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VOL. XLIX.

LONDON, ONTARIO, DECEMBER 16, 1915.

No. 1212

Rural Telephones Helpto Make Co-operative Buying a Success

YEARS ago there were many farmers' co-operative societies organized at different times, but they almost always broke up after a short career. To-day there are many farmers' co-operative organizations, and they are generally successful.

Why this difference?

Well, one reason is because the rural telephone helps to make co-operative buying a success.

Years ago there were practically no rural telephones. Farmers could not therefore get together quickly or keep in close touch with the secretaries of the co-operative organizations.

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VOL. L.

LONDON, ONTARIO, DECEMBER 16, 1915.

No. 1212

EDITORIAL.

Everyone seemed pleased with our jubilee issue of last week

Keep the stock free of lice. The time to start is early in the winter season.

Give other Farmer's Advocate readers the benefit of some of your experience.

Attend the winter conventions. There is always more to be learned about farming.

Make the plans early for putting in ice this year, and be ready for the ice harvest when it too well to suit those for whom it was made.

When a person joins a Farmer's Club or Literary Society it is his or her duty to attend the meetings.

Few people expect Henry Ford's runabout peace deputation to bump Mars' big war truck off the European highway.

As a winter live stock conditioner put near the top of your list a daily application of the curry-comb and brush.

Readers are invited to help us make this a profitable winter in so far as the best of agricultural reading is concerned.

We are told that the Allies already have supremacy in munitions. What will it be by the spring of 1916 when the big drive is promised?

The stable may be a little cool and still be comfortable and well suited for the stock, but if it is damp and too warm better ventilation would improve it.

Lost, Strayed or Stolen, somewhere between Halifax, N. S., and Victoria, B. C., report of commission on the high cost of living. Liberal reward for early recovery.

Winter Fairs are among the best educational features in this country. The farmer has time to look the stock over and listen to a few practical talks on farming subjects.

It is time now to be casting about for the best material for next year's municipal councils. The position requires good men, and the electors should see to it that no others get there.

Those of us who are inclined to grumble should at this season weigh things in a fair balance and decide that we have many things which should aid toward a joyous Christmas.

bring on a great revival of the art of painting, but who would have dreamed that the brushes of celved about the first inspiration?

these columns to general advantage.

Certainly, They Were At It Again.

On the following page in this issue is published a letter from W. H. Moore, Secretary of the Canadian Northern Railway, complaining about the Editorial, "They're at it Again," which was published in our issue of November 4. shortly after the Canadian Northern's fifteencoach special loaded with free-trip Parliamentarians and Senators arrived back from its run to the Coast. Evidently the heads of the Canadian Northern do not like to be called "lobbytists," but, as real Big Business man are not usually in the habit of making replics to articles in the press, we feel flattered to think that there must have been even more in what we said than we at first believed. The cap must have fit all

We are quite aware that Members and Senators possess passes over all Canadian Railroads. This being true why did not these same Members so anxious and feeling duty bound to see the road take a trip over it at their own convenience, pay their keep on the trip as to dining service and sleeping car service and return with a fair, unbiased view of the whole matter? If these members have passes and do not use them for the good of their country why should they get them? We may also state that such service as these men got on this trip would cost, if paid for at regular dining and sleeping car rates, a great deal more than the railway tickets to the coast and return.

Our Editorial in no way complained of the efficiency shown in the construction of the road, but in it we did endeavor to show our readers just how an extremely clever, twentieth-century lobbyist works to secure what he is after and Mr Moore's letter does not change our mind one whit. The big deals in lobbying are not pulled off in some dark alley or shady corridor; they are done in the open. Men of experience in the business say that when they want to bribe a man they do it right out in broad daylight, perhaps in the rotunda of the Chateau Laurier before many eyes. The public are more easily fooled by this method, which only shows that those who practice it are past masters of the art. The trip West was the same thing carried farther than any other like attempt. The C. N. R. took the press along to advertise the trip and prepare the peo-

ple for the next shock they may give parliament. This matter of calling the farmers of Canada the lobbyists most effective in securing aid for the C. N. R. is a joke. We remember having read somewhere, that upon one occasion two deputations of farmers from different parts of the West went to Ottawa to see about getting a branch line run up into their country. While there, a farmer from one of these deputations was asked which way he thought the road would go, and his reply was something like this: I don't know but the other fellows paid their own fare while the railroad paid ours. Readers can It has been predicted that the war would guess which way the road would be the more like-

ly to go. It is a good thing for newspapermen both Peel County army horse dealers would have re- from Canada and the United States to see Canada from East to West and tell the people about it, but we still contend that such was a minor Are your dairy cows, feeding cattle or other consideration on the part of the C. N. R. on stock given a daily outdoor run, or are they con- this special occasion. They wanted Parliamenttinuously confined during the winter months? A arians and Senators first, and the press to tell letter describing the conditions under which it is the people about the speeches of these men and done and reasons therefor would be read in the C. N. R. road. At one tactical stroke they hoped to capture Parliament. Senate and public profitable. Read the results of the experiment.

opanion, and the rest, provided more aid is asked, would be easy salling.

"All Members" and "All Senators" were asked. We are well pleased that many did not accept, but have not changed our opinion about the policy of the C. N. R. in asking them and about the handicap which that company has placed against the free thinking of those who took the trip when next Sir William and Sir Donald ask for government aid.

The story has just reached us that the man. whose duty it was to introduce the trainload of notables in Winnipeg, put it about right in his introductory speech when he said: We have here Senator So and So, and Mr. So and So. Member of Parliament, and many other FRIENDS of Sir Wm. Mackenzie.

A trip like this should be a good way to make friends which dare not but stand together whether it be in the West. In the East, or on the floor of the House. We leave our readers to judge whether or not there was any "lobbying" connected with this most enjoyable trip, and to watch closely parliamentary procedure with the representatives of the C. N. R. in future.

Are Cobs Necessary?

In the Farm Department of this issue there appears an article dealing with an experiment carried on at Weldwood with thick-sown and hall planted corn. We haven't the least doubt but that the findings in this experiment will cause some to say, "I don't believe it," and yet the scales, and the analysis made at the Ontario Agricultural College of the two samples sent down there, prove that the thick-sown corn, without cobs, has just as much silage feeding value pound for pound as has the heavily-cobbed corn from the hills. It is not necessary to go into details here. The article contains these. But we should like to emphasize the fact that the corn from the thick-sown rows which was sent for analysis contained no cobs at all, while the sample from the hill corn was well cobbed. Both lots were planted on the same day and both were cut the same day. It is essential in this experiment that the corn in drills has the same number of days to mature as the corn in hills has. If it has and also has an equal chance in cultivation, soil and fertilizer, then our experiment bears out the theory that thick-sown corn put in so thick that it does not cob contains in the stocks as much feeding value as the hill corn does in stocks and cobs together. Let no one misunderstand our statement. This corn though not cobbed was ripe, even riper to all appearances than the cobbed corn. It grew nearly as tall as the hill corn, was very thick in the rows, and yielded almost double in pounds per acre that the hill corn did. The contention of an American experiment station that, provided the maturity was obtained, the thick-sown corn contained in the stock what in the hill corn is simply transferred from the stock to the cob in the plant's effort to produce seed is borne out by our test. Experimenters in Canada have said, "I don't believe such can be the case." It is time now for them to start some experiments and either further prove or disprove this work. We intend to carry it out on a larger scale next year. Our thicksown corn seems to have made almost ideal silage and more of it, and why should it not be

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JOHN WELD, Manager.

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London, Canada.

Always Plow Under Something.

An American farmer is reported as saying in reply to a question concerning his success as a farmer: "I always plow under something." There is no secret in such success. Thousands of farmers not only in the United States but also in Canada owe their success to the same principle, perhaps not followed out to the letter but followed to the degree that good crops are grown on well fertilized land. Soil fertility is the Liz factor toward returns in general farming practice and the farmer who always plows something under is on the right road.

The winter season is important in that it is during that time that most of the farmyard manure is made and this is yet the most important fertilizer on the average farm. What kind of manure is best for the soil? This depends somewhat upon the soil. If it be heavy and sticky a manure of a long, strawy nature should prove more valuable than manure which is too short and rotten. On a sand., light soil the well-rotted manure should be most valuable. But the cost of application must be considered, and in this, spreading green manure on the snow in winter has a big ad antage, and if the land be level little loss should ensue. Every farmer in the land should handle his feed and h's stock so as to make his manure pile as hig as to sible. and in the application of the manure it is generally conceded that lighter and more frequent applications are more profitable than fewer and heavier coatings. Keep the manure machinery on the farm busy this winter.

Next to farmyard manure we might mention green manures, ch'ef among which in Eastern Canada is the old reliatly common red clover, When Luying grass seed for next spring's seeding get some extra even though the price be high and next fall if more acres are seeded down then tequired have a legume to plow under. Many of our best farmers seed down all land some cocereals each year. A second crop of clover a dea tine covering to plow in. And in the clawing.

down of manure, clover, or other things a old the mistake of turning them under at too great depth. The fertilizing properties of these materials will leach away beyond the reach of the roots of the plants soon enough without putting them down below this level at plowing time.

There are other crops which do much good turned under. On a light soil fall rye, pastured for a time in the spring and later allowed to grow up after which it is plowed down, improves the fertility, and physical condition of the soil. It is a very satisfactory green manure for some soils. We have seen exhausted sand lands brought back to usefulness by this method. There are still other crops, which, under certain conditions, prove good soil builders whim plowed

Then there are the artificial manures both organic and inorganic. Undoubtedly they are destined to fill a bigger place in Canadian agriculture as the years pass on and the farmer becomes more familiar with their various uses and advantages, and also knows more of the specific requirements of his soil. He must know what his soil reqdires and then make the best use of his barnyard manure and his green manures in conjunction with the most suitable artificial fertilizer for his own special requirements. It would pay every farmer this winter to study fertilizers and next summer to find out what his land needs. We are told that most Ontario soils, light or heavy, require lime. If so, the farmer should make himself familiar with the best forms of lime to apply, having in mind the source of the lime as it affects the cost of transportation.

Fertilizers, natural and artificial, are the big thing in the growing of big cross. Lie stock is a great aid to cheap and valuable fertilization. However it is accomplished, plow under some-

The C. N. R. Attempts to Justify Its Secretary Canadian Northern Ra'lway System. Trip.

Editor "The Farmer's Advocate":

. I have read in a recent issue of your paper an article in which you refer to the Canadian Northern parliamentary and press trip across the Continent. I think you have been very unfair in your comments on that trip, and let me tell you why.

In the first place you insinuate that the Members and Senators will be influenced by a 'free trip to the Coast." I suppose you know that under the law Members and Sena o.s already possess passes over every railway in Canada. Therefore, so far as the transportation end is concerned, we could give the Members and Senators nothing except that which they already There were, of course, meals which possessed. were furnished on the trip free, and which are not ordinarly so. I presume that bo'h you and I have attended many dinners and banquets, without in any way surrendering our independence of thought or action.

We, naturally, wanted to influence the minds of the Members of Parliament and the Senators to the extent that we wished to prove that the Canadian Northern Railway had been well constructed, possessing the most favorable grades of any railway on the Continent, and was located through territory which is, and will be, productive of traffic. Or in other words: we wanted to proce that the assistance which we had received from Parliament had not only gone into the railway, but had gone into a railway which, from the standpoint of Canada, was worth while

You have stated that the dill; papers have, with almost every issue, given their readers 'glowing accounts of the wonderful trip." will remember when the daily papers were, with every issue, d scribing the railways in terms not at all complimentary. Institutions of these derogatory statements came from our com etitors, from political sources, and from a lick knowledge of the true situation. Start a filshood on its way, be it ever so small, and it will grow out of a'l proportion; and in the same way the statements of Canadian Nerthern ineffci ney grew until reople believed that the ralway was adily constructed and incapable of rendering any great service to the people of Canada. I think you will agree with me that the people of Canada, as a result of the trip, have a different opinion of the Canadian Northern. We might have hung plans and profiles from the "Chateau Laurier" to the Parliament Buldings, and those occupying the ways of the mighty would not have realized the true facts of the case as they have done by travelling over the Canadian Northern from Quelier through the Rocky Mornains to Vancouver, with fifteen cars in the train, without the ass's once of a second engine.

You have intimated that the trip was devoted to lobbying. Now if this were true, the lobbying was conducted, you must admit, under the full glare of the arc-lights of publicity. from twenty to thirty newspaper men on board, There were sleeping and eating in all of the cars, and wide awake newspaper men cognizant of everything that happened. We pointed out the advantages of the Canadian Northern, it is true, to Members and Senators and to newspaper men. the object of the trip; but we did it fairly and openly, and no efforts were made to secure a judgment that was not based upon facts.

As a matter of fact, the lobbyists who have been most effective in securing aid for the Canadian Northern in the past, have been the farmers of Canada. I can assure you that thou ands of them have signed petitions to the Company and to the Governments, as ing for the construction of railway I'nes to be built by the Canadian Northern Railway. Deputations have waited upon Governments asking for assistance. out the aid of the farmers of Western Canada,

the railway lines could never have been built. You will realize that this country is, to large extent, dependent upon the markets of the United States for finance. As a result of the acceptance of our invitation by the Members and Senators to go across the Continent, we were able to secure representation from nine daily newspapers in the United States-from New York and from Chicago. They came not only to see the Canadian Northern; they came to see the country and its productiveness. They returned home, not only to say complimentary things about the Canadian Northern, but things about the country and its stability which must be of benefit to Canada, to the provinces, to the municipalities, and to all the institutions of Canada.

There is just one thing more that I want to say, and that is that the Canadian Northern in extending its invitations invited ALL of the Senators and ALL of the members, those who have in the past been friendly, and those who in the past have been unfriendly. We said to those who accepted the invitation, 'Here is the railway, here is the country; judge for yourselves, by your judgment we must necessarily

Yours very truly.

W. H. MOORE,

Nature's Diary.

A. B. Klugh, M.A.

Last week we had an interesting visitor to the university grounds—a Barred Owl which came and sat in a tree over one of the walls of several hours. There it sat, on a branch only some fifteen feet from the ground, perfectly unconcerned as people passed beneath it, or stood and looked up at it. Occasionally it turned its head round and looked directly over i's back, without effort, and without any turning of the Deculiar way that ow's have. remained until a ladder was placed against the tree by an enthusiastic photographer, with a view to obtaining a close-range photograph, when it flew to another tree some hundred yards away, and after a short stay here flew o'r.

This species is a large owl, eighteen to twenty inches in length. Above it is ashy-brown barred with white, the breast is tawny barred with white and the abdomen is light tawny with dark stripes. It has no "horns," as the feather tufts on the heads of many species of owls are called, but the head is rounded. Its face is given a striking appearance by the large disks of feathers which radiate out from the eyes, and on which are concentric rings having the eyes as their centres. The feet are feathered right down to the toes. The iris of the eye is black, not yellow as in the case of the majority of owls.

The range of the Barred Owl in Canada is from Nova Scotla to Mani'oba and as far north as Parry Sound. It is fairly common in some localities, but is not an abundant species anywhere.

The voice of this species is a loud, far-carrying "Who-to-who-to-who-whooooo" the last note being long-drawn-out and usually higher pitched than the rest. While in camp at Brule I ake this fall one of these owls gave vocal performance every night, and sent its notes echoing through the stillness for miles up and down the lake.

Considered from the standpoint of the farmer this owl must be counted as one of his friends, for though it does occasionally ta'e poultry and game-birds, careful in estigation has shown that these items make up only four and a half per cent. of its food. Its main food consists of small mammals, among them many of the most destructive rodents, such as the common rat and the field mouse. Other mammals irequently taken are the red-backed mouse, white-footed mouse, cottontail rabbit, red squirrel, common mole and short-tailed shrew. It takes numbers of grasshoppers, beetles, crayfish and frogs. It also has a habit, rather unique among owls, of eating smaller owls.

The nest of the Barred Owl is usua'le in a hole in a tree, but sometimes in a deserted nest

four in number an At this time of twigs of our decid plainly than they with leaves. If pretty sure to f galls on them, as Oaks are the favo insects, and abou galls are found of of trees put toget course occur on th them are found on quite common is curs as irregular of the Red Oak. often several of t

DECEMBER 16, 1

of a hawk or cro

gated mass. If that they are har chambers. In the (grubs) or the ad the galls. Which adult, depends up youngest galls we sect is a little fo abdomen and redd are of course not the word, since al Another gall v is one of the eas Pine-cone Willow willows in practic derived from its to the fact that the of which it is but form little or formed by a little the terminal bud.

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Remember that

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Lime water use

Let us have a market situation some of our own

to sell them

It Is Time f Horse-M

It must disgu-

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ntervent The ernment but wi hev do allow "epresen ernmen to purcl that the trip was devoted h.s were true, the lobbying ist admit, under the full of publicity. There were newspaper men on board, all of the cars, and wide cognizant of everything nted out the advantages rn, it is true, to Members wspaper men. That was out we did it fairly and were made to secure a

based upon facts. the lobbyists who have ecuring aid for the Canast, have been the farmssure you that thou ands etitions to the Company as ing for the construcbe built by the Canadian eputations have waited g for assistance. Withers of Western Canada, never have been built.

this country is, to a upon the markets of the As a result of the ion by the Members and he Continent, we were itation from nine daily States-from New York y came not only to see they came to see the iveness. They returned complimentary things thern, but things about oility which must be of provinces, to the muniinstitutions of Canada. g more that I want to e Canadian Northern in s invited ALL of the e members, those who endly, and those who in endly. We said to those ion, 'Here is the railjudge for yourselves, we must necessarily

W. H. MOORE, nern Ra'lway System.

s Diary.

gh, M.A. interesting visitor to Barred Owl which came one of the walls ofor sat, on a branch only ground, perfectly und beneath it, or stood sionally it turned its irectly over i's back, it any turning of the that ow's have. as placed against the tographer, with a view photograph, when it hundred yards away,

flew o' wl, eirhteen to twenty is ashy-brown barred s tawny barred with light tawny with dark as the feather tufts ies of owls are called, Its face is given a large disks of feathers e eyes, and on which the eyes as their hered right down to eye is black, not yelnajority of owls.

ed Owl in Canada is oha ard as far north rly common in some oundant species any-

is a loud, far-carryooooo'' the last note sually higher pitched np at Brule I ake this ve vocal performance otes echoing through d down the lake. dpoint of the farmer as one of his friends, ally ta'e poultry and tion has shown that four and a half per in food consists of m many of the most the common rat and mals irequently taken white-footed mouse, el, common mele and es numbers of grassl frogs. It also has org owls, of eating

owl is usua'le in a es in a deserted nest

DECEMBER 16, 1915

of a hawk or crow. The eggs are from two to four in number and are round and white.

At this time of year the gails on branches and twigs of our deciduous trees show up far more plainly than they do when the trees are covered with leaves. If we look at the Caks we are pretty sure to find several different kinds of alls on them, as for some reason or other the Oaks are the favorite trees of the gall-forming insects, and about as many different kinds of valls are found on them as on all other species f trees put together. Many or these galls of course occur on the leaves, but a good many of them are found on the twigs. One gall which is quite common is the Gouty Oak Gall, which ocurs as irregular swellings on the small branches of the Red Oak. They are of variable size and often several of them coalesce to form an elongated mass. If we cut into these galls we find that they are hard and woody and contain little chambers. In these chambers we find the larvae (grubs) or the adults of the insects which cause he galls. Which we find, whether larva or adult, depends upon the age of the gall. In the youngest galls we find the larvae. The adult insect is a little four-winged "fly," with a black abdomen and reddish legs. These so-called "f.les" are of course not really flies in the true sense of the word, since all true flies have but two wings. Another gall which is extremely common and is one of the easiest galls to recognize is the Pine-cone Willow Gall. It can be found on the willows in practically every swale. Its name is derived from its resemblance to a pine-cone, due to the fact that the leaves of the branch at the to of which it is formed do not develop fully but form little overlapping scales. This gall is formed by a little true fly, the egg being laid in

On the willows also may be seen numbers of elliptical galls on the twigs. These are the work of a fly closely allied to the species which causes the last-mentioned gall, and the gall is known as

the Elliptical Willow Gall.

some of our own authorities.

the terminal bud.

THE HORSE.

Keep the in-foal mare in a box stall.

Remember that slips may cause the mare to

Horses have started to "paint" for the sake of appearances.

Lime water used on dusty or musty feed may prevent wind troubles later on.

Feed your horses well anyway. Some day,

perhaps sooner than you think, you may be able

Let us have a little more light on the horsemarket situation as infuented by the war or by

It Is Time for An Explanation of Horse-Market Conditions.

It must disgust farmers, who have suitable, sound horses which they would like to sell to the representatives not only of our own Government but of the Allied Governments, when they read of such transactions as were carried on in Peel County, Ontario, in buying horses for the first Canadian Contingent. There are thousands of surplus horses on the farms of Canada-horses which could be bought from the farmers direct, and worth the money, but the farmer, it seems, cannot sell. In Peel county, according to the investigation, one firm turned over all the horses, in number, that were purchased in that county for the first overse's contingent, and James R. Fallis, M. P. P., with another man, com-posed the firm. All these horses were purchased by these men and resold to the Government. We are inclined to believe that farmers who complained of the methods of buying horses some time ago had some grounds for complaint. At any rate this parliamentarian and his partner were all to sell, according to reports of the evidence cfore a commission of in as igation, a fifteen-v old mare which a farmer had disor \$40, because she was lame, for the posed . fat sun of \$165. A black horse had his white d white face "painted" black pond with the remainder of his legs 0.0 appearance, and all these horses agent from farmers after passing inspection and were resold to the hirsute were govern that a profit. Sir Chas. Paridsen Intohen he said to the M. P. P., "so the govern it right ot less and the government raid more farmer for yo ntervention." The

ernment is not buying horses just now hey do start again they might as well representatives of the other Allied Govto purchase in Canada, for their opresition will not be likely to make the horses bought cost the Canadian Government any more than do the clever schemes of some of its own horse dealers. We believe the Canadian farmer has a just right in asking a few questions regarding the horse market in this country. can he not sell his horses direct to the government when that government is in the market, and why can not a reasonable explanation be given as to why Great Britain, France and other Allied Governments are not or have not been operating in this country,? Do they not desire to, or is it that our government bars them out? The Canadian farmer is ready to accept any reasonable excuse for the present condition of affairs but so far none has been forthcoming. What is the matter with the excuse? If those in authority have one why don't they out with it and put an end to all this discontent among horsemen? Such transactions as those pu'led off in Feel county do not help any in allaying the f elings of the farmer with good horses for sale. If there is truth in the statements that unsound horses bought in the United States for army purposes and bad' in transit are being dumped on the Canadian horse market, and it seems to be the case. this too will not tend to smooth the ruffled feelings of the farmer overstocked with horses.

We would like the frank opinion of our farmers and horsemen on this subject. We would also like to see a full explanation of the horse situation by those who must know, but so far have hedged the point when questioned. So far as we can see there can be no military secret connected with the horse market in this country, and if the Allied horse buyers have been shut out of Canada the excuse must be one which someone feels ashamed to make public. Thousands upon thousands of horses have gone out of the United States and Canadian farmers have seen train-load after train-load cross their farms, where their own surplus horses roamed unsaleable in the pas-Winter is now on, and it costs money to feed horses in the stable. To shut out buyers from the Allied Nations while transactions such as those carried on in Peel county are going on

looks bad indeed.

Lameness In Horses.

Lameness may be defined as "an expression of pain in one or more legs during progression. While this definition is generally accepted, we may claim that it does not "go far enough." as the act of progression is not always necessary for the manifestation of lameness, a horse may stand

DIAGNOSIS OF LAMENESS .- In many cases the seat of lameness is evident, while in others. even though the lameness be well marked, it is difficult, and requires care and knowledge to locate it. While we do not think it wise for all amateurs to attempt to diagnose and treat a case of more or less obscure lameness, where professional help is procurable. it may be inand to those who are not within reasonable distance of a veterinarian, instructive. to deal briefly with the peculiarities of gait shown. according to the part affected. The first point to be determined is the limb in which the animal is lame. This may seem an easy matter, but in reality is attended, in many cases, with no little difficulty, especially to those who have not given lameness special attention and study. may be mentioned that a horse lame in one fore leg or foot will step as lightly as possible with the lame foot, lift it from the ground quickly, and tread heavily with the sound foot, his head nodding at the same time, that is, his head nods more or less, according to the severity of the lameness, as the sound foot touches the ground. When lame in the hind leg, the elevation and depression of the hip of the lame leg will be more marked than that of the sound one. In some

cases a mistake may be made by expressing the opinion that the lameness is in the hind leg, when in reality the horse is lame in front, and vice versa. This mistake has been made so often that the peculiarity of gait that causes it has been called "crossed lameness." For example, a horse lame in the near fore leg is trotted away from the observer; he appears to be lame in the off hind leg as that quarter appears to ascend and descend to a more marked extent than its fellow, but when the animal is trotted toward the observer, it will be seen that the real or apparent irregular motion of the hind quarters depends upon the elevation and depression of the head and body, and that the lameness is really in iront. An opinion should not be ventured until the horse has been trotted both from and toward the observer. Of course, there are many cases of lameness in which the seat, and cause are so apparent that such an examination is un-

In testing a horse for lameness, it is well to select a hard, smooth road, and have an attendant take the horse "in hand" with a loose rein, first walking him straight away from and then straight back toward the observer; then taking him at a slow, easy trot, still with a "free head" over the same ground. A horse may stand and walk sound and still go sound when trotted fast or excited or with his head held up by the person leading him, but show lameness when allowed to jog with a free head. When a horse is lame in both fore feet, some difficulty is often experienced in its detection, as to the inexperienced he may appear to go sound. not nod as when but one limb is affected, but will step short and quickly with both feet; he is said to be "groggy." Each foot is carefully put to the ground and quickly lifted up again, the step is short and there is a rolling motion of the In other cases he may exhibit lameness in one foot as he goes from, and in the other as he approaches the observer. Such cases are very he approaches the observer. confusing and require considerable power of dis crimination. Care must be taken to not comfound peculiarity of gait with lameness. example, a horse, especially a young animal, may appear to be lame in the near fore foot, if led with a tight rein and his head pulled to the left side, or when first bitted. This is called "bridle lameness' and disappears when the animal is led with a slack rein. Again horses that are habitually in a ring or round a circle, usually appear lame in the fore limb nearest the centre of the circle. When a horse is lame in both hind limbs, the difficulty of diagnosis is not so great. as he is both stiff and lame; but mere stiffness must be distinguished from lameness, although the two are often confounded. A stiff horse certainly is unsound, but may be very useful for slow work. Mere stiffness is not accompanied by pain; it may indicate fatigue in old age and pass off with exercise, or it may be constant, and while the animal is discommoded more or less. he does not suffer pain; but lameness is an indication of actual pain or disease, and although it may disappear on exercise it must not be confounded with stiffness. There are some kinds of lameness which are apparent in the stable only, the movements caused by bringing the patient out of the stable being sufficient to cause the total disappearance of the lameness. Hence the examiner should see a horse in the stable as well as out of it. WHIP.

(To be continued.)

"My pulle's are six years old." So spake a farmer the other day. Most farm pul'ets 'are about the same age or o'der, and their owner begrudges them the feed they eat. Old hens will not lav as many eggs as young birds, so why Feep them?



There May Soon Be a Market for These.

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Dates of the Live-Stock Meetings.

The following is a list of the dates of the Live-stock Meetings to be held in Toronto the last day of January and during the first days of February:

Monday, Jan. 31, 2.00 p.m., Dominion Cattle Breeders' Association, Directors' Meeting; 2.00 p.m., Canadian Hackney Horse Society, Directors' Meeting; 3.00 p.m., Dominion Cattle Breeders' Association, Annual Meeting; 7.00 p.m., Canadian Hackney Horse Society, Annual Meeting; 7.00 p.m., Canadian Jersey Cattle Club, Directors' Meeting; 7.00 p.m., Canadian Thoroughbred Horse Society, Directors' Meeting; 8.00 p.m., Dominion Shorthorn Breeders' Association, Directors' Meeting; 8.30 p.m., Canadian Thoroughbred Horse Society, Annual Meeting.

Tuesday, Feb. 1, 11.00 a.m., Dominion Shorthorn Breeders' Association, Annual Meeting; 11.00 a.m., Canadian Jersey Cattle Club, Annual Meeting; 2.00 p.m., Canadian Standard-bred Horse Society, Directors' Meeting; 3.00, Canadian Standard-bred Horse Society, Annual Meeting.

Wednesday, Feb. 2, 10.30 a.m., Canadian Ayrshire Breeders' Association, Directors' Meeting; 11.00 a.m., Canadian Hereford Breeders' Association, Directors' Meeting; 2.00 p.m., Canadian Hereford Breeders' Association, Annual Meeting; 3.00 p.m., Canadian Kennel Club, Annual Meeting; 6.00 p.m., Ayrshire Banquet; 7.30 p.m., Canadian Pony Society, Directors' Meeting; 8.00 p.m., Canadian Kennel Club, Directors' Meeting; 8.00 p.m., Canadian Pony Society, Annual Meeting; 8.00 p.m., Clydesdale Horse Association of Canada, Directors' Meeting.

Thursday, Feb. 3, 9.00 a.m., Ontario Sheep Breeders' Association, Directors' Meeting; 10.00 a.m., Canadian Ayrshire Breeders' Association, Annual Meeting; 10.00 a.m., Ontario Sheep Breeders' Association, Annual Meeting; 1.30 p.m., Dominion Sheep Breeders' Association, Directors' Meeting; 1.30 p.m., Clydesdale Horse Association of Canada, Annual Meeting; 7.30 p.m., Canadian Shire Horse Association, Directors' Meeting; 8.00 p.m., Canadian Shire Horse Association, Annual Meeting; 8.00 p.m., Dominion Sheep Breeders' Association, Annual Meeting.

Friday, Feb. 4, 9.00 a.m., Ontario Berkshire Club; 9.30 a.m., Ontario Horse Breeders, Directors' Meeting; 10.00 a.m., Ontario Yorkshire Club; 10.30 a.m., Ontario Horse Breeders' Annual Meeting; 11.00 a.m., Dominion Swine Breeders' Association, Directors' Meeting; 2.00 p.m., Dominion Swine Breeders' Association, Annual Meeting.

Pig Competition Criticism.

Editor "The Farmer's Advocate":

I took much interest in results of hog feeding test in Nov. 25 issue. I was surprised at the gain of the winning bunch for the amount of feed consumed. During the 16 weeks or 336 feeds they consumed 1.025 lbs. of whey, which is 3 lbs. a feed, or \$\frac{1}{4}\$ of a lb. per hog. The grain averaged 9-10 of a lb. per hog. This looks like only a maintenance ration. The four hogs weighed 832 lbs.—the weight at 6 weeks could be placed at 25 flis., making 732 lbs. gain for the 1,125 lbs. of grain, plus 1,025 lbs. whey. This is equal to 1 lb. gain for 1\frac{1}{2} lbs. of grain plus 1 1-3 lbs. whey. How does this compare with the results of official tests with hogs on pasture?

Middlesex Co., Ont.

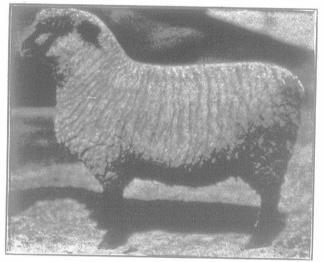
Note.—These pigs we understood we ghed considerably more than 25 lbs. each when started, but even so the gains were phenomenally high and the pasture they ate must have been very good feed. We invite those who fed the pigs to give us more details.—Editor.]

A few days ago we read a long harangue about the high prices farmers were said to be getting because of the war, and the big profits they were making at the expense of the "helpless" consumer. Of course, as usual, it was written by a man who never farmed and never intended to. The funny thing about it all is, why these soft-handed chaps who see so much money in farming do not try it. They seem to think that farming requires no special ability, little capital, a minimum of work and a maximum of profit. Now is a good time for them to put on the overalls.

If things have not been going right in municipal affairs it is the duty of some of the reliable and capable men in the township to offer themselves as candidates for the township council and then it is the duty of farmers to elect them. It is time politics were obliterated from municipal elections.

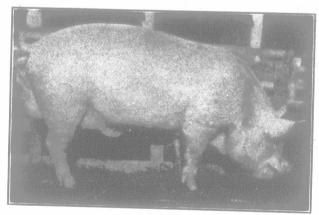
In the Stable and Feed Lot.

We are now in the midst of the winter-feeding period. The grass for this season is no more, and stock must be fed on hay and grain with silage and roots added to make the rations as much as possible like the succulent and nourishing feeds of summer. There is a good supply of feed in the country but not a whit too much. There cannot be too much feed so long as the farms are properly stocked. From an individual point of view no hay or grain should leave the farm except in the form of animals or animal products. Yet, there is a large demand in villages, towns and cities for feed and they must have it. Some farmers east or west will produce the stuff for the urban customer, but the best farmers don't do it. Let the other fellow sell



Arkell's Winning Ewe at Toronto, 1915.

his raw commodity if he cares to; a good farmer cannot afford it. Neither can a twentiethcentury stock farmer afford to feed haphazardly. Every pound of grain and hay must be fed so that it will do its bit. Cheap roughages, where possible, must replace expensive hay; grains must be blended to make the proper mixtures while roots and silage must be administered daily to nourish and maintain the health of the animal. Feeding is a science that only the wide-awake herdsman can master. The chemist with his knowledge of food constituents and the veterinarian who knows every muscle and bone of the animal body are not experts in actual feeding. However, science has rendered invaluable services. The information we have gained about balanced rations would alone pay for the inception and up-keep of our agricultural colleges and experiment stations for some time. Our duty as farmers is to mix scientific information with exand common sense, and from this we should compound a ration that will produce economical gains.



John Duck's Champion Yorkshire Boar at London, 1915.

This season there is a quantity of sprouted or unmarketable wheat and discolored barley to feed. The former is uncommon and makes it necessary to modify our old established rations in many regards so we can make as much as possible out of the grain which usually goes to the market direct.

FEEDING FOR FINISH.

