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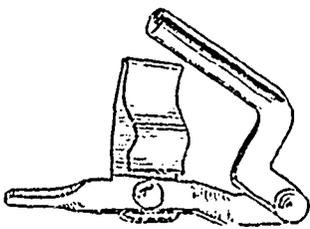
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C. C. MACDONALD, WINNIPEG, MAN.

...LEADING TOPICS FOR THE WEEK...

National Thanksgiving. Canadian Butter Misrepresented. Dirty Dairies of Denmark. Our Bacon Trade. Poultry for the British Market. A New Corn Product. Free Rural Postal Delivery. Horseshoeing. Western Dairy School. Timely Poultry Thoughts. Farm Pointers. Canadian Butter to the Front. Questions and Answers. Correspondence. Market Review and Forecast. Live Stock for the West. Rates to the Fat Stock Show, etc., etc.

ISALEIGH GRANGE STOCK FARM...

Ayrshire and Guernsey Cattle.
Improved Yorkshire Swine.

Shropshire Sheep. Our Ayrshire herd is headed by the noted bull, Marchless, sire, Glencairn III., imp. 6955; dam, Nellie Osborne, imp. 1000.



Our Special Offering for December consists of six choice young Ayrshire bulls and a few heifers, two extra Guernsey bull calves, and a choice lot of sheep and pigs. All at very low figures for immediate sale.

T. D. McCallum, Manager,
Danville, Que.

J. N. GREENSHIELDS, Proprietor

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DUFF'S White and Black Minorcas and Barred Plymouth Rocks

I have shipped Birds and Eggs to England, France, South Africa, and all parts of United States and Canada. As the breeding season is now over, I will dispose of twenty Black Minorca yearling hens at \$2.50 each; ten White Minorca hens at \$2 each, and twenty-five Barred Plymouth Rock hens at \$2 each. I have also for disposal three White Minorca cocks at \$3 each, and three Plymouth Rock cocks at \$3 each. There is no better stock in the world, and as all of the above birds are specially selected, purchasers may be assured of getting the best.

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43 Brooke Ave., Toronto, Ont.

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1898

The first edition of the 1898 calendar (an unusually interesting one) will be ready for delivery early in December. Copies mailed on receipt of stamps or currency at the rate of 7 cents per copy.

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245 East 56th St., New York City.

MEYER'S WYANDOTTES Silver, Buff Golden, White
PLYMOUTH ROCKS Buff, White
PEKIN DUCKS Buff, White.

are amongst the very best. TRY A COCKEREL.
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FOR SALE

Will sell my breeding stock which includes my imported birds of Golden and Silver Wyandottes. Winners at the Canadian and U.S.A. shows. Golden and Silver Wyandottes eggs, \$1 per 13. Headed by Cock from Sharp Butterfield.

JAMES LENTON, Park Farm, OSHAWA



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One pair of Andalusians.
One pair of Partridge Cochins.
One pair of Black Hamburgs.
One pair of Brown Leghorns.
Also Young Stock in the above varieties.
W. R. KNIGHT, - Bowmansville, Ont.

Oxford... Fat Stock Show

The County of Oxford Fat Stock Club will hold their Annual Christmas Fair at the

Town of Ingersoll,
Thursday, December 16, 1897.

Very special efforts are being put forth by the officers of the Association to make the Fair one of the best ever held in the county.

Nearly \$500.00 are being offered in prizes for cattle, sheep, hogs and poultry.

A number of very handsome prizes are donated for bacon hogs.

Prize lists furnished on application to the Secretary. Address

M. S. SCHELL, Woodstock, Ont.

Guelph Xmas... Fat Stock Jubilee Show

"Smithfield of Canada"

The annual Christmas Fat Stock Show under the auspices of the Guelph Fat Stock Club and the Guelph Poultry Association, will be held in the

City of Guelph, Victoria Rink,
Thursday and Friday, Dec. 9 and 10,

when prizes to the amount of \$1,000, including the Queen's Jubilee Prize of Twelve Sovereigns (gold), for the best animal in the Show, will be awarded. Prize lists can be had on application to the Secretary.

JOHN MCCORKINDALE,
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English Advertisements.

Henry Dudding

Rilby Grove, Great Grimsby, Lincolnshire, England

Has always for inspection, and sale, the largest flock of pure Lincoln Longwool Sheep in the county, including many prize-winners, having taken prizes for many years at the Royal and other shows for both Rams and Ewes, including champion medals at both the Paris Exhibitions, Vienna, Amsterdam, Canada, Australia, New Zealand, and all the leading prizes at the Chicago Exposition; also the first for the best collection of Lincoln fleeces of wool at the Royal Windsor Show and the Lincolnshire Show, which proves the character of this flock. The sheep are famous for their great size and one hundred and twenty-five years' good breeding. At Lincoln-Ram Sale, 1896, this flock's consignment not only made the highest individual average of any consignor, but also made an average price exceeding that made by any other breed in England, i.e., \$511 per head, the first six making an average of \$340. The sheep for sale this year are all sired by noted rams, and are fully equal to their predecessors in every way.

Rail Stations: Stallingbore, 3 miles distant, and Great Grimsby 7 miles.
Telegrams: "Dudding, Keelby, England."

S. E. Dean & Sons

Dowsby Hall, Folkingham, Lincolnshire, England

Have always for inspection and sale fine specimens from their FLOCK of PURE LINCOLN SHEEP (No. 47 in Lincoln Flock Book), including SHEARLING EWES and RAMS, also RAM and EWE LAMBS. Sheep from this flock have been exported to nearly all parts of the world, where their great substance and large fleeces of beautiful quality wool give the greatest satisfaction to purchasers. Early in 1894, about twenty Rams from this flock were sold by public auction in Buenos Ayres, and realized the highest average ever obtained for Ram Hogs exported from England. The flock is most carefully bred, and none but the very best sires used. Messrs. Dean also send out selections from their flock to purchasers who are unable to come to England to inspect them, and they have given great satisfaction. Messrs. Dean have also for sale purebred BATES SHORTHORNS and pure LINCOLN RED SHORTHORNS.

Dowsby Hall is one mile from Rippingale Station, on the Great Northern Railway, Boston and Stamford Branch.

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MR. J. H. PARKIN'S Registered Flock No. 37 of the above Sheep is one from which breeders of these most excellent Mutton and Wool Sheep can rely upon obtaining specimens of the highest merit, with grand wool and even fleeces, as well as being true to type and character. The breeding and pedigree of the flock is second to none in England. For the last thirteen years every sire used in the flock was specially selected from that noted flock of Mr. T. Powell, who now has the direct personal management of this flock, from which specimens are always for sale on application to

T. POWELL,

East Lenham, Maidstone, Kent, England.

James Flower

Chilmark, Salisbury, Wilts, England
Registered flock of nearly 2,000 Grand Hampshire Down ewes. Established more than 50 years ago by present owner's father. Prizes won at the Royal, Bath, and West Royal Counties, and other shows, including the Challenge Cup at Salisbury Fair in 1894, 1895, and 1896. Won 51 prizes out of 53 classes, including champion prizes during last three years. Selections always for sale at home and at the Annual Sale, Bretford Fair, August 12th.

J. E. Casswell

Stock Book No. 46
Laughton, Folkingham, Lincolnshire, Eng.
This well-known flock has been established more than 100 years, and the pedigree Lincoln longwool rams and ewes have been noted throughout the Colonies and South America for their "size, symmetry, and lustrous wool." Ewes from this flock have always passed from father to son, and have never been offered for sale. Mr. J. E. Casswell's grandfather, Mr. G. Casswell, of Laughton, was the first breeder in the county to let his rams by public auction. At Lincoln Ram Fair, 1895, Mr. J. E. Casswell made the highest average for 20 rams. During the last two years the following amongst other noted sires have been used: Bakewell Councillor and Baron Rilby, for each of which very high prices have been refused; Laughton Baron, Laughton Major, Laughton Style, Laughton Choice, No. 5; Ashby George, 60 guineas; Laughton Judge, 95 guineas; his son, Laughton Justice Lincoln, 200 guineas; Lincoln, 175 guineas; Welcott, 70 guineas; Lincoln, 75 guineas; and his sire, Laughton Rilby. Shire horses, Shorthorn bulls, and Dorking fowls are also bred. Inspection and correspondence invited. Visitors met by appointment. TELEGRAMS: Casswell, Folkingham, England.

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The Stockman's Friend

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We will send, postpaid, "American Dairying," by Gurler; cloth bound, 266 pages. Price..... \$1 00

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We will send, postpaid, "The Fertility of the Land," by Prof. Roberts, of Cornell University; 415 pages, illustrated. Price..... \$1 25

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We will send, postpaid, "Wolf's Handbook for Farmers and Dairy-men"; cloth bound, 375 pages. Price..... \$1 50

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We will send, postpaid, "The Concise Imperial Dictionary"; cloth bound. Price..... \$2 00

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We will give you your own subscription free for six months.

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We will give you your own subscription free for one year.

With this list of premiums will not our many friends do their utmost to aid us in at least doubling our circulation this winter. It can be done by each one sending in one new subscription.

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Agents wanted in every district to canvass for FARMING. Full particulars and sample copies sent on application to

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WALTER NICHOL, Plattville, Ont., Breeder of Ayrshire Cattle and Leicester Sheep. Choice young stock for sale.

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J. H. SMITH & SON, Willow Grove Farm, Highfield, Ont., Breeder St. Lambert and St. Helen's Cattle. Prize herd at the Industrial.

ROBT. REESOR, Locust Hill, Ont., Breeder Jersey Cattle and Shetland Ponies. Young stock for sale. Locust Hill is 20 miles from Toronto on the C.P.R.

W. M. ROLPH, Glen Rouge Farm, Markham, Ont., Breeder of Jersey Cattle. Herd nearly all pure St. Lambert. Young stock always for sale.

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HOLSTEINS.

E. PANNABECKER, Fairview Farm, Hespeler, Ont., Breeder of reg. Holsteins. Stock for sale.

GREGOR MACINTYRE, Renfrew, Ont., Breeder Thoroughbred and High Grade Holstein Cattle. Stock for sale.

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J. BUCHANAN, Napier, Ont., Breeder reg. Aberdeen-Angus Cattle. Stock by Lord Forrest for sale.

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W. H. BEATTIE, Wilton Grove, Ont., Breeder of Shropshire Sheep, Chester White Swine, Collie Dogs, and B. and W. Turkeys.

W. L. WRIGHT, Glanworth, Ont., Breeder of Shropshire Sheep, Chester White Swine, White and Bronze Turkeys.

J. R. & E. R. Kirkham

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Have always for inspection and sale pedigree registered Lincoln Longwool Rams and Ewes from their registered flock (Stock Book No. 20), which has been most carefully bred for upwards of one hundred years, each Ram and Ewe having full pedigree Royal, 200 guineas, used in the flock this season.

FARMING

VOL. XV.

NOVEMBER 23RD, 1897.

No. 12.

FARMING

AN ILLUSTRATED WEEKLY JOURNAL DEVOTED TO FARMING AND THE FARMER'S INTERESTS.

Published every Tuesday by

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TOPICS FOR THE WEEK

Quality Not Quantity in "Farming."

Readers of FARMING must remember that in its present form we are able to give them over one-half more reading matter during the year than we would be able to give in the old monthly form of FARMING. We purposely make our weekly edition in its present concise form so as to meet the needs of this advanced age. In this go ahead day even the farmer does not care to take time to read through a large agricultural journal. In FARMING, we aim to give only the very best farming matter, boiled down, concise and to the point. By issuing weekly the farmer gets everything up-to-date, and fresh. Our aim is quality not quantity.

Among the many excellent exchanges which come to our office, some of the very best are those smaller in size. In these the matter is boiled down and the reader gets as much definite information and knowledge of the subject as by reading a long, labored article. Such has been our aim in regard to FARMING, and we are assured that it will meet the approval of every intelligent farmer.

We trust our subscribers will not forget that we offer to advance subscriptions one year for two new yearly subscribers, and six months for one new yearly subscriber at one dollar per annum. If sample copies are needed kindly drop us a line and we will have some forwarded at once. We are receiving complimentary notices on every hand and feel assured that FARMING, in its present concise weekly form, is just the paper the farmer needs. You will therefore be doing your neighbor a kindness by securing him as a subscriber to FARMING. Don't delay, now is the time to secure them. See our special premium list in this issue, and look out for our special holiday premiums next week.

National Thanksgiving.

This week brings with it the day set apart for national thanksgiving. Every loyal Canadian citizen has reason to be thankful for the blessings of the past year. Our fair land has been preserved in peace and plenty, and our relations with the motherland have become more cordial and more intimate. These closer relations have brought with them greater interest in Canada and Cana-

dian affairs than ever before. The British trader is looking more to Canada than he ever did for an outlet for his manufactured goods, and, we in turn, may confidently look forward to an enlarged demand for our produce from the English consumer, because of the events which have transpired since we last returned thanks for the kind providences bestowed upon us. Our relations with our neighbors have been mutually cordial, and beneath the little ruffles, caused by a Dingley bill and an Alien Labor law, there is a strong feeling of friendship for our kinsmen to the South. This is as it should be, and the prayer of every loyal son of Canada during this thanksgiving week will be that the cordial relations which have existed so long between the two great peoples of this continent may continue for many years to come.

