) till it is heated to 160°F., then remove to a cool place. This process practically destroys all the bacteria or germ life in the cream, including the lactic acid germs which are necessary to cause ripening. These are supplied by a "starter" which is a ferment used to hasten the ripening of cream.

HOW THE STARTER IS OBTAINED.

It may be made by putting good, fresh milk in a self-sealer in a warm place till it sours; but this is not always successful. I heard Mr. Stonehouse, Instructor at the Ontario Agricultural College, say that he had tried every day for two weeks and failed to get a good starter in this way. It is better, when first beginning, to get the pure culture which is in the form of a white powder, and can be bought from the dairy supply companies. Once you get a good starter you may keep on using it without change (so long as it remains good) by adding it to the fresh milk just as you add a cupful of old yeast to the fresh batter when you want more yeast. Milk that is used for a starter should have 25% of water added, then be pasteurized in the same way as cream.

Cool it down rapidly to 80°F., add a small quantity of the previously-made starter, stir thoroughly, cover and leave undisturbed till required for use, when two or three inches should be removed from the top (the top layer contains bacteria injurious to the cream), the whole stirred till it is smooth and without lumps, and then about ten per cent. of it is added to the cream which has been allowed to cool down to 70°F. after pasteurizing. Stir well and put the cream where it will maintain a temperature of about 55°F. until

it is ready for churning, which should be in 24 hours. Never mix sweet and ripened cream together just before churning. The ripe cream churns more rapidly, and consequently when the butter comes much of the sweet cream is still unchurned and passes off with the buttermilk.

THE RIGHT TEMPERATURE FOR CHURNING.

In regard to the right temperature for churning, that is a question each of you must decide for yourselves. There are several points to consider: the temperature of your room, the period of lactation, the season of the year, the food and breed of the cows and the condition of the cream. Cream from fresh cows churns at a lower temperature than that from cows that have been milking a long time. Cows fed on succulent food like roots and silage will give a more rapidly churning cream than if fed on timothy hay and dry corn stalks. Over-ripe cream should be churned at a lower temperature than if it had been taken at the right time. Poor, thin cream requires a higher temperature than rich cream. Milk of Ayrshire cows is, perhaps, the hardest to churn. The fat globules in their milk are very minute and slow to collect. For this reason their milk is much better adapted for cheese than butter. Much of the butter at the O.A.C. dairy is churned at 57°F. or lower. We keep Ayrshire cows, and in winter I always churn at 67°F. and get it in good firm granules at that.

Scald the churn well before using. Have a strainer of fine perforated tin with ears or rests, so that it will fit the top of the churn, and pour the cream through it. It will retain the lumps and curd, which can be removed from the strainer much more rapidly than from the butter.

HAVE A MODERN LABOR SAVING CHURN.

A word as to the kind of churn to use. I have been so accustomed to seeing the barrel churn in the backwoods of Muskoka that I never doubted but that the old, upright dash churn had long since become a relic of antiquity in the older and wealthier parts of Ontario. It is with amazement that I learn that where 100-acre farms will command from \$5,000 to \$8,000 each, where the farmers have all modern improvements in labor-saving machinery, the wives are still pounding away with the primitive dash churn. I know there are women who will make good butter with the old-fashioned appliances, but is not this reason enough why they should be rewarded with the improvements that require less labor? It certainly requires less energy to turn the handle of a barrel churn than to use the dasher, and it is so much easier and better to wash the butter while it is in loose granules in the

churn than after it is in the bowl. If the cream is in proper condition, it should not take more than 20 or 30 minutes to churn. Long churning is caused by the temperature being too low, the cream being poor in butter fat, the cream having been kept too long, the cows being poorly fed, or having been milked a long time. About two quarts of water at 50° or 55° F. should be added when the butter breaks, if it is soft and has churned quickly, but if it has been long churning and breaks in fine granules, do not add the water till the granules are almost large enough to stop the churning, which is when they are the size of a grain of wheat or a little larger. The object in using the water is to thin the buttermilk, so that the butter will rise to the surface, and allow the buttermilk to drain off more freely.

Set the cream strainer on the pail and let the buttermilk run through it, to retain any particles of butter that leave the churn. In washing, use the same quantity of water as of cream. About 50° F. is the best temperature in ordinary cases. Strain into the churn, fasten the cover on and revolve rapidly, to prevent massing, about a dozen times.

WORKING AND SALTING THE BUTTER.

While the water is draining off scald and then cool the butter-worker. This is a triangular, sloping table, with a lever attached, which may be bought for \$2.50 or made quite easily at home, and is so much superior to the old-time bowl and ladle that any woman who has once used it will never be without it. In using the lever press gently, and avoid a sliding or chopping motion, as this spoils the grain of the butter. Salt according to the taste of those who are going to eat the butter. I like $\frac{3}{4}$ oz. to the pound, but some of our customers say it is not enough.

The cream-strainer makes a good sieve for sifting the salt on the butter, which should always be done while the butter is in loose granules, to ensure thorough mixing. If the butter is not too soft, once working is sufficient, unless it is to be kept for a long period, when it is better to give it a second working.

PARCHMENT PAPER OFTEN USED CARELESSLY.

I believe the use of the pound mould and parchment paper is pretty general, but, judging by the rough, warty appearance of the paper on butter that I see in the stores, I do not think it is generally known that the paper should be well soaked in water to make it wrap neatly. Do not put salt in the water; it spoils the appearance of the paper, and is not necessary. In conclusion, let me say that the object of the Superintendent in sending me here is not for the sake of what I may teach you, but to encourage the farmers' wives to come out

and talk over their work. Each one of you must have learned something by your own experience that will be of value to your neighbor, and it will be better for yourselves and everybody else when you meet together and discuss your common interests the same as the farmers or the sensible people of any other profession. Above all, let me urge you to send your sons and daughters to the O.A.C. Dairy School. The instruction given, which is of the highest order, is perfectly free; the only expense entailed being board and railway fares, and this is repaid a hundred times in the useful knowledge gained. I have met people who think they know everything about butter. Prof. Dean and his staff of Instructors freely admit that they have still much to learn.