To some it might appear like threshing old straw to discuss feeding fat cattle, nevertheless buyers cannot secure the same spread or margin they formerly could, and consequently must feed as economically as science or practice can advise. A pound of gain will cost the average feeder in the vicinity of 12 cents. If he can do it more cheaply so much the better; if it costs him more he must needs pay strict attention to his balance sheet, for it might be too heavy on the wrong side. Oat and barley chop as well as corn are good old orthodox rations in this country. Many a bullock weighing between 1,500 pounds and the even ton have crossed the ocean leaving

behind them a huge pile of cobs from which in their feeding days they were fed the savory kernels. Nowadays the market here at home wants more meat, but it asks for the sappy, smooth, well-fleshed yearling or two-year-old, fed well from a calf up on silage, roots, straw, chop and hay. The steers of years ago got roots but no silage, and some, we are sorry to record, get none yet. It is wrong of course, but farmers are erecting more silos year after year and some day only the poverty-stricken will be without them. There is need of an educational campaign to encourage the production of greater quantities of roots and silage. With plenty of these two essentials or either one, store cattle can be wintered on exceedingly plain feeds and do well, while with them fattening animals will put on finish and weight more cheaply than can be accomplished in any other way. The element of labor during the growing season enters into the proposition, more particularly with roots, but that problem can be solved if plans for the future be made in time. It is assumed that every stockman of this

era will have a good supply of either roots or silage. Generally speaking there is no excuse for a lack of them. Then there is the time-honored mixture of oats and barley chopped together, Next in order but not inferior comes wheat, which, this year, a great many farmers must feed. They should do so without any regret, for it is worth to feed what the Westerner is netting for his No. 1 Northern even though he sell it as high as \$1.05. Corn is plentiful in some sections, but in those districts steer feeding is not practiced as much as elsewhere in Ontario. Throughout Kent, Lambton, Elgin and parts of Middlesex County considerable corn is stored in cribs to be fed in winter, but elsewhere the greater part of which is not fed from the shock goes into the Essex County, of course, grows corn abundantly but there heef takes second place to pork. Corn may almost be considered as king of the grains in the feed runs; it is a standard by which the efficiency and worth of other feeds are valued. Unless fed with clover hay or other grains it would probably pay to purchase some cottonseed meal or o'll cake and feed along with Experiment stations in the United States usually report a profit from the use of cottonseed even when corn is abundant. We also have in mind a nice lot of steers that were fnished last spring in Lambton County on silage, hay and cottonseed meal, getting as much as 6 to 7 bs. per day per steer of the concentrate. That occured where the farm grains were scarce and when cottonseed was cheap. The steers did well and were a choice lot when finished. cite this circumstance only to suggest that one can feed steers without the corn, wheat, oats or barley if necessary, but, of course, the silage would contain ingredients common to shelled corn plus succulency.

Admitting then that corn, when available, is one of the best of feeds, we might proceed to the common grains usually fed. Oat and barley chop is probably most common and it gives good results, but wheat would improve it as a fattening ration. The latter grain by some is considered equal to corn, while others claim that it will produce 10 per cent. less gains. It, like corn, is rich in carbohydrates but it has more protein and less fat. Consequently it is superior to corn for feeding store cattle or growing animals, and should be used in that capacity so far as needed. When mixed with oats and barley, wheat is quite the equal of corn and steer feeders can use it to exceedingly good advantage if they have it on hand this winter. Equal parts of the three grains, ground together, fed along with about 30 lbs. of silage and 20 lbs. of roots to each 1,000-lb. steer per day should produce gains as economically as any allowance that could be fed. A concentrate that might improve this mixture would be a small quantity of oil cake or cottonseed meal. Two years ago at "Weldwood" we fed 11 lbs. of oil cake in addition to oat and barley chop and got profitable gains. Silage and roots were fed in the amounts previously mentioned and the steers gained on the average 235 and two-fifths Ibs. in 3½ months, or 2.2. Ibs. each per day Three of the best made an average daily gain of 2.5 lbs.; a fourth gained almost 2 lbs. and another which did not do well gained 1.6 hs. per day. These were, as previously stated, young steers weighing about 1,000 lbs. They probably gained more quickly than older steers would have done in such a short period, and they were started on more feed than would be advisable where a longer feeder period is the practice. One rule recommended by Mumford, an authority on feeding, is to start heavily on roughages, including clover or alfalfa hay, and give the steers all they will consume without wasting any. In addition start with 2 lbs. corn per steer per day, creasing 1 lb. dally until 10 lbs. are fed. After 3 days increase 1 lb. daily until 17 lbs. are fed; 15 days later let this be increased to 22 lbs. per day. Although this is quite applicable to opr

erable s hand. butchers on such straw. with son commodi stock an liberal a oteers an quite sat desired Wheat in for it is it to bes ing bone would be should be alone is oats or 1 the mout winter, es wise to n barley or fattening percentage store catt

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Feed Lot.

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conditions at the start, the quantity soon mounts up to an allowance that a great many feeders would not care to dole out in this country. Where the cattle are to be fed for 6 months, 6 weeks should elapse before the animals are put upon full feed. In the meantime they should have plenty of roots and silage, clover or alfalfa hav, and failing these some nitrogenous concen-

The quantity of grain that should be fed per steer must be decided by the man in charge. He must be able to detect an animal as soon as it Underfeeding and overfeeding can both be read in the individual steer or heifer if the herdsman knows his business. The steers referred to in a preceding paragraph were getting 9 quarts of chop, 11 lbs. of oil cake, 30 lbs. silage and 21 lbs. of roots each after the first month, and in addition to this their hay allowance was increased till they received about 10 hs. per day each in the last month. So long as a steer will consume this amount and keep his appetite keen he is not getting too much; many steers will handle even more grain. Cattle fattened in the Corn Belt of the United States are fed very liberally, but much of the corn passes through them undigested and is later picked up by hogs. Even in Canada in many cases steers are followed by pigs, and where corn is fed it is not a bad practice. Oftentimes the pork alone is a very large part of the profits which accrue from the feeding operation.

MAKING BABY BEEF.

Whole milk is one prime essential in making However, it is usually necessary to relieve the dams of some responsibility and force the calves along with grain and roots or silage. Finely-ground oats and bran are very good at first, and the calves will take to the mixture at a tender age. Oil cake meal will be found useful in this case, but it should not be necessary to continue the bran any length of time, for the young calves will soon learn to eat roots and silage when oat and barley chop with a handful of oil cake will encourage the production of flesh and supply all necessary ingredients. There is no reason why a portion of the ration should not be ground wheat. It is fattening, but at the same time it is very appropriate for growing animals.

Last June on a Middlesex farm we saw a very nice lot of baby beeves ready for market. were about 15 months old and would weigh approximately 900 lbs. each. During their lifetime they got very little hay, silage being the chief roughage. Mixed grains or chop were fed as soon as the calves would take to it. Young steers and heifers in the stalls, at that time about 5 months old were getting 2 lbs. of chop per day, and this would be increased to 6 or 7 hs. daily during the finishing period. Throughout the lactation period the calves were allowed to suck, and this nourishment combined with chop and silage resulted in economical beef.

WINTERING STORE CATTLE.

Store cattle should not be allowed to stand still as regards growth and gains during the winter, neither should they be fed expensive feeds. Roughages such as silage and roots should form a large part of their daily meals, and with plenty of these they should assist in cleaning up considerable straw or poor-quality hay if it be on We have seen steers and heifers that butchers would not reject in the spring wintered on such a frugal fare as roots and good oat straw. They would have done better no doubt with some chop or good clover hay, but those commodities were not available for that class of stock and they did well without them. With a liberal allowance of silage and some dry fodder oteers and heifers will come through the winter quite satisfactorily, but if substantial gains are desired a little chop will give good returns.

Wheat in such a case would be very appropriate
for it is this class of cattle kind that can utilize
it to best short a contract would be make it to best advantage. The stock would be making bone and muscle, for which reason wheat would be one of the best of grains to feed. It should be borne in mind, however, that wheat alone is not so good as when mixed with corn, oats or barley. Alone it is pasty and sticky in the mouth, and when in use in this stable this winter, especially for growing stock, it would be wise to mix it with a small quantity of oats or barley or such grains as can be spared. With fattening cattle it should not form so large a percentage of the ration as is recommended for store cattle.

A newspaper report from Boston, Mass., claims that four-fifths of the milk consumed in that city comes from Canada and the adjacent states in tank cars, and in consequence cows are disap-Pearing from the state hillsides to the extent that there are now only 50 cows to every 1,000 of the population of the commonwealth. The problem has got into politics, the republican candidate for governor having promised constructive legislation, if elected, that will be fair to the consumers and incourage the state live-stock industry.

FARM.

The Institute Problem

Editor "The Farmer's Advocate"

In a recent issue of "'The Farmer's Advocate" you invite a discussion of the proposed re-organization of the Farmers' Institutes or the forming of the proposed County Boards of Agri-

Anything pertaining to Farmers' Institutes, which have contributed so much to the prosperity of the rural community in the past, should be of interest to all agriculturists. That interest in Institute meetings is waning seems, on the surface, to be a fact. In many cases this is so, and yet in others, much interest is yet manifested; at any rate it seems so to me, although having had but limited experience in Institute work I find that in the older, more thickly-populated districts interest has waned, but not so in the more remote and comparatively thinly-populated districts. In these places interest is shown by the numbers attending, and by the many questions asked.

It seems to me that there are several reasons for the lack of interest in these former districts, among which might be mentioned the following: 1, the influence of the press; 2, lack of numbers owing to rural depopulation; 3, lack of ample re-

wards in farming.
In the first place we find our agricultural papers, in ever increasing numbers, being placed in the homes of most of our farmers by a persistent number of canvassers and otherwise. These papers contain all the up-to-date literature and findings in science in regard to agriculture, so that it is very difficult for institute lecturers to bring anything new before an audience.

Then perhaps we forget that there are not so

many rural dwellers now as there used to be.

get busy and increase production, while our Federal Government is allowing injustices and burdens to be placed upon them? Are we being

asked to swim with mill-stones about our necks?

My opinion is that so long as these unjust economic laws remain, so long will farmers lack interest in agriculture and in Institutes, but let these be removed, then will people flock to the land, interest will be revived, and there would not need to be much of a change in Institute work, unless it would be to employ more demonstration work and have lantern-slide talks.

With regard to the new scheme, it no doubt is advisable in many districts. But why not have the territory covered by these Boards coincide with the territory covered by the District Representatives rather than according to the political For instance, my own township is in Russell Riding, but is included in the territory covered by the Carleton County Representative. One of the objects of the new scheme is to develop local talent, which would be a good thing. It should also result in the discussion of and the remedying of difficulties, which may be purely local, and of which an outside delegate might know little

Carleton Co., Ont. JAS. F. FERGUSON.

About a Corn Experiment.

Editor "The Farmer's Advocate":

In your issue of Nov. 11 you gave an account of a test with corn grown for silage purposes. It is not my desire to criticize I. B. Whale, who conducted the experiment, nor to boom one variety of corn more than another, but I believe it is important to look at such a test from as many viewpoints as may affect its bearing and

It is inferred that all the varieties were planted on the same date, or thereabouts; also that they were all harvested on the same date

and in an impartial manner. If the climanner. If the cli-matic conditions would have permitted you to have delayed harvesting the Dent varieties, your test was very unfair and could not but prove fatal to the latermaturing varieties. I consider this part of the test to be the basis of merit.

It is needless to note that had Quebec Yellow been in the test, it would have caught Longfellow napping, to say nothing of the Dent varieties. In the seed corn belt we find that Longfellow matures a bout ten days earlier than some of the Dent varieties. The writer saw last season some Golden Glow, which was grown at Hunt-ingdon, Quebec, and

which was quite well matured. I would think that almost invariably Dents would be grown well up to maturity in Middlesex county.

I am glad to note that the test was made in a field. Too many tests have been conducted with one or two rows of each variety, as it is generally conceded that a narrow strip of corn never does well.

This test should induce growers of Dent seed corn to select the earliest maturing strains of I do not wish to be misundereach variety. stood, as I have always advised the growing of such varieties as will properly mature, whether it be in the seed corn or silage belt. Government reports confirm the value of well-matured corn for silage purposes. Tests and scales are very important factors in determining results.

Essex Co., Ont. ROBT. W. KNISTER [Note.—It was unnecessary to "infer" anything as the corn was grown on our own farm "Weld-wood," and it stated explicitly in the article describing the experiment that all varieties got exactly the same treatment. They were all planted on the same day side by side in the center of our corn field and they were all cut the same day, Sept. 28, at the time our corn was being cut for silage purposes, and surely as late as one could safely leave corn on heavy land in Middlesex county. We simply gave the results of the tests as we found them, and think that our article was fair to the varieties as they showed up this year on our particular type of soil. The experiment was carefully conducted and the results carefully compiled. It is only one test. Others another year might not agree with it. All varieties had as many days to mature as we could give them. Dents could not have been left ten days longer .-



Our Lady of the Snows. A Canadian stream wrapped in its winter cloak,

The number of discarded churches and schools are sad reminders of this fact. Therefore, there are not so many to attend our Institute meet-In this township can be counted block after block of one thousand acres being worked by from ten to twelve men.

The last reason is the chief one, however, and is the cause of the second one. The rural prob-lem is purely economic. There is an important work ahead of the new Government Commission, viz., to find out what is the matter with Canadian agriculture. If they find out, as many of us are convinced, that farmers are seriously handicapped by our economic laws, and can induce the powers that be to remedy the matter, then the Institute problem will also be solved.

Perhaps there will be a difference of opinion regarding the third reason, viz., that farming does not yield sufficient returns. The majority of us are engaged in mixed farming, and must of necessity continue so. How many men on the average farm are making any more wages than a good hired man? A good man receives by the year three hundred dollars, with his board and washing thrown in, if living with the family, thus costing the farmer about five hundred dollars. Now, how many farmers can show an increase in ten years of five thousand dollars. Perhaps in some cases we may, if we count the increased value of land. The fact remains that if our children and women folk received wages for the work they do the farmer in many cases would have nothing.

Now, in view of this fact, is it any wonder that interest in farming itself is waning, and if interest in farming wanes, how can it be maintained in Institute work? The question then naturally arises: Are farmers being exhorted to Editor "The Farmer's Advocate":

Variety.

Longfellow.

Halton Co., Ont.

Golden Glow....

After reading the result of experiments with corn at Weldwood, which appeared in your issue of November 11, I thought it would be of interest to your readers to learn the result of my own tests, carried out under the supervision of 11.

R. Hare, District Representative for Halton.

The corn, consisting of 7 varieties, was planted in a heavy clay loam, which was a clover sod, ploughed in the fall and manured during the winter, with a mixed manure at the rate of 12

Compton's Early.....

Saltzer's North Dalo a

White Cap Yellow Dent.....

Wisconsin....

tons per acre. The corn from the butts and tips being sown separately from the bodies and the whole planted in one-eighth-of-an-acre lots, in hills 36 by 42 inches.

The corn was planted on May 27 and harvested September 27. On cutting and weighing the whole crop of each variety separately, I found that the seed from the tips and butts gave nearly the same yield as that from the body of the corn, and after thoroughly drying samples of shelled corn, I then tested it for germinating powers and tabulated my results as below, on a basis of the yield in lbs. per acre:

Lbs. of	Lbs. of		Germinat-
stalks and	corn on	Total	ing powers.
leaves.	cobs.	Yield.	%
12,912	7,488	20,400	85
9,312	7,488	16,300	85
10,504	5,616	16,120	97
9,784	5,616	15,400	98
7,24 0	6,360	13,600	93
8,184	5,616	13,800	70
68,000	5,360	12,160	85
		T. A.	DAWSON.

An Important Experiment with Corn.

Some months ago in "The Farmer's Advocate" an article appeared dealing with the planting of corn in hills and in drills. The writer attempted to outline the views of a United States investigator who claimed that corn planted very thickly in drills gave a crop for silage purposes superior to the hill-grown product, in that it became just as mature but the food constituents were in the leaves and stalk instead of ears and kernels. The corn grown thickly in drills gave, as one would expect, small stalks, plinty of leaves, but few ears. This made ideal silage. However, exception was taken to such corn on the grounds that it contained few ears and consequently did not carry the quantity, ton per ton, of food materials such as proteins, carbohydra es and fats. The experimenter, however, declared that he had proven by actual field test and laboratory analyses that the drill-grown corn was matured quite as well as that grown in hills and furthermore gathered and stored in the leaves and stalks just as much food material and in as digestible a form as did the hill-grown product. So far as we have been able to ascertain our experiment stations in Canada tabooed such a thing and have not yet attempted to confirm their own belief or dissipate their own prejudices by giving the practice a trial that Canadian corn and silage growers might have the facts relative to the methods herein outlined.

From experiments carried on at "Weldwood" with different methods of growing corn the staff of "The Farmer's Advocate" considered there was something in the assertion of the United States experimenter and anxious that corn growers in Canada might have the result of some tests conducted on Canadian soil undertook in the spring of 1915 to prove or disprove the contention of our neighbor across the line. Corn was planted at "Weldwood" both in hills and in drills, while some of the latter planting was done to thic ly that few ears formed. At harvest time, September 23, representative samples of each were sent to Prof. R. Harcourt, of the Chemistry Department at the Ontario Agricultural College, for analysis. The results of that analysis show decidedly that the drill-grown corn without ears was quite as well matured as the hill-grown corn and that it carried just as much food constitutents. Unfortunately the meisture content of the two samples as they were taken from the field was lost. The table submitted gives the amounts of the different materials in two e ua' samples after being dried to a constant weight and are quite sufficient to room to rose for it (a) be assumed with all actured that the two samples contained approximatly equal amounts of moisture whin bary sted. We are sure at hast that the drill grown corn was just as dry as the other, for it was more britt when harvested and less sappy in appearance. Therefore the figures in the table indicate the relative vehicle of the two samples of corn grown a cording to the different methods.

RESULTS OF THE VALUE OF

In some rewards the results of the boundary

be as well matured as that grown in drills. Prof. Henry, in "Feeds and Feeding" tabulates the results of the analysis of a corn crop in all its various stages of maturity, and that work shows an increase in protein and a marked increase in carbohydrates as the corn approaches the ripe condition. Relative to the experiment in question the drill-grown corn showed less protein but considerably more starches and sugars, which are classed under the name carbohydrates. Fibre also indicates maturity, but one would expect the coarse, growthy stalks produced in hills to contain more fibre than the stinder dri l-grown product; it would require an exems of fibre to sti en the stalks in order that it might sen!. significance can be attached to the excess of feet in one sample over the other. Henry's analyses show the fat content of samples at various stages of maturity to be almost constant. In connection with the ash the table favors the hill-grown product for maturity. To be consistent throughout the ash, carbohydrates and protein should have all been greater in one than in the other but such is not the case, and we are left to conclude that one is as well matured as the other, but the drill-grown corn has more starches and sugars, a very important item in silage. Furthermore, by adding the proteids, ash, fat and carbohydrates (the moisture and fibre being unimportant as food) we find this quantity of the earless corn to contain 71,66 parts of actual feeding constituents, while a like weight of eared corn contained 69.90 parts. There is evidently little difference in the two samples as feed.

in favor of the drilled corn. By sampling and weighing it was estimated that 32 ton; werd produced on an acre when sown in drills, while 17.4 tons was the greatest yield from any one of seven different varieties grown under the check-row system in hills 3 feet 6 inches by 3 feet 2 inches. The different cuttings were made in the drill-planted crop, in each case taking a distance of 42 inches which represented a hill of corn. The average of these three samples was 15½ lbs. The total per acre, of course, appears high but the rows were only feet apart and the corn was as thick in the drills as it could stand. When seeding the checkrow planter was driven twice over the same row dropping each time to its capacity. In addition to being thick in the row the corn grew high, in the ma ority of places comparing quite fa orably with the product of the hills. Allowing for any discrepancies that might creep into the calculations the drill-grown corn far out-yielded that produced in hills. This was evident in the field and we were not surprised that the scales showed such a difference in tonnage between the two

So far as cultivation and destruction of wieds are concerned there are argumen's for both methods, but the corn in drills grew so quickly and covered the ground so early in the season that weeds had little chance between the rows. In fact the land planted according to the drill method was cleaner throughout the season. Excessive moisture prevented as frequent cultivations as is customary, but the drilled connictions swanshed out anything but corn plants on that part of the field.

From the experiment we are fixed to believe that corn planted in drills will reduce more stage maneral than under the hill system. Furthers or, we must conclude for the time being that then planted thickly in dril's the corn matters of a well as hill can but stores its read possession as a testile leaves a 1 stalks instead that it is a conclude of manage for we have a fine as a well as the leaves a 1 stalks instead to use the stalk of the spring until the in order that it will not contain a planting their own a waying the spring until the in order that it will not contain a much or became too rige.

the objection to matured corn being that the kernels pass through the animals undigested. If we can obtain a goodly amount of carbohydrates good silage is assured, and when it is contained in the leaf and stalk it will male a palatable and digestible silage.

The corn grown under these two systems was ensiled and during the winter analyses will be made of enough samples of each to inform us as to the feeding value of the silage and how each has behaved in the silo. This information will be made public as soon as we have fed both varieties to the cattle and the results of the analyses are in our hands from the chemists.

China Adopting American Plans.

The Chinese Government has created a Ministry of Agriculture and (on me ce and inaugurated a system of extension teaching, beginning with a training school for travelling lecturers and demonstrations of improved farming methods. Four classes of experiment stations are heing organized, devoted respectively to cotton, sugar, forestry and pasturage. H. H. Jobson of College Station, Texas, has been engaged on a three-year contract as a cotton-growing expert, and a model ranch under another American has been established at Chu Chow devoted to cereals and horticulture, chiefly fruit growing. The appointees for extension work are required to ne over 25 years of age and must have had practical experience in farming in the districts designated where they will (1) give lectures, (2) distribute selected seeds for crop improvement, (3) demonstrate the use of impro ed implements, (4) investigate the causes of natural calamities and pests and (5) plan for the gradual improvement of various farming methods

THE DAIRY.

A New Canadian Milk Record.

Canadian Holstein breeders will be glad to learn that the cow Rauwerd No 12462, exhibited by G. A. Brethen, Norwood, Ont., at both Toronto and Ottawa Exhibitions has completed her test, finishing with a wide margin over previous Canadian records. In the semi-official A.R.O. test beginning the third day after calving she has produced 29,000.7 lbs. milk and 890.6 lbs. fat in 365 consecutive days. Calculating butter as 80 per cent. fat, her production is equivalent to 1,113.25 lbs. butter in this time. Besides exceeding all other yearly records in Canada Rauwerd's production has been exceeded only by three other cows in the world. Her performance is also noteworthy in that she spent nearly a month of her milking period on the fair grounds at Toronto and Ottawa and travelled some 500 miles on the fair circuit. When over ten months in milk and after having given 26,000 lbs. she possessed sufficient type and bloom to win second place at Toronto and first in Ottawa in what was considered very strong Holstein competition.

A daughter of Rauwerd, De Kol Mutual Countess, as a junior three-year-old, in R. O. P. made 20,679 lbs. milk and 694 lbs. fat, exceeding by a substantial margin the best heifers of her age on both sides of the line, including the present world's champion milk cow, Tilly Alcarta. Thus Rauwerd in a period of 8 months in the mature class and her daughter Countess, for the full year have the unique distinction of beating the world's 30,000-lb. milk cow in these two classes.

Throughout the year Rauwerd was fed the ordinary home-grown feeds such as silage, turnips, mangels and clover hay in winter. She was out on pasture each day in summer up till the time she was taken to the fairs. Her meal ration consisted of bran and oat and barley chop as a basis with the ordinary dairy feeds on the market such as oil meal, cottonseed meal, glutin meal, brewers' and distillers' grains varied from time to time so that she never got stale on any one feed. On account of the roughage, her mixture of concentrates and general care the cow was never off feed and apparently just as normal her work as the ordinary cow would be. Rauwerd has developed very strilingly each year. She is now well in calf and will have a little longer period of rest before her next calf than she did prior to her last freshening. Even greater things are expected of her next year.

"Breed and strain go a long way in the ability of an animal to turn its food to the best account, so that when it comes to a matter of producing the greatest amount of human food from a given area of land the exect of certain thrifty, rapidly fattening breeds and strains is point of view. not to be despised from a nation. cittle but of Many modern breeds, not only of producing sheep and pigs as well, are cula from a given a far greater weight of men! rs. quantity of food than their anciet f constitution this ability is largely a math ver it is the and power of digestion, but ah ock Journal. effect has been the same."-Ii

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POULTRY.

A Few Points Regarding Ducks.

As information about poultry raising has been accumulated and as the demand for properly fattened fowl has increased, ducks have risen in popularity among growers of the feathered kind. Formerly ducks ran more or less wild and their flesh did not acquire that nice flavor that is given to it to-day by partial confinement and suitable feeds. The time was when breeders were obliged to plead with dealers to handle their output, but now many 100-acre farms are devoted exclusively to duck raising, and the crop, when 10 weeks of age, goes to the trade without serious trouble or inconvenience. Duck cating has become both fashionable and pleasant.

It appears that thousands of farms are admirably adapted for the handling of a few ducks. Ponds or running streams are unnecessary, that is exploded theory. What is required are comfortable though not elaborate quarters and some knowledge as to how they should be fed. Ducks will not or should not replace chickens on the average farm, but we believe that the web-footed birds could be kept and bred profitably in addition to the hens. The busy season with them is short, and their accommodations can be more rudely constructed.

Housing, breeding and feeding are the three important phases of duck raising. Their feathers will protect them from almost any amount of cold, but they like to have their feet warm and dry when at rest. This peculiarity makes it unnecessary to construct expensive buildings. A small house made of rough lumber with the cracks covered and the roof papered, shingled or covered with metal to prevent leaking will The floor should be kept as dry as possible. Often a board floor is laid 6 or 7 inches from the ground and then covered with dry earth and leaves or straw. The breeding stock should be at liberty to go out when they please, for ducks like activity, and it is the exercise they will take of their own accord that prevents digestive troubles and keeps them healthy

They will be out early in the morning even in the snow and cold, for they like the fresh air, but at night they like to get into a dry, sheltered place and squat down on their feet, the vital part of their external anatomy

In breeding, the parent flock should not be fed too much fattening food. It is necessary to force the ducklings, but the laying stock should have an abundance of green feed and egg forming rations. A good mixture recommended for breeding and laying ducks is as follows: 50 per cent. by measure corn meal, 15 per cent. wheat bran. 15 per cent. green feed such as cooked potatoes, turnips or other vegetables, 12 per cent. beef scraps, and 8 per cent. coarse sand or grit. This should be mixed with water to a dry, crumbly state and fed twice a day night When the breeding season is over this ration should be changed to equal parts by measure of cornmeal, wheat bran and a cheap grade of flour; 10 per cent. of this bulk beef scraps, 10 per cent. coarse sand or grit and $12\frac{1}{2}$ per cent. green feeds such as green rye, oats, clover on anything of this nature available at the time. If the ducks have considerable freedom and access to grass and grit the two latter parts of the allowance might be omitted.

Secure a good drake and run from 5 to 7 ducks with each drake. Often more females than stated above can run with a single drake and the eggs prove fertile, but that depends largely on the character of the male bird. It is not wise to make the proportion of females to male too large. In many cases, especial y on large plants, the eggs are incubated artifically but this increases the initial expense, and where broody hens are available there should be little difficulty in getting a good hatch and rearing the ducklings with a very small percentage of loss.

When feeding remember that a duck has no crop; the food passes at once to the gizzard, thus making it unwise to feed any quantity of hard grains. They will consume some of course and relish it as is proved by their foraging in crain fields after harvest, but ducklings particularly should get the greater part of their feed in the form of mashes.

There are three different phases of feeding. first, to prepare ducks for market at ten we's of age; second, to develop young ducks to be kept as breeders; and third, the feeding of breeding stock. There's for the market should be disjoint of at the weeks of age, during which time per haps for different mixtures or rations could well be used

From ime of hatching to five days old tro vide th llowing mixture: Cracker or I read crumbs d corn meal, equal parts by many hard-li eggs, 15 per cent. of the to al bulk of crac and meal; sand, 5 per cent, of the total (ickers and meal. Mix with water or milk, ed four times a day.

Fro. e to twenty days old feed the following mi Wheat bran, two parts by measure corn m

THE FARMER'S ADVOCATE

this bulk; beef scraps, 5 per cent.; sand. 5 per cent.; green feed, 10 per cent. Mix with water to a dry crumbly state and feed four times a

From twenty to forty-two days old gie the following mixture: Wheat bran, two parts by measure: corn meal, one part; beef scraps, 5 per cent. of this bulk; sand, 5 per cent.; green feed, 10 per cent. Mix with water to a dry, crumbly state and feed four times a day.

From forty-two to seventy days old, the following mixture will tend to fatten the birds: Corn meal, two parts by measure; wheat bran. one part; beef scraps, 1) per cent. of th's bulk;

weather, for egg production is good and the fowls keep in a thriving and vigorous condition. Chicks hatched from stock kept in cold or cool houses are usually much stronger and thriftier than chicks hatched from stock kept in warmer houses. A house which is open on the south side must be well built on the other three sides in order to make it draft-proof.

The location of the house should be dry. the ground is wet or damp it should be well drained. This may be done by putting in a tile drain or an open ditch. The yards should be drained so that they will be dry most of the time. Damp ground is cold and it soon becomes

sour and unhealthy Chickens grow best on a sandy or gravelly loam. Both of these types of soil are usually easily drained and may be kept in a nice sweet condition.

Houses that face the south secure the largest amount of exposure to the sun's rays, which the fowls enjoy. A 'slightly eastern exposure is to be preferred to a western exposure unless the prevailing winds are from the east.

A safe working rule is to allow about four to. six square feet floor space per bird. The lighter breeds, Leghorns and Anconas, are more active than the g neral utility breeds, Hymouth Rocks and Wyandottes, and they will stand slightly more crowding. It is a good plan, however, to give the birds as much room as possible, keeping in mind

Small flocks usually pay better than large ones. A flock of twenty-five birds will usually lay more eggs per bird than a flock of one hundred. It will cost more, however, to construct four houses for four flocks of twenty-five birds each than one house for one hundred birds, and it will take more labor to care for the four flocks. The larger egg production secured from the smaller flocks would doubtless more than offset the extra cost of labor. Then, again, a flock of one hundred birds can be divided into four flocks

Damp air in the poultry-house is fatal to egg production. It is much better to have a cold, dry house than a warm, damp one. Hoar-frost on the walls of a house is the result of warm, moist air coming in contact with the cold walls. If the foul air is gradually mixed with fresh air, no rime will occur.

in one large house.

An earth floor is frequently satisfactory where the soil is light in texture and well drained. Otherwise a board or cement floor is better, and preferably the latter, as it is more durable and sanitary.

The nearer square a house is-o her tnings being equal-the less lumber it will require. A long narrow house is colder than a short, deep one, because it has a larger area of exposed surface and it is more inclined to be drafty.

The shape of the roof influences the cost of construction. The steeper the pitch the greater the cost of building, particularly with a shedroof house as compared with a gable or combination-roof house. On the other hand, the steeper the pitch the longer it will last. Most roofs are one-fourth pitch, while shingle roofs should be one-third pitch.

A poultry-house should be of simple construction, and the fewer permanent fixtures there are the better. The feeding hoppers, disting boxes and nests should be movable in order to make the house easy to clean.

The roosts should be made low down, particularly for the heavier breeds. Leghorns require about eight inches of perch room, Plymouth Rocks nine, and Brahmas ten. The roosts may be made of two by four inch scantling or of two by two inch piecs, with the corners slightly rounded.

When a dropping-board is used it should be made low down to admit of easy cleaning. For one roost, the dropping-board should be twenty inches wide, and for two roosts the boards should be three feet wide. It should be made of matched lumber and should be well constructed. especially where nests are located under the dropping-board. We do not use dropping-loards at all and we find that we save much labor.

Nests are made about twelve by liften inches and they should be dark, as this tends to provent egg eating.

Hemlock or vellow pine is frequently used in the construction of poultry houses.—From a bul letin on "Farm Poultry" by M. A. Jull.



Rauwerd.

Canadian champion milk and butter producer as she appeared at Toronto Exhibition, where she stood second

coarse sand or grit, 5 per cent.; green feed, 10 the cost of construction per bird. per cent. Mix with water to a dry, crumbly state and feed four times a day.

These recommendations should be used as a guide only. They are used largely where the greater part of the feed must be purchased, but on the farm there should be chop and meal available that would combine into a good ration.

Housing the Poultry.

One of the things upon which profitable egg production depends is a good, comfortable house The more eggs laid during the winter months the larger are the profits from the farm fock, but the diffcult question is to make the hens lay during the cold months of the year. On some farms the hens are allowed to roost in a drafty shed, and on other farms the hens are kept in the horse There are on many farms, however, poultry-houses that are often too small, poorly ventilated and with damp floors. housing conditions are often responsible for a low winter production from a good floc.

It cannot be said that any particular type of poultry-house is the bost; local con itions de-



Ready for Christmas.

termine to a large extent the exact type which will give good results. At the same tim, there are general principles which apple in all cases. A poultry-house should be comfortable, light

dry, and with a good supply of ir sh air, but free from drafts. It may be necessary to provide curtains in front of the house, and perhaps occasionally in front of the roosts on very cold nights. One should not be too dependent upon the use of cortains, and they should be made more or less stationary features. Use a cheap grede a conton for curtains, for it is as satisfacthe more expensive grades.

Houses with open fronts or cotton fronts have one part; rolled oats, 50 per cent, of proved satisfactory, even in the most severe

Winter Feeding for Eggs.

Editor "The Farmer's Advocate"

We need not expect a hen to lay eggs roosting on the fence and plicking up her living in the barnyard any more than a dairy cow to fill a pail running around the straw stack in winter. Now, in the first place I will give the dimensions of the hen-house I used which was frame, 9 x 30 feet, mostly inside another building with little outside wall excepting on the south side. About 12 feet of the space was for roosting and the remainder a scratching pen littered with chaff into which the grain feed was scattered. Fresh water for drinking was supplied every day, and if any remained unused it was emptied outside. hen-house should be kept clean the same as the horse or cow stable. My plan was to clean it well once a week, but I am satisfied that if time permitted it would pay to do it oftener, in fact, it ought to be done every day. My system of feeding was to give the flock of over seventy-five hens in the morning seven pounds of barley and after breakfast a drink which consisted of separator skim-milk warmed. The mid-day meal was six pounds of chop composed in the proportions of one part corn to two parts oats mixed with warm water. The evening feed consisted of seven pounds of whole corn. For green feed I gave them small apples, apple clippings and cabbages culled out from many which we grew. For grit I kept a small box two by three feet supplied with coal ashes. Hens require a little meat, and after butchering we saved the scrape and plucks for them. The grain feed amounted to about twenty pounds per day for the flock, which consisted of Barred Plymouth Rocks which had been graded up for some three years.