More than any other Canadian citizen, the farmer has great reason to be thankful for the blessings of the past year. In addition to a bountiful harvest in nearly every portion of our great Dominion, there has been a marked advance in the prices for farm products. Wheat is worth fully 25 per cent. more than it was a year ago. The market for live stock has revived, and not for several years has there been the same demand for good young stock as there has been this fall. Dairying has been a profitable business for the farmer. In addition to the high prices for cheese, which prevailed during the earlier part of the season, there was an abundant supply of milk. The demand for good butter has been fair, and prices have been comparatively high. In fact, the farmer, in nearly every branch of farming, has experienced a revival, and has had a better demand for his products than a year ago.

Let us therefore, as loyal citizens, be truly thankful for the many blessings of the past year, both individual and national. Let us be thankful that we live in one of the fairest countries in the world; a land endowed by nature with beautiful scenery, fertile fields, and a vigorous, healthy climate, and ordained by Providence to be the home of a thrifty, contented and prosperous people. Let us have every confidence in the future of our young Dominion, and not be too eager to look for pastures green in other climes. Let us feel that Canada affords for young Canadians opportunities for advancement that are not to be found in other lands. Let us encourage a stronger Canadian sentiment, a stronger love for our native land, and a year hence we will have greater reason for thanksgiving than even this year affords.

Secretary Wilson Again.

We have had occasion frequently to refer to that indefatigable hustler, Secretary Wilson, of the United States Department of Agriculture. His annual report has recently been issued, and it is needless to say that it is one of the most concise and yet comprehensive reports of its kind that has come to this office for some time. The report in itself does not deal so much with the work that has been accomplished during the year, but is full of plans and methods of development along every line of agriculture, and if one-half the schemes proposed are carried to a successful issue Secretary Wilson will have accomplished more since taking office than all his predecessors put together. Not a single phase of agriculture, or of anything affecting the welfare of the agriculturist, seems

to be lost sight of. From the development of the markets for farm products down to the nature and tillage of the soil on the farm, comprehensive and definite lines of work are outlined, which, if carried into effect, should place the American farmer on a plane equal with, if not ahead of, any of his competitors. This report is well worth considering by our Department of Agriculture, lest the good work it is doing may be outclassed by its greatest competitor.

Canadian Butter Misrepresented.

Secretary Wilson, in dealing with the development of the market for American butter in his annual report, makes the following statement, which, we think, should not be allowed to pass without a protest: "The products of the United States and of Denmark have been found to be the only absolutely pure butter imported into England, all others, including the product of the British colonies, contain more or less injurious ingredients used as preservatives."

If there is anything for which Canadians may justly feel proud, it is that the food products of Canada are absolutely pure, and free from any foreign ingredient whatsoever. The high reputation of Canadian cheese in the British market at the present time is largely due to the fact that that product has been absolutely free from any foreign ingredients, and that the cheese imported from Canada has contained nothing in the way of "neutral," grease, or anything else but the pure milk as taken from the cow. The same may be said regarding Canadian butter, and we are prepared to state that every pound of Canadian butter sent to England has been absolutely free from any injurious ingredient, or anything used as a preservative. If Secretary Wilson does not know that our laws absolutely prohibit the manufacture of oleomargarine or the use of any injurious ingredient in the manufacture of butter, it is time that he was made aware of the fact. True, our exports of butter, so far, have not attained to very large proportions. They are sufficiently large however to be excepted when a statement like the above is made in reference to the butter shipped from the British colonies into England.

A strong proof of what we claim in regard to the high character of Canadian butter is contained in the results of Professor Dean's experiments in regard to the amount of water in butter, given in this issue. Not only is Canadian butter free from any injurious ingredient, but contains two and one-half per cent. less water than the Danish butter, upon which England depends largely for its supply. Professor Dean's experiments were carried on with butter made at the college, but, as the methods of manufacture there are practically the same as those used in the manufacturing of all Canadian creamery butter, the results obtained by him may be looked upon as representing pretty fairly the quality of Canadian butter in this particular.

The British consumer is becoming more and more exacting in regard to the quantity of water he buys when he purchases a pound of butter, and the Canadian creameryman should use every endeavor to keep the quantity of water in every pound of butter he makes as low as possible. We cannot "load up our hutter" with a lot of valueless water, or any other unnecessary ingredient, and expect that the English consumer is going to pay the highest price for it. The quality must be to his liking or he will not buy.

Dirty Dairies of Denmark.

The British dairy farmer is making considerable stir over the report that the dairies of Denmark are dirty and insanitary. The report seems to have good foundation, and emanates from no less an authority than Mr. John Spiers, a member of the Royal British Commission on Tuberculosis, who recently made a tour through Denmark. Speaking on this subject recently, Mr. Spiers stated that on probably fifty per cent. of the farms in Denmark the "dungstead" and the well were within a few yards of each other. In such cases the water which the cows drank could not help but be polluted. Besides, the sanitary conditions of many of the stables were anything but wholesome. In Great Britain, the sanitary authorities insist upon stables having something like 700 to 800 cubic feet of space for each cow. In Denmark not more than 350 cubic feet is demanded, and Mr. Spiers reports that in thousands of cases it is less than 200 cubic feet. Not only is this insanitary condition of things in existence at the present time in Denmark, but it has existed for generations.

That the British dairy farmer is justly indignant is to be expected. The Dane is his greatest competitor in supplying the butter markets of the large British centres, and while the British sanitary laws are stringent and are rigidly enforced, these laws in Denmark are comparatively lax in their methods of enforcement, or not sufficiently complete in themselves to be capable of being enforced. How the position of the British farmer in this regard is to be remedied is hard to say. It is not likely that the British Government will take any action in the matter that would in any way curtail the supply of butter required to meet the wants of the British consumer. The British farmers are seeking protection for themselves, inasmuch as they have to compete with countries where the sanitary laws are not as rigidly enforced as they are in Britain, and are endeavoring to bring influence to bear upon the Board of Agriculture to take some action in the matter. The English consumer, however, seems to be the chief one to be considered. If the country, from which he gets a large share of his butter supply, produces that supply under conditions which are certainly not conducive to good health in the person who consumes the product, something should be done to remedy the evil. This remedy seems to be in the hands of the Danes themselves. The British producer cannot do much but agitate in the matter. The agitation should have the effect, however, of inducing the Danish authorities to take immediate action in the matter. If reports are true, the people of Denmark have a big task before them, and it may take years to win back the reputation they have lost by this disclosure.

Heretofore Danish dairies have been held up as models for Canadians to copy. The Danish methods of making butter and their methods of handling and shipping it have been frequently commended by the highest authorities. But it would seem that former investigations as to their methods have not gone back far enough to the source of the milk supply. It matters very little how perfect the methods of manufacturing butter are, if the stables and conditions surrounding the cow which produces the milk are not wholesome and sanitary. Pasteurization is largely practised in Denmark in the making of butter, and a contemporary points out that it is necessary for them to pasteurize their milk so as to counteract the evil influence of their dirty dairies.

Though this agitation does not affect the Canadian dairyman directly, there is a lesson in it all which he should take home to himself. Dairy methods, whether connected with the production of milk or with converting the milk into butter or cheese, must be cleanly methods, and must have regard to perfect sanitary requirements. We have laws respecting sanitation, but we question very much if they are what they ought to be in order to insure perfect safety to the producer and consumer of our dairy products. In many sections where cows are kept and where dairying is carried on to a greater or less extent, we are afraid that the sani-

tary conditions are not always what they ought to be. Canadian dairymen should read the signs of the times in this particular, and leave no room for doubt in regard to the sanitary conditions affecting our extensive dairy trade.

Our Bacon Trade.

All through the summer our farmers have received a good price for their pork, but with the advent of the increased offerings the fall usually brings, the price has fallen to the extent of nearly two cents a pound. There is a reason for this, and a few words in explanation of our bacon trade may help our farmers to a right understanding of the situation and of what their position is in relation to it.

Our Canadian pork packers are making what is known as Wiltshire bacon. The Wiltshire bacon is cured very rapidly, and is intended for immediate consumption. It will not keep like the pork the farmer cures, and if held too long, soon becomes rancid. A few years ago our Canadian packers cured their bacon too hard. It would keep well, but did not command the highest prices. They have since learned to cure a softer bacon, and now the Canadian bacon is similar to that of English and Danish curing. The English trade in bacon is a week-to-week one, never a large supply at once, but a steady one week after week. It is subject to quick, sharp changes. A three or four days' rain, so that people cannot get out to buy, means the loss of that much trade, and the next week there is, of course, a corresponding increase of goods on the market, and, as a result, a fall in prices. Exactly this condition of things has happened during the present season, only on a very large scale. Denmark was somewhat short of hogs during the summer, because the Danish farmers had quit raising them at the low prices that prevailed a year or so ago. This caused a shortage in Denmark, and for very similar reasons there was a shortage in Canada.

During the summer one of our largest packing-houses received about three thousand hogs a week; in the fall the number ran up to eleven and twelve thousand a week. It was somewhat the same with other packers, and the result was that when this increased quantity came on the market prices declined rapidly. With the decline in price the receipts of hogs declined also, and the receipts at the packing-house mentioned above were only eight hundred last week. In fact it was shut down for the want of hogs enough to work with.

The greatest demand for bacon is during the warm summer weather. The Danes have learned this fact and taken advantage of it. During the past summer Denmark sent to the English market on an average about twenty-two thousand hogs a week, and during this last week she sent only twelve thousand. The Dane has adapted himself to the conditions of the trade, and breeds his pigs so that he can market them at the right time.

In Canada, on the contrary, the killings during the summer ranged from five to twelve thousand a week, and during the fall they ran up as high as twenty-two thousand a week. Is it any wonder that prices fell?

The lesson for Canadian farmers is obvious. They must breed their pigs so that the heavy sales of hogs can be made during the summer months, when the demand is greatest and the price is also the best. From the nature of the market to be supplied there should also be a continuous regular supply going forward every week.

The last few years have shown us another important fact in reference to our bacon trade. When the price of pork fell, a couple of years ago, to below four cents per pound, live weight, the Danes stopped raising so many hogs. The price, evidently, was not satisfactory to them. In view of this fact the manager of one of our Canadian packing-houses believes that if farmers could raise hogs with profit at four and one quarter cents a pound, live weight, Canadian bacon would drive the Danish article out of the English market in five years' time.

Poultry for the British Market.

A very timely and practical bulletin has just been issued by the Dominion Department of Agriculture on the dressing, packing, and shipping of poultry for British markets. As the bulletin points out, this trade is as yet scarcely past the experimental stage. Only occasionally has any effort been made to establish a regular business in this line. There is no doubt, however, but that a large trade in dressed poultry for the British markets can be developed if only proper methods are adopted in dressing and shipping. The quality of the poultry must also be good, and when the trade has developed somewhat, a regular supply must be kept up during the season. Spasmodic efforts will never amount to anything. When a customer is obtained, he should get his supply regularly. If this is done, he will learn to depend upon this one source for his supply, and if the quality is the best, he will have no excuse for seeking a supply from any other source.

The bulletin deals more particularly with the shipment of turkeys. Regarding the prospects for developing this particular line of trade, the bulletin says:

The exportation of turkeys from Canada to Great Britain is hardly yet past the experimental stage. Most of the shipments have been sent more as an occasional venture than as part of a regular business. One importer of poultry in Great Britain says: "Everybody thinks he is qualified to pack and ship poultry; whereas, as much as any other article of food, it requires the skilful handling which can be given only as the result of experience." It will be prudent for a beginner to send only small trial shipments early in the season, and thus open up a trade which can be enlarged as it is found profitable.

If turkeys be prepared, packed, and shipped according to the requirements of the British markets, they will, undoubtedly, meet a good demand, and secure prices equal to those of the turkeys imported from France and other continental countries. The price varies from year to year, and also at different times of the year. Wholesale, the range of prices may be from five pence per pound, up to nine pence and over per pound, for the finest quality of birds, in the best condition.

Further on it states:

The demand is usually good from about the 1st of December to the 1st of March. The reception of poultry in the British markets is affected by the condition of the weather much less now than formerly. Cold storage facilities in the several cities in Great Britain enable the handlers to guard against deterioration from mild or soft weather on the arrival of the birds.

For the Christmas trade, birds of large size command a relatively higher price per pound than small ones. Cuck turkeys of the largest size should be marketed before Christmas. The demand for hen turkeys continues until March.

It then goes on to give specific details as to the manner of killing the birds; how they should be treated immediately before killing; the methods of packing and preparing for shipment. Cleanliness must be observed in every particular, and special attention given to grading the birds and to having those put in a box as near one weight as possible. Instructions are also given as to shipping turkeys in feather.

In reference to the trade in geese and ducks, the bulletin says:

Geese are in demand in Great Britain for a longer time after Christmas than is usually the case in markets on this side of the Atlantic. It is not probable that a profitable trade of large volume can be developed in them in the near future. The supply of ducks, chickens, and fowls in Canada is hardly yet sufficient for the demand of the Canadian home trade.