It is this spirit of being able to see the room for progress and improvement that we need to infuse among butter-makers throughout the country.

Q.—What kind of deep setting is best?

ANS.—By Miss Hollingworth—The creamer with a zinc box in a wooden frame, the zinc being made to form two cylinders, through which the movable milk cylinders with glass and taps at the bottom are slid, and can be taken out when repairs are necessary.

Q.—When should a starter be added to the cream?

ANS.—Twenty-four hours before churning.

Q.—How long should milk be kept in deep setting in winter?

ANS.—Twenty-four to thirty-six hours.

Q.—How long will it take a herd of 8 or 10 cows to pay for a separator?

ANS.—We realized \$5 per month extra profit over what we had done without the separator. If I remember rightly we had eight cows milking at the time.

Q.—What is the cause of butter being like granulated sugar and not collecting?

ANS.—The cream was poor in butter fat, and perhaps too cold. Have a richer cream.

Q.—What is the cost of a Babcock Tester?

ANS.—\$4 and upwards.

Q.—Will not buttermilk do as well as sour milk as a starter?

ANS.—Yes, if it is perfectly good. Too often it has developed injurious bacteria.

Q.—Does freezing injure cream?

ANS.—I think not. Prof. Dean says he has inquired among creamery men who receive frozen cream and they say it makes no difference.

Q.—Why is there considerable butter left in the buttermilk sometimes?

ANS.—This is the result if the temperature is too high, if sweet and sour cream are mixed just before churning, or if the churn is filled too full. A churn should not be filled more than one-third of its capacity.

Q.—Would you recommend pasteurizing on the farm?

ANS.—For winter butter, yes, if it is properly done; if not, it is better left alone.

Q.—Would it be worth while having a butter worker for three or four cows?

ANS.—Yes, if you have only one cow, have a butter worker.

Q.—Would you recommend investing money in modern appliances if there is a creamery near?

ANS.—No, send the milk to the creamery; the farmer's wife has plenty of work without it.

Q.—Can pure cream be obtained without the use of a separator?

ANS.—I think so, but the chances are against it.

By Mr. Wully: I say not; examine the dirt in a separator bowl after using, to prove it.

Q.—How should cream be warmed for churning?

ANS.—By setting the cream can in hot water and stirring.

Q.—What about butter color?

ANS.—It depends on where the butter is to be consumed. Canadians want it colored; the English want it white. They use color at the O.A.C. dairy.

Q.—Is not whole milk better than skim-milk for a starter?

ANS.—Not if the skim-milk is fresh from the separator. The fat in the whole milk is no help to the starter, and is wasted if you don't use all your starter.

Q.—What do you think about using soap on dairy utensils?

ANS.—It should never be done; you may use soda, but for wooden utensils the best thing is to dip a wet brush in salt and scrub well.

Q.—What are the main points to observe in putting up a dairy building?

ANS.—Construct it so that the temperature can be controlled; have good drainage, a perfectly tight floor so that no milk can get under, and a building erected that can be easily cleaned in every part.

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. F. 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.

Wanted, steady, reliable man by the year, one who is willing to milk. Farm consists of 140 acres, on which stock are raised and fruit and grain grown. Liberal wages to good man. No. 589. a

Man, who is a good milker and can plow, can obtain employment on a farm near Napanee. Will hire by year or month and will pay the highest wages. No. 590. a

Strong lad wanted to help milk and deliver milk occasionally. Must be used to horses and general farm work and willing to put his hand to anything. No. 591. a

Wanted, man capable of taking care of stock. Must be a good milker. Permanent position to right man. Farm is situated in Minto Township, Wellington Co. No. 592. a

Young or middle-aged man wanted to work on a farm in Kent Co. Must understand the care of stock and general farm work. Chores and cutting firewood constitute the winter's work. Wages, \$150 a year, or will hire for part of a year. English Home boys need not apply. Address Box 66, Duart, Ont.

Vacant, a good position on a farm for a man and his wife the year round, near a small town with churches, etc. Good wages to a suitable couple. Also a young man wanted for general farm work. Must be a good milker and quiet with cattle. Good wages to a steady man. No. 593. a

Wanted by November 15 a single man on a farm near Owen Sound. Must understand farm work and be thoroughly reliable. One who has had experience with bush work preferred. Wages \$175 a year, with board and washing. No. 588. b

Domestic Help Wanted.

Housekeeper wanted on a farm near Owen Sound. References required. No. 594. a

Situations Wanted.

Married man with three small children, a good milker, and who understands farming, wants a place on a farm. No. 446. a

Married man, aged 33, wishes yearly employment. Is used to all branches of farm work. Salary wanted, \$200 a year, with free house, garden and wood. No. 447. a

Unmarried man, 30 years old, strictly temperate, an associate graduate of the O.A.C., who has worked on a dairy farm all his life, wants a position as manager of a large farm. Has been in charge of pure-bred prize-winning cattle for 8 years. Can do all kinds of farm work. No. 444. b

Young man wishes situation on a stock farm; was reared on a farm, and is farming now; five years a school-master; is not afraid of work, and is a first-class milker. No. 445. b

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

The Farm Home

September.

Here's a lyric for September,
Best of all months to remember;
Month when summer breezes tell
What has happened wood and dell.
Of the joys the year has brought,
And the changes she has wrought.
She has turned the verdure red,
In the blue sky overhead;
She the harvest moon has hung,
Like a silver boat among
Shoals of stars—bright jewels set
In the earth's blue coronet;
She has brought the orchard's fruit
To repay the robin's flute
Which has gladdened half the year
With a music liquid clear;
And she makes the meadow grass
Catch the sunbeams as they pass,
Till the autumn's floor is rolled
With a fragrant cloth of gold.

—Frank Dempster Sherman.

A Retrospect.

LAURA ROSE, O. A. C., Guelph.

Many of the readers of THE FARMING WORLD no doubt visited the wonderful World's Fair in Chicago in 1893, and the beautiful sights of that White City are still vivid in their memory.