One season I began keeping tally to see just at the birds were laying. In the fall the old what the birds were laying. In the fall the old hens had been sold off leaving nothing but pullets, and from forty of them in January we We kept those 40 young hens got 96 eggs. over summer and added to the flock 38 springhatched birds which we raised that season. In the months of January and February we received 1,020 eggs, which at the price then averaged per dozen from the storekeeper brought Counting the feed at 20 cents per day for the flock the cost was \$11.80, leaving a profit of \$10.30 for the two months. During the month of March we secured 422 eggs, and during the whole year from 40 hens 5,000 eggs, which at the low rate of 11 cents each gave a return of \$75. Besides the eggs sold we raised 85 chickens, which at 30 cents each would return \$25.05 or a total of \$100.05. At the price of eggs now a very much better showing could be

Elgin Co., Ont.

M. CHARLTON.

HORTICULTURE.

Bordeaux and Sawdust for Storing Apples.

A few years' experimental work on the problem of "farm apple storage" has been conducted at the Vermont Agricultural Experiment Station and their results have been recorded in Bulletin No. The findings are not applicable to commercial storage. They are experiments with dips, and mechanical mixtures or media which might contribute toward the preservation of apples. Readers will see at once that such methods of storing could be practicable only under farm con-

Among the protective dips used may be mentioned Bordeaux mixture, lime water and paraffin; while some of the mechanical media were cork mawdust, wood sawdust, leaves, sand, chopped hay and paper wrappers. Of the protective dips Bordeaux mixture was the only one that gave anything like satisfactory results. This seemed to ward off fungus and preserve the fruit. Furthermore, the flavor of all the apples dipped with Bordeaux mixture seemed to be retained to a remarkable extent. Sawdust was the best mechanical medium tried.

The successes with Bordeaux mixture and hardwood sawdust suggested a combination of the two. Apples were first dipped in the Bordeaux mixture and then packed in hardwood sawdust. It was found that this combination and this method of storage preserved the fruit longer and more satisfactorily than any one process or any other combination of dips and materials. The authors describe their methods in the following paragraphs.

'In view of the favorable results obtained with the Bordeaux-sawdust treatment, one may inquire as to the use a farmer or orchardist may make of this discovery. It is not the present purpose to discuss the full range of application of this new principle of apple storage; but a single sugguestion may be of interest. In the first place the Bordeaux-sawdust treatment is not applicable to commercial quantities of apples. It is only of service to the man who is concerned in the preservation of the family supply and who lacks good storage facilities. Mazy varieties keep till mid-win-

ter in moderately good storage quarters. It is the late winter, spring or even early summer supply that calls for special treatment. It will, therefore, be necessary only to give special attention to the fruit designed for late use. To this end the author suggests, first of all, the careful grading of the fruit and the use only of perfect speci-The apples may then be immersed in a 5-5-50 Bordeaux mixture for ten minutes. The use of a gunny sack expedites the immersion. They should then be allowed to dry and, before packing, should be cooled to as low a temperature as practicable, so be it they do not freeze. As the packing in hardwood sawdust proceeds, a plentiful supply of the filling material should be used in order to keep the individual specimens somewhat assunder. The sawdust should be well firmed. The barrel should be stored in a cool and cleanly place. Once a supply of good hardwood sawdust has been provided, it may be used repeatedly.

"There is no cause for anxiety in connection with the use of Bordeaux. The apples will be but slightly and locally colored with the antiseptic solution. Chemical analyses were made late in the storage period with a view of ascertaining the amount of copper salts on the apples and scarcely a trace could be detected. However, if the apples are pared no possible danger can It should be remembered that a much interim elapses between immersion and use in the case of storage, than elapses between orchard spraying with Bordeaux and the utilization of fall apples which go into market at an early date. No one who was not looking for Bordeaux would be likely to observe the faint

spots in the cavities of apples.

FARM BULLETIN.

Just Before Christmas. It's comin' noo aboot the time o' year when

the wee lads an' lassies will be thinkin' aboot Christmas an' wunnerin' what auld Santa Claus will be bringin' them for a present, gin they behave themselves an' dinna' mak' ony trouble for their feyther or mither between noo an' the 25th o' December. It's a hard job tae drap a auld tricks at once an' tak' tae walkin' the straight an' narrow way sae sudden like. At least, that's the way I found it in the fits an' starts I took at tryin' tae reform. Monys the Monys the time I hae spoiled my chances for a full stockin' on Christmas mornin' by ma tendency tae get intae mischief. I mind one time ma wee brither an' I were sent oot tae the barn tae hunt for It was weel alang in December an' what eggs there was layin' aboot were liable tae be frozen, but I didna' ken aboot that then. I found one wi' a lang crack in it, an' I says tae mysel', "It maun be rotten I guess, or it wouldna' hae a crack like that in it. I'll see gin I can hit wee Dougal wi' it. He's over prood o' that new coat o' his." Sae I watched wisna' lookin' an' I flung the egg at him, intendma chance when he in tae dae na mair than spoil the looks o' that But the egg took him fair on the side of the heid, for I hadna' been vera carefu' in takin' aim, an' he just gle'd one yell an' went doon in a pile. I was unco' frichted an' ran intae the hoose tae get ma feyther. He cam' oot tae the barn an' picked wee Dougal up an' carried him in. wl' me followin' him, an' wishin' it was day after to-morrow. Weel, it was muir nor half an' oor afore Dougal cam' oot o' his faint, or whatever it was an' began tae tak' notice o' what was gaein' on. He had a big lump on his heid, aboot the size o' a plum, but when ma feyther an' mither saw he was beginnin' tae cheer up again, an' was likely tae pull through, they began tae think o' ither things an' I cam' in for ma share o' attention. "Will ye tell me," ma feyther, "what possessed ye tae be throwin" stanes at poor Dougal?" "It wina' a stane," says I, thinkin' I saw a way oot. 'It was just I'll be thinkin' it wis maybe the auld Plymouth Rock hen laid it an' that wis why it wis sae hard," says I, beginnin' tae cry. "The egg wis frozen, ye little scallywag," feyther. "Gang awa" tae the bedroom till I hae time tae attend tae ye." An' I got ma trimmin'; there's na guessin' aboot that. But what was worse, wee Dougal got my share o' Christmas presents that year an' I found naething mair in ma stockin' than a couple o' egg-shells filled wi' maple sugar. I wis mad eneuch tae fling them baith awa', but aifter thinkin' aboot it a while I changed ma mind an' made the best o' it. But tae this day, gin there happens tae be an egg by ma plate at breakfast I'm reminded o' the scrape I got intae wi' ma we brither Dougal. especially gin the egg happens tae be hard-boiled.

Hooever, I canna' say that I always cam' oot at the small end, in ma transactions wi' ma parents an' brithers. I mind anither time, just aboot a year aifter the frozen egg accident, ma auntie happened tae be keepin' hoose for us for a couple o' weeks or so. an', although she had na bairns o' her ain she had great ideas o' trainin' those that belonged tae ithers. This time I'm tellin' ye aboot was the day afore Christmas, an' ma auntie, bein' unco busy wi' the

cookin' an' a', got ma brither an' me tae help her. "'Here,'' says she, "you twa laddies tak" the seeds oot o' this package o' raisins, an' I'll ye a couple o' wee pies for yer dinner.' Weel, the thing looked a' richt tae me in mair ways than one, an' we went at it. Ma brither wis a smart little chap an' he worked awa' at these raisins wi' his mind on the ple, an' never a let-up till his share was a' feenished up. As for me, dinner an' the pie seemed a lang way aff an' I says tae masel', says I, "A chap ought tae hae a percentage on a job like this. tae tak' every third raisin for masel." I did. But when we got through, ma auntie came tae inspect the wark, an', says she tae me, "Sandy," says she, "'ye dinna' seem tae hae as mony as Dougal. Where are the rest?" Wi' a' ma faults I hadna' got doon tae tel.in' lies, so I says tae her, *Weel, auntie, I juist ate a few them. I took the seeds oot o' twice as mony as I ate, though," says I, "sae ye're gettin' them done pretty cheap." "Weel," says ma aunt, "gin ye's rather work on commission than for wages ye can gae wioot yer pie for dinner. Dougal can hae yours as well as his ain.'

It was a hard blow for me, but I had tae pie up wi' it. Dougal ate the twa pies an' every once in a while he would be tellin' me how guid they were. I didna' say onything, hooever, an' alang in the aifternoon Dougal commenced tae complain o' feelin' sick. "I hae an' unco' bad pain here, Sandy," says he, pittin' his hand on his stomach, "Weel," says I, "I guess those his stomach, "Weel," says I, "I guess those twa ples are no agreein wi one anither in sic close quarters. Ye'll maybe ken better than tae eat my pie the next time," says I.

Poor Dougal had a bad nicht o' it, an' it was some time the next day afore he was feelin' juist himsel' again. "I tell ye Sandy," he says tae me a guld while aifterwards, when we was talkin aboot auld times, "I was beginnin' tae think this was a pretty tough auld warld onyway. Warkin' for salary wasna' muckle better than warkin' on commission. It's as bad to hae too much as to hae naething at a'. I'm thinkin' we baith got oor lesson out o' the scrape," says he.

says, "I guess we did."

An' I sometimes get tae wunnerin' gin ony thing ever comes tae us in this life that hasna' got its lesson tacked on tae it somewhere, gin we will only take the trouble tae look for it. This warld is naithing mair than a big school in which we get oor experiences o' a' kinds, an' oor punishments an' rewards accordin' as we deserve them, sae far as I can see. Frae the time we're able tae stan' on oor feet we're geetin' oor bumps, an' I suppose we will keep on gettin' them until we try oor last examination an' pass oot o' this school intae some ither, where it's tae be hoped we'll hae a chance tae profit by oor hard experiences here. We are no' apt tae forget them sae lang as we stay on this job at ony rate. It's mony a lang year noo since ma brither Dougal an' me warked an' played an' fought on the farm thegither, but there isna' muckle a' it a' that I dinna remember. Talkin' aboot fightin' reminds me o' one time we were diggin' a cellar for the new hoose we were gaein' tae build an' Dougal an' me were sittin' on the bank takin' a wee rest aifter dinner afore gaein' back tae wark. Dougal thocht he wad lay doon for a meenute or so an' tak' a bit o' a sleep, sae he stritched himsel' oot on the edge o' the cellar wi' his hat over his face an' in aboot ten seconds he was dreamin' o' "hame an' mither." chance was too guid tae lose. I couldna' resist the temptation tae pit oot ma foot an' gie him a wee push, juist eneuch tae send him over the edge o' the bank intae the cellar. He was mighty short in the grain, was Dougal, an' when he cam up oot o' the mud an' dirt he juist made one jump an' got me by the hair wi' the intention I suppose o' killin' me on the spot. Hooever, I had no notion o' dyin' juist then, gin I could help it, an' it wisna lang before we were baith rollin' on the ground. In oor struggles we got near tae the edge o' the cellar again, an' as luck wad hae it over we went an' Dougal got his second mudbath that day. I wisna' muckle better mysel' an' when we got up an' looked at one anither we juist had tae laugh an' ca' the thing off. Dougal had a scratch on his nose an' I lost a handful o' ma hair, sae oor honor was maintained. Some folks canna' see ony use in fightin' un-

der ony circumstances, but I'm no' sae sure aboot it. I like tae see a chap stan' up for himsel' an' for what he thinks is richt even gin he has tae use his fists tae dae it. My school-days were what ye micht ca' a "seven-years war," canna' think it did me ony harm. On the contrary, I'm pretty sure it did me guid an' that I'm the better for it tae this vera day. At ony rate we get considerable satisfaction in reviewing the battles o' oor younger days, an' that's mair than we can say for mony a thing that we get mixed up in later on in life. When we quit fightin' we quit growin', no mistak' aboot that. Of course, I wouldna' say that I dinna' believe in arbitration, but that wad be in case the thing couldna' be settled by war. But I maun stap moralizin', Mr. Editor. I was juist intendin' tae tell ye a wee bit story ye ken.

SANDY FRASER.

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Agricultural Conferences at the Guelph Winter Fair.

There was a time in the history of the On- no trouble in the flock. Farm crops should be tarlo Provincial Winter Fair when the lectures given in connection with that annual event were attended by a large crowd of stockmen and farmers, but the Fair has grown to such an extent and the exhibits have improved so during the past few years that interest has seemed to wane comewhat in the lecture room. However, we can safely say that outside of the meetings connected with the seed branch of the work the attendance at lectures this year was a great improvement over that of a year ago. The leture room this vear was situated in the City Hall, the old room having been torn out to give more space for live This was a great improvement over former arrangements.

DECEMBER 16, 1915

The Fitting of Live Stock for Market. HORSES.

A goodly number were present on Monday afternoon to listen to the address's on the fitting of live stock for market. The horse department of this meeting was taken by John Gardhouse, of Weston, who pointed out that good fitting was not simply loading a horse with flesh but putting him in the best possible condition for the work that is required of him and counling wih that the best possible appearance. The horse should he strong, sound and hard, both in wind and limb, and should show that straight, natural gait so important in the draft animal to enable him to do the work expected of him.

Care should be taken in selection of the animal to be fitted. The horseman should be a good judge of thin horses and growing colts; and with regard to the colts and even oder horses, attention should always be given to the feet keeping them pared down and cared for properly. Fresh air and exercise are absolutely essential and very important in assisting to keep the animal's

feet, joints and limbs in proper condition. There are no hard and fast ruls of feeding. Be cautious at the beginning, and remember that the stomach of the horse is small. The theory that a horse should get so many pounds of feed to so many pounds of live weight will not work out in actual practice. Mr. Gardhouse cited the case of two geldings, one in low condition and one in proper fit, and made it plain in his remarks that if they were put at hard work the thin horse would require more feed than the other horse in order that, at his wor', he might be built up. The feeds recommended were rolled oats, bran, a few roots, and a medium quantity of good, well-cured, mixed hay or alfalfa. Mr Gardhouse believes the average person feeds far too much hay. The feeder should also remember that his horse should always get plenty of good. pure water and salt. Raw linseed oil is often profitably used in getting the animal's digestive system in proper condition. Rolled oats. 40%: bran, 30%; molasses, 20%;, and water, 10%, allmixed, will make a splendid ration, and along with a few roots, a moderate supply of well-cured hay, good, clean water, salt, regular feeding, and grooming with a fair amount of exercise should fit horses to perfection.

SHEEP R. H. Harding, of Thorndale, took up the fitting of sheep, beginning with the wintering of the breeding flock, which should natural'y come of the grass in good flesh and should get a liberal ration of clover, alfalfa, pea straw, bean straw, etc., along with three or four pounds of turnips or other roots, per head daily, up until a couple of weeks before lambing time. They should get also all the fresh water they will drink, and should have access at all times to salt and sulphur kept in a small trough fastened to the side of the pen. Where roots are not available on half pound of oats per day will greatly assit the in-Mamb ewe to meet the extra drain on her system. Exercise is absolutely essential. Otherwise weak lambs will result. Where the snow does not get deep the flock might well have the run of a small field near the barn up until March first, after which they should be shut in until turned on It is a good plan to have a movable feed rack and place it in the far side of the yard from the feeding pen so the sheen will exercise going to and from it. As lambing time approaches, if it is before grass, it is wise to increase the grain ration a trifle to insure plenty of milk for the lambs. Dry, airy pens are preferable to hot, stuffy, basement pens. A tightlyboard d shed with a wide opening to the south. and free from drafts is all that is required until lambing time, and unless a man is raising pure bred or early lambs for special rurroses. Mr. Harding believes that he is just as far ah ad to have his lambs dropped about May first when the ground is warming up and the grass will produce He ad ised the aring the ewes ahundance of milt. about April 19. All lambs should be docked at from three to seven days old, and all male lambs should be castrated, as wethers make ten per cent. faster gains than ram lambs and cause

arranged so that there is always rape or secondgrowth clover when the lambs are weaned.

Mr. Harding spoke of the marketing of lambs and referred to the fact that the demand, as it now exists, was for the light lamb, a condition which he believed was due to the fact "that all kinds of sheep and lamb had been sold for lamb in the past, and the housekeeper, thinking to make sure of getting lamb, had got in the habit of asking for the lighter weight. All lambs should be well finished and should not be marketed in a thin condition in order to keep somewhere near the weight limit which the market demands. Lambs make their best and cheapest gains in the fall, if provided with good rape or clover pasture. It will cost from three to five cents per day to feed these lambs in the winter. He ad ised the finishing of lambs a couple of months earlier if possible.

BEEF CATTLE.

Duncan Anderson, of Orillia, Ont., spoke on the fitting of beef cattle. He divided his subject into four principal points, namely: the dairybred steer, butchers' cattle, export steer, and baby beef. In his opinion the outlook for beef cattle raising was never better in the history of the Dominion, but owing to the fact that dairybred calves, had been saved in large numbers the market had been glutted with these cattle, inferior from a beef standpoint, to such an extent that at some times 90 per cent. of the butchers' cattle going on the market are dairy-bred stuff, which finally goes into soup or is used for , canning purposes. The man who keeps a dairybred steer and attempts to make beef out of him does not know his business, according to Mr.

At the present time the market demands butchers' cattle at from 850 to 1,100 lbs. live weight-cattle which will dress out 450 to 600 lbs. each. The very fat ones are discarded. The handy carcass with no waste is what is desired.

Export cattle are not very much in demand. In 1909 this country exported to Britain, alive, 113,000 cattle, while in 1913 less than 3,000 crossed the Atlantic alive, and this year none are going to Britain. The trade in the Eastern States, however, demands a heavy steer, and for that market the cattle cannot be too well finished and should weigh from 1,400 to 1,500 lbs. each. At the present time in Ontario haby beef is by far the most profitable form in which the grower and feeder can market his stock. It gives a quick turn-over, and in practicing it the feeder raises his own stock which is a great advantage, because, at the present time, cattle cannot be bought with any assurance of making very much

money on them through feeding. SWINE

The fitting of swine was discussed by Prof. Geo. E. Day, of the O. A. C., who pointed out that it had never been proven that any one breed of hogs will make cheaper gains than any other breed. However, it has been proven that young hogs make much cheaper gains than older pigs. For instance, experiments carried on in the States have shown that pigs weighing from 50 to 100 lbs. each made 100 lbs. gain on 400 lbs. of meal, whereas, pigs weighing from 150 to 200 ths. required 482 lbs. of meal to make ,100 lbs. gain, and pigs weighing from 250 to 300 fbs. required 511 lbs. of meal for 100 lbs. of gain. In his own work at the College he had found that pligs weighing from 54 to 82 lbs. required 310 its. of meal for 100 lbs. gain, while those weighing from 82 to 115 lbs. required 375 lbs. meal to 100 Its. gain, and those weighing from 115 to 140 Ms. required 438 Ms. mal, and again those weighing from 140 to 170 lbs, required 455 lbs. of meal for 100 lbs. gain. This season young pligs, from the time they were wean'd up to 170 lbs. in weight, made 100 lbs. gain on 280 lbs. meal, and these pigs never saw stim-milk. It has been proven then, that it is not impossible to raise pigs profitably without skim-milk. The substitute used was tankage, which comprised from 10 to 11 per cent. of the ration and cost around \$48 to \$50 per ton. It is necessary to have good pigs, good pasture and proper feeding to make Never put newly-wean d ries on chean gains. pasture. It is better to keep them inside until they reach nearly 100 lbs. in weight. clover seems to be the best pasture at Guelph, as difficulty is found in maintaining a stand of For early pasture sow a strip near the barn with oats or barley, and seed down to red clover with this crop at eight or nine pounds per Cut the grain for green feed or for hav in late June, and turn the pigs on the clover which will grow up rapidly about the middle of July. Fifteen or twenty pigs can be pastured per acre Pigs on pasture should get at least one-half a full meal ration, and three-quarters a full meal ration would prove even more proftail. pigs should go to market before seven months of It is important that Canada continue to produce the bacon hog as we cannot hope, in this country, to compete in the fat-hog business with the corn-growing sections to the South, and we can produce the bacon hog more cheaply than it can be done in Denmark and the Old Land. so that pig breeders and feeders should continue to pin their faith to the bacon hog.

Shipping and Marketing Live Stock.

Perhaps the best meeting the stockmen had was that addressed by Thos. McMillan, Seaforth, Ont., and J. J. Ferguson, of Chicago, Ill., on The Shipping and Marketing of Live Stock." This was a well-attended meeting and much interest was displayed throughout. We are giving Mr. Ferguson's address in full that our readers may have the privilege of reading and keeping it.

At this time when the best efforts of the Dominion and Provincial Governments are being directed toward increased production and improved quality of all farm products, the time is ripe for farmers and stockmen to study carefully everything which can help them to produce more and better crops and live stock. Better products would sell for higher prices, which means more money for the farmer and more comforts for the farmer and his family.

Canada is already fortunate in having a splendid equipment of modern stock yards and packing houses, which provide open competitive markets for the purchase of live stock and the sale of live-stock products every working day in the year, but we believe Canadian farmers and stockmen have not yet come as closely in touch with their central markets as have the stockmen of the United States. Much improvement would result from a better understanding and closer working relations between the producers and Canadian packers.

The Management of Public Stock Yards and the owners of Packing Houses invite visits from farmers and stockmen, and are always willing to show their friends from the country just how the commercial end of the live-stock business is handled.

In the production of cattle, sheep and swine, for meat purposes, no one any longer questions the value of well-bred sires of the most approved type, supplemented by judicial and liberal feeding of the animals with the right kind of feed from birth until ready for market. Canada has so long been a leader in the breeding and feeding of fine, pure-bred stock that any suggestion in this connection might seem unnecessary were it not for the fact that there is a very wide spread between the best practice of breeders of pure-bred live stock in Canada and producers of cattle, sheep and swine for commercial market purposes.

KINDS OF LIVE STOCK WANTED BY PACKERS.

anadian packers are only middlemen. agents, between the producers, who raise stock for market, and the consumers who buy meats and meat products. Packers buy stock on the open market on the basis of its desirability to the ultimate consumer. Public taste and demand change from time to time, so that the packer, in order to please his customers, must select, as far as possible, the kind and type of animal which will yield the kind and quality of product most desired by the consumer.

Unfortunately for the packer the country produces large numbers of animals which are not of the most desirable class, and not specially wanted anywhere. For the products from these animals special market outlets must be found. With world-wide connections, Canadian packers have a wide variet; in markets, so that ultimately a place is found for all kinds, grades and weights of meats and meat products. If it were not for this open world-wide market to which the Canadian farm r now has access prices for the less desirable kine's of live stock would suffer greatly. Although all kinds and grades of live stock clear through the modern packing house there are some kinds which are profitable alike for the producer, packer and consumer. kinds are always in demand at good prices, and the Canadian farmer who produces them will find his feeding operations much more profitable.

If the men who raise the cattle, sheep and hogs for market would occasionally visit the large live-stock markets and watch the packers' buyers grade and select the kind their business calls for and for which the market pays the best prices, a great improvement would soon develop in the grades and quality of live stock produced for meat purposes. While the modern packing house can find an outlet for all grades and weights of cattle, sheep and swine, the following

regarding most desirable kinds may be in order. CATTLE. - Demand for very heavy cattle loaded with fat has d'sappeared. The waste in handling these cattle is too great, consumers will not eat tallow, and the quality of the meat is not nearly so good as that from lighter, younger cattle. The demand for heavy cattle for export is exceedingly limited. The domestic market will take only a few b avy cattle occasionally for

e a chap stan' up for himsel' an ks is richt even gin he has tae dae it. My school-days were a' a "seven-years war," did me ony harm. On the consure it did me guid an' that or it tae this vera day. At ony derable satisfaction in reviewing r younger days, an' that's mair for mony a thing that we get on in life. When we quit fightin', no mistak' aboot that. Of a' say that I dinna' believe in tnat wad be in case the thing d by war. But I maun stap

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special purposes. There is a demand every day for well-bred, smoothly-finished cattle weighing from 900—1,050 pounds. The packer has no particular choice as to breed, but his customers prefer meats from well-bred animals of beef quality with a rating probably as follows: Aberdeen-Angus, Shorthorn, Hereford, Galloway, followed by pure-bred and grade dairy types. For straight beef production Angus cattle are probably most desirable from a packer's and retailer's stand-

Cattle which are hornless, either naturally or from operation, feed better and ship much better than animals with horns. Cattle feeders have no conception of the immense loss in the packing house resulting from hooks and bruises inflicted by horns during shipment. During the past year particularly, Toronto market has received large numbers of young cows and heifers which should have been retained on the farms for breeding purposes. These cattle usually arrive thin, shrink badly, yield poorly, and do not furnish beef of high quality. With prospects so bright for beef production such cattle should not be slaughtered except where the sacrifice is absolutely necessary. If they must be marketed they should be put in better condition before shipping.

Many farmers and shippers lose money by sending forward cows and heifers in calf for slaughter. Animals in this condition are worth much less in the packing house, and as this is a condition which is easily prevented farmers should give it more attention.

SHEEP.-Eastern Canada probably produces a larger percentage of desirable lambs in proportion to numbers marketed than any other section of the continent. From the packer's standpoint the short-wool types are most desirable as they yield trim, tidy cuts of handy weights, and please consumers much better than cuts from the heavier long-wool types. The most desirable weights run from 75 to 90 pounds. Many farmers anxious to market as much weight as possible, carry their lambs late into the season when they will average over 100 pounds. It is a question for the farmer to decide whether he wants heavier total weight at slightly lower price or to sell and ship the kind that will command top prices at lower weights. Heavy wethers or old breeding ewes, either thin or fat, are not wanted on any market, usually handled under protest. may seem unnecessary to add that the tails of all lambs for market should be docked and all buck lambs castrated early in the season.

SWINE.—'Choice Canada Pea-fed Bacon' has so long been recognized as the world's finest export bacon that little can be said in the way of suggestion for improvement. There is a tendency with farmers, when prices are high, to rush thin hogs to market. This has been specially true during the past season. A thin hog has nothing to recommend him either to the packer, the retailer or the consumer. While the farmer usually wants to get lots of weight on his hogs before shipping, most desirable weights from the packer's standpoint are 170 to 225 pounds. However, individual farm conditions should in every case control the time and weight at which the farmer markets his hogs.

TRANSPORTATION OF LIVE STOCK TO MARKET.

Every shipper should insist on the railroad supplying him clean, disinfected cars for moving his stock to market. Shippers should be particularly careful to know that cars which they intend loading have not come from districts where any live stock epidemic is prevalent without being thoroughly disinfected and inspected under Government supervision. Cars should be well bedded during the summer months, preferably with sand which is cool and sanitary. From November 1st to May 1st straw or coarse marsh hay are best. Clean, well-bedded cars improve the condition and appearance of stock on arrival at market, help prevent bruises and injuries, and undoubtedly favorably affect selling prices of the animal.

Shippers should insist, with transportation companies, on prompt handling of their stock in transit. Unreasonably long delays at shipping points, in transit or destination should be reported to traffic managers of the roads concerned. If improvement on the next run does not result the matter should be reported to the Railway Board, as every hour of unnecessary delay means direct financial loss to the shipper.

SELLING ON MARKET.

The best practice to day recognizes the value of an experienced commission man as selling agent and representative of the shipper. He is on the grounds in daily contact with the packers' buyers; knows all the ups and downs of the market, and can handle stock with much greater advantage to the shipper than the shipper can handle it for himself. It is good practice for a shipper, whenever possible, to accompany his load of stock to the stock yards and follow them through with the commission men so that he may learn whether he is bringing in the kind of stock the market demands, and whether the prices he paid to the farmers are fair and reasonable, based on quality of the stock.

SHRINK AND FILL .- It is the aim and purpose of every honest farmer and shipper to get as much feed and water into his animals before they leave home as they can possibly carry. The value of this practice to the shipper is questionable, as stock over-filled do not handle well, do not travel well, and often arrive at destination in a very unattractive condition. The usual feed before leaving home is desirable. We he itate to say much about the relative merits of selling weighed off cars as against selling fed and watered, as both practices have ardent champions at Canadian markets. However, we feel free to say the time is come when a single standard might well be considered. Large photographs were on view illustrating leading commercial grades of beef, mutton and pork. These were explained in detail to give stockmen an understanding of the relative value and desirability of the different kinds at public markets.

A FEEDER'S VIEWPOINT.

Mr. McMillan pointed out that the shipping and marketing of live stock involves fattening and fitting. In his belief animals should be let out for exercise each day for several days before going to market. Without exercise the animals may cripple. The ability of the cattle to stand shipment depends upon the feeding just before they are loaded. It is never good policy to gorge them before sending to the station, and it is always well, where at all possible, to deliver early in the morning, to avoid over-heating. Where cattle are marketed directly from the grass, they should be taken off pasture and fed hay just previous to shipping, as this will prevent too great loss in shrinkage. The cattle should be weighed as soon as delivered, as they will shrink from 30 to 60 lbs. per hour if left standing after being driven some distance. Under no consideration should the animals be abused, and the cars should be comfortably loaded, not too full nor yet to slack. Some cattle shipped from pasture direct showed a shrinkage of 80 lbs. each, while others taken from the pasture and fed hay, under the same conditions, showed only 35 lbs. shrinkage each. In shipping, the cattle should always be graded according to quality, as this means 10 to 20 cents per cwt. more on the market. Baby beef production is, in Mr. McMillan's opinion, most profitable, as cheaper gains are made.

Canada's Live Stock Markets.

Our live stock markets was the subject of one of the best addresses of the series, given by Prof. H. S. Arkell, Assistant Live-Stock Commissioner, Ottawa. Mr. Arkell estimated the value of the live stock in Canada at approximately threequarters of a billion dollars, which represents the capital of the farmers invested in stock and does not really estimate the actual product marketed annually, but in live animals, dressed meat, milk, butter, cheese, or eggs, a very considerable proportion of this total amount is annually turned A contrast is immediately suggested between the price obtained for the product as it leaves the farm and the price paid when it reaches the consumer. This problem is really the cost of distribution, which includes the legitimate services rendered by the commission man in selling the product, by the packers in transforming it into marketable meat, by the railway companies in carrying it, by the banks and financial transactions, together with all speculative profits attributable to the business of distribution and which result in depressing the price to the producer and increasing it to the consumer. It must be recognized at once that distribution cannot be carried on without the hanks, railway companies, packing firms, commission agents and all legitimate services rendered, but the question arises: is the toll taken in distribution too great, and to what part of the business must the excessive cost be charged and what is the remedy? These questions cannot be satisfactorily answered. In Mr. Arkell's belief speculative profits are frequently taken without reasonable compensation or service being given therefor. These are frequently offset, however, by losses, about which the public knows Rates are sometimes high, but Mr. Arkell believed it wrong to directly charge, as a body, the people engaged in the different phases of the business, either with dishonesty or extortion. However, an investigation is necessary, as the problems connected with the cost of distribution have increased with the growth of civilization.

The problem of distribution from the farmer's point of view is simply the problem of marketing. Mr. Arkell cited the case of the erg circle movement in Prince Edward Island, where, at the present time, there are 66 egg circles with 6,000 farmers as members and half the area of the Province is covered by their operations, a movement which has led to such improvement in production and quality that keen competition between firms in Montreal and Boston has resulted for these eggs, and the prices paid are commensurate with the value of the eggs. Last vear these circles did a business of a quarter million dollars, this year they will do between three and four hundred thousand dollars worth of business. This movement, undertaken by the farmers themselves, has done wonderful things for egg production. The sale of wool has also been revolutionized, which is a result of two years' work. Different grades of wool have been standardized throughout the Province, and an increase in price of from 3 to 5 cents per lb. has been realized by the members of the association, and the wool product of Canada has been able to secure satisfactory markets. Mr. Arkell believed that many losses not directly attributable to the financial houses, transportation companies or the packing industry could be averted without impairing the profits of any of those engaged in the business, and to the great advantage of the farmer.

The speaker then illustrated what the business resulting from the production and sale of live stock meant to the financial status of the Dominion. Between 1890 and 1905 Canada exported stock in large numbers to Great Britain and the United States. From 1905 to 1910 and 1911 this export fell off until in the latter year mentioned there was practically nothing, but again in 1913 we started to export and these exports have increased in 1914 and 1915. Before 1905 Canada was little known except as an agricultural country, but from that time on immigration increased with commercial enterprise, and labor employment went from the farm to other industries and consumers increased more rapidly than producers. Conditions at the present time force us to increase our exports in order to preserve our national credit. Prices of foodstuffs have gone above the ability of the consumer to pay for them, and consumption is cut in two. With the curtailment of consumption at home larger quantities are available for export abroad, The Hon. W. T. White has stated that the export of munitions and of agricultural and animal products has saved the credit of Canada. The manufacture of munitions will cease when the war ends, but the manufacture and export of foodstuffs may continue so long as the world market demands This means that the attention of the nation financially and industrially is being turned toward the importance of agriculture as the source of national wealth and that agriculture has an opportunity to come to its own in Canada. It is, therefore, the business of governments both Federal and Provincial, to give to agriculture better facilities for carrying out its business than had hitherto been provided. In 1911-12 agricultural exports amounted to 53 per cent, of the total export business, in 1912-13 to 58 per cent., In 1913-14, 54 per cent., while for the last ten months of the war to October 31, 1915, they amounted to 47 per cent., and exports exceeded imports by the amount of \$35,600,259.

By building up a live-stock trade we shall add definitely to the wealth of the country. The world does not want gold it wants food, and Canada is in a position to help produce it.