The same methods of preparation are advised in regard to chickens and fowls as with dressed turkeys, and altogether the bulletin is a very valuable one indeed, and should be in the hands of every poultry breeder and dealer in the country. Write the Department of Agriculture at Ottawa for a copy.

Free Rural Postal Delivery.

Free rural mail delivery seems to have passed the experimental stage in the United States. According to the report of Perry S. Heath, first Assistant Postmaster-General, rural delivery has been tried in twenty-nine States and over forty-four different routes. The report points out that the satisfactory results from these tests suggest the feasibility of making free postal delivery a permanent feature of the postal administration. This could only be brought about gradu-

ally and not in all the districts at once. The report also points out that public policy in the United States requires that some advancement be made along this line, and that the United States should follow the lead of the more densely populated countries and establish a delivery service all over the settled portions of the country.

Such an admission on the part of the United States postal department will give new life to the movement, and now that the system has been proven satisfactory the farmers of the United States will have strong grounds for demanding that a free rural delivery be established in every well-settled district. As pointed out in a former article on this subject the scheme will not be very expensive, and in addition, the increased revenue to be derived from a free delivery in the country districts will go a long way towards meeting the extra expenditure such a system would entail.

The advantages to be derived from such a system are many, and are not altogether on the side of the farmer. The city trader, dealing largely with the farmer, would find the system of distinct advantage to his business. The daily newspaper would have a new constituency in which to enlarge its circulation, as there would be nothing to prevent the farmer from receiving a daily paper as regularly as those living in the city. The greatest advantage however would undoubtedly be on the side of the farmer. A free postal delivery would go a long way towards counteracting the present tendency to migrate from the country to the city. By making the conditions of living on the farm more like those which prevail in the cities, there would be greater inducement for the young man to remain on the farm.

A New Corn Product.

A new industry has sprung up in some of the corn-growing States. The product obtained is known as "cellulose," and is the properly purified pith of the stalk. It is claimed to be the best form of cellulose known, and can be recovered from the corn stalks at a cost of \$100 per ton less than from sources formerly used. There are many ways in which this cellulose may be used. It is used as packing for war vessels, and is one of the best known non-conductors of heat and cold, thus making it desirable for use in refrigerators, cold storage rooms, etc., and packing steam pipes, car journals, etc. It is also valuable for the manufacture of paper, smokeless gunpowder, celluloid, water-proof compound, linoleum, patent leather enamel and a number of other uses.

By the present process of manufacture about fifteen pounds of cellulose can be recovered from 100 pounds of kiln dry corn fodder. The balance of the stalk product is used for feed. In the process of manufacture, the stalks are cleansed from all blades and foreign substances, and then cut in an ordinary feed cutter and afterwards ground to the condition of coarse bran. By an air-blast the heavier particles of the stalk are separated from the pith. The stalk particles are found to be a very desirable food for stock, and are in splendid condition for combining with cornmeal or other concentrated grain products. The cellulose has a ready market value of $17\frac{1}{2}$ cents per pound, or \$2.62 for each hundred weight of stalks.

The first factory for the manufacture of cellulose from corn stalks was built at Owensburg, Ky., a couple of years ago. Since then several factories have been established in other States, and the business has reached more than an experimental stage. Several smaller factories are now projected for next season. These will be smaller than the original factories, and will cost about \$40,000 each, with a capacity for working up 75,000 tons of corn stalks per year. It is the intention of the operators to locate these factories within easy hauling distance of the farms.

That the business is a profitable one for the corn grower is evidenced by the fact that the industry has grown so rapidly since it was started. The hundreds of ways in which the cellulose may be used indicates that a large quantity can be disposed of.

Flare on the Wheat Situation,

Mr. Broomhall, statistician of the English grain trade, has just issued his annual statement of the world's resources. According to his statement, Europe is to have a bread famine before the next wheat crop is available. Mr. Broomhall states that the European crops this year amount to 140 million quarters as compared with 185 million quarters last year. The year 1891 has been referred to as the famine year, and Mr. Broomhall states that the deficiency, as compared with that year, is 10,000,000 quarters. He reckons that North and South America produced 93,000,000 quarters, of which the United States raised 74,000,000, as compared with 59,000,000 last year. The production of the Americas in 1891 was 101,000,000 quarters. Asia, Africa, and Australia are reckoned somewhat in excess of last year, but fully 11,000,000 quarters less than in 1891. The world's production this year is 278,000,000 quarters, as compared with 298,000,000 quarters in 1896, and 368,000,000 quarters in 1891. The reverse visible in Europe, the United States, and Canada amounts to 10,000,000 quarters, as compared with 15,000,000 quarters in 1896. The aggregate production and reserves, therefore, fall 25,000,000 quarters short of the estimated requirements of the current season—316,000,000 or 28,000,000 quarters in excess of the total production and reserves. The conclusion which is drawn from this is that unless there is a plentiful yield in Argentina in the coming harvest, an absolute dearth of breadstuffs in Europe will be the result.

If the statements of Mr. Broomhall are to be relied upon, and his official position warrants us in giving them some credence, the wheat situation is more serious for the European consumer than the most careful estimates have made it up to the present time. We are of the opinion, however, that it would be just as well for holders of wheat not to place too much reliance upon them until they have been left to simmer a while. The statements are so contrary to what growers have been accustomed to hearing as to savor a little of manipulation. However, a few weeks will show the correctness of Mr. Broomhall's figures. And if they prove to be reliable, there are much better things in store for the wheat holder than was anticipated a few weeks ago.

A New Way to Tell a Good Cow.

We quote the following from the *Mark Lane Express*, which will be of interest to dairymen generally:

"North Somerset" writes: As science advances, more and more attention is given to details, and it is found that often what are popularly considered to be very minor points often turn out to be something of the greatest importance. As is well known in farming, to produce a good milker is considered to be somewhat of a lottery, and many a calf is reared for dairy purposes that would have been far more profitably converted into beef. Now, how are we to pick out these? I glean from a Swedish dairy newspaper—*Mejeriernas Annonsblad*—that a discovery has recently been made, the truth of which has been proved by a first-class veterinarian, that makes it possible at the birth of a calf to judge if it will become a good milk cow or not. It has been observed that the palps, that are on the inner side of the cheeks near the corner of the mouth, have different forms, according to whether the animal is a good, a middle class, or very indifferent milker. The palps being large, broad, and flat, denote that the animal gives a large quantity of milk. If they are only round the milk qualities are of the most ordinary description. While if they are pointed the milk yield is of a most wretched description. Here is a chance for some English farmer, who keeps a record of the milk production of each cow, to put this statement to the test.

This is really a novel method of telling a good cow. If our breeders, by following a plan of this kind, can tell at birth whether a heifer calf is going to be a good milker or not, it will work a revolution in the standard of the dairy breeds of this country. Will not some of our careful breeders make a note of this in raising future stock for the dairy, and give the readers of *FARMING* the benefit of their experience in the matter?

Murdoch McKenzie, Oungah, Ont., writes: "Please find enclosed \$1, being my subscription for *FARMING* in advance for one year. I am well pleased with the way you report the market, and hope you will continue to give the market correctly."

NOTES AND IDEAS.

Mr. W. L. Carlyle has been appointed professor of Animal Husbandry at the Wisconsin experiment station to succeed Professor J. A. Craig, who resigned to engage in sheep farming. Mr. Carlyle is a graduate of the Ontario Agricultural College, taking his degree of B.S.A. from Toronto University in 1892. His home is in Chesterville, Ont., and he is well known in many parts, having had charge of one of the travelling dairies for a season or two. After this he was engaged on the Institute staff in Minnesota. At this work he has been very successful, and now goes to fill a more important position. The farmers of Ontario should feel proud of the fact that two of the graduates of the Agricultural College should be chosen, one after the other, to fill so important an office in the State of Wisconsin. *FARMING* wishes him every success in his new work.

CANADA'S FARMERS.

In addition to the sketch given last week of Mr. John Bell, of Amber, we would like to say that Mr. Bell farms two hundred acres and has two hundred and sixty acres rented. He has made four importations of Clydesdale horses, and now has five stallions besides a number of mares and young stock. He has made two importations of Tamworth swine, and stock from his herd have been sent to every province in Canada, to nearly all of the Experiment Stations in America, and to nearly every State in the Union.

Mr. Bell has never entered public life, but had he consented to do so he would soon have been occupying highly responsible positions.

CANADA'S DAIRYMEN.

II. C. C. Macdonald, Winnipeg, Man.

Among Canada's young dairymen, who are coming to the front as teachers of advanced dairy methods, none have had a larger experience nor a wider training for the work than Mr. C. C. Macdonald, Dairy Superintendent for Manitoba. Mr. Macdonald was born in the county of Northumberland, Ontario, in 1863. He received his early education in the public school, and at an early age took a deep interest in agricultural matters. When a boy of fifteen he began a study of some of the sciences pertaining to higher agriculture, which has been of great benefit to him in his later work. At eighteen years of age he was managing a cheese factory for the Allan Grove combination in Eastern Ontario, and was in the service of that company for seven years. In 1890 he was appointed chief dairy instructor for the Quebec Dairy Association. In 1891 he entered the service of the Dominion Dairy Commissioner and spent two years in Quebec, as dairy superintendent, under Prof. Robertson's directions. While in the service of the Dairy Commissioner he spent one season in Manitoba and the Territories, and had charge of the Government winter creamery at London during the winters of 1892, 1893 and 1894. In 1894 he retired from Professor Robertson's staff and engaged for a season in the cheese and butter trade in the Province of Quebec.

Mr. Macdonald was appointed to his present position, as Dairy Superintendent for the Province of Manitoba, in 1895, and has filled that position with credit to himself ever since. Shortly after entering upon his duties there he made an extended trip through the mining districts of British Columbia for the purpose of studying the requirements of the markets there for dairy produce. Much valuable information was gained, which has been of great advantage to the Manitoba dairymen. The dairy industry of Manitoba has made rapid advancement since Mr. Macdonald began his work. In 1894 the estimated value of Manitoba's dairy products was \$34,000. In 1895 the actual output was valued at \$198,000. In 1896 it was valued at \$245,000, and the prospects are that 1897 will show a very large increase over any other year.

In 1896 the Manitoba Government established a dairy school at Winnipeg, with Mr. Macdonald in charge. This school has been attended by as many as 110 students at one time, and under Mr. Macdonald's management has been of great benefit to the dairymen of Manitoba, the majority of the cheese and butter-makers in the province having taken the dairy school course.

Mr. Macdonald's work comes under the general supervision of the Hon. Thomas Greenway, Premier of Manitoba and Minister of Agriculture. Under his direction Mr. Macdonald has published a number of useful bulletins on dairy subjects, which have been very useful in educating the Manitoba dairymen to more advanced and better methods of dairying. As a further proof of the good work Mr. Macdonald is doing in developing the dairy industry of that province, it may be mentioned that in 1894 there were only three creameries and thirteen cheese factories in operation in Manitoba, while during the present season there were twenty-nine creameries and forty-nine cheese factories in active operation.

HORSE-SHOEING.

W. A. Shoultz, Veterinarian, Gladstone, Man.

The art of horse-shoeing originated many centuries ago, and had for its primary object the protection and preservation of the foot. At the present day it is also employed to correct faulty action, and to expedite recovery from certain diseased conditions.

It can safely be estimated that the majority of cases of lameness are the result of improper shoeing, and no matter what good qualities a horse may otherwise possess, with unsound feet he is comparatively useless. In the light of these facts, the question of horse-shoeing becomes one worthy of the careful consideration of every horse-owner, who should be able, at least to some degree, to distinguish between good and poor shoeing.

No one can become a competent, practical horse-shoer without first having acquired a thorough knowledge of the anatomy (structure) and physiology (functions) of the foot. In Great Britain horse-shoers are required to take a course of instruction in these branches and pass satisfactory examinations before being licensed to practise the art, and it would be well for both horses and owners if such a law existed in Canada to day.

In a treatise of this kind it would be impossible to give a complete description of the anatomy of the foot, and we will confine ourselves to a brief mention of the different parts of the hoof. In equine anatomy the "foot" signifies the hoof and its contents. The hoof is a protective horny case enveloping the lower extremity of the digit, to which it is closely and firmly united. It may be conveniently divided for description into the wall, the sole and the frog. The wall is the visible portion of the hoof, as it rests upon the ground. It consists of minute, hair-like, horny fibres, held together by a kind of cement substance. At the heels it is sharply inflected inwards, towards the sole, to form the bars. It is covered by a thin layer of soft horn, the "periole," the function of which is to prevent the hoof from becoming dry and brittle.

The sole occupies the space between the lower border of the wall and the frog, and in a natural and healthy state is slightly concave.

The frog is the triangular mass of spongy horn situated between the bars. It has several distinct functions. Firstly, being highly elastic, it tends to obviate concussion or jar and injury to the limb; secondly, as it projects, in its natural and unamutilated state, beyond the wall, it was obviously intended to bear weight; thirdly, from its shape and position it is serviceable in preventing slipping. Interference with the performance of these functions will result in disease or wasting away of the organ. Wear and pressure are essential for the proper and healthy development of the frog, and the pernicious habit some blacksmiths have of paring it away at every shoeing cannot be too strongly condemned.