Lately when in Chicago I drove over the grounds, and it was like passing through an abandoned and neglected graveyard. Where once had stood monuments erected to art, literature and science the tall swamp rushes and golden rod grew rampant. As I looked at a stagnant pond overgrown with weeds and was told that it had been the centre of the Court of Honor, I thought of what a lady friend of mine, when she returned from the Fair, and, speaking of this particular feature, said: "I shall be satisfied with heaven if it be but as beautiful as the 'Court of Honor' when lit up in the evening." The dear lady has since gone to test the realities of that other world; may she find it more beautiful and infinitely more lasting than the brilliant devices of man.

Every turn of the winding road brought to view heaps of debris—fragments of broken brick and stone and mortar, the only landmarks left to indicate where stood the Machinery Hall, the Electrical Building, the Fisheries, the Arts and Science, etc. Does it not seem strange that so little remains of an outlay estimated at \$300,000,000? And of the two hundred buildings, I think it is only three that survive—the Monasterio de la Rabida, the German Building and the Art Galleries. The first, you will remember, contained many old paintings and letters relating to Christopher Columbus. It is now used as a hospital.

The German State building, Das Deutsche Haus, was the costliest and finest foreign building on the grounds, \$150,000 being expended on it, and it still remains in fine condition in all its

splendor. It is extremely German in design and coloring, and is now used as a resting place and restaurant, situated as it is in a lovely part of Jackson Park. This building contains the immense globe of the earth, which slowly revolves as you turn a crank.

Near the German building stand the art galleries, now called the Field Museum. One visiting in Chicago and having a half day at his disposal, or, better still, a whole day, could spend it with great satisfaction wandering around through the immense rooms, filled, it seemed to me, with specimens of everything under the sun. I was especially taken with the large cases of wild animals—so materially and artistically mounted. Wednesday and Saturday you get in free; a fee of 25c. is charged on other days.

The Columbus ships, the *Pinta*, the *Nina* and the *Santa Maria*, brought over from Spain, still stand idly in the lagoon—a neglected, forlorn spectacle.

The police lately routed out some tramps who for weeks this summer had been living in one of the ships.

What recollections we all have of the Midway Plaisance, with its gaiety and jugglery! This has undergone a wonderful transformation, being now one of the most beautiful boulevards in the city—a driveway a mile long connecting Jackson and Washington Parks.

As I drove homeward through the sunshine and looked over the peaceful waters of Lake Michigan, I fell into a moralizing mood. In comparing my recollections of 1893 with the realities of 1900 I thought of how fleeting and changeable was the work of man. The lake alone remained unchanged, and God made that.

Hints by May Manton.

Ladies' Blouse Shirt Waist, No 3608.
To Be Made With or Without the Fitted Lining.

Whatever number of tightly fitted bodices a wardrobe may include, it is incomplete without just such a loose, comfortable waist as the one shown in the illustration. For immediate wear the material may be silk, linen, duck, or any of the familiar cotton stuffs. For early autumn it may be taffeta, French flannel, cashmere or any similar material preferred. As shown, the blouse proper is of ciel blue linen with collar and shield-shaped plastron of tucked batiste, with embroidered bands, the collar showing an edge of the linen beyond the trimming line. With it is worn a skirt of hair-lined serge, which is unlined and a narrow belt of black velvet ribbon held by a simple clasp and a four-in-hand tie of batiste.

The model being of washable

material is made without a lining and is fitted by means of shoulder and under-arm seams, but the pattern includes a two-seamed foundation which can be used with silk or muslin materials. In either case the plastron is attached to the right side, beneath the collar, and is hooked well into place at the left side. The high stock is fitted to the throat and finished with points that may be of needlework or hem-stitched silk. The sleeves are cut in two pieces and are finished with pointed cuffs, which match the stock collar.

To make this waist for a lady of medium size 4 yards of material 21



3608 Ladies' Blouse Shirt Waist
32 to 42 inches bust.

inches wide, 3 yards 32 inches wide, or 2 1/4 yards 44 inches wide, will be required, with 1 1/2 yards of tucked batiste 18 inches wide for collar and plastron.

The pattern, No. 3603, is cut in sizes for a 32, 34, 36, 38 and 40-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.

The Mode in Tailor-Made Gowns.

As to our every-day gowns for this winter Parisian women are coming around more and more to the tailor-made. There is nothing English about these. They relieve the severe effect with all sorts of fancies in borders, revers and collars. A little note of red strikes the eyes as a prominent feature in the new tailor-made things.

—October Ladies' Home Journal.

The Farming World

A PAPER FOR FARMERS AND STOCKMEN.

Managing Director, . . . D. T. MCANISH
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.

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QUESTIONS AND ANSWERS

ADDRESS WANTED.

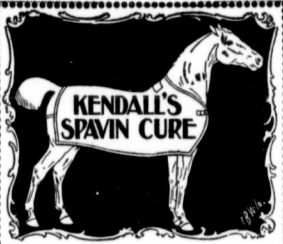
"New Subscriber" Alton, Ont., writes: I have taken your paper for two years and am much pleased with it. Would you be so kind as to give me the address of the "Standard Oil Co."

The head office of the "Standard Oil Co." is Cleveland, Ohio, though the company has a branch office in nearly every large city in the world. The Toronto office is known as the "Queen City Oil Co." and is located at corner of Yonge and King streets.

WEAK COLT.

B. A. writes: I have a four-year old colt which has been going in harness for the last six months. Though sure-footed, he gives way on the off pastern joint to such an extent that he sometimes nearly comes down."

The writer does not say whether the weakness shown by the colt is in the fore or hind leg. This however does not make much difference. Although the colt gives way at the pastern joint, the defect may be above, and due to want of tone in the muscles in the upper portion of the leg. If there is no doubt about the weakness being in the pastern joint, the application of an adhesive plaster bandage would do good. After the bandage has been applied the horse may be worked. There are cases where such a bandage has been worn for three months. If the muscles in the upper part of the leg are thought to be at fault, apply cold water for twenty minutes both night and morning. Should this fail, rub the leg all over with green (Stockholm) tar and let the colt out for a few months' run.



WORTH \$50 A BOTTLE
To This Man

It may be worth a like sum or even more to you....