In Canada there has been a surplus of cattle for export. Feeding cattle have gone to the St. Paul market, butchers' cattle to the Chicago mar-0,679 head have gone to France. and a moderate number of high-class export cattle have been sold into the kosher trade on the local market with a number of cutters and canners. We exported in canned beef 9,620,882 lbs., and dressed beef to the amount of 21,753,672 lbs. The Department has made great effort to secure the sale of Canadian beef in Britain, and is hopeful that further contracts may be secured. Canada now has an opportunity to establish an export dressed meat trade such as she may not expect to obtain were operations delayed. If Canada lags other countries will step in and secure the trade. The former Minister of Commerce in France estimates that his country will need to import annually at least 200,000 tons of cold storage meats from the present until some years after the war ceases. The destruction in all these European countries requires little comment; meat will be required from outside in all of them. Great Britain has already taken all the surplus from Australia and has purchased heavily in the Argentine, which will have the effect of raising the world's price. The regular sources of supply of meat are apparently unable to meet the demands, so that it seems to be Canada's opportunity to get her share of this business. If Canada supplies an exportable surplus she must expect, then, to receive an export trade, and competition must be met from other sources of sup-When time again adjusts suprly and demand the price in Canada will naturally fall, but this will not be for some years.

Some interesting figures were given in regard to the pig market. Prior to the war Denmark was killing 60,000 pigs a week. It is now estimated that she is only killing 30,000 a week. To the end of October, 1915, Denmark killed 700,000 fewer pigs than in the same period in 1914. This is due to the fact that Denmark cannot get American corn or Russian barley and to the proximity of war. By a Danish Government regulation one-third the supply must be sent to Great Britain, one-third retained at home, and the other third likely goes to Germany. The Germans are now paying 40 cents a pound for Danish bacon. It is easily seen that part of Great Britain's supply is cut off. The other immediate source of supply is Ireland. To the end

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of October, 1915, Ireland killed 1,127,000 pigs. This represents an increase of not more than 200,000 as against the same period last year. From what source then is Great Britain obtaining her bacon? Canada's sales of bacon alone to October aggregate \$16,000,000, or an increase of between 300 and 400 per cent. as compared with a similar period last year. Danish bacon is now bringing from 95 to 99 shiftings per hundred on the British markets, Canadian between 85 and 83, and United States from 72 to 76. The United States is clearly unable to compete with Canada on an equal basis, in the Old Country market. Every indication points to the wisdom of increasing our hog production in Canada, but we must stick to the pronounced bacon

It may surprise some readers to know that the exportation of sheep for the months of September and October, 1915, amounted to 47,000 head. Ordinarily the surplus would go into cold storage, but this year very few sheep or lambs are hung in the storages and the surplus has gone across to the New England markets. There is a shortage on this continent of small meats, and the price is high. It is doubtful if any more profitable animal than sheep can be kept on the

Ontario farm. The development of agriculture is a first consideration as a source of economical revenue to the country and fundamental to the permanent establishment of the commercial status of the nation and indispensable to the well-being of the people. We must increase the productivity of the land and develop live-stock resources. The livestock marketing question is a national question. Violent fluctuations of markets must be avoided in order to secure steady business for the middleman and a permanent profit for the producer. Production must be lifted to a level such that, with a permanent surplus available for export. the price in Canada may be governed steadily by the world's market. Unless we have an unprecedented immigration to this country after the war, Mr. Arkell could see no other means by which we may expect to establish our live stock in Can-There must be more co-operation between the producer and the middleman, and recognition must be given of these four facts: 1, that the producer cannot continue to do business without a steady profit; 2, that the packers render a legitimate service in the live-stock trade in the distribution of the product; 3, that the railways must expect to obtain a reasonable toll in acting as carriers of the goods to the consumer; 4, that the banks can render efficient help in providing facilities under reasonable terms for the financing of every feature of the trade. The interests of these great and industrial bodies must be clearly allied in attaining the end in view. Each unit has a particular and important part to play.

Poultry Men in Session. POULTRY PRODUCTION.

Monday evening the lecture room was given to a series of talks on poultry. Marcellus, in his address on Poultry Production divided the subject into two branches: the production of eggs, and the production of meat. The factors affecting egg production were given as: breeding, feeding, exercise, housing and environment, each and all important, and the maximum production is not possible unless due consideration is given to all. Poultry breeding is old as an art but new as a science. Phenomenal egg records are not everything, as it is important to pay attention to eggs which hatch strong, vigorous chickens which grow to maturity. It should not be sufficient to be able to hatch 50 per cent. of the eggs set and rear 75 per cent. of the chicks hatched. Such results cause excessive national waste, and it is necessary that conditions be much improved. Also, the standard for Canadian eggs should be considered a factor in breeding operations, and to get eggs which will conform to the standards now set it is necessary to pay more attention to the eggs used for hatching purposes, incubating only those which are up to or above standard weight and which, in color, are good representatives for the breed laying them. It must be remembered that birds in close confinement generally produce eggs with lighter colored shells. It has been proven that the male bird is largely responsible for the transmission of heavy laying qualities from the parent to the offspring, and the influence of the female parent is secondary. Meat production must not be lost All birds selected for breeding purposes should be heavily muscled along the breast or keel and show a soft, fine-textured skin on the shanks. Constitutional vigor, however, should be a first consideration in breeding the stock. Pick out the birds which show the short, broad head and beak and have clear, bright, alert eyes, and a well-filled face in front of the eve.

The common grains grown on the farm, with green food or succulence, meat food, shell and grit will make an excellent ration for laying hens. Sour milk or buttermilk makes a good animal food, and cabrage, mangels or sprouted oats good green feed. The dry mash under average conditions is preferred to the moist, from the standpoint of labor and saving of feeding in the re-

sults secured. The dry mash should be fed from the hopper and accessible to the birds at all times. Birds require exercise, and the best way to induce them to take it is to cover the morning feed in the litter late the night before. The hatching power of eggs is lowered materially where birds are closely confined in small pens throughout the winter.

Housing is generally better understood than breeding and feeding. Houses must be well ventilated, free from dampness and free from drafts. The cheaper and more open type of house is usually preferred. The tight, close house, is generally difficult to ventilate, and, as a consequence, the air is damp and humid, and tuberculosis and disease is likely to spread. Always keep the birds comfortable and the pens clean, and the attendant should always look after his work and be careful around the birds not to excite them or disturb them. The question of production from first to last requires close attention to detail.

CANADA'S OPPORTUNITY.

The opportunity which is now at Canada's door, with regard to poultry and eggs, was brought before the meeting by W. A. Brown, of the Foultry Division, Live Stock Branch, Ottawa, who pointed out that Great Britain was the greatest egg-importing country in the world, taking, in 1913, 215,799,500 dozen. The war has disrupted this trade, and supplies which formerly came from European countries have been greatly interfered with. Fortunately Canada had a surplus this year. Twelve or fifteen years ago Canada shipped eggs to Britain, but increased home consumption caused a falling off, and during the six years previous to 1914 Canada imported eggs extensively; in the fiscal year 1912-13 alone to the extent of 13,000,000 dozen. High prices and increased demand, however, have increased production, and had it not been for the demand of the British market caused by the war, egg prices this year would likely have been lower than last. Early in the spring, with feed high and eggs dropping in price, many farmers did not set as many eggs as they intended. Prices were low in the Central West, so that there is a lack of stability in the poultry business. If the poultry industry in Canada is to be a profitable undertaking steps must be taken to place the Canadian product on the British market in such quantities and in such condition as will demand the highest possible prices. Canada has all the facilities for the production of high quality eggs, and the industry in this country, at present, is only a fraction of what it might be if advantage were taken of our present opportunities. According to the last United States census there were more poultry in the single State of Missouri than in the whole Dominion of Canada. The poultry industry of the western provinces is still in its infancy, and these provinces are well situated for both high summer and winter egg production.

Canada must produce, prepare, grade, market, and advertise her products and cause them to be in brisk demand on the markets of the world. We now have access to the British market in a way and to an extent, which, under normal conditions, would have been difficult to obtain. The Canadian surplus of eggs has been entirely inadequate to meet the demands on that market. Canadian storage eggs intended for home consumption have been exported and United States eggs imported to take their place. Also large quantities of United States eggs have entered Canada in bond for re-shipment to the Old Country, but the British market has not taken favorably to United States eggs. Canadian eggs are preferred because they are larger, as a rule, do not show shrinkage, and can be laid down in better condition, and the price quoted for Canadian eggs is from 2 to 4 cents per dozen higher than for United States eggs. In spite of this some Canadian dealers have re-packed United States eggs in Canadian cases. Such practices and the sending of Canadian eggs of decidedly inferior quality do not make for the stability of the It will not do to leave a matter of such great national importance as the development of this export trade in the hands of a few men whose anxiety to sell goods somewhat gets the better of their patriotic feelings. Production must be increased, quality improved, national standards provided, the quality of export regulated and supervised, adequate transportation provided and Canadian eggs widely and appropriately advertised. The hour of opportunity has arrived, the time to act is at hand.

John Porter, of Toronto, gave a very interesting address and threw out several valuable hints on the marketing of poultry, one of the most important phases of the business.

Seed Growers' Meeting.

On Tuesday at 10 a.m. the first seed growers' meeting was held with Prof. C. A. Zavitz in the chair. After routine business was attended to several papers and addresses were given which were listened to with much interest by the small crowd present.

Some practical experience in seed potato growing was given by H. Goltz, of Bardsville, Ont.,

a very successful grower of prize winning seed potatoes. While his own soil is a clay loam the prefers a sandy loam for potatoes. In p. eparing the land he plows down clover from the first to the 15th of September, plowing lightly. He then works the land until late in the fall, when it is plowed at greater depth. It is disked early in the spring and harrowed at intervals to kill sprouting weeds. It is important that the land be kept worked early in the spring in order to retain moisture. The potatoes are planted not later than May 24th in dril.s 28 inches apart and 5 inches deep, made with a riding plow. sets are cut with from one to three eyes each, and dropped by hand 14 inches apart in the drills. They are covered by harrowing the dails crosswise with the drag harrow. One week after planting they are harrowed, and cultivation is kept up throughout the summer, ridging the dirt slightly to the rows. Mr. Goltz uses Paris green only in spraying. He never uses a potato digger, and selects his seed by forking out the best hills and taking seed from those with the largest number of uniform tubers. He has grown Early Rose and Empire State varieties for twenty-three years without a change of seed, and has grown Early Eureka and Early Ohio for ten years. He advises selection with potatoes as with stock, using nothing but the best. We might have said that in the tall, at the time of the first plowing, he applies from ten to fifteen loads of manure per acre believing that the soil must be well fed. The potatoes for seed are pitted in a side-hill in sand, and they are left there until nearly time to plant. Mr. Goltz does not like to have his potatoes sprout too much before planting.

Alex Lamont, a successful grower of Mount Brydges, Ont., led in the discussion. The variety grown in his section of country is almost exclusively Dooley. Potatoes are planted after fall wheat or after clover. After harvest, where they are put in following wheat, the land is well cultivated following a light plowing, and if not clean is plowed again later in the season. From twenty to twenty-five tons of manure per acre are put on in the fall. The land is worked early in the spring and the potatoes planted about the 24th of May. They are plowed down on his farm every third furrow about five inches deep and about fifteen inches apart. Bordeaux mixture is used in spraying, and in Mr. Lamont's opinion is a success in keeping the tubers free from The potatoes are dug October 1st to 15th. The best hills turned out with a fork are used for seed for the coming year. Mr. Lamont had a good word to say for the standing field crop competition and what it has done to develop en-

thusiasm in his district. In the absence of A. J. Craig, of North Gower, who was to address the meeting on the Banner Oat Seed Centre of his section, W. D. Jackson, B. S. A., District Representative of Carleton County, read a paper from Mr. Craig in which the good that this Seed Centre has done was clearly brought before those present. year this one Centre will have 5,000 bushels more good seed of Banner oats than will be refor its own use. The Centre was organized in 1913 and has been a great success. L. H. Newman, in commenting on this work, pointed out that the first seed for this centre was bought from some growers in the West, who last year lost their crops and could not fill orders from British Columbia, which were finally supplied from the same strain of seed grown by the North Gower Seed Centre. In Mr. Newman's opinion, when these Centres are scattered over the entire country, there will be no shortage of good seed in any one year, because if the crop fails in one place, seed may be got of the

same strain desired from another section. OBSERVATIONS ON SILAGE CORN.

T. G. Raynor, of the Dominion Seed Branch, gave some of his observations on the growing of silage corn in Eastern Ontario. From ten years' experience and much experimental work he gave some very interesting facts relative to the advancement made in corn growing in that part of the country. Back in 1906 the dealers supplied the farmers with seed of such varieties as Mammoth Southern Sweet, Red Cob Ensilage, and White Cob Ensilage. The good varieties only formed a small percentage of the corn sold. Conditions have now changed until the demand is for the early maturing varieties and in place of corn being purchased, shelled in bulk, it is bought on the ear, for seed. Corn, to keep well, should not have more than 12 per cent. moisture, and when it is cut it contains from 20 to 25 per cent. Farmers, if they tried, could produce very much of their own seed. A larger acreage of corn is now grown in Eastern Ontario than before and more silos are erected each year. Formerly the corn in Eastern Ontario was grown in drills from 2 feet to 4 feet apart, usually from 3 feet to 3 feet 6 inches. During the last few years the hill system has become more popular, and in Mr. Raynar's opinion the hill-grown corn makes better silage than the drill corn. He has found the best results from planting corn 3 feet 6 inches apart each way for both silage and husking purposes, and also that there is little difference between Wisconsin No. 7, Bailey and Golden Glow when

THE VALUE OF GOOD SEED.

At the evening seed meeting Prof. C.A. Zavitz, of the College, gave an address on the value of good seed, in which he eulogized the various seed growers' associations and organizations for the work they were doing. His subject was dealt with under six headings, namely: good varieties; purity from other varieties; large, plump, sound, well-matured seed; seed of strong vicality; freedom from diseases such as smut, scab, etc.; and freedom from weed seeds.

Prof. Zavitz made it plain that the farmer, if he does not secure the best varieties of crops for his farm, is certainly living below his opportunities, and there is very little excuse for the man who is not wide awake to the value of the varieties which will best meet the system of farming which he is carrying out. In nearly all classes of farm crops, according to Prof. Zavitz, there are far too many varieties grown on the farms of Ontario. The number should be cut down as much as possible and only the best varieties used, and care should be taken to assertain the varieties best suited for the district in which they are grown. Prof. Zavitz referred to varietles which are best for Ontario generally, recommending O. A. C. No. 72 oats, U. A. U. No. 3 oats, Mandschueri and O. A. C. No. 21 barley, Dawson's Golden Chaff and Imperial Amber Winter Wheat, Mammoth Winter Rye, O. A. C. No. 61 Spring Rye, Common Emmer, Rye buckwheat, New Canadian Beauty and Early Britain Peas, Pearce's Improved Tree Beans, Hairy Vetcnes, Early Yellow Soy Beans, White Cap Yellow Dent and Wisconsin No. 7 Dent corn, Salzer's North Dakota Flint corn, Golden Bantam Sweet corn, Early Amber Sugar Cane, Ontario Valuegated and Grimm Alfalfa, Yellow Leviathan Mangels, Empire State, Davies' Warrior and Extra Early Eureka Potatoes. He also recommended the Marquis Spring Wheat and the Arthur variety of field peas from the Central Experimental Farm at Ottawa. By the way, the Marquis variety received the spring wheat championship at the Winter Fair. At the O. A. College, O. A. C. No. 72 gave a yield of 103.5 bushels per acre, and the American Banner 92.8 bushels per acre. The O. A. C. 72 has surpassed the Banner in each of the nine years in which they have been tried, and at the Winter Fair this year there were 137 varieties of oats, 57 being No. 72. The O. A. C. No. 72 had more than four times as many entries as any other variety of oats. Prof. Zavitz went into the vields of the leading varieties mentioned, as they have been worked out on the college plots this year. At the Winter Fair this year there were 40 entries of barley, and not a name occured with the exception of O. A. C. No. 21, and the Bureau of Industry report places the increase in yield of barley in the last 16 years as compared with the 16 years previous at 23 per In potatoes Prof. Zavitz mentioned the Extra Early Eureka which gave 323 bushels per acre this season, and has given an average of 232 bushels per acre for the past five years.

One of the greatest troubles is to get pure samples of grain in Ontario. Purity of varieties is very important.

It is necessary to sow nothing but large, plump, sound, well-matured s ed. In experiments with cereals repeated from four to nine years there has been an average increase in bushels of grain per acre per annum where the large, plump seed was sown against the shrunken seed of 15.4 in oats, 7.8 in barley, 4 in spring wheat, 7.8 in winter wheat, 5.1 in peas, and 3.8 in spring rye,

in favor of the large, plump seed.

Seed of strong vitality is necessary and a'l seed sown should be tested as to germination. In each of two years when winter wheat was sprouted in the fields germination tests of the grain were made with the following results: Where the skin over the germ was unbroken 94 per cent., skin over germ broken 76 per cent., sprouts onequarter inch long 30 per cent., and sprouts one inch long 18 per cent.

Seed should always be free from disease as smut and scab. Losses were particularly heavy this year from smut. The best treatment used for this at Guelph is immersing the grain for 20 minutes in a solution made by adding one pint of

formalin to 42 gallons of water. With regard to potato rot, experiments at Guelph showed a great difference in the susceptibility of different varieties to this disease. 1915 two varieties had less than 1 per cent, each of rot and two other varieties had unwards of 50 per cent. under similar conditions. Those varieties freest from rot were Davies' Warrior, Extra Early Eureka, Stray Beauty and Holborn

Abundance, those most subject to it were Early Rose and Beauty of Hebron.

Of course, all seed should be free from weed seed impurities, and it is of great importance to sow pure seed in a proper rotation, to apply the manure before cultivated crops, to practice thorough cultivation of the soil, and to watch the roadsides, fence corners, neighbors' fields, etc.

THE IMPORTANCE OF FANNING MILLS.

Following Prof. Zavitz, came Prof. Murray, of Macdonald College, who gave an address on the fanning mill, its construction, purpose and use, going back to the early days, when the fanning mill depended entirely on the wind blast for its effectiveness, and tracing the development up to the present time, when fanning mills are used to remove straw, chaff, stones, etc., to remove shrunken, light or immature seed, to grade the seed according to the size and weight, to remove weed seeds and other foreign seeds.

It is worth while to grade seed because the miniature plant must depend upon the supply of food stored in the seed for its early growth. seed is composed of the plant and this food sup-If the seed is shrunken there cannot be much food for it. The results of experiments were quoted which showed that in every instance the heavy seed yielded from 3 to 9 bushels per acre more than light seed with oats, and in every case it yielded from 1 to 8 bushels per acre more than medium seed. The results of experiments carried on at four experimental stations were given. In wheat, experiments were quoted showing a greater yield of 21 bushels per acre more with large seed than with small seed, and at Guelph spring wheat yielded 5 bushels per acre more from large seed than from small, and winter wheat showed a difference of 9 bushels per

acre in favor of the large seed. Grain must be clean and free from weed seed Prof. Murray quoted from a bulletin recently issued by the Seed Branch. Over 4,000 samples of grain that were actually being sown were taken. 978 of these samples were oats, and 44 per cent. of these oat samples were free from noxious weed seeds; only 12 per cent. were free from all weed seeds; 42 per cent. were free from seeds of cultivated plants. The sample having most noxious weeds had no less than 4,838 per lb., and contained enough noxious weeds to sow 2,000 per square rod. Several other equally bad facts were brought out in connection with the samples of barley and spring wheat, proving conclusively that there is not, at the present time, enough emphasis placed on the cleaning of the Prof. Murray figured that a good fanning mill could be purchased for \$30, which meant only an outlay of \$1 per acre on 30 acres of (ro) for one Figures which he quoted in connection season. with the seed samples taken at Ottawa would prove that in many cases from \$2 to \$3 per a rewould have been saved each year by good clean-

Then he went into the equipment of the fanning, mill. Extra screens should be provided for nost mille and the man buying the mill should study it carefully. Many mills are poorly operated; screens are not selected to do the work required, and their adjustment warrants more attention than it ordinarily receives. The capacity of a mill frequently gets more attention than it deserves. Speed is of secondary importance in cleaning seed grain; efficiency is the prime consideration. It takes 20 busnels of seed oats for a 10-acre field, and 50 bushels per acre is an expected yield, making \$200 from the field. A fast mill will clean the 20 bushels in 15 or 20 minutes, and the time of two men would be worth about 25 cents. A slow machine might require an hour at a cost of 75 cents. A saving of 50 cents on the seed for this field might mean a loss of from 2 to 10 bushels per acre and a liberal sprinkling of weed seeds. This looks like Speed is unimportant. Efficiency poor economy. is of prime consideration. The fanning mill should be of good construction, strong and dur-Simplicity is a prime requi ite. The mill should be easily adjusted, and not require a mechanic to repair. For the ordinary farm the hand machine was advised, but where Seed Centres are organized a power machine might do better work. The original equipment purchased with the fanning mill is not generally complete, and more screens are often required.

GRAIN SCREENINGS.

Grain screenings was the subject of a short paper by J. R. Dymond of the Seed Laboratory, Ottawa. He estimated that this year 100,000 tons of screenings will be cleaned out of Western grown grain at the terminal elevators at Fort William and Port Arthur. These screenings consist of from 40 to 60 per cent. small and shrunken kernels of wheat, oats, barley and fax. The remainder is made up of 25 to 30 kinds of Western weeds. The elevators reclaim as much of this domestic grain as possible to mix with their feed grains, a large proportion of the remainder going to the United States, but considerable comes to Eastern Canada. This material has considerable feeding value, but there is a danger of spreading weed seeds when used. Dymond cited a case where registered seed was

spoiled by using a dressing of manure from a livery stable, the manure having contained weed seeds from Western oats which had been fed to the horses. A sample of rolled oats was brought last winter to the Seed Laboratory by Mr. Newman, and it contained 120 weed seeds per ounce, 95 of them being wild oats, some of these had been crushed, but 100 were picked out of the sample just as they came and 12 produced plants These rolled oats were purchased by a Farmers' Club for feeding purposes. In bulletin 319 a report of 149 samples of chop feed shows that 30 contained wild oats, 15 contained wild mustard, 10 contained stink weed, and 8 contained hare's ear mustard. Lambs' quarters and wild buckwheat occured in 26 and 22 sam 1 s es ecti ely, One sample of chop feed contained 26 samples of wild oats, 18 of wild mustard, 1 ball mustard, 13 hare's ear mustard, 5 stink weed, 20 lambs' quarters, and 25 wild buckwheat per ounce, equivalent to 1,648 weed seeds per pound. other sample averaged 3,248 per lb. letin gives the names and addresses of the manufacturers of these feeds.

Feeders should consult these publications so as to be able to avoid buying from millers and feed manufacturers who are not careful to destroy the vitality of the weed seeds going into their feed. Formerly millers miled their unground screenings with bran and shorts but now these are ground previous to mixing, but it requires great care in the grinding else many small seeds escape being crushed. Screenings that have not been graded to remove the finer seeds cannot be satisfactorily ground by ordinary choppers, as special machinery is required to pulverize the tiny seeds. Experiments have shown that the complete elevator screenings are somewhat unpalatable to all classes of s.oc , but by adding molasses, the ration was made palatable for dairy cows. It is advis d to se arate the fner weed seeds, usually called "black seeds." In purchasing screenings for feed buy only recleaned screenings and be sure all smal seeds are removed. All the screenings accumulating at the Government Elevators, Calgary, Moose Jaw, Saskatoon, and the terminal elevators at Fort William will be recleaned this year. These racleaned screenings will be of good feeding value, and should be avaiable to East rn fe drs moderate prices. It is manufactured and sold by the Board of Grain Commissioners, and samples will be available from C. E. Austin, Supt. of Government Elevators, Fort William. Any sample suspected of cent ining vital weed seeds will be examined and reported upon free of charge by the Seed Branch, Ottawa.

SEED DISEASES.

At the morning seed meeting W. A. McCubbin gave a somewhat technical address on seed with special reference to the potato. This address being, as formerly stated, largely technical we are holding it for our Horticultural Department in a later issue where we will have more space to go into details.

On the whole the meetings this year were a decided success, but they were not attended by the large numbers which should have availed themselves of the opportunity of hearing these addresses. The program was arranged so that the addresses did not conflict very badly with the judging. However, those who missed the meetings should save this report as it contains, in summarized form, the best points brought out.

The Season in Quebec.

Editor "The Farmer's Advocate":

In this part of the Province we have had a fairly good season. The hay crop was light on account of the very dry weather in June and July, but the beautiful hay s a on allowed us to secure the crop in good condition. Fortunately we had a few showers in the first part of August, which helped to mature the grain and brought on the other crops very quickly. September was a fine, hot month, so that crops ripened off well and corn was fairly good. Water was very scarce; many wells and springs were dry. The rains in October were not heavy and dry ground was hard to plough. On November 15 we had a heavy fall of snow, which has all disappeared during the recent warm weather so that the water situation has improved. The last week of November was real "Indian Summer;" those who had not finished ploughing have had a fine week for it, and to-day, December 1, many are still ploughing.

P. P. FOWLER. Shefford Co., Que.

Good Prices.

Wee McGregor, the champion steer at Guelph and Toronto Fat Stock Shows was sold at Toronto to the T. Eaton Co. for 46 cents per pound. The next highest price was 221 cents per pound for a baby beef heifer, and the third highest was 20 cents per pound for a dehorned steer under one The first-prize carload of steers brought \$11.60 per cwt. There was keen competition in the bidding for the prize stock, all of which sold Gan

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Canada's Greatest Winter Live-stock Show.

Superlative! No other word or words could of expectancy is now absent, for few importations are being made, but there are still the big classes on Cedric King by Cedric's Baron; 2, Hassard, and the same from contacts. It is now absent, for few importations on Cedric King by Cedric's Baron; 2, Hassard, and the same from contacts. fittingly describe the 1915 Ontario Provincial Winter Fair held at Guelph last week. Guelph always has a great fat stock show, but, with added classes, larger entries, more uniformly good fitting and increased accommodation for exhibits and spertators, last week's show eclipsed all other fat stock exhibitions ever held in Canada, and small wonder was it that the face of the enthusiastic, capable and always energetic secretary, R. W. Wade, beamed with a broad smile of satisfaction. Attendance records were broken; exhibit records were smashed; history was made; and everyone was pleased. Many difficulties were overcome in putting on this great fair, for, up to a late date, the Military occupied the buildings and uncertainty prevailed. Much hard work had to be done in a short time. The seating capacity of the ring-side gallery was increased by one-third; cattle stalls took the place of the old lecture room, and a new room was provided in the city hall; more entries were handled, and all was ready so that the great show ran smoothly from The only appeal heard was for first to last. more room and when conditions right themselves this will surely come. Everything possible was done to help people see the educational side of There were no weak features. The display of horses in numbers and quality never was qualled at Guelph. The cattle classes showed a big step forward, for, from end to end of the long line-ups the entries were in fine fit. There was an absence of half-fitted stock which formerly weakened the show. The sheep pens were filled with just a little better exhibits than ever. The bacon hog, in all his breeds, kept pace with the advancement shown in other departments. Poultry broke the Canadian show records; and the grain and seed exhibit was a marvel in quality and arrangement. Top this off with vigorous addresses on live agricultural subjects, and the Winter Fair must go down into history as the best yet of its kind.

DECEMBER 16, 1915

Nothing is perfect. This year's show will be overshadowed in years to come. Greater things will eventually grow out of the success of this year. Ontario is demonstrating what can be done, and we expect to see the Provincial Winter Fair improve and expand and continue to show the way. If lectures are to be continued, they should be announced from time to time in the ring, and the public directed to the lecture These meetings are good and should be attended by larger audiences. We must commend the management for the efficiency shown under difficulties. More stalls, a larger ring and three times the seating capacity are required. All these things will come.

The Hon. Martin Burrell, Dominion Mini ter of Agriculture, officially opened the fair on Tuesday afternoon, (which seemed a little late for the opening), in an eloquent address dealing particularly with the Federal Aid given to Agriculture under the present regime. The Hon. Duncan Marshall, Minister of Agriculture in Alberta, and the Hon. Finlay McDiarmid, acting Minister of Agriculture in Ontario, also took part in the opening exercises. The report which follows brings out the progress in each department.

Horses.

Between fifty and sixty horses were stabled in different places around the city in addition to those that found accommodation in the Winter Fair building. Space was inadequate to accommodate the excellent display of the equina kind, for in numbers and in quality they surpassed anything with which the management had been obliged to deal in the past. Only a very few importations have been made this year, but there are plenty of good horses in this country, when brought together, to make a horse show of outstanding merit, and that is exactly what occured at the Guelph Winter Fair. On more than one occasion the arena was occupied from one end to the other by a single class, and even then there was not sufficient room in which to exhibit the animals with ease and without danger to the horses and grooms. The classification for this department was so well filled that future growth will be prevented both by stabling accommodation and by the limited area of the arena where the entries are shown.

CLYDESDALES.—Year after year the Clydesdale enjoys the most popularity of any equine breed at the Guelph Winter Fair. Hackneys may, through their artificial action, excite the onlookers for the time, but for that lasting esteem which goes out to the utility heast the bonnie Clyde makes the greatest bld. They exceed other breeds in numbers, and when there is a class being judged there is always an interested audience at the ringside. In former years Guelph was a coming-out place for importations that did not land in time for the Canadian National, and there were some interesting classes indeed when these new animals lined up in the arena to await the decision of the judge. Some of the element

and the same keen contests. It is customary for the Canadian-bred animals to out-number those in the open classes, and they did in 1915 by a wide margin. Prof. W. J. Rutherford, Saskatoon, Sask., made the awards in the open classes, while Canadian-breds were judged by J. M. Gardhouse, Weston, Ont.

In the line-up of aged imported stallions were entries that had met on different occasions in the past. Lord Gleniffer, a Toronto and Chicago grand champion, went to the top, but not on account of action, for the horse was older than the majority of his competitors and had lost some of his show-ring skill in moving. However, his 2,200 pounds of weight were so well carried and he was in such excellent bloom that he would have looked out of place elsewhere in the line. Scotia's Pride occupied second position in 1914 and again this year. He was a heavy horse, a good mover and set on good legs and feet. Like last year's results. a lighter horse with perhaps more quality went into third place; this year it was Baron Senwick, a black, sired by Baron's Pride. Flat, flinty bone and a good set of hoofs were distinguishing features of the candidate with the white ribbon. Alert and Ardyne Blend were fourth and fifth, with three more below them.

With the three-year-old stallions came Baron Ascot, last year's grand champion at Guelph. History repeated itself in that the same horse won his class and the grand championship of both imported and Canadian-bred classes. Baron Ascot was very firmly coupled, possessed a good quality and was a good mover. Lord Malcolm were stable males of the winning entry, and stood second and third. Fourth came Birchburn with excellent feet, and Royal Type, a little more upstanding, was fifth.

In the class for two-year-old stallions were four candidates. The Count of Hillcrest was superior in quality of bone and slope of pastern, but the judge considered that the substance of Cedric King was sufficient to justify the placing of the red ribbon on the latter horse. former animal was beautifully built, but perhaps a shade small to compete in such heavy company.

There were only two yearlings in the male classes. These were Royal Design, a new arrival in this country, and MacQueen of Atha, a young The former fellow sired by Gallant Carruchan. horse, a black with considerable quality and good conformation, won the red ribbon.

Nine aged mares constituted one of the best classes in the ring, and from that number a few were chosen that presented strong arguments for Nell of Aikton, a four-year-old in excellent bloom, gave a good exhibition of action. She possessed a pair of hocks that are seldom equaled, and she could use them in a perfect manner. Again there was Laura Dee that won the three-year-old class last year and was still showing in good form. She was foaled in 1911 and showed in the freshness of youth. Honors in this class and premier position among the female classes went to an aged mare that is well known to Clydesdale admirers, namely, W. W. Hogg's Royalette, which is now eleven years old. had lost some of her former life and freshness, but she still retained that excellent conformation and quality as well as a true and easy way of moving that carried her to the top of this line-up and ultimately to the grand championship. Dee was second in the class; Nell of Aikton was third, while Snowdrop and Bloom of Whitefield were fourth and fifth.

The three other classes for females were not so well filled, but in them were to be seen some good individuals. The three-year-olds were led by Quenelda of Petty. Lady Ascot won in the two-year-olds, and Heather Moon, a nice filly, was placed at the head of three yearly fillies.

Exhibitors.-John A. Boag & Son, Queensville; Smith & Richardson, Columbus; T. H. Hassard, Markham; Levi Good, Greenock; J. F. Husband, Eden Mills: Bender & Walter, Cowanstown; Graham Bros., Claremont; A. G. Gormby, Unionville: Jos. Telfer, Milton West; T. D. El'iott, Bolton; Jas. Weatherston, Puslinch; Geo. Miller, Caledonia; Charles Gilstorf, Mount Forest; W. W. Hogg, Thamesford; F. C. Wilson, Rothsay; W. F. Batty, Brooklin; H. A. Mason, Scarboro; R. C. Rogerson, Fergus: John D. McGibbon, Milton.

Awards.-Aced stallion: 1 and 4, Graham Bros., on Lord Gleniffer by Sir Ronald, and Alert by Baron's Pride: 2 and 7, Smith & Richardson, on Scotia's Pride by Crossrigg, and Gartley Ideal by Baron Ideal, 3, Boag & Son, on Baron Senwick by Baron's Pride; 5, Elliott. on Ardvne Blend by Hiawatha: 6. Bender & Walter, on Dunure Lucky Star by Baron O'Buchlyvie; 8, Husband, on Glassford Laird by Glassford Favorite. Stallion foaled in 1912: 1, 2 and 3, Graham Bros., on Baron Ascot by Baron's Pride. Fyvie Peer by Diploma, and Lord Malcolm by Mendal: 4, Boag & Son, on Birchburn by Everlasting; 5, Smith & Richardson, on Royal Type by Sir

on The Count of Hillcrest by The Bruce; 3 and 4, Smith & Richardson, on Baron Kipling by Baron's Pride, and Everard by Everlasting. Stallion foaled in 1914: 1, Smith & Richardson, on Royal Design by Baronet of Ballindalloch: 2, Graham Bros., on MacQueen of Atha by Gallant Carruchan. Aged mare: 1, Hogg, on Royalette by Royal Edward; 2, Smith & Richardson, on Laura Dee by Baron O'Dee; 3, Hassard, on Nell of Aikton by Baron O'Buchlyvie; 4 and 7, Mason, on Snowdrop by King Tom, and Pride of Auchenclieth by Picador; 5, Miller, on Bloom of Whitefield by Scotland's King; 6, Boag & Son, on Popular Polly by Sir Hugo. Mare foaled in 1912: •1, Graham Bros., on Quenelda of Petty by Baron O'Buchlyvie; 2, Smith & Richardson, on Mandoline by Mendel; 3, Hogg, on Lady Mary Aberdeen by Bubio: 4, Boar & Son, or Schwar Duches by by Rubio; 4, Boag & Son, on Solway Duchess by Title Deeds. Mare foaled in 1913: 1, Boag & Son, on Lady Ascot by Ascot Chief; 2, Mason, on Blink of Airmont by The Right Honorable. Mare foaled in 1914: 1, Mason on Heather Moon by Macaroon; 2 and 3, Hogg, on Jean Armour Dunure David, and Denholmhill Blossom by Marmarides. Mare and two of her progeny: 1, McGibbon, on Young Jess of Whitefauld; 2, Wilson, on Fanny Clark; 3, Batty, on Newbigging Beauty; 4, Rogerson, on Maggie 4th of Drum. Three, the get of imported sire: 1, Batty, on get of Gallant Carruchan; 2, McGibbon, on get of Marathon; 3, Rae, on the get of Major Muir. Champion stallion: Graham Bros., on Baron Ascot. Champion mare: Hogg, on Royalette.