The foot should be shortened from beneath, using the knife as little as possible. Only the dry flakes which nature is about to cast off should be removed from the sole and frog. The bars should be left severely alone. The heels require to be lowered till they are exactly even with the frog.

After a sufficient quantity has been removed, the ground surface should be made perfectly level by the use of the rasp. In levelling the foot the obliquity of the pastern must be taken into consideration, and the angle of the wall made to conform exactly to the angle of the pastern.

After the foot has been levelled in the manner above described, the sharp or feather edge should be removed by the rasp—to prevent splitting or chipping—before the shoe is applied. The shoe must then be fitted so that its outer edge corresponds exactly to the margin of the crust. In this way no rasping of the wall after the shoe is applied will be required. Probably one of the most common errors in shoeing is endeavoring to fit the foot to the shoe instead of moulding the shoe to fit the foot.

Shoes should be as light as possible. The number of nails required will depend largely on the size and toughness of the foot. Three on each side will generally be sufficient for roadsters and saddle horses, but in all cases they should be as few as possible.

Calks should never be used unless absolutely necessary. A shoe concaved so as to make a sharp rim around the outside will generally suffice for ordinary purposes.

When clips are used, notches should be cut in the wall for their reception, as driving them down will press the hoof in and injure the sensitive tissues beneath. Springing the heels is an indefensible practice, and often causes quarter cracks and other foot affections.

CANADIAN BUTTER TO THE FRONT

NOT LOADED WITH WATER.

By PROFESSOR H. H. DEAN.

The average percentage of moisture in forty-eight samples of butter sent to the chemical laboratory from the Ontario Agricultural College dairy during the past season was 11.034. The average moisture in fourteen samples selected at random from our ordinary churnings was 11.297 per cent. In several trials where a centrifugal dryer was used the moisture averaged 9.402 per cent, while samples of the same butter, treated in the ordinary way, contained 10.125 per cent. of water.

We consider this a good showing for Canadian butter, especially when we know that the best German butter averages from twelve to fifteen per cent. water (Fleischman), and that the English butters range about the same (Oliver). In 1895 Dr. Holm, of Copenhagen, Denmark, gave me the following as the averages of Danish butter:

1891	Danish butter contained	11.57	per cent	water
1892	"	11.57	"	"
1893	"	11.24	"	"
1894	"	13.83	"	"

It will thus be seen that if the butter made in the college dairy fairly represents Canadian creamery butter, and we teach in our dairy school the same methods practised in making our own butter, our butter contains nearly one per cent. less water than the best German or English, and over two and one-half per cent. less than the average Danish in 1894, which are the latest figures I have.

The water in butter has no more food value than the water from a well,

or from a city waterworks system, and Canadian makers would do well to keep the amount of water in their butter under twelve per cent., as our customers will sooner or later find out that water at twenty and twenty-five cents per pound is dear food.

TIMELY POULTRY THOUGHTS.

By THOMAS A. DUFF, TORONTO.

Now is the time of the year for chilly blasts and snow flurries, consequently all poultry houses should be in first-class condition, and the quarters made as comfortable as possible. Remove all dung, and take out two or three inches of the surface soil, and replace the same with fresh sand as dry as it can possibly be obtained. The soil so removed would make an excellent top dressing for a lawn, or to fertilize a poor spot in the farm garden—for surely all farmers now have a kitchen-garden. If it could be lightly spread where onions are intended to be planted next spring, you would be surprised at the increase in size and yield.

The above remarks obviously apply to those houses without board floors, and resting upon the ground; where there is a board floor, this should be thoroughly scraped and, if earth be used, fresh, dry sand placed thereon. Personally, I prefer cut straw or chaff to the depth of two or three inches, and when this becomes damp or foul let it be removed, placed upon the land, and clean straw scattered upon the floor.

Be sure to provide a dust bath for your fowl. For twenty-five hens (and no more should be kept in one pen) make a box of rough lumber two and one-half feet wide by four feet long and nine inches high. Into this put road dust, which has been previously gathered. Should this duty have been neglected, use as light and as dry sand as can be obtained. Fill the box to within two or three inches of the top and add from a quarter to half a pound of sulphur. Place this box where the sun will strike it, and you will have as good a preventative of vermin as I know of, cleanliness alone excepted.

It is time the windows, which perhaps have been out all summer, be returned and fastened snugly in their places. Replace any broken panes of glass. The walls should be white-washed and everything be made as sweet and clean as possible. Where convenient, apply this with a spray pump, thus forcing it into all cracks and crevices. Whitewash makes a wonderful transformation in a hen house, quickly sweetening, cleaning and brightening everything it touches.

If the poultry house is in any way damp measures should be taken to remove the evil, for dampness is a virulent cause of coughs, colds and roup, and a long succession of ills to which poultry flesh is heir. An excellent authority says: "A damp site may be removed by digging out the soil two or three feet deep and filling in with rocks, placing a few inches of gravel on top of the rocks."

Remember that it is during the winter months the money is made in the poultry business.

Be sure, therefore, that your house and mode of feeding are conducive to your hens commencing to lay as early in December as possible, and keeping

at it incessantly until August or September.

Do not forget to save plenty of green food with which to supply your fowls during the months when all that which is green is covered by a mantle of snow. Green food is an absolute necessity in all well regulated poultry houses.

FARM POINTERS.

Winter is at hand, and everything should be put in shape for it. The spring is supposed to be a busy time, but there is no season of the year so busy as the short days of the fall, so get a hustle on.

See that the stable floors are all right. Replace all broken or worn out plank. (This should have been done during the summer, on wet days, when you were loafing.)

Look the cow ties over, and have the broken ones repaired. A few cents spent now may prevent a nasty accident later.

Replace all broken window panes with new ones; don't use straw or a piece of board instead. Let in plenty of sunshine; it is the best thing that comes into the stable.

See that all the stable doors swing properly on their hinges, and that all fastenings are in repair. Close any large cracks around the doors.

If the stable is a frame one, and the walls are only one thickness of boards, line up the inside with building paper, and, if you can afford it, add a lining of lumber also. But add the paper anyway; it is very cheap, much cheaper than hay or grain for keeping stock warm.

Go over all the buildings and fasten all loose boards, etc., and fasten all loose pickets and boards on the fences around the buildings.

See that the gates around the barnyard are in good working order; shut them, keep them shut, and thus keep the cattle in the yard when they are allowed out. Don't let them have the run of a field, and perhaps the farm.

Gather all farm implements into the implement house, or wagon house, or barn. Get them in under cover some place or other before they get frozen in the ground. If there is positively no place to put them, gather them in a sheltered place and cover them with boards, but don't leave them scattered all over the farm. It will take only a few minutes to grease or oil all polished surfaces so that they will not rust.

Look over the stock, and cull out all animals that it will not pay to feed during the winter. Don't have any sentiment about this, but do the culling from a business standpoint. You are in business, and no business man will feed unprofitable stock. Dispose of those cows that will not yield a profit on their feed. Many farmers have tried to accumulate wealth by keeping cows that do not pay for their board; so far, none of them have succeeded.

Don't "winter" any stock except work horses. Feed all stock liberally, so that no animal will be standing still, but all growing in value, or producing valuable product. There is more profit in feeding one good cow than two poor ones. Be sure you are not feed-

ing the *two poor cows*. Can you prove you haven't got them?

The time is now coming to control and supervise the service of the bull. Midsummer and dog days are the best time for the cows to be dry and preparing to calve. The winter is the best time to make milk. The product of four cows, fresh in the fall, has been found in actual practice to be equal to the product of five cows which calve in the spring.

THE WESTERN DAIRY SCHOOL.

The Dairy School at Strathroy will open again on the 24th of November, 1897, and will continue until the 8th of April, 1898. Short courses will be given in both butter and cheese-making by competent instructors. The equipment of the school is of the best, and farmers' sons and daughters should take one or more of the short courses. The courses are made short on purpose for them, in fact the school is the farmers' dairy school.

During the summer, milk from the surrounding country was received, separated and the skim-milk returned to the partons in a sweet condition for feeding calves. It was found to keep sweet for twenty-four hours. The butter commanded the highest price, both in Canada and in England. Application for admission should be made to the superintendent of the dairy school, F. J. Sleightholm, B.S.A., Strathroy, Ont.

QUESTIONS AND ANSWERS.

J. B.: "What are the distinctive features of the Hampshire Down, Suffolk, and Oxford Down sheep? From whom can reliable stock be had in Ontario and Quebec?"

[The Hampshire Down sheep are the heaviest of what are called the Down breeds, though truly speaking the Southdown is the only breed raised on the Downs. The original stock of the Hampshire Downs were the native sheep of Hampshire, Wiltshire and Berkshire, crossed with the Cotswold and Southdown. They thus possess the fine mutton and wool producing qualities of the Southdown combined with the superior size and stronger constitution of the original sheep and the Cotswolds. They mature early and fatten quickly.

They have perhaps the largest head of all the Down sheep, carried on a neck somewhat thick and particularly erect. The ears are long and inclined to fall slightly outward. The face, feet and shanks should be of a rich, dark brown color. They have a Roman nose, the head is well covered with wool, and the body is long.

The Suffolk sheep are descended from the old horned Norfolk sheep, improved with Southdown rams. They were first recognized as Suffolks in 1859. They are hardy, prolific, and mature early. They have black faces and legs, are hornless, and closely resemble the Southdown in character and wool, but are about thirty per cent. larger and proportionately longer in the leg. The head is longer and finer than that of the Southdown, a medium size with black ears and bright eyes.

The Oxford Down is the result of a blending of the Hampshire and Cotswold. They are very hardy and well

adapted to localities favored with only inferior herbage. They attain heavy weights at an early age, and produce a large crop of wool. The face of the Oxford Down is generally brown, and though sometimes inclined to be grey, should not be speckled. The legs are of a dark brown or smoky color. The head is longer, the nose thinner and more Roman shaped, and the fleece looser and more lustrous than that of the Shropshire.

The Suffolk and Hampshire sheep have not been bred in Canada to any great extent, in fact are only being introduced. The Oxfords are well established. A glance over the advertising columns of FARMING, and the breeders' lists in the columns of the *Agricultural Gazette*, will show who are the leading breeders of these kinds of sheep.]

PERMANENT PASTURE.

Editor of FARMING:

SIR,—I am thinking of laying down a large tract of land, say about one hundred and fifty acres, to permanent pasture. The land is very shallow, in some places there is not more than six inches of clay on top of the rock. I would like to get the experience of some one who has laid down land to permanent pasture.

Yours truly,
W. J. MITCHELL.

Kirkfield, Ont.

Editor of FARMING:

SIR,—In your issue of November 9th, Mr. MacLellan, of Quebec, asks for information re permanent pasture. I wish briefly to say that some fourteen years or so ago I laid down two fields, and have been well satisfied with the results. Of course I got soundly rated and laughed at by my neighbors, but I am used to that kind of thing. I followed corn with oats and seeded, and I am satisfied that more nourishment is now, and has been each year, produced, than would have been afforded by the land in ten years by the ordinary process of seeding. Of course it costs money, nearly all experiments are costly; but the results are what count. Although I sold the farm in 1889, I have closely watched those fields since until this last season, when I asked my son about them. He said that, though heavily stocked with shippers, a good crop of hay could be harvested. In September I saw those fields, and I am convinced that they will be all right for forty years longer if handled properly. I cannot remember the whole formula of seeds, nor is it necessary, as the climate and kinds of soil differ so widely in different localities that the seeds must be selected, having in view these two things. I left it to the seed merchant to supply the suitable kinds, and was satisfied with the mixture. Some of the names were as follows: Timothy, red top, and Kentucky blue grass; alsike, white dutch, red and trefoil clovers; sheep fescue, oat grass, perennial rye grass, cock's foot or orchard grass.

There may have been others; but to these or any of them suitable for Mr. MacLellan's soil I would add lucerne, providing the land is properly underdrained. It sends down an enormous taproot that will reach moisture any season, but it will not stand too much surface moisture, and it will

last, too, under proper conditions. The formula as above given would require to be varied for clay soil. The seedsman will attend to that.

Yours truly,
E. J. YORKE.
Alvinston, Ont.

CORRESPONDENCE.

The replies to the questions on the care and management of swine are continued this week; also a number of letters on the management and feeding of dairy stock.

(1) What is your method of housing pigs during the winter?

(2) Do you allow pigs to run out during the winter for part of the day, or do you prefer to keep them inside all the time?

(3) What is your method of keeping the piggery and pens clean?

(4) What kind of feed has given you the best results for the winter feeding of pigs for the market?

(5) If grain is fed, do you feed it wet or dry?

(6) Do you feed turnips to pigs, and if so, in what way?

(7) Have you any special way of caring for and feeding stock boars and brood sows during the winter?

PREFER CARROTS OR MANGOLDS.

Editor of FARMING:

SIR,—(1) The fattening pigs are confined in pens in a frame building, with the temperature at about 45° in cold weather. The breeding stock live, for the most part, in a shed with earth floor, where they have plenty of exercise and can go in and out at will.