Final, Barnes Co., N. D., March 19, 1898.
Dear Sir—I have used your Kendall's Spavin Cure, and think it a good Liniment. I have cured a Spavin on my best mare, and I would not take \$125 for her, which I offered for \$75 before. I will be pleased to have your book and receipts for this inclosed stamp, as I read on the carton.
Truly yours, FRANK SMITH,
Hastington, P. O., Ontario, Mar. 6, '98.

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Dear Sir—Enclosed please find a two-cent stamp for your valuable Horse Book. I had one but it is lost. I have used your Kendall's Spavin Cure without one failure in years, and consider it the best Liniment for man or beast in the market. Please send me the book as you advertise it on bottle, for horses.
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It is an absolutely reliable remedy for Spavin, Splints, Curbs, Ringbones, etc. Removes the bunch and leaves no scar. Price, \$1; six for \$5. 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
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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.

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When writing to or purchasing from our advertisers, it will be to your advantage to mention THE FARMING WORLD.

Shipments of Fruit.

The first shipment of fruit sent to Great Britain by the Ontario Department of Agriculture has reached Manchester in good condition. A second shipment is expected to arrive in a few days. These two shipments were made up of apples and pears, and were sent over under the most improved cold storage methods and ventilation, with a view to testing the market and finding out the most favorable condition in which to send our perishable fruits to England. No account sales have yet been received, so it is not possible to say what the actual returns from the shipments are. A third shipment, consisting mainly of grapes, will be sent forward next week. The returns from these three shipments, as well as of others to follow, will furnish a lot of data that will be of value in deciding whether the exportation of fine fruits from Ontario can be successfully carried on. The account sales will be looked forward to with a great deal of interest.

Canadian Fairs Association.

The executive committee of the Canadian Association of Fairs and Exhibitions met in Toronto during the Industrial Fair. There were present T. J. Murphy, Simcoe, president; John Burns, Whitby, 1st vice; James Mitchell, Goderich, and vice; Alex. McFarlane, Otterville, Secretary; G. R. VanZant, Markham; S. McLure, Elders Mills; T. F. Wallace, Woodbridge; E. Jackson, Newmarket, and James Brethour, Sunderland.

By request Mr. C. C. James, Deputy Minister of Agriculture, was present to hear suggestions from the committee as to the best methods of improving the efficiency of fall fairs and agricultural societies. It was decided to submit a series of questions to every agricultural and horticultural society in the province with a view to obtaining information as to the best methods of managing these institutions.

The next annual meeting of the association will be held some time during January, 1901, when papers on live topics will be read by Messrs. Mitchell and Burns. The other speakers who will be asked to address the meeting are Dr. Saunders, Ottawa; M. A. James, Bowmanville; F. W. Hodson, Ottawa; John I. Hobson, Guelph, and Captain McMaster, of Toronto.

We Should Have Good Roads.

There is no reason why Canada should not have good roads. Life is too short to be satisfied with small loads at the expense of a great deal of power and wear and tear of horses and wagons. Councilmen and others interested in this matter should communicate with the Sawyer & Massey Co., Hamilton, who will be pleased to share their experience with the enquirer. Write them and get the benefit of their experience at no cost to yourself. Their good-roads machinery is up-to-date in every respect and they

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Head Office: McKinnon Building, Toronto.

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The Association is prepared to undertake the following services on behalf of consignors of apples, eggs, poultry and all kinds of fruit and produce—

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4. To have goods inspected when claims are made by consignees, either for damage in transit, or for alleged non-compliance with contract, and to report thereon.
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Consignors making small shipments under the auspices of the Association can, by co-operation through the Association, receive all the advantages which can usually be commanded by large shippers only. Those who desire the protection of the Association are requested to write at once to the Head Office of the Association, at Toronto, for list of apple receivers, list of sailing dates and instructions for grading and packing of fruit for export.

Consolidated Phosphates Limited

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One of the objects of this Company is to introduce intelligent methods of cultivation by bringing farmers to a clear understanding of the principles involved in manuring.

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Ravages of Consumption

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DR. SLOCUM the famous scientist, whose lectures and demonstrations in New York and London this season have astounded medical circles, has at last perfected his new system of treatment for the absolute cure of tuberculosis and all pulmonary diseases. This triumphant victory over the deadly bacilli is far reaching in its effects, for there is no longer room for doubt that the gifted specialist has given to the world a boon that will save millions of precious lives. Dr. Slocum's system of treatment is both scientific and progressive, going as it does to the very source of the disease and performing the cure step by step.

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Third Step.—Building healthy flesh and fortifying against future attacks.

The Slocum system cures grip and its painful after effects, dangerous coughs, bronchitis and every known form of pulmonary disease.

It makes weak lungs sound, strengthens them against any ordeal, and gives endurance to those who have inherited hollow chests, with their long train of attending dangers. To enable despairing sufferers every where to obtain speedy help before too late, Dr. Slocum offers

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Simply write to **THE T. SLOCUM CHEMICAL CO., 178 King St. West, Toronto, Ont.**, 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 seeking Slocum's Free offer in American papers will please send for samples to the Toronto laboratories. Let no previous discouragements prevent your taking advantage of this splendid free offer before it is too late.

can supply just what every municipality needs in order to improve and maintain the roadways in good condition.

Shearing Lambs in October.

A bulletin from the United States Department of Agriculture advises the shearing of lambs in October, before beginning to fatten for the winter market. They say five wethers shorn Oct. 14, and fed for 15 weeks, gained 225½ pounds at a cost of \$6.11 per hundred pounds, while five similar wethers, not shorn, fed in the same way at the same time, gained 210½ pounds at a cost of \$6.67 per hundred. In another trial, eight wethers were shorn Oct. 6, and fed for ten weeks, gaining 194.4 pounds. Another like lot were not shorn, and it was found that the shorn lambs had made the most gain and matured much earlier.

"Blood Will Tell."

At a meeting of the Indiana Short-horn Breeders' Association, Mr. Mortimer Levering told of a carload of 12 steers which averaged in the market last winter 1,550 pounds each, and sold for \$8.25 per hundred pounds, or a total of \$1,534.44. They were sired by the famous Aberdeen Angus bull that was the champion at the Omaha Exposition last year, and that was sold for \$1,000.