CANADIAN-BRED CLYDESDALES. - There were in all an even dozen classes for Canadianbred Clydesdales, and all except two were well filled. This part of the horse classification is important, for it allows the breeder of a few or many horses, as the case may be, to exhibit what can be produced in this country. The entries were well fitted and well brought out, which resulted in some close contests and a fair distribu-tion of prize money. J. M. Gardhouse, of Weston, Ont., made the awards in this division.

The aged class of stallions included in its number of six Lord Ronald and Glen Rae, stable mates from Seaforth, Peerless Ascot and Baron There was no animal present that was Rozelle. outstanding for quality, but as a whole the entries were the good, useful kind. Lord Ronald, a horse with plenty of substance, firmly built and a good mover, went first, with Baron Rozelle, another strongly-coupled animal, standing second. Peerless Ascot, a shade more upstanding than the two above him, was moved into third place, and Glen Rae. a sire with a number of his get in the show and many of them in the money, stood fourth. Orla's Boy was fifth and Honest John sixth.

Only five three-year-olds came forward, but first was Randolph Romeo, an animal with grand underpinning, a good slope of rastern, and a good mover. He was later made champion of the Canadian-breds. International, a fine type of sire but not possessed of as good a set of hoofs as the winner, stood second, with Ross Mac-Gregor third.

Seventeen two-year-old stallions made a grand display. They were a good lot, and a good advertisement for Canadian breeding. Royal Regent. from the Claremont stables, showed by his action that he was entitled to a position well up in the line, and he was ultimately given first place. Sir Acme was a strong individual in loin, chest and breast, and otherwie worthy of the blue ribbon. Canada's Glory, another solid fellow, was put third, and fourth in the line stood Appolo, a shade smaller animal but endowed with considerable quality. Two other good candidates got into the money, and a number of first-class entries went back to the stables with only the honor of having given a good account of themselves in a strong class.

Out of an even dozen yearlings, Duke Carruchan, carrying the style and quality of old Gallant Carruchan's get, went to the top. Tommy Atkins, with peculiar markings, able to move properly and possessing quality and good underpinning, went second, while in third place was found, at the last, Grandee's First, one of the proper kind, but not fitted quite so well as some of the others.

In the aged mare class stood thirteen firstclass individuals. Dairy Dean by Dunure Baron was given premier place; Queen of Tuan, a smooth thing of fair quality, received the blue ribbon, and Charm, last year's champion female, went third: Queen Maud was fourth, and Bess Gartly

A strong class of two-year-old fillies came forward, and for a time Lady Bydand by Bydand and Scotland's Charm by Kinpurnie, strove for The latter filly was exceedingly the red ribbon. well fitted and showed well in action, but she did not appear to possess the outcome that breeders

n in Quebec. .dvocate'': Province we have had a

e hay crop was light on y weather in June and nay s a on allowed us to condition. Fortunately the first part of August, the grain and brought on ckly. September was a t crops ripened off well

good. Water was very springs were dry. The t heavy and dry ground n November 15 we had a ich has all disappeared weather so that the oved. The last week of an Summer;" those who

ng have had a fine week nber 1, many are still

P. P. FOWLER.

Prices.

ampion steer at Guelph Shows was sold at Torfor 46 cents per pound. as 224 cents per pound d the third highest was dehorned steer under one rload of steers brought was keen competition in stock, all of which sold

Nillie Carruchan, one of the Brooklin fillies by Gallant Carruchan, was considered best of six yearlings. She was well put up and made of quality stuff. Flora Dora, with considerable substance and good bone, was second, while immediately below her stood a stylish filly, but perhaps a shade smaller, Jean Scott. Miss Seal, a nice thing, was fourth, and Spark's Blossom, a compact, nicely-coupled thing, was fifth.

Eleven fillies foaled in 1915 lined up with Nellie Muir, first; Marathon Belle, second; and Fancy Baroness third.

Exhibitors.-J. & W. Gray, Londesboro; Thos. McMichael, Seaforth, Hastings Bros., Crosshill; Wm. Woodley, Dundas; Smith & Richardson, Columbus; R. C. Rogerson, Fergus; Lew Richardson, Ashburn; T. H. Hassard, Markham; Hodgkinson & Tisdale, Beaverton; G. A. Smith, Erin; John D. Ballantyne, Atwood; A. G. Gormley, Unionville; Robt. Nichol, Hagersville; J. J. 1nnes, Bright; Wm. B. McKay, Embro; Fred. J. Wilson, Rothsay; Peter Christie, Manchester; Robt. Tuck & Son, Eden Mills; Levi Good, Greenock; I. Weylie, Caledonia; Graham Bros., Claremont; W. Findlay, Brampton; Jas. Given, Georgetown; R. J. Barton, Beeton; Geo. Mi'ler, Caledonia: Robt. Patterson, Rockwood; Alex. Farr, Wal'enstein; Garfield McMichael, Scaforth; Chas Gilstorf, Mount Forest; Wm. Rae, Jr., St. Mary's; John D. McGibbon, Milton; Chas. H. Turner, Omagh: John Gildner, Berlin; W. F. Batty, Brooklin; W. W. Slimmon, Wallenstein; Geo. Dale & Son, Clinton; Archie Lamont, Mt. Brydges; Jos. Fewster, Brampton; Arthur Sayles, Paris; Arbogast Bros., Sebringville; Harvey Hastings, Schomberg; R. A. Roe, Hawkestone; Robt. A. Watt, Blyth; Allan Fried, New Dundee; Robt. C. Given, Glen Williams; Alex. McCort & Son, Bolton; W. G. Ormiston, Burketon Jct.; W. R. Beattie, Elora; H. A. Mason, Scarboro, W. H. D. Steen, Bramp-

Awards.-Aged stallion: 1 and 4, McMichael, on Lord Ronald by Baron's Luck, and Glen Rae by Great Britain; 2, Hastings Bros., on Baron Rozelle by Rozelle; 3, Woodley, on Peerless Ascot by Prince Ascot; 5, Rogerson, on Orla's Boy by Prince Orla; 6, Gray, on Honest John by Balladoyle. Stallion foaled in 1912: 1, Hassard, on Randolph Rome Sir Randolph; McMichael. International by Prince Romeo; Richardson, on Ross MacGregor, by Lord George; 4, Smith, on His Royalty by Royal Scott; 5, Hodgkinson & Tisdale, on Golden Spark by Gay Spark. Stallion foaled in 1913: 1, Graham Bros., on Royal Regent by Gallant Carruchan; 2, Christle, on Sir Acme; 3, Barton, on Canada's Glory by Celtic Baron; 4, Gormley, on Appolo by Beau Ideal; 5, Wilson, on Gay Ronald by Montrave Ronald; 6, Innes, on Prince of Shasta by Prince Expectant. Stallion foaled in 1914: 1, Batty, on Duke Carruchan by Gallant Carruchan; 2, Farr, on Tommy Atkins by The Charmer: 3, Miller, on Grandee's First by Grandee's Last: 4, Rae, on Major's Pride by Major Muir; 5, Hassard, on Sir Elgin by Capulet; 6, Rogerson, on Prince's Dandy by Dandy Prince. Stallion foaled in 1915: 1. Hassard, on Pride of Dunedin by Dunedin; 2, Fewster, on Sprucehill Favorite by Golden Favorite; 3, Wilson, on Montrave Ronald: 4. Gray. on Nation's Stamp by International; 5. Dale & Son. on Honest Tom by Glen Rae. Aged mare: 1, Hasward, on Daisy Dean by Dunure Baron; 2, Hastings, on Queen of by Baron Elect; 3, Miller, on Charm by Lord Charming: 4, Tuck & Son. on Queen Maud by King's Seal; 5, Roe, on Bess Gartley by Baron Gartley; 6, Arbogast Bros., on Nellie's Pride by Baron's Luck: 7, Lamont, on Jean Pilgrim by Elderside; 8, McMichael, on Spring Mare foaled in 1912: Beauty by Glen Rae. Wilson, on Bertha Orla by Prince Orla. Mare foaled in 1913: 1, Miller, on Scotland's Charm by Kinpurnie: 2, Roe, on Lady Bydand by Bydand; 3, McGibbon, on Jennie Crawford by Marathon; 4, Batty, on Nora Carruchan by Gallant Carruchan; 5, McCort & Son, on Bessie Scott by Kirkland: 6, R. Given, on lady Cook by Royal Cook. Mare foaled in 1914: 1, Batty, on Nellie Carruchan by Gallant Carruchan; 2. Watt, on Flora Dora by Glen Rae; 3, McCort & Son, or Jean Scott by Whittington; 4. Beartie, on Mis-Seal by King's Seal; 5, Nichol, on Spark's Blossom by Gay Spark; 6, Ormiston, on Parey by Black Ivory. Mare foaled in 1915: Arbogast Bros., on Nellie Muir by Major Muir: 2 and 1, McGibbon, on Marathon Belle by Marathon and Lady Marathon by Marathon; 3. Stren, on Fancy Baroness by Baron Hamlet. Three, the

get of sire: 1 and 2, McMichael, on get of Glen Mare and two of her progeny: 1, Miller, on Charm; 2, McMichael; on Princess Glendrie; 3, Gray on Minnie. Champion stallion: Hassard, on Randolph Romeo. Champion mare: Miller, on Scotland's Charm. Grand champion stallion: Graham Bros., on Baron Ascot. Grand champion

nale: Hogg, on Royalette.
SHIRES.—There were only three exhibitors in the Shire classes. These were John Gardhouse & Sons, Weston; J. M. Gardhouse, Weston, and H. Folliott, King. In only one class were there more than one entry. Watnall King shown by John Gardhouse & Sons, was alone in the class for stallions foaled previous to January 1, 1913, and J. M. Gardhouse's Dunsmore Nateby was the only stallion foaled in 1913. This horse was made champion stallion. Rokeby Halo, Nicausis Queen and Bonny Jess were the three females that responded to the class for mare loaled previous to January 1, 1913. Rokeby Halo won this class and was later made champion female, for J. M. Gardhouse, Weston. Nicausis Queen won second place for John Gardhouse & Sons, and Bonny Jess was third for H. Folliott. Heather Belle, a mare foaled in 1913, was the only one in a class for females of that age. She was exhibited by J. M. Gardhouse. Tuttlebrook Dina was exhibited by John Gardhouse & Sons, and was the only mare in the class for those foaled on or after January 8, 1914. Although the numbers in this breed displayed were small yet there were some good individuals, and it was too bad that longer line-ups could not be secured.

PERCHERONS.-Breeders of the Percheron horse took advantage of the Guelph Winter Fair to exhibit some of the good horses which they have had in this country for some time, or have purchased within the last few years. Some of the animals which were brought out are well known to horsemen, while others more or less un'nown came forward and helped to make an excellent exhibit of this type of horse. The classes were larger and the quality was better than has been customary at Guelph during the last few years. Fourteen excellent horses were forward in the class for aged stallions, and it was indeed a wonderful sight to see the arena filled from end to end with these big, majestic gravs and blacks. Ichnobate, a horse which has been champion on many occasions, was chosen to head this great line-up, while Irade, another large gray sired by Sahara, was moved into second place. horses were strongly coupled and nicely turned, but in this regard Kavaignac was also to be considered, and he was given third place in as good a class as ever lined up at Guelph. Avocation was fourth and Jet fifth. Ichnobate, the first-prize entry, was ultimately made champion of the males.

In females, Lacune, foaled in 1911, was osen for champion. She won her class in chosen for champion. which there were three entries, and came up against Lady Emoresse which won in the class for mares foaled in 1913 or later. Although there were points about the former mare that could be criticised, yet the judge prefered her to Lady Empress for premier position.

Exhibitors: David Fountain, Weston; J. B. Hogate, Weston; Shantz & Block, New Dundee; R. Hamilton & Son. Simcoe; Hodgkinson & Tisdale, Beaverton; Levi Good, Greenoch: Wm. Pears, West Toronto: W H D Steen Brampton: T. D. Toronto; W. H. D. Steen, Brampton; T. D. Elliott, Bolton; F. J. Sullivan, Windsor; Mrs. E. Hogate, Weston; H. B. Callender, Guelph.

Awards.-Aged stallion: 1, Hodgkinson & Tisdale, on Ichnobate by Alger; 2, Elliott, on Irade by Sahara; 3, Hamilton & Sons, on Kavaignac by Romancier: 4, Sullivan, on Avocation by Avocate; 5, Steen, on Jet by Etudiant; 6, Fountain, on Jeantes by Coco. Stallion foaled in 1912: 1, Hodgkinson & Tisdale, on Molitor by Imposant. Stallion foaled on or after Jan. 1, 1912: 1, Hodgkinson & Tisdale, on Niguot by Jurien; 2, Pears, on General Cormier by Cormier, 3, Mrs. Hogate, on Beauchemier by Indigo. Aged mare '1, Hogate, on Lacune by Gogel: 2, Pears, on Lady Grey by Incivil: 3. Callender, on Junette by Casino. Mare foaled on or after Jan. 1, 1913: 1 and 2, Pears, on Lady Empresse by Cormier and Lady Julia by Cormier. Three, the get of sire: 1 and 2. Pears, on the get of Cormier. Mare and two of her progeny: 1 and 2, Pears, on the progeny of Julia and Impresse. Champion stallion: Ichnobate. Champion mare: I acune.

Robt. Graham, Toronto. HACKNEYS.—Seldom if ever before has there been such a spectacular Hackney show staged in Ontario as that witnessed at the Winter Fair this year. On Wednesday evening when con iderable of the judging of this breed was done great excitement prevailed, and at times it appeared that the Backney had come back to enjoy the popularity that was more pronounced years ago. In the aged stallion class over 15.2 the struggle was between Spartan and De Wilton. Right royally did they perform as the audience shouted and cheered De Wilton ultimately went to first place; Spartan, which in his carrer has mastered show-ring etiquette went second, and Warwick Albert was third. Prickwillow Connaught after a lively contest with Anticipator, won the class for aged stallions under 15.2. He was a strong-

ly-built fellow that could step high and move straight and quickly. The two-year-old stallions also made an interesting bunch. Excelsior, a dark, bay youngster of perfect symmetry and grand style, won his class quite easily with Oscar, a well-built horse, in second The three winners previously mentioned, De

Wilton. Prickwillow Connaught and Whitegate Excelsior made a championship class that lifted the visitors off their seats with excitement. After a wonderful exhibition of Hackney action and performance Prickwillow Connaught was given the ribbon for which they had all competed so strenuously. Some excellent animals appeared in the female classes. Princess Winyard, the winning yeld

mare foaled previous to January 1, 1913, was made champion over all her competitors on account of her conformation and ability to move in a very pleasing manner. Other females of excellent merit were Bobcaygeon Empress, Model's Queen Misty Morn and Whitegate Gertrude. On the whole it was a splendid display of Hackneys.

Exhibitors.—Jas. Tilt, Brampton, Graham Bros., Claremont: Jas. M. Semple, Milverton; Robt. M. Ross, Paris: H. M. Douglas, Finvale; John W. Manary, Duntroon; J. F. Husband, Eden Mills; John D. McGibbon, Milton; Crow & Murray, Toronto, Jos. Telfer, Milton West; Chas. Osier, Cairo; J. M. Gardhouse, Weston; W. W. Hogg, Thamesford: John Bingham, Georgetown R. C. Rogerson, Fergus; H. Blackstock, Thornton; John A. Boag & Son, Queersvile; H. A. Mason, Scarborough; Geo. M. Anderson, Guelpn. Awards.-Aged stallion, (15.2 and over): 1,

Semple, on De Wilton by Drumlanrig: 2, Tilt, on

Spartan by Polonius; 3, Ross, on Warwick Albert

by Warwick Premier. Aged stallion (under 15.2):

Crow & Murray, on Prickwillow Connaught by Forest King; 2. Douglas, on Anticipator by Rosador; 3, McGibbon, on Warwick Performer by Warwick Model; 4 and 5, Telfer, on Harry Lauder by Warwick Model and Paderews' i by Vanguard. Stallion foaled in 1913: 1, Gardhouse, on Whitegate Excelsior by Whitegate Commander; 2, Hogg, on Oscar by Terrington Semaphore; 3, Telfer, on Model's Best by Warwick Model; 4, Osier, on Burntwood Model by Anticipator. Stallion foaled on or after Jan. 1, 1914: 1, Tilt, on Dector Spartan by Spartan; 2, Gardhouse, on Avondale by Whitegate Commander; 3, Osier, on Burntwood Sensation by Anticipator. Brood mare: Bingham, Bobcaygeon Empresse; on Gardhouse, on Whitegate Gertrude; 3; on Miss Derwent Performer; 4, Rogerson, on Dante Bess by Dante Yeld mare foaled previous to Jan. 1, 1913: 1 Husband, on Princess Winyard by Warwick Model; 2. Telfer, on Princess Euroda by Vanguard; 3. Rogerson, on Dante Model by Warwick Model. Mare foaled in 1913: 1, Telfer, on Model's Queen by Warwick Model: 2, Beag & Son, on Derwent Performer: 4, Mason, on Island Lily by Dalton King. Mare foaled on or after Jan. 1, 1914: 1, Mason, on Misty Morn by Harviestown Fanatic;

2, Husband, on Brookfield Princess by Brookfield Laddie; 3, Tilt, on Miss Spartan by Spartan; 4, Osier, on Nellie Performer by Guelph Performer. Three, the get of sire: 1, Telfer, on the get of Warwick Model; 2, Tilt, on the get of Spartan; 3, Osier, on the get of Anticipator. Mare and two of her progeny: 1, Gardhouse on Whitegate Gertrude; 2, Osler, on Burntwood Lily. pion stallion: Crow & Murray, on Prickwillow Connaught. Champion mare: Husband, on Connaught. Champion mare: Judge, Robt. Graham, Princess Winyard. Toronto.

STANDARD-BREDS.—The number of Standard-breds which were led into the ring was not great, but among them were individuals that had won in horse shows both in Canada and in the United States. Some had excellent conformation and quality, and the majority of them gave evidence of considerable speed. Jim Todd which has been shown many times by Miss Wilkes, of Galt, won his class, and was again made grand champion. In females Brerette was chosen as best of the lot. She was a mare of excellent con-

formation, stylish and of superb quality. Exhibitors.—Ashley Stock Farm, Foxboro; L. Charlsworth, Blyth; Chas. Sewers, Greenock; S. Goodison, Dixie; Miss K. L. Wilkes, Galt; M. P. Barry & Co., Rockwood; Jas. J. Fitz-patrick, Halloway; Patterson Bros., Agincourt; Geo. F. Stevens, Galt; Crow & Murray, Toronto; John Menzie, Galt; J. E. Keough & Sons, Rock-

wood. Awards.-Aged stallion: 1, Miss Wilkes, on Jim Todd by Todd; 2, Charlsworth, on Ike Medium by Red Medium; 3, Sewers, on King Brice by Baron Chimes: 4, Barry & Co., on Michael Grattan by Steel Arch; 5. Ashley Stock Farm, on Alick by Dr. Ullman. Stallion foaled on or after Jan. 1, 1913: 1, Patterson Bros., on Arley McKerron by Jack McKerron; 2, Fitzpatrick, on Harford Ashley by McMartin; 3, Stevens, on Jim McGregor by Jim Todd; 4, Sewers, on O. U. McKinney by McKinney. Aged mare: 1, Crow & Murray, on Brerette, by Bingara; 2 and 4, Miss Wilkes, on Okom Belle, and Mary Regina by Mograzia; 3, Ashley Stock Farm,

on Philly Wir or after Jan. Whitegate Skeeno Todd Jim Todd; 3

Fannie by No Ingara. Thr Thr of Alick; 3, Grattan. M Grattan. Ashley Stock stallion: Miss female: Crow Robt. Grahan THOROUGI bred division

DECEMBER

classification; than one entr Exhibitors.
Guelph; F. I Guelph; Jas. Brampton.

Awards.-S 1. 1913: 1. Masetto; 2, P. McCrae, on P. or after Janu Fox. Mare f 1 and 3, Cla and Miss Mor Diffident by A January 1, 19 Selwick. The Selwick. Bros., on the her progeny : pion stallion and Carrillon.

Ponies.- E increase in nu trend of the very large but ticular being s of sugar a fev less and mone Talke Fire Ala Hackney which couple of year the top of his males. A sw same stables, champion of Welsh ponies v last year and Exhibitors.

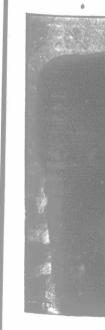
L. C. Wilkin,

Toronto; R.

Jones, Buriord Awards.-Ha 1 inch and u Alarm; 2. Will inson, on Folly age: 1, Gardho Shetland stall boy F .: 2. 3 an Teddy R, and any age: 1, W lagh, on Daisv anv age: 1, W Jones, on Day 1. Gardhouse, in, on Greenbra Beauty. Thre 2, Lloyd-Jones Gardhouse: 2, house, on Talk Gardhouse, on

HEAVY-DRA geldings and were the best Fair. In sing

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Gran. hampion

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mals appeared in the female inyard, the winning yeld to January 1, 1913, was all her competitors on account and ability to move in a Other females of excellent Empress, Model's Queen titegate Gertrude. On the lid display of Hackneys.

Tilt, Brampton; Graham

as. M. Semple, Milverton; H. M. Douglas, Elmvale M. Semple, Milverton; Duntroon; J. F. Husband. McGibbon, Milton; Crow & Telfer, Milton West; Chas. Gardhouse, Weston; W. W. ohn Bingham, Georgetown; us; H. Blackstock, Thorn-Son, Queensville; H. A. Geo. M. Anderson, Guelph. lion, (15.2 and over): 1, by Drumlanrig: 2, Tilt, on 3, Ross, on Warwick Albert Aged stallion (under 15.2): Prickwillow Connaught by uglas, on Anticipator by on Warwic's Performer by 5, Telfer, on Harry Lauder Paderews' i by Vanguard. : 1, Gardhouse, on Whiteegate Commander; 2, Hogg, n Semaphore; 3, Telfer, on wick Model; 4, Osier, on Anticipator. Stallion foaled 914: 1, Tilt, on Dector 2, Gardhouse, on Avondale ler; 3, Osier, on Burntwood Brood mare: ripator. Bobcaygeon Empresse; Whitegate Gertrude; 3,

Whitegate Gertrude; 3, Derwent by Derwent to Derwent to Derwent to Derwent to Derwent to Jan. 1, 1913: 1, Winyard by Warwick Model; Euroda by Vanguard; 3, Model by Warwick Model.: 1, Telfer, on Model's odel: 2. Beag & Son, on t, on Minnie Derwent by Mason, on Island Lily by ed on or after Jan. 1, 1914: In by Harviestown Fanatle, and Derwent by Beach of Princess by Brookfield

on by Harviestown Fanate, field Princess by Brookfield as Spartan by Spartan; 4, mer by Guelph Performer.

1. Telfer, on the get of t, on the get of Spartan; f Anticipator. Mare and Gardhouse on Whitegate Burntwood Lily. Chamamare: Husband, on Judge, Robt. Graham,

.—The number of Stanled into the ring was not were individuals that had the in Canada and in the had excellent conformation agority of them gave eviled. Jim Todd which has be Miss Wilkes, of Galt, again made grand chamrette was chosen as best a mare of excellent conof superb quality.

Stock Farm, Foxboro; L. Chas. Sewers, Greenock; Miss K. L. Wilkes, Galt; Rockwood; Jas. J. Fitzatterson Bros., Agincourt; Crow & Murray, Toronto; E. Keough & Sons, Rock-

on: 1, Miss Wilkes, on 2, Charlsworth, on Ike m; 3, Sewers, on King s: 4, Barry & Co., on sel Arch; 5. Ashley Stock Ullman. Stallion foaled 13: 1, Patterson Bros., Jack McKerron; 2, Fitzashley by McMartin; 3, regor by Jim Todd; 4, mey by McKinney. Aged urray. on Brerette, by Wilkes, on Okom Belle, and a; 3, Ashley Stock Farm,

on Philly Winkle by McKenzie. Mare foaled on or after Jan. 1, 1913: 1 and 2, Miss Wilkes, on Skeeno Todd by Jim Todd, and Clara Todd by Jim Todd; 3 and 4, Ashley Stock Farm, on Aunt Fannie by Noble Peter, and Ella Bleecker by Ingara. Three get of sire: 1, Miss Wilkes, on get of Jim Todd; 2, Ashley Stock Farm, on get of Alick; 3, Barry & Co., on get of Michael Grattan. Mare and two of her progeny: 1, Ashley Stock Farm, on Noble Lottie. Champion stallion: Miss Wilkes on Jim Todd. Champion female: Crow & Murray, on Brerette. Judge. Robt. Graham, Toronto.

DECEMBER 16, 1915

THOROUGHBREDS.—In numbers the Thoroughbred division was the weakest of the light-horse classification; only in two classes were there more than one entry.

Exhibitors.—D. McCrae, Guelph; A. E. Currie, Guelph; F. D. Parsons, Guelph; E. B. Clancy, Guelph; Jas. Bovaird, Brampton; Arthur Bros., Brampton.

Awards.—Stallion foaled previous to January 1, 1913: 1, Currie, on Charlie Gilbert by Masetto; 2, Parsons, on Toritona by Satsuma; 3, McCrae, on Percy by Per Se. Stallion foaled on or after January 1, 1913: 1, Clancy, on Master Fox. Mare foaled previous to January 1, 1913: 1 and 3, Clancy, on Carrillon by Chuctawunda, and Miss Morgan by St. Elaise; 2, Bovalrd, on Diffident by Ardon. Mare foaled on or after January 1, 1913: 1, Bovaird, on Miss Grizel by Selwick. Three, the get of one sire: 1, Arthur Bros., on the get of Earl G. Mare and two of her progeny: 1, Clancy, on Miss Morgan. Champion stallion and mare: Clancy, on Master Fox and Carrillon.

Ponies.— Even the diminutive ponies seemed to increase in numbers in harmony with the general trend of the live stock department. None were very large but some were very snall, one in particular being slightly larger than a dollar's worth of sugar a few years ago when sugar was worth less and money worth more than at present. Talke Fire Alarm, the dignified and trappy little Hackney which during the shows of the last couple of years has been unbeaten, again went to the top of his class and the championship of the males. A sweet little Welsh Poney from the same stables, Forest Pretty Lee 3rd, was made champion of the females. The Shetland and Welsh ponies were much stronger in numbers than last year and made a very interesting showing.

Exhibitors.—J. M. Gardhouse, Weston; J. & L. C. Wilkin, Myrtle Station; H. M. Robinson, Toronto; R. Ballagh & Son, Guelph; J. Lloyd-Jones, Burford

Awards.—Hackney stallion, any age, 14 hands inch and under: 1, Gardhouse on Talke Fire Alarm; 2, Wilkin, on Whitegate Pimple; 3, Robnson, on Folly's Donezett. Hackney mare, any ace: 1, Gardhouse on Whitegate Queen Victoria. Shetland stall on, any age: 1, Wilkin on Honeyboy F .: 2. 3 and 4 Ballagh on Shade Teddy R, and Royal Review. Shetland mare, any age: 1, Wi'kin, on Intelligent; 2 and 3, Ballagh, on Daisv V. and Veira. Welsh stallion, anv age: 1, Wilkin, on Forest Dawn; 2, Lloyd-Jones, on Daylight 2nd. Welsh mare, any age: 1. Gardhouse, on Forest Pretty Lee 3rd; 2, Wilkin, on Greenbrae Ruby: 3, Lloyd-Jones. on Forest Beauty. Three, the get of one sire: 1, Ballagh; 2, Lloyd-Jones. Mane and 2 of her progenv: 1, Gardhouse: 2, Wilkin. Champion stallion: Gardhouse, on Talke Fire Alarm. Champion mare: Gardhouse, on Forest Pretty Lee 3rd. Judge: Robt. Graham, Toronto.

HEAVY-DRAFT HORSES.— The classes of geldings and mares shown in teams or single were the best that ever occured at the Winter Fair. In single harness there were seventeen

entries in the ring, all decorated with beautiful harness and shiny trappings. They filled the arena from end to end and made a magnificent sight. Britnell's big black gelding was first, and Firstbrooks were second with Claude, a massive, stylish grey. Crake was third with another black of good weight and style, and fourth place went to Smith & Richardson on Dickieville. The young geldings and mare formed a recordbreaking class, and among them were horses that will surely assist in making up winning teams in the future, as some of them did on the occasion in question. The teams were well matched, well fitted and well shown. It was indeed a magnificent spectacle to see these grand animals beautifully caparisoned.

beautifully caparisoned, exhibited in the arena.
Exhibitors.—Arthur Sayles, Palis; Arbogast
Bros., Sebringville; Wm. Britnell, Toronto; A. A.
Armstrong, Fergus; Smith & Richardson, Columbus; Jas. Atkinson, Marmion; H. A. Mason, Scarboro; Hodgkinson & Tisdale, Beaverton, Firstbrook Bros., Toronto; L. J. C. Bull, Brampton;
R. H. Crake, Bradford; Philip McDonald, Embro;
Austin Black, Belwood; Alex. Lamont, Mt.
Brydges; Elijah Wray, Schomberg: Thos. McMichael & Sons, Seaforth; Herbert Matthews & Sons, Meadowvale.

Awards.—Gelding or mare shown in single harness: 1, Britnell, on Jim; 2, Firstbrook Bros., on Claude; 3, Crake, on Pat; 4, Smith & Richardson, on Dickieville; 5 and 6, Arbogast Bros., on Jimmie and Ray; 7, Atkinson, cn King; 8, Sayles, on Ravenna King. Gelding or mare, foaled previous to Jan. 1, 1912, shown on a line: 1, Arbogast Bros., on Jimmie; 2, Hodgkinson & Tisdale, on Charlie; 3, Smith & Richardson, on Major Bob; 4 and 5, McDonald, on Scot, and Magar & Black on Flisia; 7, Lamont on Bosses and Mac; 6, Black, on Elsie; 7, Lamont, on Rosebud of Seaforth. Gelding or mare, foaled on or after Jan. 1, 1912, shown on a line: 1 and 5, Wray, on Frank, and John; 2, Arbogast Bros., Wray, on Frank, and John, on King; 4 and 6, on Roy; 3, Atkinson, on King; 4 and 6, ness, geldings or mares: 1, Britnell, on King, and Jim; 2, Arbogast Bros., on Jimmie, and Roy; 3, Sayles, on Ravenna King, and Silver Lion; 4, Smith & Richardson, on Dickieville, and Maior Bob; 5, Atkinson, on Tom and King; Bull, on Jessie, and Brampton Jean; 7, Hodgkinson & Tisdale, on Charlie, and Maud.

The Prince of Wales Prize which this year was donated in the horse department for the best three animals of one breed, was won by Graham Bros., on Baron Ascot, Castle Belle and Quenelda. Second were Smith & Richardson, on Scotia's Pride, Laura Dee and Mandolin.

Beef Cattle.

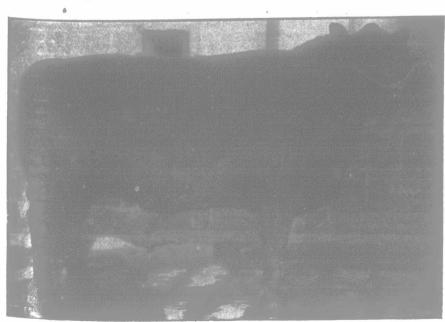
The beef cattle department of the Guelph Winter Fair showed a vast improvement over previous years, and was a contributing factor to the phenomenal success of the exhibition as a whole. It was not a show of commonly-fitted steers and heifers with one outstanding animal as the grand champion, for in almost every class were a number of steers or heifers that would attract attention in the keenest competition. In two or three classes only were animals to be seen that appeared at all rough or unfitted. Only by eliminating those that were not the very best could the judge, Peter White, of Pembroke, Ont., work up to the champion steer or heifer of the show, and even then there were four good individuals to choose from. Never before in the history of the Winter Fair was there presented such a wel'-bret, well-fitted class of stock. It was outstandingly and unqualifiedly better than visitors had ever seen at that exhibition before. Not only did a few first-class steer feeders bring their animals which they had purchased and fed, or bred and fed, but some of the foremost breeders of the

country showed animals produced in their own herd, which under the care of the skillful herdsmen had been brought to a high degree of fleshing and finish. Men of the old school who had done exceptionally good work in the past were also present with animals that had been given their best care and attention. Manitoba was represented by nine head from the herd of J. D. McGregor, of Brandon, whose two-year-old cross steer "Wee McGregor" ultimately worked up to the premier position. "Wee McGregor" is a full brother to Glencarnock Victor 2nd, which won the championship in Chicago in 1913 and was on exhibition at Guelph the same year, and was exhibited during the winter throughout the Western provinces. This year's champion had all the earmarks of an Aberdeen-Angus, and was 180 lbs. heavier than his distinguished brother which won honors at Chicago two years ago. It was not easy sailing for this steer, for T. A. Russell's champion Shorthorn and reserve steer of the show was a formidable rival. For depth of flesh and extreme finish one was as good as the other, but "Wee McGregor" was just a little firmer and that quality won him the championship. Had the Manitoba steer been a little more pliable or sappy or possessed that "something" which stockmen prefer in handling qualities he would have been a marvel, or had the Russell steer been a little more firm the results might have been different, but it is of no use to deal with what might have "Wee McGregor" won in keen competition, but it was the prevailing opinion that the decision was just.