(2) The breeding stock get more or less exercise every day, and any that are intended for pork are kept shut up in the pens after they are three months' old.

(3) The pens are cleaned every day with a wheelbarrow and clean straw added.

(4) (a) A mixture of half oats and half peas with four or five pounds skim-milk per head per day.

(b) Or the following: one-third shorts, one-third barley, one-third corn, with four or five pounds skim-milk per head per day.

(5) In all the experiments so far the grain has been fed wet.

(6) We fed a few turnips (boiled) to all our pigs, but they always prefer carrots or mangolds.

(7) We try to give the boars and brood sows plenty of exercise all the year round, with a variety of food containing plenty of material for bone and muscle. Care is always taken to keep them in good, thrifty condition, but not fat.

R. R. ELLIOTT,
Herdsman.

Central Experimental Farm,
Ottawa, Ont.

PRACTICAL EXPERIENCE THE BEST TEACHER.

Editor of FARMING:

SIR,—(1) In pens of wood, brick or stone constructed in such a way as to be free from drafts, I think there is no floor more easily kept clean or warmer in the winter than one made of planks, with enough clean, dry straw to keep the animals comfortable. If possible, not more than six pigs should be kept in a pen, and they of equal size.

(2) I allow the pigs the choice of yards in which to exercise at their own pleasure.

(3) The frequent use of fork, hoe and shovel, with fresh straw every time for beds.

(4) Pea meal, with twelve hours' soaking in kitchen slops, milk or water. It will be all the better if it can be fed warm, but not cooked.

(5) Wet every time.

(6) Yes. Pulped turnips, mangolds or sugar beets (they are all good). Mix with them peas, corn or barley meal or middlings, or an equal quantity of all. Feed enough to keep the pigs improving every day. This is a splendid ration for growing pigs.

(7) No special way of caring for them other than such care and feeding as will keep them in the best condition for the purpose for which they are kept. Don't have them too fat, but in healthy active condition.

It is very important to keep sleeping quarters dry and free from drafts. Feed three

times a day, at regular hours as nearly as possible. Feed enough, but not more than they will eat up clean. If they have free access to a mixture of charcoal, ashes, salt, and sulphur, all the better. There is no profit in the pig if you do not care for and feed it in such a way that at 200 days old it will weigh at least 200 pounds. For every phase of hogology there is no better school than practical experience, directed by good judgment and the reading of our best agricultural papers. Wishing FARMING, our splendid agricultural weekly, great success, we remain, respectfully yours,

THOS. BROOKS & SONS.

South Brant Stock Farm, Brantford.

TURNIPS MY STANDBY.

Editor of FARMING:

SIR,—(1) My method of housing is not one that I like myself, but one that is not very expensive. It, to be plain, is in hovels of poles and straw covering, warm and dry for the breeding stock, and part of the bay in the barn for fattening hogs.

(2) Breeding stock have their own way; can run in or out as they choose.

(3) Dry bedding, often removed.

(4) Corn and oats; corn and middlings.

(5) Generally speaking, sloppy.

(6) Turnips have been my standby for breeding stock, but I like sugar beets. They are better pulped.

(7) Nothing very special. Breeding boars get but very little corn during winter, unless an extra cold snap is on. No mangels for sows with pig, and but very little corn. I think there should be a more general use made of linseed meal among swine breeders and feeders. It will pay every time.

I notice quite a few feeders keeping a pig nine or ten months to get a six months' growth, and then they generally sell at a time when prices have fallen. For instance, this year I know of some feeding March pigs now (in November), when they should have been sold last August or September at 1½c. or 2c. more per pound.

I do not believe in wintering little pigs; for one reason, I have not the suitable conditions, that is, housing; and even then I think, unless you get an extra price per pound, it is a debatable question whether it pays or not.

Yours truly,

Simcoe, Ont.

J. H. SHAW.

PULPED ROOTS.

Editor of FARMING:

SIR,—(1) I like a moderately warm pen for pigs, with plenty of dry straw for bedding.

(2) If convenient, I would let them run out when they feel disposed; there is no danger of pigs taking too much exercise. If not convenient to have them run out when they like, they would be better to be out part of every fine day.

(3) If there are many pigs together it is best to clean the pen every day, as I think there is less danger of disease when the pens are kept clean.

(4) I am not in the habit of feeding pigs for the market. I sell all the pigs I raise to breeders; but if I were feeding for pork I would feed principally on grain, with a few pulped roots; and, as to the kind of grain I would feed, it would depend on the prices of the different kinds. I always feed grain ground, and for young pigs I think ground barley and shorts mixed make a very good feed.

(5) I have always fed grain wet, unless fed with pulped roots.

(6) Pulped and mixed with meal of some kind; for young pigs, if convenient, steam the roots until soft, and mix with the meal while hot, and allow it to stand till cool enough to feed.

(7) I generally feed stock boars and brood sows on pulped roots and meal, but I think it better not to feed too many roots till sows are in pig.

Yours truly,

Concord, Ont.

THOMAS TEASDALE.

MANGOLDS AND CARROTS FOR PIGS.

Editor of FARMING:

SIR,—(1 and 2) I like to give my breeding pigs all the freedom possible, only keeping them closely housed during very severe weather.

(3) In moderate weather we clean out the piggery frequently, but when very cold prefer

to throw in plenty of straw and keep them clean in that way.

(4) I find it difficult to get satisfactory results with any kind of feed in feeding for the market in winter, unless when I can give them a little skim-milk. With skim-milk any sort of grain ration will do well. I like about one-half barley chop and one quarter each of shorts and bran.

(5) Wet. Keep a feed ahead all the time.
(6) Have never used turnips as pig feed.
(7) Usually confine their diet to mangolds or red carrots until sows are near farrowing, when I give them the same as the market pigs, plenty of room for exercise being always provided them.

Yours truly,

J. G. CLARK.

Woodroffe Dairy and Stock Farm,
Ottawa, Ont.

A FRAME BUILDING BEST.

Editor of FARMING:

SIR,—(1) We prefer a frame pen, double boarded, with tar paper between (think this is plenty warm enough for pigs during winter), with plank floor; the pens to be made into two compartments so as to have a feeding pen and a dry sleeping pen, although part of our own pen is stone, with cement floor. If we were building again we would have nothing but a frame pen for winter quarters. We find a stone hog-pen to damp, and the pigs never thrive as well as in the frame pens.

(2) We prefer allowing our pigs to run out during the day in the winter. We find pigs closed up during the winter are not nearly as hardy, and we have more or less sickness.

(3) We have our pens slanted about six inches towards the trough, and under the trough we have a trench about four inches deep, which carries off all the liquid to the outside of the pens into a tank. This keeps the pens quite dry, and we give them a thorough cleaning out three times a week.

(4) We find mixed grains give us the best returns, such as peas, barley, bran and shorts in equal parts.

(5) In feeding grain we feed it wet.

(6) We don't feed turnips at all, but do feed raw mangolds.

(7) In feeding stock sows and brood sows we feed mangolds twice per day, with a little grain for noon—plenty good enough, and not an expensive food. We allow them to take all the exercise they wish to take, with a good dry place to sleep in at night.

Yours respectfully,

A. GEORGE & SONS.

Crampton, Ont.

FOOD, CARE AND MANAGEMENT OF DAIRY COWS.

Editor of FARMING:

SIR,—When fresh in October, if pasture is good, we let our cows have it as long as the weather is favorable, supplementing it with a grain ration of a mixture of bran and chopped grain, and also roots, mangolds being preferred. If the pasture is not sufficient we feed corn, or better still, ensilage. We feed liberally, using good common sense. As soon as it becomes chilly or cold at night we keep them in the stable, and let them out to pasture in the daytime until the weather is too cold, when they are stabled altogether, and put on full rations. These are 40 lbs. ensilage, from 6 to 10 lbs. of bran and chopped grain (we prefer pea meal and bran in equal parts by weight, but any grain ground fine is good if enough is fed), and what hay or straw they will eat up clean per day, each divided into two feeds. Last winter, hay being scarce, we fed no hay at all, just straw for dry feed, as they appear to crave for a certain amount of dry feed, and it was fed without any loss of product, and it was much cheaper.

We keep our cows in the stable all the time in winter. We have the water in a trough in front of them where they can drink as they want it. We find many advantages from it: each cow drinks all she needs every day in a comfortable place with the water at the same temperature as the stable. We have no risk of the cows becoming chilled, and have an even flow of milk. Both stable and cattle are kept much cleaner, and a great deal of time is saved and feed also. All stables should be properly ventilated. If a man prefers, or is obliged to let his cows out in the winter for water, it should only be for a short time in a warm yard, and the water should be close at hand, if not it tends to reduce the quantity of milk and thereby cause a loss.

We keep the cows clean by preventing them from getting dirty, then by cleaning them with brush and comb when they are dirty. The length of the stall should be suited to the cows. Use horse manure in the gutters to soak up liquids, and sawdust on standing platforms. Use the brush and comb frequently all winter, and as soon as hair begins to come out do so every day or two; it will more than pay. Continue this feeding and care until the weather and grass are favorable to turn out to pasture. Care should be taken when turning out to do so by degrees, especially if the cows have been in the stable all the time, as they will suffer from the sun.

If cows calve in the spring treat and feed them about the same during the fall, only not as heavy as the others until after calving. Give them six weeks or two months' rest, but they will require to be fed well while dry, in order to build them up for their summer's work. Never allow a cow to become poor in flesh. Keep their bodies built up for business. We find we have learned a good deal by experience, but also that there is a great deal yet to learn.

We remain, yours truly,

ALEX. HUMR

Burnbrae, Ont.

RAISING HEIFER CALVES FOR THE DAIRY.

Editor of FARMING:

SIR,—The first step, and a very important one, is selecting the calf, and a heifer should not be raised for the dairy unless her dam and sire are worthy of a place in a dairy herd. Our calves are left with the dams until they are dry and have but one feed. They are then taken to a box stall where they are fed new milk for about two weeks. We then add a little skim milk and oil cake or linseed meal, and gradually increase the quantity till at six weeks old it is getting no new milk.

They are fed bran, chopped oats and clover hay as soon as they will eat them, and at three months old are allowed grass, cut corn, pulped roots or ensilage. From this time on they are encouraged to eat all the coarse fodders they will, but are allowed very little grain after they are eight months old till within six or eight weeks of calving. We then feed oat chop liberally, as it develops the milk vessels. The heifers are not apt to become too fat at this stage, and there is little danger of milk fever with their first calf.

Most of our heifers calve in the fall when they are from twenty-two to thirty months' old and are milked for twelve or fourteen months.

While heifers intended for the dairy should never be kept too fat we think more are spoiled from starvation than from over feeding. A little handling as the heifers are growing will make them gentle and easily managed at calving time, when they are naturally nervous and excitable.

We raise from fifteen to thirty heifers each year, and find the best results are obtained from this treatment. Our bulls are kept separate after they are six months' old, but otherwise they receive the same feed as the heifers do.

The most common errors in heifer rearing are:

(1) The calves are sired by the bull that is most convenient, regardless of his breed or merits. While half a dollar may be saved in this way it often means ten or twenty dollars loss in the value of the cow, and a good cow can be served with the same feed and care as a scrub.

(2) The calves are kept because they are heifers that are dropped in the spring of the year and will be old enough to stand the winter. They are left exposed to the summer sun, the flies, and to the autumn rains until the frost comes. They are poor when they come in from the pasture, remain so till spring, and are no bigger at one year old than they should have been at six months.

Yours respectfully,

B. H. BULL & SON.

Bratton, Ont.

HEIFER CALVES.

Editor of FARMING:

SIR,—In feeding, as in every thing else in this world, the first, and in fact the main requisite, with the breeder is common sense.

Two months before your cow is due to calve dry her up. Turn her out in a good pasture, and see that she has plenty of fresh

water, and twice a day give her 3 lbs. of crushed oats and bran (1½ lbs. of each), with half pound of linseed meal twice a week. With this treatment we expect a fine, bony, strong young calf, that, as soon as it is dropped, is looking for its feed; and we never get disappointed. We allow the calf to remain with its mother until after the seventh milking. The cow is pretty well milked out before we let the calf to her to suck. At the expiration of four days we take the calf away and place it in a loose box with plenty of room to kick its heels and enjoy itself. We then feed it its mother's milk for one month, all it will drink. At the end of the month boiled oatmeal, made like porridge, is mixed with the milk, which is gradually shortened until the calf is three months old. It is then turned out with the other cattle and fed with them. During the winter the feeding is about the same, with the difference of hay and roots in place of the pasture. Fresh air, fresh water, and lots of exercise are given. Do not imagine that your stables want to be like hot-houses, or that your cattle are like exotic plants. Such is not the case. If you want pneumonia, coughs, colds, lung trouble, etc., then keep your stable doors and windows closed up tight, so that no air may enter, and you will no doubt get what you want.