He said if they had used a common mongrel bull on the same cows, the result would have been a carload of such as were called at the same market "fair to medium steers," weighing 1,100 pounds each, and selling for four cents a pound, or \$528 for the lot. Thus it would seem that the bull repaid his cost on the service of those 12 cows alone. This may be an extreme case, and while no allowance is made for any extra feed given the Angus steers, neither is any mention made of his service to other cows, or his value for the future. It is a fact that "blood will tell."

Breed Test.

The dairy test of breeds at the New England Fair, held at Old Orchard, Maine, last week, was as follows:

For the largest quantity of milk in one day from five cows: D. H. Goodell, 1st with Holsteins; Geo. H. Yeaton, 2nd with Ayrshires.

For the largest quantity of butter in one day from five cows: Geo. H. Yeaton, 1st with Ayrshires; D. H. Goodell, 2nd with Holsteins.

For the largest quantities of milk in one day from one cow: D. H. Goodell, 1st with a Holstein; Stockwell & Gifford, 2nd with a Grade.

For the largest quantity of butter in one day from one cow: D. H. Goodell, 1st with a Holstein; Stockwell & Gifford, 2nd with a Grade.

The five Holsteins gave 225¾ lbs. of milk; the five Ayrshires gave 197½ lbs. milk. The five Ayrshires gave 8.14 lbs. butter; the five Holsteins gave 7.85 butter.

Have you a Fence to build?

London Fence Machine

It will cost you less than half if you build with the

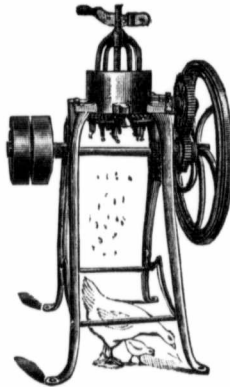
We challenge competition for speed, ease, quality of work and durability. The LONDON is a thoroughly up-to-date machine and stands without a rival for weaving square mesh coiled spring fence. The best and strongest fence in the world. The LONDON is sold at a price which every farmer can afford and save the price in 40 or 50 rods.

We are leaders in Coiled Steel Spring Wire, also common Soft Galvanized Wire. Write for Prices. Mention THE FARMING WORLD.

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Machines

For Cutting Green Bones, Gristle and Vegetables for Poultry Food



No. 4.

By feeding Green Cat Bones you will increase the number of eggs and keep your flock in better condition. It is also

CHEAPER THAN ANY OTHER KNOWN FOOD

The Malleable Iron Co. 19 to 29 Mill St., MONTREAL, Que.

Bigger Profits

Your cheese and butter making will pay you bigger profits if you use

Windsor Salt

Pure, soluble, even crystals; economical to use.

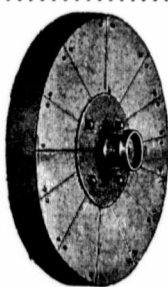
THE WINDSOR SALT CO. LIMITED WINDSOR, ONT.

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LOW WAGON WHEELS

MADE TO FIT ANY SIZE SKEIN THEY CANNOT BE OVERLOADED



No spokes to gather mud or get loose. Strong, durable and easy running.

The Advantages

Of a Low Wagon on a farm and elsewhere cannot be over-estimated. We make a specialty of the manufacture of Low Wheels for the ordinary wagon, making it possible for the farmer and teamster to possess a low wagon by simply removing their high wheels and placing these upon their wagons. The great advantage thus derived in loading logs, wood, grain, stone, fodder, hay, manure, hogs and various other things, is very evident. By lowering the wagon bed you lessen the labor of loading anything off the ground. It is much easier to lift a load when it is on a level with the knee than when it is on a level with the shoulders.

The Speight Wagon Co., Markham, Ont.

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. The 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.

Horses.

Despatches from New York indicate the placing by the Imperial German Government in this country of an order for 30,000 cavalry, ambulance and artillery horse, together with a practically unlimited commission for high-class officers' chargers. The order is chiefly for the grade of horses that is now deemed best for mounting infantry for rapid transportation from point to point in war. The German Emperor has already four representatives in the United States purchasing horses, but additional agents are to be despatched immediately to assist in getting together the larger number, provided satisfactory assurances are forthcoming that so great a lot can be collected within a reasonable time. These horses could be obtained in the four leading Western markets in six weeks, if the agents would pay the price.

Supplementing our report of the horses at the Toronto show, it is in order to state that the big and handsome three-year-old Hackney stallion Stampede, purchased last spring by Graham Bros., Claremont, O., from Chestnut Hill Stock Farm, Chestnut Hill, Pa., won easily in his class—an event omitted by our reporter in his review of the show. This son of Wildfire has a brilliant future. He is a grand colt, projected on carriage-horse lines, and will prove a sire of superior horses for heavy leather. —*Breeders' Gazette.*

Cattle.

The preliminary prize list of the Pan-American Exposition has been issued by Supt. F. A. Converse, Buffalo. Full information concerning the live stock show is presented in a beautifully illustrated pamphlet, which will be sent on application, and the rules and "sample" classifications are printed on a separate leaflet. Inasmuch as herd papers have been omitted from the cattle and swine departments, we imagine that a request for amendment in this particular will be filed by exhibitors.

Mr. James Watt, of Knowfield, Carlisle, as the result of the sale of his herd of Shorthorns, realized upwards of £2,121, or an average of £20 8s. for over 104 head. The Queen topped the list by giving 50 gs. for the six-year-old red cow, Duchess Deans. Colonel Green-Thompson secured an eight-year-old cow, Gretna, and the four-year-old cow, Rose Blossom, each for 40 gs. Mr. Townley-Parker was the purchaser of the three-year-old cow, Rosebud, for 40 gs. The highest price paid for a bull was 35½ gs.