SHORTHORNS.-As usual the entries in this breed exceeded those in other pure-bred classes of the cattle department, and they were an exceptional lot of entries. They had the appearance of being bred along proper lines, and anyone who saw them would conclude at once that they had been very skilfully and carefully fed. The winning two-year-old steer was made reserve cham-The winning pion as has already been stated. yearling was very smoothly turned and firmly fleshed. Golden Lad, a steer under one year, also showed well, being firm and nicely covered for a steer of his age. Meadow Queen, a heifer that showed at Toronto and Ottawa in the breeding classes for Shorthorns, also showed to extremely good advantage with the flesh which she now carries. The yearling heifers and heifer calves which won in their respective classes were likewise well fleshed and well brought out.

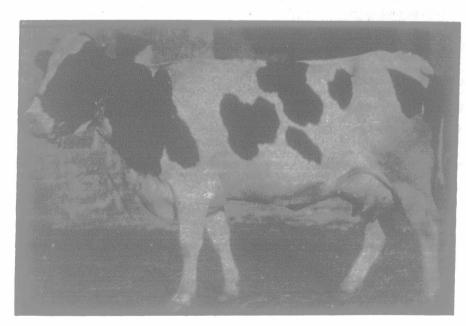
Exhibitors.—T. A. Rus-ell. Downstiew; Wm. Marquis & Son, Sunderland; Henry Larter, Rockwood; D. A. Graham, Wyoming; John Black, Fergus; John Brown & Sons, Galt; F. W. Oke, Alvinston; R. F. Duncan, Caledonia; W. A. Douglas, Caledonia: Adam Armstrong, Fergus; Albert Barber, Guelph; W. G. Gerrie, Belwcod; Jas. Leask & Sons, Seagrave; J. G. Wilson, Georgetown; W. R. Elliott & Sons, Guelph; Gordon Fried, Roseville; Geo. Amos & Sons, Moffat; John Barr, Blyth; Daniel Wright, Ariss; Kyle Bros., Drumbo; John Gardhouse & Sons, Weston; Jas. K. Camobell, Palmerston; John Watt & Son, Elora; Mitchell Bros., Burlington; Henry Waters, Guelph; Peter Stewart, Guelph; Boyd Portious, Owen Sound; Daniel Talbot &

Son, Everton: Pritchard Bros., Fergus.
Awards.—Steer, two years: 1 and 3, Russell;
2, Marquis: 4, Brown; 5, Black. Steer, yearling:
1 and 5, Barber; 2, Russell; 3, Duncan; 4, Oke.
Steer, calf: 1, Kyle Bros.: 2, Elliott: 3, Amos;
4, Wilson; 5, Wright. Heifer, two years: 1,
Kyle; 2, Gardhouse. Heifer, yearling: 1,
Mitchell; 2, Kyle: 3, Douglas; 4, Campbell; 5,
Watt. Heifer calf: 1, Kyle; 2 and 3, Mitchell;
4, Leask: 5, Stewart. Three animals, get of one
sire: 1 and 2, Mitchell, on get of Hight Sort;
3, Kyle Bros., on get of Newton Ringleader; 4,



"Wee McGregor."

Gran, champion steer at the Guelph Winter Fair; bred and exhibited by J. D. McGregor, Brandon, Man.



Colantha Butter Girl.

Highest scoring cow in the dairy test at Guelph, 1915. Exhibited by M. H. Haley, Springford, Ont.

The two classes, namely, senior bull calves and junior bull calves, added to the prize-list this year were filled with some good individuals. These two classes and those in the dairy breeds, as well, were justified by the quality and numbers of the animals presented. Not only did they appear well in the ring, but in the stalls they made a very good exhibit, and a part of the exhibition in which a good many visitors were interested.

Awards.—Senior bull calf: 1 and 3, Mitchell, on Escana Perfection, and Escana Favorite; 2, watt. on Irvindale Select; 4, Stewart, on Count Victor; 5 and 6, Gerrie, on Matchless Hero, and Matchless Pride; 7, Kyle, on Spring Valley Dread-nought. Junior bull calf: 1, Barr, on Rambling Lad; 2, Talbot, on Valentine Scott; 3 and 5, Mitchell, on Escana Bandsman; 4, Kyle, on Cup Bearer; 6, Graham, on Whitehall Boy; 7, Pritchard. on Lancaster Sultan.

HEREFORDS.—In the Hereford breed the herds which are commonly seen on the show-ring circuit throughout the summer. and autumn were represented by fattened steers and heifers. whole they were well finished and made an exceptionally good display. Miss Brae 50th, Pages' two-year-old heifer of good size and finish was made champion of this breed.

Exhibitors.—Jas. Page, Wallacetown; Geo. E. Reynolds, Elora; W. H. & J. S. Hunter, Orangeville; W. Readhead, Milton; Henry Reed, Orton.

Awards.—Steer or heifer, two years: 1 and 2, Page; 3, Reynolds: 4, Hunter. Steer or heifer, yearling: 1 and 3, Page; 2, Reynolds; 4, Readhead. Steer, calf: 1, Reed; 2, Page. Heifer, calf: 1, Hunter; 2, Readhead, 3 and 4, Page. Three animals, get of one sire: 1, Page, on get of Bonny Brae 31st; 2, Hunter, on get of Bonny Brae 49th; 3, Reynolds, on get of Brendo Boy. Champion steer or heifer: Page, on Miss Brae 50th, the two-year-old heifer. Senior bull calves: 1, Page, on Brae Real 4th; 2 and 3, Hunter, on Matchless and Prince. Junior bull calves: 1 and 2, Hunter, on McGuire and Repeater; 3, Readhead, on Laurette of Ingleside; 4, Page, on Brae Real

ABERDEEN - ANGUS. - Some exceptionally smooth, deeply-fleshed, and firm steers and heifers representing this breed were shown at the Guelph Winter Fair. In numbers they did not, of course, equal the Shorthorns, but they made a very

strong showing for quality. Exhibitors.—J. D. McGregor, Brandon, Man.; Jas. Bowman, Guelph; John Lowe, Elora; Edgar Dennis, Newmarket; John Brown & Sons, Galt; J. W. Burt & Sons, Hillsburg; Adam A. Armstrong, Fergus; Russell Fried, New Dundee; Geo. Davis & Sons, Erin.

Awards.-Steer or heifer, two years: 1, Brown; 2, Lowe; 3, McGregor; 4, Bowman. Steer or heifer, yearling: 1 and 3, Lowe; 2 and 4, Bowman; 5; Burt. Steer, calf: 1, Fried. Heifer, calf: 1 and 2, Lowe; 3, Bowman; 4, Davis; 5, Burt. Champion steer or heifer: Brown, on "Smiler," a two-year-old steer.

GALLOWAYS.—This breed was represented by 10 head from the herd of Lieut.-Col. D. McCrae, Guelph. This steers made a very good showing, for they had been fairly well fitted.

GRADES AND CROSSES OF ANY BREED.-The classes under this heading represented largely grades and crosses of Shorthorn, Hereford and Angus breeds. They, furthermore, represented the beef industry of the country, or at least what it should aim to be. Although individuals which resembled pure-breds competed in these classes the breed type could not win for them any place. It was beef type and beef conformation that put them at the top or at the bottom. It was the aim of the judge to place them according to conformation and according to th ir qualities as beefmakers. The classes are all the more interesting because advocates of many breeds com together in the ring with animals produced along various lines of mating and crossing. The grades and crosses were indeed a good lot, and there was an increased number over other years. Excellence was the aim here as well as in the line-ups of pure-breds.

Exhibitors.—T. A. Russell, Downsview; J. D. McGregor, Brandon, Man.; Jas leesk & Sons, Seagrave; John Brown & Sons, Galt; Harry F. Sifton, Highgate; Wm. Marquis & Sons, Sunderland; Jas. Barbour, Sr., Lucknow; Ernest Fleming, Tara; Pritchard Bros., Fergus; Jas. Page, Wallacetown; Peter Stewart, Guclph; G. & P. Gerrie, Elora, Adam Armstrong, Fergus; A. & E.A. Hales, Guelph; R. F. Duncan, Caledonia: Elmer J. Woods, Lucknow; John Hossfeld, Walkerton; Leonard Dickieson, Ariss; Ralph Fried, New Dundee; Clayton Fried, New Dundee; Geo. Amos & Sons, Moffat; J. & T. Lloyd-Jones: Burford; W. & G. Whitelaw, Elora; Hampton Bros., Fergus; A. Turnbull & Sons, Galt; John Black, Fergus Wm. Guthrie, New Dundeer, David Robertson, Guelph; Geo. E. Reynolds, Elora; Boyd Portious, Owen Sound; John Lowe, Elora: Daniel Wright, Ariss; Jas. K. Campbell, Palmerston; Taylor & Evans, Guelph; F. W. O're, Alvins on Andrew Mackie, Ariss; E. Brien & Sons, Ridgetown; John H. Graham, Georgetown; Geo. Henderson, Guelph; J. P. Henderson, Guelph; Maurice Readhead, Milton; Kyle Bros., Drumbo.

Awards.-Steers, two years: 1, McGregor; 2, Brown; 3, Leask; 4, Russell. Steer, senior year-1 and 2, McGregor; 3, Leask; 4, Pritchard; 5, Sifton; 6, Brown; 7, Marquis. Steer, jumor yearling: 1, Leask; 2, Hales; 3, McGregor; 4, Russell; 5, Gerrie; 6, Armstrong. Steer, Senior calf: 1, Stewart; 2, Guthrie; 3, Leas; 4, Mc-Steer, senior Gregor; 5, Hossfeld; 6, Turnbull; 7, Woods. Steer, junior calf: 1, Lowe; 2, Robertson; 3, Heifer, two years' 1, McGrogor; 2, Campbell; 3, Taylor & Evans; 4, Brown; 5, Armstrong. Heifer, yearling: 1, Oke; 2, Brown; 3, Hales; 4, Leask; 5, Whitelaw; 6, Mackie. Heifer calf: 1, J. P. Henderson; 2 and 5, Leask; 3, Geo. Henderson; 4, Guthrie; 6, Woods; 7, Marquis. Champion steer or heifer (a cross): McGregor, on the two-year-old steer. Champion steer or heifer (grade): Stewart, on the senior calf.

PURE BREDS OR GRADES AND CROSSES ANY BREED, (OPEN TO AMATEURS ONLY).-The cattle of this division were not second grade by any means, if they were exhibited by amateurs. They were well fitted, and some of the winners in different classes were good enough to win championships in competition less keen than what prevailed at the Winter Fair.

Exhibitors.-W. E. W. Steen, Streetsville; Wm. Marquis & Sons, Sunderland; Henry Larter, Rockwood; Ernest Fleming, Tara; Jas, Scott, Pus-linch; G. & P. Gerrie, Elora; J. M. Real, Seagrave; Elmer J. Wood, Lucknow; J. G. Wilson, Georgetown; John Hossfeld, Walkerton; Leonard Dickieson, Ariss; Ralph Fried, New Dundee; Clayton Fried, New Dundee; Russell Fried, 'New Dundee Gordon Fried, Roseville; Gardner Wood, Rockwood; J. & T. Lloyd-Jones, Burford; W. & G. Whitelaw, Elora; Hampton Bros., Fergus: Turnbull & Sons, Galt; W. Guthrie, New Dundee; David Robertson, Guelph; Boyd Portfous, Owen Sound A. C. Hallman, Breslau; J. & A. Goddall, Belwood; J. K. Campbell, Palmerston; Edward Dennis, New Market; J. W. Burt & Sons, Hillsburg; Andrew Mackie, Ariss; John H. Graham, Georgetown; Henry Waters, Guelph; Geo. Henderson, Guelph; Alex. D. Murdock, Palmerston; Maurice Readhead, Milton; Geo. Davis & Sons, Erin; Wm Guthrie, New Dundee; A. Sifton, High-

Awards.—Steer, two years: 1, Marquis; 2 Larter; 3, Steen. Steer, senior yearling: Sifton; 2 and 4, Marquis; 3, Scott; 5, Larter. Steer, junior yearling: 1, Gerrie; Steer, senior calf: 1, Guthrie; 2, Hossfeld; 3, Whitelaw; 4, Wood. Steer, junior calf: 1, Robertson, 2, Goddall; 3, Portious. Heifer, two years: 1, Campbell; 2, Dennis. Heifer, yearling: 1, Campbell; 2, Whitelaw; 3, Waters: 4 and 5, Marquis. Heifer, calf: 1, Geo. Henderson; 2, Guthrie; 3, Murdock; 4, Wood; 5, Waters.

Champion fat animal of the Show Gregor, on "Wee McGregor"; reserve: T. A. Russell, on "Tom."

INTER-COUNTRY BABY BEAF.—A class was allotted to the young men of the various counties who had fed young animals for baby-beef production. The winners were: 1, Wm. Guthrie, New Dundee; 2, John Hossfeld, Walkerton; 3, L. W. Turnbull, Galt; 4; Ralph Fried, New Dundee; J. G. Wilson, Georgetown; 6, Clayton Fried, New Dundee; 7, Russell Fried, New Dundee; 8, A. S. Turnbull, Galt; 9, Gordon Fried, Roseville.

Dairy Bull Calves.

An innovation in the prize list of the Winter Fair was made this year in the form of classes for both senior and bull calves. This was a strengthening feature, for the fact that breeding stock could be exhibited in the show-ring drew breeders who otherwise would not have appeared. Their appreciation of this privilege was evidenced in the response of the exhibitors, and in the splendid line-ups they provided. Both Ayrshires and Holsteins were in evidence, and they made two strong classes in each breed.

AYRSHIRES.-Eight senior and eleven junior bull calves constituted their respective classes, and they were of the best quality. Burnside Lucky Master Swell, winning in the senior class, was indeed one of the good ones. He is by the famous show bull, Hobsland Masterpiece, and, as the Ayrshire admirers said, 'A chip off the old block." Deep of rib, and strong in every way, with abundance of type and quality, his claims for first place were not challenged. Snow King, in second place, was another young bull with outstanding quality and good type, while Springbank Earl, third in order, also showed much promise, but not the quality to match those above him. Humeshaugh Duke, fourth, and Belton of City View, fifth, finished the line so far as ribbons were dispersed. The winning bull in this class was given the championship over Forest King 2nd, the best of the juniors. of points adhered to in making the awards is; 25 However, the latter calf was right in every way, and possessed a degree of quality that is seldom duplicated. He is by Lessnessock Forest King, and is still quite point for each ten days the cow has been in young. If he acquires plenty of size and substance, the calf will no doubt be heard from again. White points.

Duke of Menie, which was second in the junior class, was also one of the quality kind and typey. Victor of Fernbrook and Heather King of Springbank came third and fourth, respectively, with more size than the winning two, and much to recommend them. Earl of Sunnybrook was the fifth.

Exhibitors.-Alex. Hume & Co., Campbellford; E. D. Hilliker, Burgessville; F. H. Harris, Mt. Elgin; Wm. Stewart & Son, Campbel ford; H. C. Hamill, Markham; A. S. Turner & Son, Ryckman's Corners; James Begg & Son, St. Thomas; J. B. Ross, Meadowvale; Collier Bros., Beachville; Blake Pierce, Norwich,

Awards.—Senior bull calves—1, Harris, on Burnsida Lucky Master Swell; 2, Hilliker, on Snow King; 3, Turner, on Springbank Earl; 4, Hume, on Humes haugh Duke; 5, Begg, on Belton of City View. Junior bull calves-1, Turner, on Forest King 2nd; 2, Stewart, on White Duke of Menie; 3, Collier Bros., on Victor of Fernbrook; 4, Ross, on Heather King of Springtank; 5, Pierce, on Earl of Sunnybrook. Ballantyne.

HOLSTEINS.-The Holstein bull classes were even stronger in numbers than were the Ayrshires. Thirteen senior calves and eleven juniors came forward. They were of the class that supplies the herd-headers for the country, and visitors had an opportunity to see them judged, and if interested in any one, to inspect it in the stables. Plus Inka Artis, a strong fellow, with good quarters and milk indications, along with character, was best of the seniors. Second came Korndyke, with good length and conformation, while third place fell to Prince Fayne Harland, the Toronto junior champion last September. He did not possess the bloom in which he showed at the Canadian National. Baron Colantha Abbekerk was placed at the top of the junior class, with Sir Korndyke Gerben second. Deep in rib and strong in constitution was the latter bull, but not a better individual than the winner. Besides three others in the money, there were a number of young fellows that were sent back without ribbons to show they were among the first to compete at Guelph in a breeding class.

Exhibitors.-Robt. Shellington, Hatchley; Martin McDowell, Oxford Centre; C. E. Smith, Scotland; Jos. G. Currie, Ingersoll; A. E. Hulet, Norwich; C. C. Kettle, Wilsonville; S. Lemon & Sons, Lynden; Rettie Bros., Burgessville; J. K. & C. E. Moore, Peterborough; R. M. Holtby, Port Perry; A. C. Hallman, Breslau; W. H. Cherry, Hagersville; M. H. Haley, Springford; W. H. D. Stean, Brampton; Gordon S Gooderham, Clarkson; W. J. Biggar & Sons, Jarvis; L. H. Lipsit, Straffordville; Hiram Dyment, Dundas.

Awards.-Senior bull calves-1, Lemon, on Plus Inka Artis; 2, Rettie Bros., on Korndyke -; 3, Shellington, on Prince Fayne Harland; 4, Hulet, on Gerben Canary Prince; 5, Currie, on Sir Midnight Comet Ormsby. Junior bull calves-1, Haley, on Baron Colantha Abbe kerk; 2, Hallman, on Sir Korndyke Gerben; 3, Biggar, on Leota's Colantha Lad; 4, Steen, on Paul Savangeline De Boer; 5, Hulet, on Prince Echo Segis. Judge-D. C. Flatt.

The Dairy Test.

Considerable extra space was necessitated this year to accommodate the increased number of dairy cattle competing in the test. Good work was done throughout but better results could no doubt have been obtained if some of the entries, which were obliged to occupy the improvised quarters, had been provided with some ventilation and a little better surroundings. It was the best that could be done under the circumstances but it was simply another instance of where a department had outgrown its allotted space and accommodation. Holsteins through their representative, Colantha Butter Girl, scored again. This cow a three-year-old owned by M. H. Haley, Springford, Ont., totalled 302.13 points winning over the aged cows of her breed and representatives of other breeds. She gave 187.4 lbs. of milk testing 5.3 per cent fat. As for breed-type and confirmation she is also one of best, being a deep, rugged individual of the utiliity kind possessing Holstein tyre. The highest scoring Ayrshine was Lady Jane, an aged cow owned by A. S. Turner and Son, Ryckmans Corners, Ont. She is a typical Ayrshire of the kind seen in the ring yet, according to breeders who have been in touch with the dairy tests she made the highest score ever recorded in a Canadian show trial. The winning Shorthorn cow, Royal Primrose, came through the test with a good standing totalling 217.65 points. She was able to produce the mills of the conformation and to produce the milk yet her conformation and natural fleshing is such that one would expect her to produce a good steer for feeding purposes. She was indeed dual-purpose. In the three breeds Holsteins, Ayrshires and Shorthorns the scores of 1915 are in excess of those recorded last year. This year's highest score surpasses that of 1914 by 4.65 points.

The test is of three days duration and the scale roints for each pound of butter-fat, 3 points for each pound of solids not fat (S. N. F.) and 1 milk, after the first thirty, with a limit of 10 Aged cow-Aged cow-

DECEMBER

Heifer—2, Heifer—3, h

Cow, three

Cow, three

Aged cow-

Aged cow-Aged cow-Aged cow-

Aged cow-Aged cow-Aged cow-Aged cow-Cow, three Cow, three Cow, three Cow, three Cow, three

Heifer-1, S Heifer—2, 1 Heifer—3, B Heifer-4, D Heiler-5, I. Heifer—6, Q Heifer—7, D

Aged cow-1 Aged cow—2 Aged cow—3

Aged cow-4 Aged cow-5 Aged cow—6 Aged cow-8 Aged cow-9 Aged cow—1 Aged cow-1

Aged cow-1 Cow, three y Cow, three Cow, three y Cow, three Cow, three y Cow, three

Cow, three y Cow, three Cow, three Cow, three y Heifer-1, Fa Heifer-2, Da Heifer-3, Ca Heifer-4, Pr Heifer-5, Pe Heifer-6, La Heifer-7, Bo Heifer-8, Ma Heifer-9, Ne Heifer-10, M

Aged cow-1, Cow, three y Cow, three ye

Aged cow-1, Aged cow-2, Cow, three y Cow, three ye Cow, three ye Heifer—1, Lac Heifer—2, Que Heifer-3, Beau

At the begin Were creulated 80 good as usi that these repo all the pens w adde The la more space tha the shoep. Th that of former Was s good as There was comp all the classes strongly represe vear centred a Drug and Cup.

in this t

DECEMBER 16, 1915

s second in the juni	or class
TOOT DIE DIE	W72 4
a ming of Springha	nk dame
ely, with more size	thom 42
recommend them.	Earl -

e & Co., Campbellford; E. D. H. Harris, Mt. Elgin; Wm. bel.ford; H. C. Hamill, Markon, Ryckman's Corners; James nas; J. B. Ross, Meadowvale; Blake Pierce, Norwich.

calves-1, Harris, on Burnside Hilliker, on Snow King; 8, Earl; 4, Hume, on Humes-Belton of City View. Jumior Forest King 2nd; 2, Stewart, 3, Collier Bros., on Victor of Heather King of Springtank; Sunnybrook. Judge - W. W.

olstein bull classes were even were the Ayrshires. Thirteen juniors came forward. They supplies the herd-headers for s had an opportunity to see rested in any one, to inspect Inka Artis, a strong fellow, milk indications, along with the seniors. Second came agth and conformation, while Fayne Harland, the Toronto tember. He did not possess showed at the Canadian Na-Abbekerk was placed at the s, with Sir Korndyke Gerben d strong in constitution was a better individual than the thers in the money, there were ws that were sent back withhey were among the first to

breeding class. hallington, Hatchley; Martin C. E. Smith, Scotland; Jos. E. Hulet, Norwich; C. C. Keton & Sons, Lynden; Rettie K. & C. E. Moore, Peter-Port Perry; A. C. Hallman, Hagersville; M. H. Haley, Steen, Brampton; Gordon S. J. Biggar & Sons, Jarvis; L. Hiram Dyment, Dundas.

calves-1, Lemon, on Plus Inka 1 Korndyke —; 3, Shellington, 4, Hulet, on Gerben Canary Sir Midnight Comet Ormsby. ley, on Baron Colantha Abbe-Korndyke Gerben; 3, Biggar, 4, Steen, on Paul Savangeon Prince Echo Segis. Judge-

iry Test.

Dace was necessitated this the increased number of in the test. Good work ut better results could no ned if some of the entries, occupy the improvised ovided with some ventilater surroundings. It was e done under the circum imply another instance of ad outgrown its allotted ation. Holsteins through lantha Butter Girl, scored hree-year-old owned by M. ont., totalled 302.13 points cows of her breed and rebreeds. She gave 187.4 6.3 per cent fat. As for ation she is also one of ged individual of the utilistein tyre. The highest Lady Jane, an aged cow and Son, Ryckmans Cornpical Ayrshire of the kind ccording to breeders who h the dairy tests she made r recorded in a Canadian ing Shorthorn cow, Royal h the test with a good She was able .65 points. vet her conformation and h that one would expect steer for feeding purposes. pose. In the three breeds d Shorthorns the scores of those recorded last year. re surpasses that of 1914

lays duration and the scale making the awards is; 25 of butter-fat, 3 points for not fat (S. N. F.) and 1 ys the cow has been in thirty, with a limit of 10

Resume of the Dairy Test.

SHORTHORNS.	milk.	cent.		in	Total
Aged cow-1, Royal Princess, J. W. Jackson, Wo dstock	165.5	4 0	9.3	milk. 10 12 70	217.65 199.27 98.4
Cow, three years—2, Maplewood Jessie, A. Stevenson. Heifer—2, Butterny Rose, S. W. Jackson, Woods.ock Heifer—3, Kelly Queen, John Kelly & Son, Shakespeare	00 4	3.1 4.3 4.1	9.2 9.375 9.55	45 40 50	96.62 109.62 99.18
AYRSHIRES.					
Aged cow-1, Lady Jane, A. S. Turner & Sons, Ryckmans'					
Aged cow-2, Dewdrop of Menie, Wm. Stewart & Son, Campbell-					262.29
Aged cow—4, Gienshamrock Cantyagain, Alex. Hume & Co., Campbellford	153.1	4.7	9.45		224.93 223.30
bellford	170 4	4 1	00	34	222.30 220.23
Aged cow—o, whitehill white Rose 3rd. A. S. Turner & Son	169 0	4 0	0.0	25	216.01
Aged cow-7, Violet of Craigielea, H. C. Hamill, MarkhamΑged cow-8, Scottie's Victoria, Jno. McKεθ	181.2	3.6		35	212.63
Cow, three years—1, Gem of Craigielea, H. C. Hamill	124 0	20	9.55 9.65	19 25	209.86 157.93
Cow, three years—2, Queen Jessie of Brookside, Jno. McKee	120 4	9 7	0.05		156.32
Cow, three years—3, Speck Springbank 2nd, Jno. McKee Cow, three years—4, Douglas Scottie's Sarah, Jno. McKee	112.9	4.4	10.13		154.79
Cow, three years—5, Brighton Brae Teena 2nd, N Dyment, Brant-				44	148.21
ford	109.4	3.8	9,35	50	136.61
Heifer—1, Susana Evergreen, E. B. Palmer & Son, Norwich Heifer—2, Bluebell Craigielea, H. C. Hamill	147.6	4.3	8.7		197.19
Heirer—3, Briery of Craigielea, H. C. Hamill	121.2	4.3	9.6		192.46 164.75
Heiler—4, Dairy Maid of Hickory Hill, N. Dyment	123 2	3 9	9.47		161.44
Heifer-5, Lady Jewel of Springbank, A. S. Turner & Son	124.0	3.9	9.15		156.43
Heifer—6, Queen, F. H. Harris, Mt. Elgin	100.7	3.9	9.25		144.29 136.34
HOLSTEINS.	2001	1.0	0,1	00	100.51
Agod com 1 Hyland Ladage Managers Log Compie In accept	055.4			0 =	200
Aged cow-1, Hyland Ladoga Mercena, Jas. Currie, Ingersoll	231.1	3.6	9.1		298.83 276.86
ville	215.4	4.0	9.12	11	274.36
Aged cow—4, Pauline Colantha Posch, A. E. Hulet, Norwich	221.2	3.7	9.7	10	268.96
Aged cow—5, Ladoga Ada Veeman, A. E. Hulet	214.8	3.7	9.35 8.8		258.95
Aged cow-7, Maggle Clark, C. E. Smith, Scotland	203.4	3.4	8.87		244.45 227.25
Aged cow—8, Aaggie Faforit Johanna, G.S. Gooderham, Clarason	214.0	3.1	8.52		220.58
Aged cow-9, Countess Maude Posch, C. C. Kettl Wilsonville			8.85		200.07
Aged cow—10, May Schuiling Pietertje, C. C. Kettle			8.05		194.94
Aged cow—12, Plus Pontiac Artis, S. Lemon & Son, Lynden					169.00 110.92
Cow, three years-1, Colantha Butter Girl, M. H. Haley, Springford.	187.4	5.3	9.57		302.13
Cow, three years—2, Pontiac Atlas Francy, Rettie Bros			9.17		242.77
Cow, three years—3, Faforit Beauty Posch, W. H. Cherry	205.0		$9.62 \\ 8.57$		230.27 221.86
Cow, three years—5, Bessie Belle Banks, F. W. Lee, Springford	192.8	3.4	8.97		215.78
Oxford Centre	194.2	3.3	9.07	32	213.29
Cow, three years-7, Miss Johanna Posch, A. E. Hulet	173.5	3.6	8.67		201.30
Cow, three years—8, Princess Mercena Schuiling, Rettie Bros Cow, three years—9, Lily Abbekerk Pauline, W. H. Cherry	148.8	9.4	8.95 9.65		196.20 178.56
Cow, three years—10, Mona De Kol Lassie, J. K. & C. E. Moore	132.4	4.0	8.75		167.78
Heifer-1, Fayne Segis De Kol, R. M. Holtby, Por Perry	199.9	3.3	8.7	13	217.09
Heifer—2, Daisy Fayne 2nd, M. H. Haley	166.4		8.75		210.08
Heifer—3, Calamity Cornucopia, Martin McDowell	133.9	4.3	$9.35 \\ 9.12$		186.81 180.60
Heifer-5, Percilla Sarcastic, W. H. Cherry	138.6	4.0	9.87		179.66
Heifer—6, Lady Keyes Mercena, A. E. Hulet	147.2	3.1	8.52		151.72
Heifer—7, Bonnie Stapel Echo, Hiram Dyment, Dundas	155.6 155.3		8.6 8 .5		L51.34 L48.30
Heifer—9 Netherland Olive De Kol, W. J. Biggar & Son, Jarvis	104.1	3.7	9.5		126.12
Heifer-10, Maysie Evangeline De Kol, J. K. & C. E. Moore	122.7	2.9	8.27	44	120.80

GRADES.

JERSEYS.

 Aged cow—1, Rioter's Peony, Ira Nichols, Woodstock...
 124.9
 4.1
 9.05
 27
 161.93

 Cow, three years—1, Flora of Glenboyle, D. A. Boyle, Woodstock ...
 111.9
 5.1
 9.2
 88
 179.36

 Cow, three years—2, Sunny Brae's Ruby, Ira Nichols...
 90.9
 5.2
 9.67
 163
 154.56

Sheep.

At the beginning of the Winter Fair, reports Were circulated that the exhibit of sheep was not so good as usual. Visitors could see at once that these reports were without foundation for all the pens were full and new pens had been The latter were occupied making in all adde mor space than has previously been alloted to the shoep. The quality, too, was quite up to that of former years making a sheep exhibit that was s good as has ever been at the Winter Fair. There was competition in all the breeds and most all the classes and all the leading breds were stroidy represented. Considerable interest this year centred around the competition for the Drungsond Cup. For two years Robt. McFwen in this trophy and breeders were anxious

to know if it was to become his permanent property by winning it again in 1915. A pen of five Southdowns from the same flock that had captured the prize in the past proved invincible and secured for Col. McEwen the beautiful cup that will in future be kept as a well-earned trophy in his home.

Cotswolds.-Exhibitors: G. H. Mark & Son, Little Britain: E. Brien & Son, Ridgetown; E. F. Park, Burford; Jas. A. Campbell Thedford; Sam. Dolson & Sons, Norval Station.

Awards.—Ewe lamb: 1 and 2, Dolson: 3, Cambell: 4, Mark; 5, Brien; 6, Park. Three ewe lambs:—1, Dolson: 2, Cambell: 3, Mark; 4, Brien. Wether under 1 year.—1, Mark: 2, Park; 3 and 6, Cambbell: 4 and 5. Brien. Three Wethers under 1 year:—1. Brien: 2, Cambbell: 3, Mark; 4, Park. Wether, yearling:—1, Mark: 2, Brien: 3, Cambbell: 4, Mark. Wether under 1 year:—1, Park: 2, Mark: 3, Cambbell: 4, Brien. 4, Dolson. Ram lamb:—1, Cambbell: 2, Mark: LINCOLNS:—Wether, yearling:—1, Linden: 2, Lincolns:—Wether, yearling:—1, Lincolns:—1, Lincolns:—2, Lincolns:—1, Lincolns:—2, Lincol

3, Brien; 4, Dolson; 5, Park. Champion wether: Mark, on yearling.

LINCOLNS:-Exhibitors:-John S. Gosnell & Sons, Highgate; Jos. Linden, Denfield; P. A. McIntyre, Parkhill; H. Lee, Highgate; A. & W. Whitelaw, Guelph.

Awards:—Ewe lamb:—1, 2, 3 and 5, Gosnell:
4, McIntyre; 6, Linden. Three ewe lambs—1 and
2, Gosnell; 3, Linden; 4, McIntyre. Wether
under 1 year:—1, 2 and 4, Linden; 3, Gosnell; 5
and 6, Lee. Three wethers under 1 year—1,
Linden; 2, Lee. Wether, yearling:—1, Lee; 2, Gosnell; 3, Linden; 4, Whitelaw. Ram lamb:—1 and 3, Gosnell; 2, Linden; 4 and 5, McIntyre. Champion wether: Lee, on yearling.

Leicesters:-Exhibitors:-A. & W. Whitelaw, Guelph; John Kelly & Son, Shakespeare; Jas. Clark & Sons, Puslinch.

Awards:-Ewe lamb.-1 and 5, Whitelaw; 2 and 3, Kelly; 4, Clark. Three ewe lambs:-1, Whitelaw; 2, Kelly; 3, Clark. Wether under 1 year:—1, 2 and 3, Kelly; 4 and 5, Whitelaw; 6, Clark. Three wethers under 1 year:—1, Kelly; 2, Whitelaw; 3; Clark. Wether yearling:—1 and 3, Kelly; 2, Whitelaw. Ram lamb:—1, Whitelaw; 2 and 3, Kelly; 4, Clark. Champion wether:—John Kelly.

OXFORDS:-Exhibitors:-Johnson Bros., Appin; E. Barbour, Hillsburg; J. A. Cerswell, Bond Head; Peter Arkell & Sons, Teeswater: W. E. Wright & Son, Glanworth.

AWARDS:—Ewe lamb:—1, 2 and 3, Barbour; 4, Arkell; 5 and 6, Johnson Bros. Three ewe lambs:—1, Barbour; 2, Arkell: 3, Johnson Bros.; 4, Cerswell. Wether under 1 year:—1, Arkell; 2 and 4, Johnson Bros; 3, Barbour. Three wethers under 1 year:—1, Barbour; 2, Arkell; 3, Johnson Bros. Wether, yearling:—1 and 2, Arkell: 3, Barbour; 4, Cerswell. Ram lamb:—1, 3 and 4, Barbour; 2 and 5, Arkell. Champion wether; Arkell. Arkell.

SHROPSHIRES:-Exhibitors:-W. H. Beattle, Wilton Grove; John R. Kelsey, Woodville; J. Lloyd-Jones, Burford; J. E. Bretnour & Nephews, Burford; Thos. M. Blackburn, Kettleby; W. E. Wright & Son, Glanworth.