When the heifer is about 14 or 15 months' old we put her to the bull. About two months before her calving time she is fed and handled the same as the other cows, only with the difference that she has to be taught what her udder is for, consequently when she comes in with the other cows at milking time her udder is well rubbed and her teats gently pulled. She is taught to stand quietly; place her leg so that when she calves there is no kicking and no fooling around. She has been treated from her calfhood up as a pet and there is never any trouble with her.

One of the worst errors in breeding that we have noticed is the practice of dosing cows before calving. We have heard it said by breeders and farmers that it is well to keep their bowels right, and that is the reason they give them medicine. I know of one breeder of Jerseys who gives his cows before calving a good handful of wood ashes and the same of salts. Just imagine such a dose inside the stomach of a cow, a delicate organism like that, the result is that about 60 per cent. of his calves die of diarrhoea. Another error that we notice in feeding is that one likes to see his calf in good order, or practically fat. It is always well to remember that a fat calf never makes a good dairy cow. Err, if you err at all, on the side of under feeding, instead of over feeding. Give your calves plenty of fresh air, fresh water and exercise, winter and summer.

Bull calves we rear in the same way as the heifers, with this difference that a handful of pea or cornmeal may be added to their oatmeal when about ten months old if they are intended to be used for service at once. We are, yours truly,

S. WICKS & SON.

Buttonwood Farm, Mount Dennis.

Oct. 28, 1897.

THE DECADENCE OF THE FAIR SYSTEM.

Editor of FARMING:

SIR,—I was glad to see your article entitled "The Decadence of the Fair System," in your issue of Nov. 2nd. It has for some time been my opinion that we have too many so-called agricultural exhibitions. If we had just three really good exhibitions, held at, say, Toronto, London and Ottawa, it would surely be much better for the farming community generally, and also for exhibitors. With only three good fairs, the prizes could be largely increased, exhibitors would be encouraged to come forward, and competition would naturally be keener. The successful exhibitors would feel that they had some return for the labor experienced in fitting their stock or produce for the fairs, not only by receiving a substantial prize, but also by the advertisement of gaining a prize against strong competition.

If outside attractions are necessary, they should be of a high character, but should not form the principal feature of an agricultural fair. I hope some of your readers will express their opinions, whether favorable or adverse to the abolishment of local exhibitions.

Yours, etc.,

J. E. RICHARDSON.

Creekside Farm, Princeton, Ont.

BOOKS AND BULLETINS.

Nearly all "Bulletins" mentioned under this heading can be obtained free on application to the Directors of the respective Stations or Colleges. In cases of doubt as to address write to FARMING.

Human Food Investigations and the Rational Feeding of Men. Bulletin No. 54, by the chemist, H. Snyder, B.S. Agricultural Experiment Station, St. Anthony Park, Minnesota.

Milk: Its Value as a Food, and Studies which Suggest a Different Method of Stiles. By C. B. Voorhees and Clarence B. Lane. New Jersey Agricultural Experiment Station, New Brunswick, N.J., U.S.

Losses in Boiling Vegetables and the Composition and Digestibility of Potatoes and Eggs. From the Department of Agriculture, Washington, D.C.

Composition of Full Cream Cheese. By Wm. Frear, Ph.D., chemist. Bulletin No. 2. The Pennsylvania State College Experiment Station.

Dominion Shorthorn Herd Book. Vol. XIII, Containing pedigrees of 1,407 bulls and 1,369 cows, a total of 2,776. This includes sixty-five pedigrees of bulls and several cows that should have appeared in Vol. XI., but the pedigrees were not sent in time. List of transfers for the year 1896. From the secretary, Henry Wade, Parliament Buildings, Toronto.

Beekeeping. Farmers' Bulletin No. 59. By Frank Benton, M.S., assistant entomologist, U.S. Department of Agriculture, Washington, D.C.

Home Butter Making. By C. C. Macdonald, Dairy Superintendent of Manitoba. Contains full instructions as to the best way of handling cream and of making and marketing butter. From the Department of Agriculture, Winnipeg, Man.

Steer Feeding Experiments. Bulletin 67. From the Experiment Station, Manhattan, Kansas, U.S.

Studies and Illustrations of Mushrooms. Bulletin 138. Cornell University Experiment Station, Ithaca, N.Y.

Journal of the Jamaica Agricultural Society for September. Shropshire Sheep, Notes on the Management of Fowls, The Kerry Cow, Stock Breeding, Budding and Grafting the Orange. Published at No. 3 King street, Kingston, Jamaica.

The Seventh Annual Report of the Agricultural College of the University of Wyoming and of the Wyoming Agricultural Experiment Station for the year ending June 30, 1897.

The Guernsey Grade Cow. From W. H. Caldwell, Secretary and Treasurer of the American Guernsey Cattle Club, Peterboro, N.H.

The Constitution of Milk, with Especial Reference to Cheese Production, by S. M. Babcock; Tainted or Defective Milks; Their Causes and Methods of Prevention, by H. L. Russell; Bulletins 61 and 62 of the Wisconsin Experiment Station, Madison, Wisconsin.

The Veterinary Profession: Its Relation to the Health and Wealth of the Nation, and what it offers as a career. In noticing this excellent pamphlet, in our issue for October 12th, Dr. E. M. Michner's name was given as the author of it, and the party to whom applications should be addressed for copies of it. The name should have been Dr. Leonard Pearson, Dean of the Department of Veterinary Science, University of Pennsylvania, Philadelphia, and to him applications should be made for copies of the work.

Fruit Growers' Association.—The annual meeting of the Ontario Fruit Growers' Association will be held in Waterloo on Wednesday and Thursday, December 15th and 16th. Mr. Orr, Provincial Superintendent of Spraying, will show results of his work, also exhibit specimens of the San José scale and speak about his work. Prof. Fletcher, of Ottawa, will give an address. Addresses will be delivered on "Our Export Trade," "Cold Storage of Fruits," and other allied subjects. A good programme has been prepared. Mr. L. Woolverson, of Grimsby, is the secretary of the association.

The Ontario 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.

LIVE STOCK MEN EXPRESS THEIR OPINION.

Many unsolicited letters endorsing the "Monthly Lists" have been received by the secretary; a few of these have been appended. Although so many letters regarding the "lists" have been received, none of them have contained adverse criticism:

DEAR MR. HODSON, — I wish to congratulate you on the enterprise, good sense, and patient perseverance which have resulted in the issue of THE ONTARIO AGRICULTURAL GAZETTE. In this GAZETTE a long felt want is supplied—the buyers and sellers of purebred stock (cattle, sheep, and swine) are brought together. By this ingenious use of the press the owners of stock all over the country can, for a very trifling expenditure, make monthly announcements of the animals which they have for sale, giving the breed, age, and sex in each case; and buyers in all parts of the Dominion can, by reference to the list, at once find out where to write or go in search of the animals which they desire. I doubt whether in the last twenty years any more important move has been made in the interests of the stockmen and farmers of this country.

Hoping that you may have health and strength to continue the work, I am, very truly yours,

JAS. MILLS, O.A.C., Guelph.

The Associations are certainly accomplishing a great amount of good, and deserve to be well patronized.

J. A. R. ANDERSON, Hamilton.

I think the Associations are doing grand work.

JAS. DOUGLAS, Caledonia, Ont.

I fully appreciate the work done by the Associations in the past, and think, if anything were needed to increase their usefulness, that this last departure fills the bill.

JAS. SHAPP, Rockside, Ont.

I consider the bulletin to be issued by the Associations of great value to the breeders of purebred live stock.

NAAMAN DYMENT,

Clappison's Cor., Ont.

The idea of issuing a bulletin of stock for sale is a good one.

CALDWELL BROS., Orchard, Ont.

I will be glad to have a place in the next issue of the bulletin. I think the scheme a good one.

J. G. CLARK, Ottawa, Ont.

I think the plan of advertising the stock of the members of the different Associations is a good one, and I hope it will meet with the best results.

T. CURRELLY & SON,

Fullarton, Ont.

I heartily approve of the step taken by the Live Stock Associations. It will be of great value to stock breeders.

C. A. KIPP, Chiliwack, B.C.

I highly approve of your scheme to advance the sale of thoroughbred live stock. The bulletin will be welcome.

J. H. GOLDEN,

Amherstburg, Ont.

I enclose you list of stock for bulletin. The idea is a good one.

H. J. CHUTE, Somerset, N.S.

Re breeders' bulletin. I like the idea very well.

R. S. MCBETH, Oak Lake, Man.

I am very much pleased with your scheme, and feel certain it will be of great benefit to the stock breeders of Ontario.

GEORGE NORTH, Marden, Ont.

I appreciate the advantage afforded by the breeders' bulletin.

J. C. NICHOL, Hubrey, Ont.

You have struck the right key in getting out a bulletin of stock for sale.

GEORGE THOMSON, Bright, Ont.

I approve of your plan, and appreciate the extra advertising it gives.

A. W. YOUNG, Tupperville, Ont.

We are of opinion the scheme is a good one, and will prove valuable to stockmen.

TAPE BROS, Ridgetown.

We think the plan of issuing a bulletin a very good one, and hope it will meet with the success it deserves.

BERDAN & McNEIL,

Strathburn, Ont.

I am pleased with the progress the Associations are making.

C. R. DECKER, Chesterfield, Ont.

I believe the issue of bulletins as you propose will be of great benefit to stockmen.

H. GOLDING, Thamesford, Ont.

I am much pleased with this departure; it is just what we needed.

ALVA McINTOSH,

Winchester Springs, Ont.

I am pleased to get a chance to advertise in this way.

JAMES CHRISTIE,

Winchester, Ont.

The bulletin is quite a scheme, and should prove a great help to breeders in disposing of their stock.

W. R. BOWMAN,

Mount Forest, Ont.

The movement is a grand one.

NATHAN DAY,

Powles' Corners, Ont.

You have struck a good idea in publishing a bulletin.

JOHN KITCHING, Corwhin, Ont.

I am very glad you have made an arrangement to advertise the stock of the Associations.

CHRIS. FAHNER, Crediton, Ont.

The bulletin will be a good thing for Ontario.

JOHN PIKE, Locust Hill, Ont.

The Associations will be successful in this new venture.

M. H. PARLEE, Sussex, N.B.

I have seen the official bulletin and I am more than pleased with it. It cannot help but be of great service to the members of the Swine Breeders' Association. I have not been advertising for the past two months, as I had sold all the stock I had on hand. I have some now and will enclose you a list. I wish you continued success.

J. E. BRETLOUR, Burford, Ont.

We are glad that you have arranged for a better and cheaper system of advertising the stock of the members of the Live Stock Associations. It was much needed.

WM. BUTLER & SONS,
Dereham Centre, Ont.

I consider the issuing of a monthly bulletin by the combined Associations a good idea, and it will, no doubt, fill a want which has been felt for the past few years.

ROBT. DAVIES,

Queen street east, Toronto.

I congratulate you upon carrying out your idea. It will, I feel convinced, prove of great benefit to stock breeders.

RICHARD GIBSON, Delaware.

We think this is a good way of advertising, and hope it may prosper

J. YUILL & SONS,

Carleton Place, Ont.

I congratulate you on the idea of publishing monthly lists. The lists should prove a great value, both to breeders and purchasers.

J. M. GARDHOUSE, Highfield, Ont.

I am very much pleased to see the step taken by the Dominion Cattle Breeders' Association in publishing a monthly list of names; also of animals for sale. It will be of great benefit to both buyer and seller.

MAJOR JOHN VARCOE, Carlow, Ont.

PASSENGER AND FREIGHT RATES

TO PROVINCIAL FAT STOCK AND DAIRY SHOW, BRANTFORD.

The following circular has been issued by the officials of the Canadian Pacific Railway:

November 9th, 1897.

To Freight Agents:

BRANTFORD FAT STOCK SHOW.

Live stock shipped to the Ontario Provincial Fat Stock and Dairy Show, to be held at Brantford, December 6th to 9th, will be entitled to the privileges and concessions enumerated in circular O.D., No. 663, of August 6th, re exhibition freight, if the conditions therein be complied with.

W. B. BULLING, JR.,

Gen. Freight Agent, Eastern Div., Montreal.

E. TIFFIN,

Gen. Freight Agent, Ontario Div., Toronto.

The following letter was received by F. W. Hodson, November 9th, 1897:

DEAR SIR,—I am in receipt of your letter of November 5th regarding the Ontario Provincial Fat Stock and Dairy Show, and note that the correct dates are from December 6th to 9th. On the certificate plan passengers will therefore be able to travel, commencing as early as the 2nd, and their certificates will be honored at Brantford, to return to their destination up to and including December 13th.

(Signed) D. McNICOLL,
Passenger Traffic Agent,
Canadian Pacific Railway Company.

LIVE STOCK FOR THE WEST.