Following is a list of imported stock which arrived at the cattle quarantine, South Quebec, Canada, for the week ending Sept. 8: From Hamburg, Germany, 32 Rambouillet rams for Geo. Harding & Son, Waukesha, Wis., and 20 Rambouillet rams for Dwight Lincoln, of Ohio. From Liverpool, 21 Hampshire and 21 Southdown sheep for Dr. W. Seward Webb, of Vermont. From Glasgow, 19 Scotch Shorthorns for H. Cargill & Son, Cargill, Ont.; 2 Shorthorns for Arthur Johnston, Greenwood, Ont., and 8 Shorthorns for Stephen Nicholson, of Ontario. —*Breeders' Gazette.*

At an auction sale of Herefords held at Wabash, Ind., on Sept. 14, excellent prices were realized. The top bid was \$600 for the bull, Columbus 18th; 11 bulls sold for \$2,015, or an average of \$183.20 each, and 26 females for \$4,340, or an average of \$167 each.

The great combination sales of Herefords and Shorthorns to be held at the stock yards, Kansas City, October 15 to 26 next, are being looked forward to by American breeders with a good deal of interest. The cash prizes offered amount to \$25,000. On Oct. 18 to 20, 150 Shorthorns will be offered, and on

Oct. 22 to 26, 250 Herefords will be offered for sale.

At a meeting of the breeders at Ottawa Fair held at the office of the Minister of Agriculture on Thursday, Sept. 20, it was decided to hold an auction sale at a recent date in the city of Ottawa.

Mr. G. Woodburn, manager for R. & W. Conroy, Jersey Farm, Aylmer, Que., after a visit to the other side of the line is convinced that Canadian cattle rank first. He states that he has seen very much better Jerseys in Canada that could be bought cheaper, quality considered.

Sheep.

The annual sale of Border Leicester shearing rams belonging to Messrs. J. & H. Findlay, Newmill of Craiglassie, was held on Saturday. The animals were well brought out, and met a very level trade, the average for the 52 head sold being £6 1s. 4d. The highest priced one was one bought by Mr. Wm. Whyte, Hatton of Eassie, at £8 5s.

The eleventh annual ram sale of the Lincoln Long-Wool Sheep Breeders' Association was held at Lincoln on Friday. About 350 rams were offered, the most of them being second cuts from the different flocks. Although no sensational prices were forthcoming on this occasion, there was a good level trade for the best sheep, the total sum realized being over £2,600. The best average was made by Mr. J. Cartwright's Dunston Pillar rams, 15 of which made £17 19s. 2d. apiece. The highest individual price for a ram of this lot was £44. The Laughton rams, bred by Mr. J. E. Caswell, averaged £16 3s. 11d.; 20 from Dowsby, £15 11s. 10d.; and 20 bred by Mr. Tom Caswell, £14 2s. 6d. Messrs. R. & W. Wright, of Notton Heath, sold 25 at an average of £13 4s. 2d. The highest individual price of the day was 50 gs., given by Mr. W. Taylor Sharpe, of Baumber, for one of the Messrs. Dean's rams from Dowsby, 20 of which averaged £15 11s. 10d. —*North British Agriculturist.*

VOL. I. CONTINENTAL DORSET CLUB RECORD.—The first volume of the pedigree record conducted by the Continental Dorset Club has just been issued by Secretary Joseph E. Wing, Mechanicsburg, O. It is neatly and attractively printed and presents complete indexes and lists of owners and breeders. A beautiful half-tone engraving of a flock of Dorsets forms the frontispiece. The scale of points adopted by the Continental Dorset Club for sheep of this breed will interest all who are studying these hot-house lamb producers.

William Cooper & Nephews, Chicago, Ill., write: "We have a few copies left over of the last edition that will be published of the 'Sheep Breeders' Directory,' a valuable book to intending purchasers of English sheep for breeding purposes. We shall be glad to furnish copies of the book to your readers as long as they last."

A large winner in Southdowns at Ottawa was Hon. G. A. Drummond, Beaconsfield, Que. Mr. W. H. Gibson is manager of this flock and had on exhibition some splendid animals lately imported from the Prince of Wales' flock at Sandringham, among them being Union Jack, who was a great winner as a lamb. A twin brother of Union Jack was the champion at the Paris Exposition.

A. J. Watson, Castleberg, Ont., has won a large number of prizes at the 1900 exhibitions for Cotswold sheep. At Ottawa he won 1st in every class, the following being his record: 1st for aged ram, ram lamb and shearing ram; 1st, 2nd and 3rd for aged ewe; 1st and 2nd for yearling ewe and 1st and 2nd for ewe lamb. He also won diploma for best flock. This is a record to be proud of.



ONLY FIRST-CLASS GOODS.

THE

"Waggoner"

is the only satisfactory

Extension Ladder

made.

Light, Strong, Convenient and Cheap.

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.

Elastic Carbon Paint

J.M.

A BIG THING LOOK INTO IT



ATLANTIC REFINING CO., TORONTO.

Dear Sirs,—Your Elastic Carbon Paint has certainly gained favor with the farmers who have used it. At the Toronto, London and Ottawa fairs I was surprised to hear from so many who had used this paint on their machinery and wagons as well as on buildings and roofs, and in every case had given entire satisfaction. Yours truly,

S. W. GRANT.

Atlantic Refining Co.

Cor. Esplanade and Jarvis Sts.
TORONTO, CANADA

Market Review and Forecast

Office of THE FARMING WORLD,
Confederation Life Building,
Toronto, Oct. 1, 1900.

General trade continues fairly active for this season. A large business is being done in produce at country points. The country is said to be suffering just now from too much mining speculation, and not a few of the recent failures are reported to be due to losses from such investments. Money is steadier. Call loans are quoted at 5 per cent.

Wheat.

The wheat situation of the week has had a bullish tendency. Foreign markets have ruled steady to firm, though towards the end of the week cable reports were lower. The heavy rains in the Canadian Northwest, and also in the Dakotas, have caused serious damage to the crop, and prevented harvesting in good condition. Some estimates place the damage to the crop in the Territories at about 75 per cent., with 25 of this: no better than chicken feed. This is having a buoyant effect upon the market in the West. But this only affects the situation as far as spring wheat is concerned, the winter wheat crop being all gathered in in good shape. It is to be hoped that the damage in the Canadian West will not be as serious as present reports seem to indicate. Though there has been a bullish tendency there has been less disposition to hold with a slump of 1½ cents at Chicago on Friday.