Awards:—Ewe lamb; 1 and 2, Brethour; 3 and 4, Lloyd-Jones; 5, Kelsey. Three ewe lambs:— 1, Brethour; 2, Lloyd-Jones; 3, Kelsey; 4, Beattie. Wether under 1 year:—1 and 2, Brethour; wether under 1 year:—1 and 2, Brethour; 3, 4 and 5, Lloyd-Jones; 6, Kelsey, Three wethers under 1 year:—1, Brethour; 2, Lloyd-Jones; 3, Kelsey. Wether, yearling:—1 and 2, Lloyd-Jones; 3, Kelsey; 4, Brethour. Ram lamb:—1 and 4, Brethour; 2, Lloyd-Jones; 3, Recettor 5, Blackburn Characteristics 6, Kelsey; 4, Brethour; 2, Lloyd-Jones; 3, Blackburn Characteristics 6, Kelsey; 4, Brethour; 2, Lloyd-Jones; 3, Blackburn Characteristics 6, Kelsey; 4, Brethour; 2, Lloyd-Jones; 3, Blackburn Characteristics 6, Kelsey; 4, Brethour; 2, Lloyd-Jones; 3, Kelsey; 4, Brethour; 4, Beattie; 5, Blackburn. Champion wether: Lloyd-Jones, on the yearling.

SOUTHOOWNS:-Exhibitors:-Robt. McEwen, Byron; J. Lloyd-Jones, Burford; Geo. Baker & Sons, Burford; Hampton Bros., Fergus; Geo. L.

Telfer, Paris; Peter Arkell & Sons, Teeswater.

Awards:—Ewe lamb'—1, 2 and 3, McEwen;
4, Lloyd-Jones; 5 and 6, Hampton Bros. Three Three ewe lambs:-1, McEwen; 2, Lloyd-Jones; 3, Baker. Wether under one year'-1 and 6, Lloyd-Jones; 2; 3 and 5. McEwen; 4, Tellfer. Three wethers under one year:—1, Lloyd-Jones; 2, McEwen; 8, Arkell. Wether, yearling:-1, Arkell; 2, McEwen 3, Brethour; 4, Lloyd-Jones. Ram lamb:—1, 2 and 4, McEwen; 3, Lloyd-Jones; 5, Baker. Champion wether: Arkell, on the yearling.

DORSET HORNS:-In this breed W. E. Wright & Son, Glanworth, and P. A. McIntyre of Parkhill were the only two exhibitors, the former having the greater number of entries. All the prizes except fifth in ewe lambs, third in wether, under one year, second for three wethers under 1 year, and third in ram lambs went to Wright & Son. The wether which won first place in the yearling class was made champion.

HAMPSHIRES AND SUFFOLKS:-Exhibitors:—Geo. L. Telfer, Paris; John Kelly & Sons, Shakespeare; J. K. & C. E. Moore, Peterborough; Geo. Henderson, Guelph; Jas. Bowman, Guelph.

Awards:—Ewe lamb:—1 and 4, Telfer; 2 and 8, Kelly. Three ewe lambs: 1, Telfer; 2, Kelly; 8, Moore. Wether under 1 year:-1, 3 and 4, Kelly; 2, Telfer. Three wethers under 1 year:-1, Kelly 2, Telfer, 3, Bowman. Wether yearling:—1 and 2, Kelly; 3, Henderson. Ram lamb:—1 and 3, Telfer; 2 and 4, Kelly. Champion wether, Kelly, on yearling.

Grade or Cross: (Long-woolled breeds) wether under 1 year:—1, 2, 3 and 4, E. Brien & Sons; 5, Jas. A. Campbell. Three wethers under 1 year:-1 and 2, Brien; 3, Campbell; 4, A. & W. Whitelaw; 5, Jos. Linden. Wether, yearling:—1 and 4, H. Lee: 2, Kelly; 3, Brien. Champion long-woodled wether:—H. Lee. (Short-woodled breeds) Wether under 1 year:—1, Robt. McEwen; 2, J. E. Brethour & Nepnews: 3, Johnson Bros.; 4, Llovd-Jones; 5, J. R. Kelsev. Three wethers rk, Burford; Jas. A. Campbell Thedford; Sam. under 1 year:—1, Lloyd-Jones; 2, J. R. Kelsey; 3, lson & Sons, Norval Station.

Awards.—Ewe lamb: 1 and 2, Dolson: 3, Camp-Peter Arkell & Sons. 2, J. R. Kelsey; 3, J. Lloyd-

LEICESTERS:-Wether, yearling:-1, Whitelaw; Wether under 1 year -1 and 3, Whitelaw; 2, Clark.

OXFORDS:-Wether, yearling:-1 and 2, Cerswell; 3, Wright; 4, Barbour. Wether under 1 year:-1, 2 and 4, Barbour; 3 and 5, Cerswell.

SHROPSHIRES:—Wether, yearling:—1 and 3, Wright; 2, Brethour; 4, Lloyd-ones. Wether under 1 year:-1, Wright; 2 and 5, Brethour; 3, Lloyd-Jones; 4, Kelsey. SOUTHDOWN:-Wether, yearling:-1 and 2, Mc-

Ewen; 3, Brethour, 4, Baker. Wether under 1 year: 1 and 2, Lloyd Jones; 3, McEwen; 4, Baker. DORSET HORN:-Wether, yearling:-1, 2 and Wright. Wether under 1 year:-1, 2 and 3, Wright.

HAMPSHIRE & SUFFOLK:-Wether, yearling:-1, Henderson; 2, Kelly. Weiher under 1 year:-1, Kelly; 2, Henderson; 3, Telfer.

Grade or Cross-(Long-woolled breed). Wether, yearling:-1, Brien; 2, Lee; 3, Whitelaw. Wether under 1 year:—1, Brien; 2, Lee; 3, Campbell; 4, Whitelaw; 5, Linden. (Short-woolled breed) Wether, yearling:-1, Wright; 2, Kelsey; 3, Lloyd-Jones. Wether under 1 year:—1, Lloyd-Jones. 2, Kelsey; 3, Wright; 4, Henderson; 5, McEwen.

The judges in the various classes were: Cotswolds, C. Snore, Glanworth; Lincolns, J. T. Gibson, Denfield; Leicesters and long-woolled grades, Jas. Douglas, Caledonia; Oxfords, W. H. Beattie, Wilton Grove; Shropshires, Hampshires and Sufiolks, W. A. Dryden, Brooklin; Southdowns, J. Ayre, Bowmanville; Dorsets and short-woolled grades, R. H. Harding, Thorndale; Sheep carcasses, Geo. Morris, London, and Prof. G. E. Day, Guelph.

Swine.

It was truly expansion year in the swine exhibit, the entry being by far the largest of any year in the show's history. The two principal factors responsible for the increased entry were the high prices that have ruled for the past year for marketable hogs, and the naturally increased interest in the swine - breeding industry, together with the addition of several extra classes, notably that for boars, other distinct breeds of pure-breds, and a class for butcher hogs. Another pleasing feature of the exhibit was the extremely high quality and fitting which was of a standard seldom, if ever before seen in a Canadian show-ring, and again stamps Canada as the premier breeding ground of the

Yorkshires were out strong, and made an exhibit that reflected much credit on their breeders and exhibitors. Every class was a strong one, and if special mention should be made of any it was that for sows under fifteen months, the line-up being a truly grand one of remarkable uniformity and perfection of type. The exhibitors were: Jos. Featherston & Son, Streetsville; J. E. Brethour & Nephews, Burford; A. Stevenson, Atwood; John Duck, Port Credit; Matthew Wilson, Fergus; G. N. Graham, Udora; Wm. Murdock, Palmerston, and Henry Wilson, Georgetown.

Berkshires, as usual, were both numero high quality. Every entry in every class was up to the standard, and presented a problem for any judge to face to pick the winners. The exhibitors were: John S. Cowan, Atwood; E. Brien & Sons, Ridgetown; Adam Thompson, Stratford; P. J. McEwen, Wyoming; Sam Dolson & Sons, Norval Station, and W. W Brownridge, Georgetown.

Tamworths were never better, but more and stronger competition would be to the material advantage of the breed, as well as in interest for the public. They were exhibited by D. Douglas & Sons, Mitchell; Thos. Readman & Son. Streetsville, and Sam Dolson & Sons, Norval Station.

Chester Whites were out in their usual number and high quality, and were exhibited by D. DeCoursey, Mitchell; W. E. Wright & Son, Glanworth; Henry Capes, Wyoming: Geo. G. Gould, Essex, and Geo. Bennet, Charing Cross.

Other Pure-breds were represented by Hampshires exhibited by Hastings Bros., Crosshill; Duroc Jerseys exhibited by Mac Campbell & Sons, Northwood; and Poland Chinas, exhibited by Geo. G. Gould, Essex. The exhibit was a most creditable one, and represented the perfection and finished product of the several breeds.

Grades and Crosses had a large entry of well fitted hogs, exhibited by the breeders mentioned at we, with the addition of Jacob Lerch, Preston, Thos. Pat. Port Credit, and Pritchard Bros., Fergus.

Export Bacon Hogs, a departure from the usual custom of exhibiting bacon hogs in pairs was made this year by making the entry a single animal. This, we believe, is a move in the right direction. The entry was the largest ever seen at this show, and the quality the highest. The exhibitors were the same as mentioned in the former classes.

Butchers' Hogs was a new class, and proved an interesting one. There was a large entry of wellfitted hogs ready for the knife. They, ten mane e. hibited by the breeders already mentioned.

Judges. - Bacon Hogs, Butcher Hogs, and Yorkshires-Prof. G. E. Day, Guelph, and D. Hamilton. Berkshires and Tamworths-H. . . .

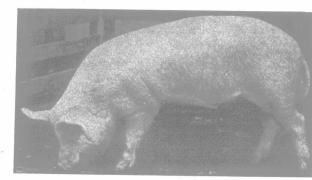
Bond Head. Chester Whites, any other pure-breds, and grades and crosses—Sam Dolson, Norval Station. YORKSHIRES.-Awards-Boar 6 months and under 9-1 and 5, Brethour & Nephews; 2, John Duck; 3, Wm. Murdock; 4, Henry Wilson. Boar under 6 months-1 and 4, Brethour & Nephews; 2 and 3, A. Stevenson; 5, Wm. Murdock. Barrow under 6 mcnths-1 and 3, Featherston & Son; 2, John Duck; 4, A. Stevenson; 5, G. N. Graham. Sow under 15 months-1, A. Stevenson; 2, 3 and 4, Featherston & Son; 5, John Duck. Sow, 6 months and under 9-1, Brethour & Nephews; 2, Featherston & Son; 3 and 4, John Duck; 5, A. Stevenson. Sow under 6 months-1 and 2, John Duck; 3, Brethour & Nephews; 4, A. Stephenson; 5, Featherston & Son. Three pigs of one litter-1, Featherston & Son; 2 and 5, John Duck; 3, Brethour & Nephews; 4, A. Stevenson. Champion boar, Brethour & Nephews; reserve, Brethour & Nephews. Champion

BERKSHIRES.-Boar 6 months and under 9-1, P. J. McEwen; 2, E. Brien & Son; 3, Sam Dolson; 4, Adam Thomrson; 5, J. S. Cowan. Boar under 6 months-1, S. Dolson; 2, J. S. Cowan; 3 and 5, E. Brien & Sons,4, P. J. McEwen. Barrow under 6 months-1 and 2, W. W. Brownridge: 3 and 5. A. Thompson; 4, P. J. McEwen. Sow under 15 months-1, A. Thompson; 2, W. W. Brownridge; 3 and 5, J. S. Cowan; 4, S. Dolson. Sow, 6 months and under 9and 3, A. Thompson; 2, W. W. Brownridge; 4, P. J. McEwen; 5, E. Brien & Sons. Sow under 6 months-1, A. Thompson; 2, W. W. Brownridge; 3, P. J. Mc-Ewen; 4, J. S. Cowan. Three pigs of one litter-1 and 4, A. Thompson; 2, W. W. Brownridge; 3, P. J. McEwen. Champion boar, P. J. McEwen; reserve, S. Dolson. Champion sow, A. Thomson; reserve, A. Thomson.

sow. A. Stevenson; reserve, John Duck.

TAMWORTHS.—Boar 6 months and under 9-1, S. Dolson & Son; 2 and 3, D. Douglas & Sons. Boar under 6 months-1, T. Readman & Son; 2, S. Dolson & Son; 3 and 4, D. Douglas & Sons. Barrow under 6 months -1, 2, 3 and Douglas; 5, Readman. Sow under 15 months-1, 2, 3 and 4, Douglas. Sow 6 months and under 9-1, 2, 3 and 4, Douglas. Sow under 6 months-1, 2, 3 and 4, Douglas; 5, Dolson. Three pigs of one litter-1, 2, 3 and 5, Douglas; 4, Readman. Champion boar, Dolson; reserve, Readman. Champion sow, Douglas; reserve,

CHESTER WHITES.—Boar 6 months and under 9 and 2, W. E. Wright & Son; 3 and 4, D. De Coursey. Boar under 6 months-1, Wright; 2, Henry Capes; 3 and 4, De Coursey. Barrow under 6 months-1 and 2, De Coursey; 3 and 4, Wright. Sow under 15 menths-1, De Coursey; 2 and 4, Wright; 3, G. G.



A Yorkshire Champion.

Champion Yorkshire boar at the Guelph Winter Fair for J. E. Brethour & Nephews, Burford, Ont.

Gould. Sow 6 months and under 9-1 and 3. De Coursey; 2 and 4, Wright. Sow under 6 months-1 and 2, De Coursey; 3 and 4, Wright. Three piss of one litter-1, 2 and 3, De Coursey; 4, Wright. Champion boar, Wright; reserve, Wright. Champion sow, De Coursey; reserve, De Coursey.

OTHER DISTINCT BREEDS .- Boar 6 months and under 9-1, Mac Campbell & Sons; 2 and 3, Hastings Bros.; 4, Geo. G. Gould. Boar under 6 months-1 and 4. Gould; 2, Campbell; 3, Hastings. Bar.ow under 6 months-1, Hastings; 2 and 3, Campbell; 4, Gould. Sow 6 months and under 9-1 and 4, Campbell; 2 and 3, Hastings. sow under 6 months-1, Hastings; 2, Campled; 3 and 4, Gould. Three pigs of one litter-1 and 4 Hastings; 2, Campbell; 3, Gould. Champion boar, Campbell; reserve, Gould. Champion sow, Campbell; reserve, Hastings.

GRADES OR CROSSES .- Barrow 6 months and under 9-1, D. Decoursey; 2, D. Douglas & Sons; 3, A. Stevenson; 4, J. Featherston & Son. Barrow under 6 months-1, Featherston; 2, J. S. Cowan; 3, Douglas; 4, John Duck. Sow 6 months and under 9-1 and 4, J. Lerch; 2, Thos. Duck; 3, Cowan. Sow under 6 months-1, Cowan, 2, T. Duck; 3, J. Lerch; 4, Douglas.

EVPOR" BACON HOG.-1 and 11, J. E. Brethour Nephers. 2. i and 9, John Duck; 3, 5 and 12, J. Featherston & For; 6, Thos. Duck; 7 and 8. Pritchard on; 6, Thos. Duck; 7 and 8, Pritchard Bros.; 10 and 10, M. Wilson.

BUTCHER HOGS.-1, W. W. Brownridge; 2, P. J. mcEwen 8, Cao. G. Goild; 4, S. Dolson.

SPECIAL LOW FARMERS' SONS: 1, Geo. Winfield, West Menurose; 2, Cecil Barbour, Crosshill; 8, Lamont & Sons, Mt. Brydges.

DRESSED CARCASSES.-Export bacon hogs -1, J. E. Brethour & Nephews, Burford; John S. Cowan, Atwood; 3 and 4, 1'.fi chard Bros. Fergus; 5, A. Stevenson, Atwood; 6, 7 and 12, Jos. Featherston & Sons, Streetsville, 8, Jacob Lerch, Preston; 9, D. Douglas & Sons, Mitchell;

10 and 11, S. Dolson & Sons, Norval Station. Butcher hogs—1, P. J. McEwen, Wyoming; 2, Mac Campbell & Sons, Northwood; 3, S. Dolson & Sons: 4, Geo. G. Gould, Essex.

Poultry.

Canada has had many good poultry exhibitions, and Guelph has put up the best, but this year the exhibit of the feathered trite at the Gueiph Winter Fair was outstanding in its class on the American continent. Five thousand six hundred and fifty live birds were in the (rates, and the quality was perhaps best described in the words of an American judge, who has acted as judge at exhibitions the continent over, when he said that he never saw such quality in any show in Canada or the United States. Madison Square Garden Exhibition was put in the shade both as regards quality and numbers, there being from 800 to 1,000 more birds than is commonly seen at the big New York Show. There were approximately as many entries at the Guelph Winter Fair in the Poultry Department as there were in this department at the big World's Fair now drawing to a close at San Francisco. The birds were earlier hatched this year, and, notwithstanding the great amount of wet weather, they were better developed and showed much better quality than was the case a year ago. Single-combed White Leghorns were the strongest class at the Show, with 255 entries. There were 210 Barred Rocks, 200 White Wyandottes, and 180 Single - comb Rhode Island Reds. Black Minorcas showed great improvement with 187 entries. There were 140 entries in Buff Orpingtons, and 90 in White Rocks. The total showed 1,400 entries more than were ever previously out at Guelph.

Ducks and geese made a good showing, as did also turkeys, and there was no end to pigeons and pet stock.

The dressed poultry was not quite so numerous as last year, but the quality was well up to former

A Great Seed Exhibit.

The Seed Department, in the City Hall, was the object of much favorable comment at this year's fair. Never have we seen this Department at any exhibition more nicely arranged. Prof. Murray stated that, in his opinion, there had not been a more nicely-arranged exhibit of seeds made in Canada. He had seen larger exhibits in the West, but none better put up. Much of the credit for the excellent display is due $t_0\ W.\ J.$ W. Lennox, of the Seed Department; J. Lockie Wilson, Prof. Zavitz, and his staff. On the whole there were about the same number of entries as last year. Potatoes and corn were not quite so numerous, die, no doubt, to the unfavorable season. The grains were all of good sample, slightly discolored, but remarkably free from weed seids. In this particular the Winter Fair shows great improvement. There were 30 more grain entries this year than last. There were 112 bags in the field crop competition, and 163 in the competition. There were 25 entries in corn in the field crop competition, and 74 entries in the open competition. The field crop competition exhibit was very tastefully arranged, the only criticism heard of it was the difficulty experienced in examining the seed in bags which were placed high up on the stand erected to show the exhibit off to advantage, but small samples placed below were intended to obviate this. The Seed Department was one of the main features of a good show.

OPEN CLASSES IN GRAIN.

Fall Wheat, White.-1, A. Limon, Strathroy; 2, P. J. McEwen, Wyoming; 3, John W. Hutton, Mt. Brydges; 4, Alex. Morrison, Creemore; 5, John Mc-Diarmid, Lucknow; 6, W. J. Douglas, Galt. Fall Wheat, Red or Amber-1, G. A. Burns, Paris; 2, Andrew Schmidt, Mildmay; 3, J. S. Waugh, Chatham; 4, A. Elcoat, Seaforth; 5, J. & H. Laidlaw, Walton; 6, Milton Backus, Chatham; championship, G. A. Burns. Spring Wheat, except Goose-1, Wm. Naismith, Falken burg; 2, S. W. Bingham & Sons, Hillsburg; 3, Geo. E. Foster, Honeywood; 4, F. Buckland, Wiarton; 5, Geo. R. Barrie, Galt; championship, Wm. Naismith. Goose Wheat-1, Wm. Roth, Fisherville; 2, R. M. Mortimer, Honeywood. Oats, Banner-1, A. Schmidt; 2, Jacob Lerch, Preston; 3, J. M. Fisher, Mildmay; 4, A. Elcoat, Seaforth; 5, Jas. H. Wilson, Milton; 6, S. W. Bingham & Sons; 7, Dougal Kennedy, Dryden. Oats, O. A. C. No. 72-1, Jacob Lerch; 2, Wm. J. Douglas; 3, J. A. Cockburn, Puslinch; 4, A. Elcoat; 5, D. A. McNaughton, Puslinch; 6, Jas. Carter, Hagersville; 7, E. B. Palmer & Son, Norwich; 8, F. W. Oke, Alvinston. Oats, any other white-1, S. E. Griffin & Son, Acton; 2, A. Schmidt; 3, R. M. Mortimer, 4, H. L. Goltz, Bardsville; 5, John Winer, Guelph; 6, John H. Schweyer, Fisherville; 7, John McDiarmid; 8, H. Wharton, Eden Mills; 9, J. M. Fischer. Oats, Black-1, A. Schmidt; 2, Jacob Lerch; 3, Thos. W. Stephens, Auroras 4, Jas. Martin, Amherstburg; 5, Wm. Thompson, Aurora; championship, A. Schmidt. Barley, Sixrowed-1, A. W. Cohoe, S. Woodslee; 2, D. F. Mc-Kenzie, Eagle River; 3, A. Schmidt: 4, Geo. R. Barrie, Galt; 5, Jacob Lerch; 6, C. M. Graham, Peterboro; 7, S. W. Bingham & Sons; 8, Mack Leitch, Guelph; 9, H. L. Goltz; championship, A. W. Cohoe. All O. A. C.

DECEMBER

No. 21. Ry Schmidt; 2, J Schweyer; 5, Peas, Large-Michihausen, Field Peas, Sr & Son; 3, A. Miles, Norwic wallacetown; Beans-1, A. V s Waugh, Ch R. M. Mortim Wm. Roth; 2, tia; 5, J. H. Alsike-1, W. Klopp; champ Schmidt; 2, T. land; 5, E. B. Schmidt. Naismith; 2, H D. Hamilton; Potatoes, Late McConnell & Son, Acton; 4, ers, Ltd.; 6, J. Potatoes, Late Wm. Naismi 5, Port El Any early Var 3, F. W. Krou & Son; 6, Joh ers, Ltd. Con Arch. Maccoll, fellow-1, J. Johnston; 4, I W. Cohoe. Co Maynard; 2, H Leamington. Knister; 3, Al Anderson; 6, Imp. Leaming-Jas. Martin; 4 Dent-1, A. Ou 4, A. Mousseau 7; E. Thompso Shepley; 2, J. J. S. Waugh; 1, A.Oullette; Shuttleworth B A. Smith; 2, ning-1, F. A. B. R. Cohoe; Mangel Seed-1 Tutton. Autu S. E. Griffin & Sheaf-1, H. L. 2. H. L. Goltz 5, T. J. Sheple Goltz; 2, Arch. E. Griffin. Au Wheat-1, G. R 2, J.A. Slater; W. J. Fraser. A. C.; 2, Geo. Corn, Any Eigh nard: 2 Waugh; 5, Ed.

Martin; 2 Potatoes, Roun Naismith; 3, 1 Fruit Growers H. L. Goltz; 2, 4, Pt. Elgin Type-1, 11. L. Fruit Growers, . STANDING OATS.-1, J Winer, Guelph, Abundance; 4, 1

A. S. Maynar

Flint-1, A. M

Variety White 1

Jas. Martin; 4, Martin; 7, A. I

Corn, Any Vari

A. Mousseau: 3

R. Armstrong.

Alex. McKague Goltz. Bardsville Lucknow, Abune Banner, 9, W. A D. A. McNaught POTATOES. Warrior; 2, H. 8, E. Barbour,

Bracebridge, Ab Doole TURNIPS .-Sons, Dundalk;

R. Short, Elora PALL WHE STRING WH SUGAR BE Fos: Patterson

ston 1 D CLOVE C RN, DENT cons No. 7; 2, sin 7; 3, R 4, R. J. ASSES.-Export bacon hogs & Nephews, Burford; 2, ood; 3 and 4, P.fitchard Bros. son, Atwood; 6, 7 and 12, Sons, Streetsville; 8, Jacob Douglas & Sons, Mitchell; n & Sons, Norval Station. J. McEwen, Wyoming; 2, s, Northwood; 3, S. Dolson & ld, Essex.

oultry.

many good poultry exhibitions, ip the best, but this year the d tribe at the Guelph Winter in its class on the American and six hundred and fifty live s, and the quality was perhaps ords of an American judge, who exhibitions the continent over, never saw such quality in any the United States. Madison on was put in the shade both numbers, there being from 800 n is commonly seen at the big e were approximately as many inter Fair in the Poultry Dein this department at the big ing to a close at San Franearlier hatched this year, and, t amount of wet weather, they d showed much better quality ear ago. Single-combed White gest class at the Show, with 210 Barred Rocks, 200 White ngle - comb Rhode Island Reds. great improvement with 187 of entries in Buff Orpingtons, The total showed 1,400 enr previously out at Guelph. no end to pigeons and pet

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seed Exhibit.

in the City Hall, was the comment at this year's fair. Department at any exhibition Prof. Murray stated that, in t been a more nicely-arranged Canada. He had s:en larger none better put up. Much ellent display is due to W. J. Department; J. Lockie Wilson, On the whole there were f entries as last year. Potaquite so numerous, die, no le season. The grains were ly discolored, but remarkably In this particular the Winter There were 30 more ement. than last. There were 112 competition, and 163 in the e were 25 entries in corn in , and 74 entries in the open crop competition exhibit was the only criticism heard of rienced in examining the seed aced high up on the stand hibit off to advantage, but ow were intended to obviate ent was one of the main

SES IN GRAIN.

A. Limon, Strathroy; 2, P. 3, John W. Hutton, Mt. ison, Creemore; 5, John Mc-V. J. Douglas, Galt. Fall . A. Burns, Paris; 2, Andrew S. Waugh, Chatham; 4, A. H. Laidlaw, Walton; 6, Milchampionship, G. A. Burns. se-1, Wm. Naismith, Falken-Sons, Hillsburg; 3, Geo. E. Buckland, Wiarton; 5, Geo. ship, Wm. Naismith. Goose nerville; 2, R. M. Mortimer, er-1, A. Schmidt; 2, Jacob isher, Mildmay; 4, A. Elcoat, n, Milton; 6, S. W. Bingham edy, Dryden. Oats, O. A. C. , Wm. J. Douglas; 3, J. A. Elcoat; 5, D. A. McNaugharter, Hagersville; 7, E. B. 8, F. W. Oke, Alvinston. S. E. Griffin & Son, Acton; . Mortimer; 4, H. L. Goltz, ner, Guelph; 6, John H. John McDiarmid; 8, H. Whar-I. Fischer. Oats, Black-1, Lerch; 3, Thos. W. Stephens, mherstburg; 5, Wm. Thomp-, A. Schmidt. Barley, Six-Woodslee; 2, D. F. Mc-Schmidt: 4, Geo. R. Barrie, C. M. Graham, Peterboro; 7, Mack Leitch, Guelph; 9, H. W. Cohoe. All O. A. C.

No. 21. Rye - 1, Jacob Lerch. Buckwheat - 1, A. Schmidt; 2, Jacob Lerch; 3, H. Wharton; 4, John H. Schweyer; 5, Robt. Armstrong, Wallaceburg. Field Peas, Large-1, Lloyd L. Skillings, Bright; 2, A. Michihausen, Lion's Head; 3, Thos. W. Stephens. Field Peas, Small—1, Peter McLaren; 2, S. E. Griffin & Son; 3, A. Miehlhausen; 4, C. E. McMillan; 5, Jos. Miles, Norwich; 6, L. L. Skillings; 7, J. A. Page, wallacetown; championship, Peter McLaren. Field Beans-1, A. W. Cohoe; 2, Oscar Klopp, Zurich; 3, J. Waugh, Chatham; 4, G. S. Newman, Muirkirk; 5, R. M. Mortimer; 6, Geo. E. Foster, Red Clover-1, Wm. Roth; 2, A. W. Cohoe; 3, John Reid; 4, J. Marting 5, J. H. Schweyer; championship, Wm. Roth. Alsike-1, W. Devoe, Oxdrift; 2, Wm. Roth; 3, Oscar Klopp; championship, W. Devoe. Timothy-1, A. Schmidt; 2, T. J. Shepley; 3, A. W. Cohoe; 4, F. Buckland; 5, E. B. Palmer & Son; 6, J. Lerch; championship, Schmidt. Fotatoes, Late Long White-1, Wm. Naismith; 2, H. L. Goltz; 3, A. Hutchinson & Son; 4, D. Hamilton; 5, R. M. Mortimer; 6, F. Buckland. Potatoes, Late Round White-1, H. L. Goltz; 2, H. L. McConnell & Son, Port Burwell; 3, S. E. Griffith & Son, Acton; 4, A. Schmidt; 5, Port Elgin Fruit Growers, Ltd.; 6, J. A. Bennett; 7, A. Limon; 8, J. Walker. Potatoes, Late, Other than White-1, H. L. Goltz; 2, Naismith; 4, S. E. Griffith & Son; 5, Port Elgin Fruit Growers, Ltd. Potatoes, Any early Variety-1, Wm. Naismith; 2, H. Wharton; 3, F. W. Krouse; 4, Wm. J. Douglas; 5, S. E. Griffith & Son; 6, John A. Bennett; 7, Port Elgin Fruit Growers, Ltd. Corn, Compton's Early-1, J. S. Waugh; 2, Arch. Maccoll, Rodney; 3, J. A. Bennett. Corn, Longfellow-1, J. S. Waugh; 2, B. R. Cohoe; 3, R. J. Johnston; 4, L. D. Hankinson; 5, S. L. Pearce; 6, A. W. Cohoe. Corn, Salzer's N. Dakota-1 and 3, A. S. Maynard; 2, R. J. Johnston; 5, Shuttleworth Bros., Leamington. Corn, Bailey-1, A. McKenney; 2, R. W. Knister; 3, Alvin Oullette; 4, J. G. Parks; 5, W. C. Anderson; 6, J. H. Hedrick; 7, J. Wallace. Corn, Imp. Leaming-1, A. McKenney; 2, Shuttleworth; 3, Jas. Martin; 4, Jos. Ferguson. Corn, W. C. Yellow Dent-1, A. Oullette; 2, B. R. Cohoe; 3, A. McKenney; 4, A. Mousseau; 5, J. S. Waugh; 6, Robt. Armstrong; 7; E. Thompson. Corn, Wisconsin, No. 7+1, T. J Shepley; 2, J. Parks; 3, A. Oullette; 4, H. Mickle; 6, J. S. Waugh; 7, B. R. Cohoe. Corn, A. O. V. Dent-1, A.Oullette; 2, L. D. Hankinson; 3, A. Mousseau; 4, Shuttleworth Bros. Corn, Sweet Table Variety-1, F. A. Smith; 2, B. R. Cohoe. Corn, Sweet, for Canning-1, F. A. Smith; 2, J. McKee; 3, O. Herold; 4, B. R. Cohoe; 5, T. J. Shepley; 6, L. D. Hankinson. Mangel Secd-1, G. A. Burns; 2, Henry Stokes; 3, F. Tutton. Autumn Wheat, Sheaf-1, T. J. Shepley; 2, S. E. Griffin & Son; 3, A. Maccoll. Spring Wheat, Sheaf-1, H. L. Goltz. White Oats-1, B. R. Cohoe; 2, H. L. Goltz; 3, S. E. Griffin & Son; 4, A. Maccoll; 5, T. J. Shepley. Six-Rowed Barley, Sheaf-1, H. L. Goltz; 2, Arch. Maccoll; 3, L. Livingston; 4 and 5, S. E. Griffin. Autumn Wheat-2, G. R. Barrie. Spring D. Hankinson; Pearce: 3. Waugh; 5, Ed. Warwick; 6, F. A. Smith; championship, Jas. Martin: 4, B. R. Cohoe; 5, J. H. Hedrick; 6, J. cream cooled in a refrigerator by means of ice only. Martin; 7, A. Mousseau; championship, T. J. Shepley. Corn, Any Variety Yellow Dent-1, W. C. Anderson; 2, A. Mousseau; 3, R. W. Knister; 4, L. D. Hankinson; 5, R. Armstrong. Corn, Any Variety Sweet Corn-1, F. Martin; 2, L. D. Hankinson; 3, B. R. Cohoe. Potatoes, Round White Type-1, H. L. Goltz; 2, Wm. Vaismith; 3, H. L. McConnell & Son; 4, Pt. Elgin Fruit Growers, Ltd. Potatoes, Long White Type-1, H. L. Goltz; 2, A. Hutchinson & Son; 3, W. Naismith; 4, Pt. Elgin Fruit Growers, Ltd. Potatoes, Rose Type-1, H. L. Goltz; 2, Wm. Naismith; 3, Pt. Elgin

Fruit Growers, *Ltd. STANDING FIELD CROP COMPETITIONS.

OATS.-1, J. A. Slater, Galt, O. A. C. 72; 2, John Winer, Guelph, Linco'n; 3, Wm. Hutchson, Rockwood, Abundance; 4, And, Schmidt, Mildmay, Abundance; 5, Alex. McKague, Teeswater, Bumper King; 6, H. L. Goltz. Bardsville, Imp. Scotch; 7, John McDiarmid, Lucknow, Abundance; 8, J. & F. Laidlaw, Walton, Banner; 9, W. A. Rowand, Walkerton, O. A. C. 72; 10, D. A. McNaughton, Puslinch, O. A. C. 72.

POTATOES.-1, Wm. Naismith, Falkenburg, Davies Warrior; 2, H. L. Goltz, Bardsville, Davies Warrior; 3, E. Barbour, Hillsburg, National; 4, Alex. Barron, Bracebridge, Abundance; 5, D. Campbell, Mt. Brydges, Doole

- TURNIPS .- 1, David Patton, Paris; 2, A. Hanna & Sons, Dundalk; 3, Robert Tisdale, Fergus; 4, R. L. & R. Short, Elora; 5, Jas. H. Anderson, Fergus.
- PALL WHEAT .- 1, Mrs. John McDonald, Bradford. SPRING WHEAT .- 1, R. S. Frishy, Unionville.
- SUGAR BEETS.-1, T. E. Ross, Alvinston; 2, Fos: Patterson, Alvinston; 3, Robt. Mitchell, Alvinston
- I TO CLOVER .- 1, Jas. Martin, Amherstburg.
- RN, DENT.-1, T. J. Shepley, Amherstburg, Wiscons No. 7; 2, B. R. Cohoe, South Woodslee, Wiscon-7; 3, Robt. Armstrong, Wallaceburg, Wisconsin 4, R. J. Wilson, Charing Cross, Wisconsin No.