F. W. Hodson, acting for the Dominion Live Stock Associations, completed loading a second car of live stock late last night (Nov. 11th). The car contained the following animals: J. M. Gardhouse, Highfield, to D. Sinclair, Portage la Prairie, Man., 1 yearling ram (Leicester); Wm. Linton, Aurora, to F. W. Brown, Portage la Prairie, Man., 4 ewe lambs, 4 yearling ewes, and 1 yearling ram (Cotswolds); J. & W. Watt, Salem, to J. R. Sanderson, Minnedosa, Man., 1 yearling bull (Shorthorn); Thomas Teasdale, Concord, to F. W. Brown, Portage la Prairie, Man., 1 boar (Berkshire); Wm. Linton, Aurora, to Wm. Linton, jr., Elkhorn, Man., 1 mare (Hackney); Jas. Russell, Richmond Hill, to G. Allison, Elkhorn, Man., 3 heifers (Shorthorn); J. M. Gardhouse, Highfield, to G. Allison, Elkhorn, Man., 1 yearling ram and 1 ram lamb (Leicesters); Wm. Grainger & Son, Londeshoro', to T. T. Skinner, Indian Head, Assa., 1 yearling bull (Shorthorn); James Russell, Richmond Hill, to Wm. Stothers, Maple Creek, Alta., bull (Shorthorn); R. Marsh, Richmond Hill, to Wm. Stothers, Maple Creek, Alta., bull, cow and heifer (Shorthorns); John Gardhouse, Highfield, to Wm. Stothers, Maple Creek, Alta., heifer (Shorthorn); Mossom Boyd, Bobcaygeon, to Mossom Boyd Co., Prince Albert, Alta., bull (Hereford); bred by D. Smith, Compton, Que., W. Butler & Sons, Dereham Centre, to Kipp & Knight, Chilliwack, B.C., bull (Guernsey).

These animals were sent out in charge of Charles King, and are a first-rate lot. The bull bred by J. & W. Watt is a particularly good one. The bull sent out by Wm. Grainger & Son, of Londeshoro', is a promising youngster. Both of these animals, if handled well, will give an account of themselves in the show ring of Western Canada. They are among the best specimens that have left Ontario for the West during the season. The Cotswold sheep sent by Mr. Linton are not in high condition, but they are exceedingly well bred and full of quality. Mr. Gardhouse's Leicesters are in nice condition and are first-rate specimens of the breed. The three Shorthorn heifers shipped by Mr. James Russell are nice, straight, useful heifers, in thin condition but of good quality, and faultless as far as color, skin and hides go. The Berkshire boar sent out by Thos. Teasdale, of Concord, is one of his famous family of Berkshires, and if given fair treatment will be a prize-winner of the future. There are now enough animals on hand to partially fill another car, and one will be sent as soon as sufficient animals are available. Those having stock on hand which they wish shipped to the Northwest should correspond with F. W. Hodson, Secretary of the Associations, Parliament Buildings, Toronto.

MARKET REVIEW AND FORECAST.

Office of FARMING.

Nov. 22nd, 1897.

The general business throughout the country has been in a fairly prosperous condition, people are beginning to realize that a good trade is going steadily on, and a more healthy feeling prevails.

Wheat

The wheat situation is not changed very much. The uncertainty of the real condition of the Argentine crop, and the varying demand from Europe, will cause prices to fluctuate a little. They have varied a few cents the past week, and at the time of writing wheat is about one cent higher than it was last week. Montreal quotes wheat at 89c. and 90c. At Toronto exporters' wheat is being bought at 82c., middle freights, and 81c. north and west. Spring wheat is bringing 78c., and goose wheat 77c. east. Manitoba wheat, No. 1 hard, is quoted at 95c. at Goderich and Midland.

Barley and Oats.

The demand for barley is quiet, but there has been no decline in price. At the close of the week it was worth a cent more for feeding purposes. There is scarcely any new barley offering that is fit for malting. The price for No. 2 is 30c. to 31c., and for feed is 24c. to 25c. outside; 50c. to 55c. is still being offered for old barley of good malting grades.

There has been an increasingly active demand for oats during the week. The oat crop throughout the Northwest is not an extra one, and at the low prices prevailing it is being fed to stock. An active demand for export sprung up the past week, and prices have gone up nearly two cents. Mixed lots are now bringing 24c. and white 25c., north and west freights. About 50,000 bushels have been sold for export to Liverpool the last few days.

Peas and Corn.

Most of the business in peas is being done in through freights to British ports. The demand during the week was very active, and prices advanced two cents a bushel, but have fallen back to 44c. middle, and 43c. north and west freights.

The corn crop for 1897 in the United States is now estimated at about 1,500,000,000 bushels, both by government and by private experts. The annual consumption of corn in the United States is from 1,700,000,000 to 1,800,000,000 bushels, and seven-eighths of this is used for feeding stock and the rest for manufacturing and distilling purposes. The crop of 1896 was the largest ever grown, 2,300,000,000 bushels, while that of 1895 was 2,175,000,000 bushels. Two such large crops following one after the other have made the visible supply the largest ever known. On the first of March stocks on hand were estimated at 1,164,000,000 bushels. From this it would appear that there is plenty of corn in the land. The export demand depends on the price; an advance of 10c. or 15c. a bushel cuts down the demand materially, and although the crop is a large one the export trade is not overly large. The price at Toronto fluctuates a little around 26c. and 27c. for old Canada Yellow, west, and there is small prospect of any great advance in price. Montreal prices are a few cents higher.

Rye and Buckwheat.

There has been a good demand for rye for export, and prices are steady at 44c. middle freights, and 43c. north and west.

Buckwheat has been in steady demand for export. Prices ran up to 31c., but only 30½c. is offered now.

Millfeed.

Shorts is in fair demand at \$11 and \$12 cars west, and liran at \$8 cars west.

Potatoes.

Potatoes are firmer, and higher, and are bound to go higher still. The offerings are small, and the farmers are evidently holding for higher prices. Car lots have been sold at Toronto at 55c. and as high as 60c. per bag. Some of these were bought as low as 37½c. in country places a few weeks ago. The New York and Boston markets are firmer, and American buyers have been looking up potatoes both in Quebec and Ontario.

Money.

There has been no change in the honey market. Choice Ontario white clover honey in the comb is quoted at 14c. to 15c. per section. Quebec comb honey is all more or less tinged; and is worth from 9½c. to 12c. Ex-

tracted honey, 7c. to 9c. for white, and 6c. to 6½c. for dark.

Apples.

The demand for apples continues firm. No. 1 are quoted at \$3 to \$4.50 per bbl., No. 2, \$1.50 to \$2.50 per bbl. Dried apples, 2½c. to 3½c. per lb. Evaporated, 5½c. to 6c. per lb.

Cheese.

The middlemen, upon whom devolves the task of carrying a sufficient supply of cheese from now until production begins again, are anxiously estimating the amount of cheese still in the country. Messrs. Hodgson Bros. have issued a circular in which they estimate the total production of cheese in Canada during 1897 at 2,514,300 boxes. This is 452,000 boxes more than was made last year. Over three weeks ago the *Montreal Trade Bulletin* made a somewhat similar estimate counting at that time that there would be from 700,000 to 750,000 still to ship before next season. If this estimate of the amount of stocks left over is correct, Canada will have none too many to supply the demand if it is a good one. Estimates of stocks are usually under rather than over the actual amounts. Another estimate will be made at the close of navigation. The steadier feeling that prevailed when the last report was written has continued, and a lot of business has been done. Cable advices are quiet, and after such supplies as have gone forward, nothing else could be expected. Finest Ontario are quoted at from 8½c. to 8¾c.

Butter.

The market is quiet and easy for the early makes of creamery. There is a steadier feeling for choice late makes. Enquiries have been better from England since the cold weather set in, but there is said to be quite a lot of August and September creamery still in factory men's hands, and the fall make is believed to be large. October creamery is quoted at 18½c. to 18¾c., September creamery at 17½c. to 18c., dairy butter at from 12½c. to 16c.

Eggs.

There has been but little change in the market. At Montreal 19c. is being paid for single cases of strictly new laid eggs, and in round lots 18c. At Toronto strictly fresh stock is bringing 15c. to 16½c.

Dressed Poultry.

Large shipments of poultry are being made up for the Christmas market in England. A Toronto buyer has just made arrangements for ocean freights for fifteen carloads of dressed turkeys and chickens to be shipped from St. John, N.B., on December 8th. They will go in cold storage. A Montreal firm are arranging to ship seventy-five tons by the *Parisian*, from Portland, on the same day. Turkeys are bringing 8½c. to 9c. a pound; geese, 5c. to 6½c. Chickens are in good demand at 6½c. to 7c. and ducks 7½c. to 8½c. at Montreal. Similar prices prevail at Toronto.

Cattle.

There is no improvement in the export cattle trade. In England the fall pastures have been good, and the prospects for easy keep during the winter have never been better. Consequently home cattle have not been rushed onto the market at the approach of cold weather, as is the usual custom. Hence prices should be better for stock shipped there. A Liverpool gentleman gives as a reason why they are not bringing better prices that the cattle are too rough and lacking in quality. He also says that after the middle of September Canadian cattle do not kill so well. They have no sap in them, and as soon as they begin to fall off in ripeness and quality the best butchers will not handle them. Hence there is a decline in prices, and as freights become dearer in the fall there is less margin on our export cattle. Prices at Toronto for export stuff is low. Choice animals for export will bring 3½c., but the greater number sell for less. Choice butchers' cattle are in good demand just now, while the very best bring 4c. Poor stuff are hard to sell. The majority of the sales are made around the three-cent mark. During the past week stockers did not bring as high a price. The market for them is largely in Buffalo, and the demand for them has not been so good. It takes the best to bring \$3.20 per cwt. Feeders are quiet at 3¼c. to 3½c.

Sheep.

Export sheep are dull, at from 3c. to 3½c. For good lambs there is a good enquiry, and prices range from 4c. to 4½c. At Buffalo good Canada lambs are bringing as high as \$5.85 to \$5.90. It is estimated that the bulk

of Canadian lambs have been bought, and as soon as they are marketed prices are likely to rise a little.

Hogs.

The decline in price has stopped the rush of hogs, and very few are offering. There is, however, a firmer tone to the market, and the prospects are good for a rise in prices. In a month's time prices are likely to be back to good figures again. For bacon hogs, thick fat hogs, and stores, 4½c. is being paid weighed off the cars. It is reported that pigs have been bought for delivery within a week at 4¼c., and some light hogs at 4½c.

Hay.

There is no change in the market for hay at Toronto. It is still \$8 to \$9 a ton on the tracks.

Baled straw is quoted at \$5 on the track.

Stock Notes.

R. H. HARDING, Thorndale, Ont.: My herd of Chesters was founded about nine years ago, and has been replenished from time to time with first-class imported stock. My herd numbers about forty head now. Annie, 519, the bronze medal winner at London, farrowed sixteen fine pigs October 27th from a prize-winning sire. I commenced breeding Dorset sheep seven years ago, and have found them very profitable indeed.

ISALHIGH GRANGE FARM, DANVILLE, P.Q.: Having decided to make dairying a specialty, we have increased our herd of Ayrshires and Guernseys, till we have now two of as large herds as there are in Canada. The six young bulls offered in our advertisement this month are grandly bred, and should make fine animals to head herds where milking strains are wanted. Our young stock are all in grand, thrifty condition and we will be pleased to have intending purchasers come and inspect our stock. One of our late purchases was the noted bull Matchless, a son of Nellie Osborne, by Glencairn (Imp.). The young stock after this bull have proved very superior, and speak for themselves.

B. H. BULL & SON'S Brampton Jersey Herd. Among the sales recently made by Messrs. B. H. Bull & Son the following are of special mention: The beautiful young bull, Sir Brier of Brampton, purchased by Edgar Silcox, Shedden. He is an exceptionally fine animal; large, handsome, and a rich, mellow handler, was very successful in the show ring, taking sweepstakes at the best bull of any age in Montreal; second in Toronto in a very large class, and first in all county fairs where exhibited. He is a son of the famous three-year-old Sunbeam of Brampton, which is the most successful Jersey of her age in Canada. In 1896 she won six red tickets, being first wherever shown. In 1897 she has also scored five firsts, has taken the sweepstakes in Montreal as the best female of any age, and in Branford won the milk test open to all ages and breeds. Sunbeam is a daughter of the famous cow Corinne, that won second place at the Provincial Dairy Show in Gu. Inb, 1896. Sir Brier is sired by the renowned Sir Ollie, whose gets have been wonderfully successful in the show ring, and are now distinguishing themselves in the dairy. He is also a half-brother to Ollie Boy, now owned by Mr. Dent, of Woodstock.

S. WICKS & SON, Battenwood Farm, Mount Dennis, have been breeding Jersey cattle since April, 1893. Their first Jersey cow was Peerless of St. Lambert, 2842, A.J.C.C., bought from Mr. Wm. Scully. Their first appearance in the show ring was in the year 1896, at the Industrial Fair, where their young Jersey bull, Violet's Leo, took third place in the yearling class. From there he went to Montreal and Ottawa, taking first place in his class, and winning the sweepstakes for best bull of any age, thus beating all the others, including the bulls that beat him in Toronto. He is a grand young bull, and in another year, if wanted well, will be a hard bull to beat. In temper he is as docile as it is possible to be, and is a sure getter. His get have been exceptionally fine yearlings. Among others in the herd are Violet of Glen Duart, 40710, A.J.C.C., with a record of 18½ lb. butter in seven days; Queen of St. Lambert, 104474, A.J.C.C., who is believed to be able to test up to nearly 30 lbs.; and Lady Alice of St. Lambert, 125815, A.J.C.C., Peerless King is a promising young yearling bull. Among the younger stock are Violet's Luck, Queen's Saddle, and others equally as good.