The visible supply in the United States and Canada increased 1,066,000 bushels to 54,993,000 bushels, as compared with 37,770,000 bushels last year, being an increase of 15,223,000 bushels. The visible supply of wheat in the United States and Canada, and the amount of wheat and flour now in transit to Europe, are equivalent to 81,633,000 bushels, against 66,490,000 bushels a year ago, which shows an increase of 15,143,000 bushels.

The situation on the local market shows little change. No. 1 Manitoba hard is quoted firm at 89 to 90c. afloat Fort William, and Ontario red winter at 76 to 76½c. afloat Montreal. The market here is steady. Holders of red and white west are asking 67c., and buyers quote 66c. Goose is quoted at 65c. at outside points, and spring life at 67c. east. On Toronto farmers' market red and white bring 68 to 69c.; spring life, 70c., and goose, 68 to 68½c. per bushel.

Oats and Barley.

The oat market is easier and cable reports are weaker owing to large offerings of Russian in England. Montreal quotations are 28½ to 29c. for No. 2 white. Quite a lot of oats reported to be light, weighing only 31 pounds per bushel. No. 1 white are quoted here at 25c. east and No. 2 white at 23c. west. On farmer's market here oats being 29 to 30c. per bushel.

The barley market is firm. Barley is quoted here from 38 to 42c. as to quality and point of shipment. On Toronto farmer's market barley brings 44 to 47½c. per bushel.

Peas and Corn.

The pea market has declined from 1 to 1½c. at Montreal. Peas are quoted here at 60c. east, 58c. middle freights and 57c. west and on farmers' market 60c. per bushel.

The corn market has advanced 1 to 2c., No. 3 American being quoted at 50c. Toronto in car lots. The American crop is being got in in good shape.

Bran and Shorts.

Ontario bran has been selling at Montreal in car lots in bulk at \$15 and shorts at \$16.50 to \$18 as to quality. City mills here sell bran at \$13.50 and shorts at \$16 in car lots f.o.b. Toronto. At points west of here bran is quoted at \$12 and shorts at \$14.

Eggs and Poultry.

Though our exports of eggs this year have been large the English market takes them all. The market rules firm and strong with 14½ to 15c. the quotations at Montreal for Western fall stock in round lots. Choice new laid eggs are scarce here and firm at 15 to 16c. in large lots with some dealers quoting 1c. higher. On Toronto farmers' market new laid being 16 to 20c. per dozen.

There is more inquiry here for dressed poultry and the offerings are large. On Toronto farmers' market quotations are: chickens 40 to 80c. and ducks 60 to 90c. a pair; turkeys 12 to 14c. and geese 8 to 9c. per pound.

Potatoes.

The potato crop this year is a fairly good one and the ravages from rot do not appear to have been as extensive as at first apprehended. Montreal quotations are 45 to 50c. per bag in round lots delivered by farmers. A few car loads have changed hands here at 35c. per bag. On Toronto farmers' market potatoes bring 35 to 45c. per bag.

Fruit.

Prices for apples in the country rule at from 40 to 75c. per bbl. One firm is reported to have purchased between 30,000 and 40,000 bbls. of winter varieties at from 40 to 50c. for the apples which will be packed and celled by his own packers. An advance of 2s. to 3s. is reported at Liverpool.

In a cable received by J. M. Shuttleworth, Branford, of date Sept. 26, good, sound fruit is reported to be in demand. The prospects for Canadian apples are somewhat improved; prices have an upward tendency. Messrs Simons Shuttleworth & Co., Liverpool, cable prices on that date as follows:

"St. Lawrence, Strawberry, 10s. to 12s., Gravensteins, Kings, 16s. to 18s.; Fillbaskets, 15c. to 17s.; Jeneilings, 10s. to 11s.; Maiden Blush, Cabshaw, Ribstons, Snows, 12s. to 14s.; Colverts, Holland Pippis, Cayuga, Red Streaks, Greenings, 11s. to 13s.; Blenheim Pipp, 13s. to 15s."

At Toronto fruit market apples are quoted at 50c. to \$1 per bbl.

Hay and Straw.

There is a temporary scarcity of hay at Montreal and in the Eastern States which has advanced prices somewhat at country points east, where car lots of No. 1 have changed hands at \$8 to \$8.50 for baled hay. It is now understood that the last cargo of hay sent from St. John by the Government is on its way to China instead of South Africa. The demand is firm here at \$9.50 to \$10 for baled hay in car lots on track Toronto. On farmers' market hay brings \$11 to \$13, sheaf straw \$11, and loose straw \$6 per ton.

Seeds.

Reports from Toledo, Ohio, indicate the crop of clover seed a short one both at home and abroad. There is no old seed to come forward and at the higher prices holders are likely to sell early. Prices at Montreal are \$5.25 to \$6.50 for red clover, \$5.25 to \$6.25 for alsike, and \$1.25 to \$1.75 per bushel for timothy. On Toronto farmers' market alsike brings \$6.75 to \$7.75 per clover, \$5.50 to \$6, and timothy \$1.40 to \$1.80 per bushel.

Cheese.

Buyers and sellers are still apart and factormen generally evince a disposition to hold for a while and Old Country dealers show the same inclination so that things are somewhat dull. Not for some years have factories here sold up as close to the hoops at this season as just at present and salesmen feel like waiting awhile though they have been offered the top figure. A good fall make is anticipated and prospects are good for a fine wind up to this season's trade. Exports from Montreal, Portland and New York so far this season show an increase of 320,634 boxes as against the same period of last year.

Montreal quotations are 11½c. to 11¾c. for finest westerns and 11¼c. to 11½c. for finest easterns. At Brockville market on Thursday 11¼c. to 11½c. were the prices, being ½c. below last week's sales. These have been the ruling offers at most of the leading local exchanges.

Butter.