N. DYMENT, of Hickory Hill Stock Farm, Clappison's Corners, has been in the dairy business eight years. He was so successful with Ayrshire grades that some three years ago he purchased a purebred heifer. She proved such a grand cow that he purchased more, and he has since bred them with great satisfaction. His herd now numbers some twenty-two head, of which fourteen are purebred Ayrshires. That he has stock of great milking abilities may be gathered from the fact that Dandy, 2223, at four years old, with just a fair chance, gave 55 lb. of milk in one day when she had been calved two and one-half months. Another of his cows, Liberty Bank Susie, 2847, another four-year-old, gave 50 lb. in one day, when calved three and one-half months. Nellie Gray, 2057, on August 7th, gave 53 lb. in one day, and tested 5.02 per cent. of butter fat, the test being made by the milk inspector of Hamilton. Cora, a three-year-old, with her first calf, gave 40 lb. Ruby of Hickory Hill gave, as a two-year-old, 40 lb. Others are doing equally well, and he is more than pleased with them. He has at present a bull calf fourteen months old, King of Hickory Hill, a brother to Ruby of Hickory Hill. Ruby was first this fall at the Toronto Industrial in a large class and strong competition. She has never been beaten, and has carried eleven first prizes. He has also a good bull calf, two months old, out of Highland Mary of Hickory Hill. Her dam is Primrose, by an imported sire. He has also a nice Jersey bull calf, which he won as a special prize for the best herd of dairy cattle at one of the local fairs. The calf was bred by Mr. Leather, of Waterloo. Mr. Dymont also keeps Chester White swine and Brown Leghorn fowls.

Publishers' Desk.

Christmas Fat Stock Show.—The directors of the County of Oxford Fat Stock Club will hold their thirteenth annual show at Ingersoll on Thursday, December 16th. Good prizes are offered for cattle, sheep, swine, and poultry. A special feature in the swine classes is that, with the exception of one section, they all call for "best bacon," barrow or sow. This is right. Competition is open to any one in the province. A fair for the sale of fat cattle will be held on the same day. This is a good feature, and one which should commend itself to those who have fat stock for sale.

Ontario Beekeepers' Association.

The annual meeting of the Ontario Beekeepers' Association will be held in the County Council Chamber, Hamilton, on the 7th, 8th, and 9th of December. Addresses are expected from representatives of both the local and Dominion parliaments and from some of the best beekeepers in America. A cordial invitation is extended to all interested in beekeeping to attend. Further particulars can be obtained from the secretary, Mr. W. Couse, Streetsville, Ont.

Western Dairymen's Convention.

The Executive Committee of the Western Butter and Cheese Association met recently, and completed arrangements for the next annual convention, which will be held in London, Ont., on January 19th, 20th and 21st, 1898. Among the prominent speakers who will be present are Dr. W. H. Jordan, director of the Agricultural Experiment Station, Geneva, N.Y.; Mr. H. B. Gurler, of DeKalb, Ill.; Dr. Connell, Kingston; Professors Robertson, Shutt, and Dean. Every phase of practical and scientific dairying will be discussed, and no dairymen should fail to be present.

Aberdeen-Angus Breeders' Association.—The annual meeting was held on Nov. 4th, 1897. The report of the Executive Committee showed that a good year's work had been done. The number of entries made in the record during the year was 2,276. Trade in Aberdeen-Angus cattle has been good; seventeen per cent. more certificates of entry and transfer were written this year than last. There was an increase of 75 per cent. in new members this year over the average of the last five years. In all \$1,075 was paid in special premiums at the various fairs. The officers for the ensuing year are: President, M. L. Evans, of Iowa; vice-president, O. E. Bradfute, of Iowa; secretary-treasurer, Thos. McFarlane, of Illinois.

American Shropshire Association.

The twelfth annual meeting was held in Chicago on November 4th. Several addresses on matters pertaining to the sheep industry in general and the Shropshire sheep in particular were delivered. The Hon. John Dryden, Ontario's worthy Minister of Agriculture, was again elected president. Messrs. R. Gibson, of Delaware, and J. N. Greenshields, Danville, Que., are members of the executive committee.

Kingston Dairy School.—In our issue of November 2nd we published a fine photograph of the staff and students of the Kingston Dairy School for the session of 1896-97. We are advised by the superintendent, Mr. Ruddick, that the photo only included a portion of the students who attended.

Special Offer to "Farming" Subscribers.—We are pleased to be able to make the following combination offer to the readers of FARMING. Examine it carefully and see if it will not be in your interests to secure the advantage of these clubbing rates:

FARMING and <i>Toronto Weekly Globe</i> ..	\$1 50
FARMING and <i>Toronto Weekly Mail and Empire</i> ..	1 40
FARMING and <i>Farm and Fireside</i> ..	1 40
FARMING and <i>Montreal Daily Witness</i> ..	3 00
FARMING and <i>Montreal Weekly Witness</i> ..	1 60
FARMING and <i>Family Herald and Weekly Star</i> ..	1 75
FARMING and <i>London Weekly Free Press</i> ..	1 75
FARMING and <i>London Weekly Advertiser</i> ..	1 40
FARMING and <i>Ottawa Semi-Weekly Free Press</i> ..	1 60

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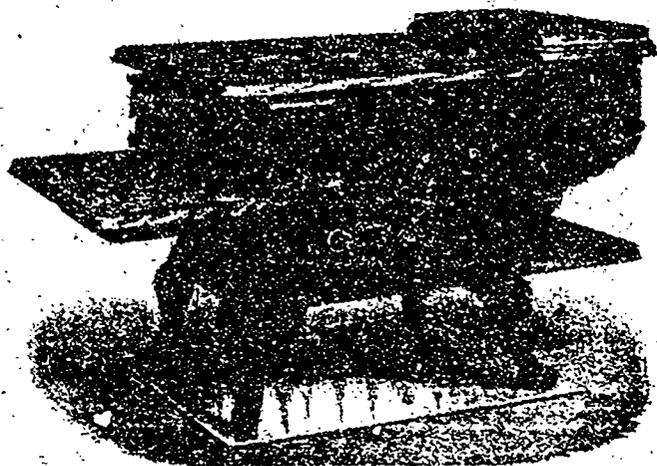
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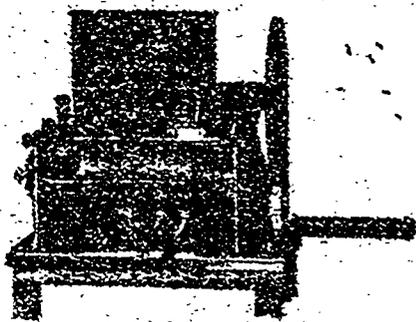
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In the United States four times as much money is expended for education as for the military. It is better than brains. By our educational facilities we have become a great nation. We, the publishers of *Woman's World* and *Jessie's Millar Monthly*, have done much toward the cause of education in many ways, but now we offer you an opportunity to display your knowledge and receive most generous payment for a little study. The object of this contest is to give an impetus to many dormant minds to awaken and think; also we expect by this competition of brains to extend the circulation of *Woman's World* and *Jessie's Millar Monthly* to such a size that we shall be able to charge double the present rate for advertising in our columns. By this plan of increasing the number of subscriptions and receiving more money from advertisers of wraps, pianos, medicines, books, baking powder, jewelry, etc., we shall add \$50,000 a year to our income, and with this mathematical deduction before us, we have decided to operate this most remarkable "missing letters" contest.

HERE'S WHAT YOU ARE TO DO.

There are thirty words in this schedule, from each of which letters have been omitted and their places have been supplied by dashes. To fill in the blank spaces and get the names properly you must have some knowledge of geography and history. We want you to spell out as many words as you can, then send to us with 25 cents to pay for a three month's subscription to *WOMAN'S WORLD*. For correct lists we shall give \$500.00 in cash. If more than one person sends a full, correct list, the money will be awarded to the fifty best lists in appearance. Also, if your list contains twenty or more correct words, we shall send you a beautiful *Agenda*, *Diary* and *Scrap Book* (for lady or gentleman), the regular price of which is \$3.25. Therefore, by sending your list, you are positively certain of the \$25 prize, and by being careful to send a correct list you have an opportunity of the \$200.00 cash award. The distance that you may live from New York makes no difference. All have equal opportunity for winning.

PRIZES WILL BE SENT PROMPTLY.

Prizes will be promptly awarded and promptly sent. We publish the list of words to be studied out. In making your list of answers, be sure to give the number of each word:

- | | |
|--|---|
| 1. -R-A- - A country of South America. | 16. B-S-M--K A noted ruler. |
| 2. -A-I- - Names of the largest body of water. | 17. --O-T-O- - Another noted ruler. |
| 3. M-D--E--A-E-- A sea. | 18. P-R-U-A- Country of Europe. |
| 4. -M--O- A large river. | 19. A-S-T-A- - A big island. |
| 5. T-A--S Well known river of Europe. | 20. M--I-N-E- Names of the most prominent American. |
| 6. S--A-N-A- A city in one of the Southern States. | 21. T--A- One of the United States. |
| 7. H-----X A city of Canada. | 22. J-F--E--H Once President of the United States. |
| 8. N-A-A-A- Noted for display of water. | 23. -U--N A large lake. |
| 9. -E--E--E- One of the United States. | 24. E-E-S-N A noted poet. |
| 10. -A-R-I- A city of Spain. | 25. O-R-A A foreign country, same size as Kansas. |
| 11. H-V--A A city on a well known island. | 26. B-H--O A large island. |
| 12. S-M-E- A well known old fort of the United States. | 27. W-M--S-W-K-D Popular family magazine. |
| 13. B--R-L-A- Greatest fertilization in the world. | 28. B-H-I-G A sea. |
| 14. S-A-L-E- A great explorer. | 29. A-L-N- - An ocean. |
| 15. O-L-F-- - One of the United States. | 30. M-D-G-S-A- An island near Africa. |

In sending your list of words, mention whether you want prize money sent by bank draft, money order or registered mail; we will send any way that winners require. The *Agenda*, *Diary* and *Scrap Book* is a perfect imitation of a Most Excellent of large size. We desire to distinguish it from real objects by microscopic feet. In every respect it serves the purpose of the real thing, and is a most desirable gift to a friend if you do not need it yourself. As present our supply of these gifts is limited, and if they are all gone when your list of answers comes in, we shall send you \$25.00 in money instead of the *Agenda*, *Diary* and *Scrap Book*. In addition to your participation in the \$200.00 cash prize, this \$25.00 prize is an added inducement, and is a most desirable gift to a friend if you do not need it yourself. We will promptly refund money to you if you are dissatisfied. What can we do? Now study carefully each word and its equivalent in the list of answers and send 25 cents to pay for the three month's subscription to our great family magazine, *Woman's World*. If you have already subscribed to our great family magazine, *Woman's World*, and we will extend your subscription from the time the present one expires. To avoid mistakes, enclose your money very carefully in paper before including in your letter. Address:

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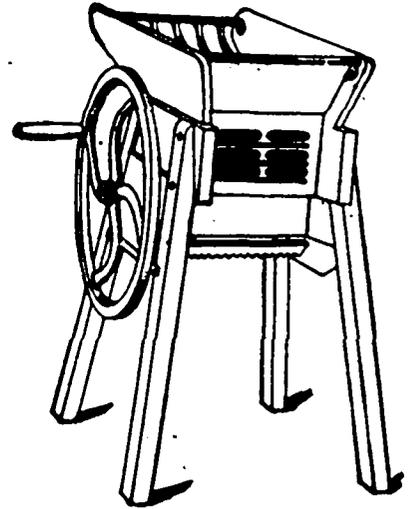
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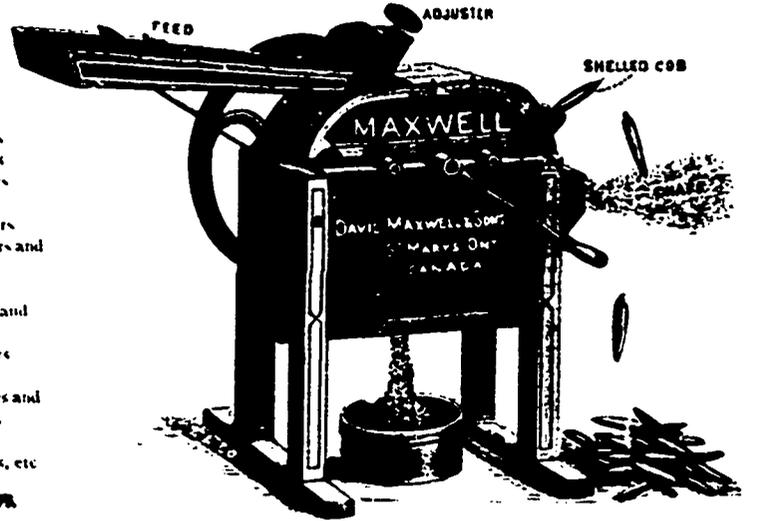
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