The prospects of a large Australian make are causing English buyers to be very careful in their bids on Canadian butter. The market, therefore, is easier with a liberal fall make in prospect. Our exports of butter so far this season show a falling off of 146,733 packages as compared with the same period of 1899. The *Trade Bulletin* sums up the market of the week as follows:

"There is no activity in the butter market, although buyers are willing to do business at a shading of present prices and the market may be called quiet and steady. There has been a few transactions during the past few days reported to us, aggregating 1,200 to 1,500 packages, at 20 to 20¼c. for finest creamery, and at 19½ to 19¾c. for seconds. Some holders are asking 20½c. for real "ding dong" fancy late made goods. A few more enquiries were received to day from England, but limits were away below what business could be done at. It is a good sign, however, to hear they are wanting the stuff. Cables from Manchester report a further decline in Copenhagen."

Creamery butter is easier here at 22 to 23c. for prints and 20 to 21c. for packages. There is a good demand for choice dairy tubs at 18 to 19c. with choice dairy table butter a ½c. pound. On Toronto farmers' market pound rolls bring 23 to 26c. each.

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Cattle.

The cattle situation on the whole is not as healthy as a week ago. Generally speaking, prices for exporters are easier and reports are to hand of shippers losing heavily on some recent consignments. On Friday cable quotations for live cattle were 11 to 12c. per lb. with market slow. At Toronto cattle market on Friday the total receipts of live stock were 795 cattle, 1,581 sheep and lambs, 1,850 hogs and 20 calves. The quality of fat cattle offered was oily medium. There were some shippers offered but none reported sold as such, some being bought for short-keep feeders. There appeared to be no buyers for the export trade on the market.

Export cattle.—Prices for these were nominal at \$4.60 to \$4.80 for choice quality and \$4 to \$4.50 for light cattle. Heavy export bulls were quoted at \$4.12½ to \$4.25 per cwt., and light ones at \$3.12½ to \$3.35.

Butchers' cattle.—Choice picked lots of these, equal in quality to the best exporters' and weighing 1,000 to 1,100 lbs., each sold at \$4.40 to \$4.60, good cattle at \$4 to \$4.25, medium at \$3.50 to \$3.75, and inferior to common at \$2.50 to \$3.25 per cwt.

Feeders.—Heavy well-bred feeders weighing 1,000 to 1,150 pounds each sold at \$3.60 to \$4 per cwt. Light steers 700 to 900 lbs. in weight sold at \$3.25 to \$3.35 per cwt.

Stockers.—Yearling steers 500 to 600 lbs. in weight suitable for the Buffalo trade sold at \$2.25 to \$3 per cwt. and other quality of the same weight at \$2 to \$2.25 per cwt.

Milch Cows.—About twelve milch cows and springers sold on Friday at from \$30 to \$50 each.

Calves.—These were in only moderate supply at Buffalo on Friday with light demand and prices easier at \$7.50 to \$7.75 for choice to extra and \$7 to \$7.50 for good to choice.

Sheep and Lambs.

At Buffalo on Tuesday Canadian lambs opened rather slow and at the close prices were lower. Choice to extra sold at \$5.45 to \$5.55 and good to choice at \$5.15 to \$5.35 per cwt. At Toronto market the same day prices were easier for sheep at \$3.50 to \$3.60 for ewes and \$2.75 to \$3 per cwt. for bucks. Spring lambs sold at from \$2.50 to \$3.25 each or at from \$3.50 to \$4 per cwt.

Hogs.

The price of bacon hogs still keeps up above \$6 mark. There does not appear to be the hogs in the country the packers require. We know of more than one packing house that cannot get enough hogs to keep things going and have had to discharge a number of men. Best select bacon hogs 160 to 200 lbs. each sold on Friday at \$6.25, and thick and light fats at \$5.50 per cwt. Unculled car lots sold at \$6 to \$6.20 per cwt.

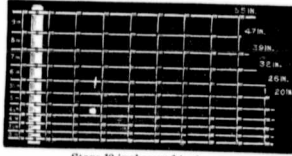
At Montreal prices are firm at \$6 per cwt. for light bacon hogs and \$5.75 for heavier weights. The *Trade Bulletin's* London cable of Sept. 27 re Canadian bacon reads thus:

"The market has undergone very little change since my last cable, there being a steady feeling at last week's rates. No. 1 Canadian lean 58s. to 60s."

WHAT HE TOOK FOR HIS COLD.

— "Have you taken anything for your cold?" asked the doctor of a hungry-looking man who came to him complaining of being "all run down." "Well, I ain't bin takin' much o' anythin', doctor, that is, nothin' to speak o'. I tuk a couple o' bottles o' Bingham's bitters a while back, an' a bottle o' Quakem's invigorator, with a couple o' boxes o' Curem's pills, and a lot o' root bitters an' quinine my old woman made up. I've got a porus plaster on my back, an' a liver pad on, an' I'm wearin' a 'lectric belt an' takin' quinine an' iron four times a day, with a dose or two o' salts every other day. 'Ceptin' for that, I ain't takin' nothin'!"

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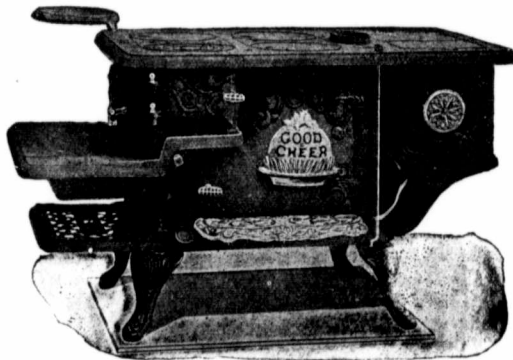
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1	10 "	1 to 5 "	
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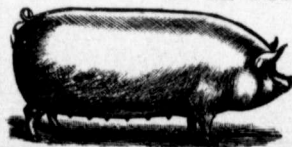
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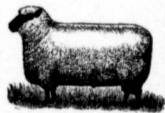
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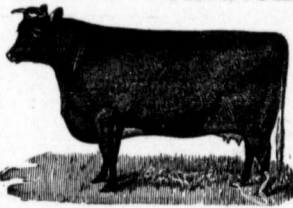
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