Dakota; 2, Ed. Warwick, Blenheim, North Dakota; 3, Alfred J. Rogers, Lynedoch, Smut Nose, 4, Daniel Haist, Fonthill, Longfel ow; 5, John L. Pearce, Wallacetown, Pearce's Prolific.

MANGELS.-1, Archie Park, Hanover; 2, Thos. Johnston, Sr., Kemble.

BARLEY.-1, S. W. Bingham, Hillsburg, O. A. C. 21; 2, Mack Leitch, Guelph, O. A. C. 21; 3, Fred E. Wickham, Walter's Falls, O. A. C. 21; 4, Alex. Morrison, Creemore, G. A. C. 21; 5, Geo. Simpson, Cainsville, O. A. C. 21.

BEANS.-1, Harry F. Sifton, Highgate, Yellow Eye, 2, G. B. Newman, Muirkirk, Yellow Eye.

Judging Competition.

The Inter-County Judging Competition, conducted under the auspices of the Ontario Department of Agriculture, resulted in a win for the team from Oxford County. Middlesex County was second, and Wentworth third. The District Representatives who trained these teams were Ray Green, I. B. Whale and Roy Vining, respectively. Each county in the contest was represented by three men, and the winning team won the Hon. Jas. Duff Trophy. Other Countles in order of standing were: 4, Grey; 5, Haldimand; 6, Peel; 7, Bruce; 8, Ontario; 9, Durham, 10, York. The trio who won the cur for Oxford County were: Wray Chambers, Arlington Robinson and A. G. McCorquodale.

The O. A. C. Inter-year Judging bout was won by the senior year. The third year was second; the second year third, and the freshmen fourth.

Among all the contestants those standing highest in the various classes were as follows: horses, J. H. McCulloch; beef cattle, R. J. Bryden; dairy cattle, C. Patterson; sheep, D. E. McEwen; swine, M. C. McPhail; poultry, M. C.

Annual Cheese and Creamery Meet-

ing at Guelph. That the interest in this meeting of Western Ontario cheese and butter makers during Winter Fair week has not waned, was shown by the fact that nearly every chair in the Class-Room of the Dairy Building, O.A.C. was filled by "live wires" in the dairy business. The President of the Western Ontario Dairymen's Association, Robert Myrick of Springfield, occupied the chair. The Secretary of the Association, Frank Herns, ably assisted to make the meeting one of the best yet

As at previous meetings, the main points in the Wheat—1, G. R. Barrie. White Oats—1, A. Schmidt; discussions centred around how to get an improved 2, J.A. Slater; 3, Geo. R. Barrie; 4, H. L. Goltz; 6, quality in cheese and butter. To accomplish this, W. J. Fraser. Six-RowdBarley-1, H. L. Goltz, O. Suggestions were made on methods of cooling milk and A. C.; 2, Geo. R. Barrie, O. A. C.; 3, A. Schmidt. cream on the farm. For this purpose insulated tanks Corn, Any Eight-Rowed Variety Flint-1, A. S. May-were recommended, particularly for cream, and the creamery men agreed to co-operate with the Dairymen Association to help introduce these as soon as a standard A. S. Maynard. Corn, Any Twelve-Rowed Variety tank at reasonable cost was available. Miss Millar of Flint-1, A. Maccoll, Compton's Early. Corn, Any the Dairy Staff gave the results of tests, showing that Variety White Dent-1, T. J. Shepley; 2, J. Parks; 3, cream kept sweeter, cooled in water, than did similar

In order to impress upon the minds of those who are not careful to deliver clean milk to the dairy manufactories, it was proposed by Instructor McKenzie to send discs of the sediment test by mail or otherwise to such patrons, calling attention to this matter and offering suggestions as to how an improvement can be The use of solutions for keeping the rubber parts of milking machines was fully discussed. Professor Lund, College Bacteriologist, gave the results of tests made of several solutions as made from a number of farms, wherein he found that the bacterial count ran from 4,000 bacteria per c. c. in the best, to 110 millions in the worst. Solutions like the latter were a source of contamination to the milk instead of a cleansing material. He recommended a Chloride of Lime solution made by dissolving one pound of the Chloride in 100 lbs. water, then using the clear liquid for immersing the rubbers. Such a solution would prove effective for two or three weeks. Tests can be made as to its germicidal property. As soon as this is lost, it should be renewed. He suggested that creameries, cheeseries and dairy companies should make up the solution at the factory and furnish it to those patrons using milking machines. By so doing, the Chloride of Lime could be purchased in wholesale quantities at a much lower price than in small lots, and the factoryman would be more likely to have it made of proper strength. It could be sent to the farm in the ordinary milk can, which, of course, should be clean before the solution is put in the can.

The bad effects of allowing rain-water to get into milk to be made into cheese were pointed out by Instructor Travis. The meeting considered it advisable start a campaign in favor of covered milk-stands at all farms in cheese factory sections.

Instructors Gracey, Boyes, and Thompson called the attention of cheesemakers to the fact that sufficient rennet must be used (no less than 3 ozs. per 1,000 lbs. milk); that curds should be tested for acidity at milling time to get uniform cheese; and that cheese should be turned in the hoops the following morning to make a

nice finish and give style to the product.
Standards for grading cream, for butter printers, butter boxes, and for weight and composition of butter

7; 5, J. H. Coatsworth, Kingsville, R. R. 1, White Cap Yellow Dent.

CORN, FLINT.—1, A. S. Maynard, Chatham, North

were advocated by Messrs. Stratton, Robertson, Jackson, Instructor McMillan, and Mr. Singleton, of the Dairy Commissioners' Staff. It seems that there are no standard dimensions for prints of butter, and that some of the 56-lb. butter boxes are not the right size to be conveniently used for shipping prints. Often these empty boxes can be purchased cheaply after the solids have been sold and can be used for shipping prints, although some of the creamery men doubted the economy of this plan. It was suggested that when ordering 56-lb. boxes that they should be 121/4 inches not less—then such a box will hold 50-pound prints. There seems to be quite a variety in the weights given both prints and boxes by creamery men. Some give 16 ozs., some 16½ and some 16½ ozs. in each print. In boxes the weights run 56, 56½ and 57 lbs. Objection was taken to a letter sent out by the Produce Merchants' Association of a certain city, which insinuated that creamerymen were in the habit of giving short weights. One of the members of the Merchants' Association was present, and had to admit that the letter probably overstated the case.

This overweight question is an important one. Suppose a creamery is shipping 1,000-lb. prints daily and gives one-half ounce of butter extra on each print, that is 500 ounces or 31 lbs. butter, worth at the present time between nine and ten dollars. In case of a creamery selling 20 boxes of solids daily, this would mean 20 lbs. daily lost where 57 lbs. to the box is packed. While the buyer objects, and rightly so, to short weights, on the other hand it is an injustice to the buttermaker, and to patrons of creameries where a rate per pound for manufacturing is the rule, to require too much excess weight. The concensus of opinion seemed to be that the prints wrapped in wet paper should weigh $16\frac{1}{4}$ ounces to the pound print and the boxes $56\frac{1}{2}$ lbs.

for local markets and 57 lbs. for export. Mr. Singleton pointed out that there are two Federal Standards for butter composition in Canada—one of 82½ per cent fat under the Adulteration Act, and one of 16 per cent maximum water content under the Dairy Industry Act. In spite of the opinion of the speaker, that the Standard laid down in the Adulteration Act was not likely to be lowered, a resolution was passed asking for an 80-per-cent fat standard in butter.

The pasteurization of cream for buttermaking was advocated in order to meet the growing demand by the public for pure and safe food. The extra price paid for pasteurized butter, it was estimated, would more than pay the cost. As a result of tests made at the O.A.C., the cost of pasteurizing the cream to make 100 lbs. of butter was 3.2 cents. The U. S. Dept. of Agriculture found the cost to be 45 cents to pasteurize 100 gallons of cream, and 18 cents to pasteurize 100 lbs. fat in cream, testing 30 per cent fat. Assuming an "overrun" of 20 per cent, the U. S. cost would be 15

cents per 100 lbs. butter.

With the improved machinery now available, pasteurization can be carried on with much less labor than formerly. For best results, sweet cream is necessary. The way to get sweet cream is to pay an extra price of from 2 to 4 cents per lb. fat for the "extra" or No. 1 quality.

The question of advertising the food value of milk and its products was also discussed, but lack of time prevented anything more than a brief reference to the Dairy products are now bringing good which is encouraging to both farmer and manufacturer. In order to maintain this position it will be necessary to spend some money on advertising in the near future.

A Maritime Seed Meeting.

The annual meeting of the Maritime Province members of the Canadian Seed Growers' Association was held in the Winter Fair Building at Amherst on Tuesday afternoon, December 7th. There was a large attendance, upwards of one hundred being present.

Principal Cumming, Secretary of Agriculture for Nova Scotia, occupied the chair, and spoke of the importance of good seed in the growth of

Prof. Theodore Ross, Secretary of Agriculture for Prince Edward Island, drew attention to the work that had been done by the members of the Canadian Seed Growers' Association, by the Seed Branch, and by the Seed Fairs and Standing Grain Competitions. During the past ten years the yield of oats in Prince Edward Island has increased about ten bushels per acre, and the greater part of that increase, or almost the whole of it is due to the use of better This means an increase of about 1,760,000 bushels of oats per annum, worth this year about

\$800,000. The Good Seed Movement has entered on its second stage in Prince Edward Island, the production of pure seed of one variety in commercial quantities. There has this year been produced in Prince Edward Island upwards of 50,000 bushels of pure Banner oats, all pure and grown on farms on which no other variety of oats was grown. These oats have stored up in them the good qualities of several generations.

T. A. Clark, B. S. A., Superintendent of the Experimental Farm at Charlottetown, gave the results of the variety tests that had been conducted and of the testing of the registered grain for the members of the Canadian Seed Growers' Association. The Banner oats had averaged more than 100 bushels per acre. He also spoke of the work done with wheat, barley and potatoes. A lively discussion followed.

The Sixth Annual Fat Stock Show, held at the Union Stock Yards, West Toronto, on Friday and Saturday, Dec. 10th and 11th, was another justification of the laudable efforts of the Stock Yards management in establishing the show for the purpose of more closely bringing before the live-stock producers the market requirements in the finished product that command the highest price. The exceedingly high prices that have ruled for the past year, and the shortage of marketable meat animals was evidenced in a smaller entry this year, compared with last year, the more noticeable in the entries for car-load lots, yet the quality particularly in the single entries, was never higher. Following, as it did, directly after the close of the Show at Guelph, very many of the better class of animals that competed for honors at Guelph again met in competition here, strengthened by many extra entries. There was a large attendance, and the increased interest manifested spoke well for the future of the live stock interests of this country. Wee McGregor, the grand champion, at Guelph, was also champion at this Show.

The following are the awards:-

CATTLE

PURE BREDS-Steer, 2 years-1, John Brown & Son, Galt; 2, Jas. D. McGregor, Brandon, Man.; 3, T A. Russell, Downsview; 4, Wm. Marquis & Son, Sunder-A. Russell, Downsview, 4, win. Harduns & Son, Sunderland. Steer, yearling—1, A Barber, Guelph; 2, T. A. Russell,; 3, A. Barber; 4, R. F. Duncan, Caledonia. Steer, under one year—1, Hugh McGregor, Brucefield; 2, J. McGregor, Brucefield; 3, H. Wade, Pickering; 4, L. Fried, Roseville. Heifer, two years—1, John Black, Fergus; 2, W. S. Hair, Watford; 3, J. Gardhouse & Sons, Weston. Heifer, yearling, —1, John Black; 2, A. White, Guelph; 3, Wm. Marquis & Son. Fat Heifer, under one year—1, Jas. Leask & Sons, Seagrave; 2, John Black; 3, R. F. Duncan. Champion Pure Bred Steer or Heifer, also winner of Walker House Cup—A.

GRADES AND CROSSES—Steer, two years—1, GRADES AND CROSSES—Steer, two years—1, Jas. D. McGregor; 2, Jas. Leask & Sons; 3, T. A. Russell; 4, D. Ferguson, Mapleton; 5, Wm. Oke, Centralia. Steer, yearling—1, Pritchard Bros.; 2, John Brown & Sons; 3, Jas. Leask & Sons; 4, Jas. D. McGregor; 5, Jas. Leask & Sons. Steer, under one year—1, Brown & Guthrie, Galt; 2, Peter Stewart, Guelph; 3, Jas. Leask & Sons; 4, F. C. Willmott & Son, Milton; 5, John Black. Fat Cow, aged—1, A. White; 2, E. C. Willmott & Son, Milton; 3, Leo. Chard, Lamb-Leask & Sons; 4, F. C. Willhott & Son, Milton; 5, John Black. Fat Cow, aged—1, A. White; 2, F. C. Willmott & Son, Milton; 3, Leo. Chard, Lambton Mills. Heifer, two years—1, Jas. D. McGregor; 2, John Black; 3, W. S. Hair; 4, John Brown. Fat Heifer, yearling—1, John Black; 2, Jas. Leask & Sons; 3, John Brown & Sons; 4, P. Lamont, Zurich. Heifer, under one year—1, A. White; 2, Jas. Leask & Sons; 3, John Brown & Sons; 4, Jacob By, Elmira. T. Faton Co., Special, for best dehorned butcher steer, Eaton Co., Special, for best dehorned butcher steer, any breed or cross, under one year, a silver cup—Brown & Guthrie, Galt.

CAR LOTS—Fifteen Steers, 1250-lbs. and over—

J. D. Ferguson, Mapleton; 2, John Black; 3, P. J. Henry, Ridgetown. Fifteen Steers, under 1250-lbs.— 1, John Black; 2, A. White; 3, John Brown & Son. Harris Abattoir Co., Limited, Special for best carload of 15 Steers without horns, weighing under 1300-lbs. each—John Brown & Son. Mathews-Blackwell, Ltd., Special: Ten best Steers, without horns, averaging 1050 lbs.—A. White. Armour & Company, Special, 15 Butcher Steers without horns, each 1100 lbs. and under-A. White. Swift Canadian Co., Ltd., Special, 15 Butcher Cattle, steers or heifers or mixed steers and heifers, without horns, under 1100 lbs., each-1, A. White; 2, John Black. Fifteen Heifers, average weights—1, A. White; 2, M. Thompson; 3, Wm. Pridham. Gunns, Limited, Special, 15 Butcher Heifers, without horns, each 1100 lbs. and under—A. White.

SHEEP.

LONG WOOLS-Three Wethers or Ewes, yearlings—J. D. Ferguson. Three Wether or Ewe Lambs, under one year—1, A. Elcoat ,Seaforth; 2, A. Hales, under one year—1, A. Elcoat , Seaforth; 2, A. Hales, Guelph; 3, J. Houston, Chatham. Carload of 59 Fat Sheep—1, J. Houston, Chatham; 2, John Black. Carload 50 Lambs, Wethers or Ewes—1, T. Harris; 2, J. D. Ferguson; 3, John Black. Swift Canadian Co., Ltd., Farmers' Special Pen of 10 Lambs, Wethers or Ewes, under 100 lbs. each, bred, fed and owned by exhibitor-

under 100 ibs. each, bred, ied and owned by exhibitor—

1, D. Ferguson; 2, A. Elcoat; 3, John Black.

SHORT WOOLS—Three Wethers or Ewes, yearlings—1, J. S. Baker, Burford; 2, J. Lloyd Jones, Burford; 3, C. F. Jackson, Port Stanley. Three Wether
or Ewe Lambs—1, J. S. Baker; 2, J. W. Springseed & Sons, Caistor Centre; 3, A. Ayre & Co, Bowman-Carload of 50 Fat Sheep—C. F. Jackson. Carload of 50 Lambs, Wethers & Ewes—1, J. D. Ferguson; 2, Brown & Cowan; 3, C. F. Jackson. Swift Canadian Co., Ltd., Farmers' Special Pen of 10 Lambs, Wethers or Ewes under 100 lbs. each, bred, fed and owned by exhibitor—1, J. S. Baker; 2, J. D. Ferguson; 3, D. Ferguson. Swift Canadian Co., Ltd., Farmers' Special Pen of 6 Lambs, Wethers or Ewes under 90 lbs. each, bred, fed and owned by exhibitor-1, J. Lloyd Jones; 2, J. W. Springsted & Sons; 3, J. Houston.

Three Barrows, 170-225 Ibs.-1, T. Readman & Sons, Streetsville; 2, J. K. Featherston, Streetsville; 3, Chas. B. Boynton, Dollar; 4, John Duck, Port Credit. Boys' Hog Feeding Competition—Pen 3 Barrows, bacon type, 170-225 lbs; must have been fed since weaned at 6 weeks old by exhibitor—1, Thos. Chard, Lambton Mills; 2, Geo. Williams, Streetsville; 3, Chas. B. Boynton, Dollar. Swift Canadian Co., Limited,

Farmers' Special Pen 3 Barrows, bacon type, 170-225 lbs.—1, T. Readman & Sons; 2, Chas. B. Boynton. Gunns, Limited, "Tankage Special," Pen 3 Barrows, range 170-225—G. N. Graham, Sunderland. Swift Canadian Co., Limited, Farmers' Special: Pen of 10 Hogs, bred, fed and owned by exhibitor, 170-225 lbs.-1, J. K. Featherston; 2, John Duck; 3, Chas. B. Boynton. Wm. Davies Co., Limited, Special, Pen of 5 Barrows, individual weights, 170-200 lbs.; must have been fed since weaned at six weeks old by exhibitor—1, John Duck; 2, J. K. Featherston; 3, Chas. B. Boynton. Wm. Davies Co., Limited, Annual: Limited to young men under 25 years-Pen containing litter of one brood Entire litter must be shown irrespective of number and must be bred, fed and owned by exhibitor; individual weights 170-200 lbs.—1, Chas. B. Boynton; 2, S. Broad. Carload 50 Bacon Hogs, 170-225 lbs.—1, Merrick & Graham; 2, H. Wade. Gunns Limited, Special—Carload 50 Bacon Hogs, range 170-225 lbs.—Merrick & Graham

The Maritime Winter Fair.

The Maritime Winter Fair was held at Amherst, December 6, 7, 8 and 9, and was in almost every respect the best yet. The building has been considerably improved and better accommodation provided for cattle and for poultry. The prize list has been extended to include young dairy stock, and all classes of this kind were well filled.

The weather during the show was damp, but neither cold nor stormy, and the roads throughout the country were very bad, so that the attendance of farmers within driving distance was rather small. Excursions on the railway, however, were well patronized and the attendance was better than an average.

Beef cattle were more in number and of better quality than for some time.

One of the largest exhibitors of Shorthorns was R. A. Snowball, who won first on aged cow on a very smooth even-fleshed roan. Harold Etter won second with a cow of more substance, but probably not as good quality. Mr. Etter also showed a two-year-old heifer, one yearling heifer, one yearling steer, and a heifer calf, winning the Shorthorn sweepstake with the

Hazen Etter of Westmorland Point, N. B., showed three Shorthorns and seven grades, and won a second on each of his Shorthorns. Harry Caster of Point de Bute, N. B., a new exhibitor, won first on Shorthorn heifer calf, and was also an exhibitor in the grade class. Charles Angus, Port Howe, N. S., showed three Shorthorns and two grades.

Forrest Bros., Amherst Point, put up the strongest exhibit in the show, having thirty cattle and not one in the lot that any breeder need feel ashamed to lead into the ring. Messrs. Forrest won first on two-yearold Shorthorn steer, first on yearling steer, and first on yearling heifer; and in the grades they won first on three-year-old steer, second on two-year-old steer, and firsts on yearlings and calves, first on aged cow, twoyear-old heifer, yearling heifer and heifer calf, winning the sweepstake for best grade any age with a calf under six months of age. This calf is a Hereford Shorthorn cross, and if he develops as he gives promise of at present, he will certainly be hard to beat. Forrest Bros. also showed four Herefords, and won three firsts and one

Geo. Black, Westmorland Point, showed one Shorthorn and three grades.

F. W. Somner, Moncton, showed three Shorthorns, and won first in the section open only to new exhibitors. Other exhibitors of Shorthorns were G. M. Holmes, Amherst, winning first on Shorthorn steer under six months and several prizes in grade class; R. W. & O. A. Coates, Nappan; J. M. Laird & Son, Kelvin Grove, P. E. I., and C. S. Corbett, Amherst Point. Wm. O'Brien & Sons of Windsor Forks, N.S., although new exhibitors at the Winter Fair, are not strangers in N.S. judging rings, and showed a splendid herd of Herefords and grades, and took a good share of the prizes, including the special prize for best animal in the Aberdeen Angus-Hereford class shown by a new exhibitor.

J. M. Laird & Son of P. E. I. showed twelve good Angus in good show condition, and took the lion's share of the prizes in this class.

The Dairy Department is always a strong feature of the Amherst Show, and this year it was bigger and better than ever. The competition was keener in almost every section, and cows that would have won two or three years ago would have had no place at all this year. The grand sweepstake for the highest scoring cow was again won by S. Dickie & Son's "Miss Lahonda," the same cow that won in 1914, making at that time the highest score ever made in Canada; her score this year was 300.3 points, 244 lbs. milk, and 9.63 lbs. fat. A daughter of Miss Lahonda, Cobiquid Hilbon May, stood second with a score of 266.1, 210.9 lbs. milk, and 8.46 lbs. fat. Dickie's also won second on two-year-olds and fifth on three-year-olds.

Wm. S. Harding, Hammond's River, N. B., won first on three-year-old Holsteins, making a score of 249.2 points, 231.8 lbs. milk, and 7.61 lbs. fat, this being the highest scoring three-year-old in the Show. Mr. Harding also won fourth on aged cows.

Stanley A. Logan, Amherst Point, won first on two-year-old Holstein, making a score of 178.4 points,

139 lbs. milk and 5.71 lbs. fat. Mr. Logan also won third on aged cow and second and third in yearlings,

Fowler Bros., Amherst Point, won first on yearling Holstein, with a score of 151.7, 140.9 milk and 4.67 fat; also third on three-year-old Holstein and third on two year-old Holsteins and first on two-year-old grade, with a score of 189.4 points, and fourth on yearling grade with a score of 160.9 points.

Lee & Clark, Victoria, P. E. I., won third on aged cow and second on three-year-old Holstein, and had a strong exhibit in the young Holstein classes.

H. A. Dickson, Central Onslow, N. S., won first on Guernsey three-year-old, making a score of 224.3 points, 146.6 lbs. milk, 7.45 lbs. fat; this was the highest scoring Guernsey any age. Mr. Dickie also won third in the same class, and second on two-year-old and third on

D. G. McKay & Sons, Scotsburn, N. S., won first, second and fourth on Guernsey cows, four years old and over, second on three-year-old and first on yearling. Roper Bros., Charlottetown, won third in aged Guernseys and first on two-year-old Guernseys, and second on yearlings.

Ayrshires were a particularly strong class; in fact, we have never seen so much Ayrshire quality, coupled with real utility, as was shown at this Fair.

McIntyre Bros., Sussex, N. B., won first and second on aged cows in a very close contest. The first prize winner was "Mona D," score 221.3, with 173.7 lbs. milk and 7.06 lbs. fat. McIntyres also won fourth in three-year-olds and first and third in two-year-olds. Fred S. Black won fourth in aged Ayrshire class,

and first in yearling class with "Peach of Springvale, with a yield of 114.9 lbs. milk, 4.96 lbs. fat, a score of 153.4. A. McRae & Sons, Charlottetown, won fifth in aged Ayrshires, first on three-year-olds, and showed a good strong exhibit in the young dairy cattle class. C. Prescott Blanchard, Truro, won second and

fourth in aged Ayrshires, second in three-year-olds, and second in the two-year-olds; also fourth in grade aged cows. John Ritson won sixth on aged Ayrshire and third on three-year-old.

In Jerseys W. E. Harding, Amherst Point, won first and breed champion with his three-year-old cow, "Blood's Fair One," with a yield of 140.5 lbs. milk, 6.47 lbs. fat, and a total score of 198.3. Ab. Harding also won third on aged Jerseys. J. R. Semple, Brule N. S., won sixth in aged Jerseys, second in three-yearolds, and third in two-year-olds, and was a winner in the grade class.

H. S. Pipes & Son, Amherst, won fourth and fifth in aged Jerseys and third and fourth in three-year-olds, first, second and fourth in two-year-olds, and first, second and third in yearling Jerseys. J. E. Baker & Son, Barronsfield, N. S., won first on aged Jerseys, making a score of 189.6, 130.7 lbs. milk and 6.18 lbs. fat; also second and sixth in same class.

Dairy Shorthorns were shown by Walter Boomer of Westmorland Point, who won first in aged cows with "May Maid," with a score of 141.7, 125.2 lbs. milk and 4.42 lbs. fat. Geo. M. Holmes won second and fifth in this class; also first and third for two-year-old Shorthorns and second on yearling; and Arthur Etter was third on aged cows. Alfred Johnson, Truro, won cow and first on three-year-old, and Geo. B. Etter won second on two-year-old.

In Grade Cows W. N. Boomer, Amherst, was first with a yield of 215.2 lbs. milk, 7.34 lbs. fat and a score of 233.6, Geo. M. Holmes second, McIntyres third, C. P. Blanchard 4th and Fowler Bros. fifth.

The Sheep Show was the best and largest yet. D. Pugsley, Barronsfield, N. S., showed Lincolns and grades and won second , third and fourth on ewe lambs, first and third on shearling ewe, and first on aged ewe. Lincolns were also shown by Albert Boswell Oxfords by J. E. Baker & Sons, J. M. Laird & Sons, and Burder Goodwin.

Shropshires were shown by S. J. Stewart, Amherst Point, and Geo. Boswell. Hampshires by Cephus Nunn and Almond Boswell, P. E. I. Dorsets by Geo. Boswell; Cotswolds by J. Tweedie, P. E. I.; Chas. Symes, Minudie, N. S.; Cheviots by Chas. Symes and Cephus Nunn; Leiceters by Albert Boswell and John Retson, and Suffolks by Albert Boswell.

Hogs were not as numerous as in some former years, but the quality was the best yet. The principal exhibitors were: Peter Brodie, York, P. E. I., with grades; J. W. Callbeck, Yorkshires, winning the largest share of the prizes for Yorkshires and the special for best three bacon hogs.

Chester Whites were shown by Henry Boswell and Wallace Stead. Tamworths were shown by Fowler Bros., and Berkshires by L. J. Stewart.

The breeders of hogs complain of the age limit set by the prize list committee, and claim that it should be 18 months instead of 15 and 12 months instead of 9, and 8 months instead of 6, and they claim this is the reason the hog classes are not better filled. The poultry exhibit was about as large as last

year (about 1,500 birds), and the quality better. White Leghorns were the most numerous, with Barred Rocks and Rhode Island Reds next in place. The Dominion Live Stock Department put on an

interesting exhibit, illustrating the marketing of eggs, and gave demonstrations in the method of candling. The Seed Exhibit was the largest in the history of the show, and although it has been a rather unfavorable season in the Maritime provinces, the quality of the

grain exhibited was above the average. The Nappan Experimental Farm put on a very interesting exhibit, illustrating the most improved plans of stables, poultry houses, etc., and a good display of grains and other products.

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A Parallel.

By Peter McArthur

The surprising success of the domestic loan is perhaps the most significant thing that has happened in the history of Canada up to the present time. The great number of subscribers shows that the responsible men of the country, both business men and those who have savings, are willing to do their part in financing the war. They approve of the course that Canada has taken and are willing that she should continue in that course. But most significant of all is the fact that the loan has been so amazingly oversubscribed. This is evidence of a national unity and strength such as even the most optimistic did not suspect. Canada has at last found herself, and is prepared to undertake her work as a nation in a time of great national peril. For a historical parallel we may go back to the days of Elizabeth-the time when England first became self-conscious as a nation. Our histories tell us that when the Great Armada threatened the island kingdom, Queen Elizabeth asked the citizens of London to provide fifteen ships and five thousand men. The citizens humbly petitioned that she would graciously accept thirty ships and ten thousand men. The aroused and united nation felt stronger and more confident than the government. The same condition obtains in Canada The government asked for fifty millions of dollars and the people promptly came forward with a hundred millions. The people of Canada today are stronger and more purposeful than any government possibly could be. Their out-look is confident and self-sacrificing. The time has come for all Canadians to be proud of Canada.

Having raised the historical parallel I am tempted to pursue it further, but in no spirit of vain-glory. On the contrary it is my desire to call attention to what is cheerful and inspiring In the present situation so that we may rise above

and business life that might make us despair of as the full expression of Canadian spirit. If the future if we dwelt on them seriously. For- you are moved to help in any way, to give sertunately these things are not representative of ice of any kind, do it at once. Think more of the true spirit of Canada. As in England at the time of Elizabeth we have the great mass of of Canadians who selfishly refuse to help in any the people working harmoniously to one great way. Every day brings fresh evidence that Canerial prosperity in which trade was expanded and fortunes accumulated. Although we have had no adventurous voyages to newly discovered lands the domain of applied science has offered us opportunities greater than were offered by The new map, with the augmentation of both the Indies." Our adventures have taken the form of scientific research and our rewards have been along the line of industrial development, but our imaginations have been aroused none the less. And as England was prepared to cope with the Armada we are in a position to assume even greater war-like responsibilities. Our population is greater and our resources immeasureably greater. We have cities greater than the London of that day; not only greater but wealthier and more progressive. In addition, and probably most important of all, our population is made up of men who have enjoyed freedom and who are educated in all the rights and responsibilities of free citizenship. Surely we have every right to look forward with con-

The great parallel holds true in still another respect. We are told that the success of British arms was largely due to the liberal financial aid given by public-spirited men like Lord Burghley, who drew heavily on their private fortunes to help the national cause. Although no private individual has perhaps equalled the generosity of Elizabeth's great minister the contributions to Patriotic, Red Cross and other funds to promote the success of the Allies, given by thousands and hundreds of thousands of private citizens will do much for our cause. And these contributions from private sources are increasing in volume as the people become awake to the needs. While much has been done, much more remains to be done and with the new spirit of self-sacrifice and national enthusiasm that is growing in Canada it will be done. And the importance of this voluntary work is beyond computation. Every what is sordid and mean. There have been pitiful exposures of graft and greed in both public help to swell the total that history will record

Canada and less of that fortunately small class We too have enjoyed a period of great mat- ada is becoming vitally united and worthy of a great future.

> Because we are still in the struggle of the war it is premature to follow the historical parallel to its conclusion, but we need have little doubt that it will hold to the end. When England defeated the Armada and took her place as a strong and united nation there came a period of development, intellectual and material that made it unexampled in all history. Although we must ever mourn "the unreturning brave" who are dying so that we may be free, we can make their sacrifice fruitful by nobly doing our part. When the war has been brought to a victorious conclusion Canada will need statesmen of wide vision, like those of the time of Elizabeth, and great thinkers and poets like those who made that age glorious. Much depends on the soldiers at the front but much also depends on the conduct of those who do the work of the country at home. If we prove worthy of the sacrifices that are being made for us we too may have the Golden Age.

A Good Sale.

At the auction sale of grade Holstein cattle at Melrose, Ont., Dec. 8, the property of Scott Bros., some record averages for grade cattle were made. The sale was well attended by local buyers and many from a distance and bidding was spirited throughout. Lindsay and Pound wielded the hammer and the 45 head were disposed of in a short time. The average for all the cows sold was \$101 each, eleven going over the \$100 mark and five selling for the even hundred each. One cow brought \$150, another \$132.50, two others \$117 each, another \$107, and still another \$105. Two-year-old heifers averaged \$86 each, yearlings \$55, and calves \$39 each. These prices were considered by all to be high and speak well for the class of stock offered. Alex. Stewart, W. Ingram, Russell Hedges, D. Campbell, Frank Wright and Bert Ferguson were among the larg-

Toronto, Montreal, Buffalo, and Other Leading Markets.

Toronto.

Receipts of live stock at the Union Stock Yards, West Toronto, from Saturday, Dec. 11, to Menday, Dec. 13, numbered 85 cars, comprising 1,692 cattle, 250 hogs, 864 sheep and lambs, and 94 calves. Quality fair. Trade slow and choice handy-weight steers, 1,000 to 650 lbs., \$5.75 to \$6.15. choice butchers', \$7.15 to \$7.50; good butchers', \$6.75 to \$7; medium, \$6 to \$6.50; common, \$5 to \$5.75; feeders, \$6 to \$6.50; stockers, \$4 to \$5.50; milkers, \$70 to \$100; calves, \$3.75 to \$10.25. Sheep, \$5 to \$7.50; lambs, \$9.50 to \$10.50. Hogs, \$8.50 fed and watered.

REVIEW OF LAST WEEK'S MARKETS The total receipts of live stock at the City and Union Stock-yards for the past

	City.	Union.	Total.
Cars	70	768	838
Cattle	602	10,719	11,321
Hogs	4,200	18,600	22,800
Sheep	1,004	6,108	7,112
Calves	80	611	691
Horses		284	284

The total receipts of live stock at the two markets for the corresponding week

of 1914 were:			
	City.	Union.	Total.
('ars	85	656	741
Cattle		9,325	10,347
Hogs		13,734	14,984
Sheep		6,986	8,351
Calves		568	600
		4.0	19

The combined receipts of live stock at the two markets for the past week show an increase of 97 cars, 974 cattle, 7,816 hogs, 91 calves, and 265 horses, but a decrease of 1,239 sheep and lambs, compared with the corresponding week of

1014. With Christmas in view, good to choice Cattle sold steady all week until Thursday, when buyers held off somewhat, knowing that the sale of show cattle on Saturday would provide them with some specially fine "holiday" beef. Values at to close then suffered 15c. to 25c. per \$4.75; canners and cutters, \$3.25 to con and medium and common stuff \$4.50; light bulls, \$4.25 to \$5; heavy Probably a little more. Baby beef was bulls, \$5.50 to \$6.75.

market top, and steers and heifers weighing 750 lbs. sold at \$7.50 to \$9.50. Not a few of this class were sold to 1,200 lbs., brought \$6.90 to \$7.50. Medium kinds finished weak, at \$6.25 to \$6.60, and common at \$5.25 to \$5.75. Canners fell with the break in butchers', after a short respite of strength, and brought \$3.25 to \$3.75, whereas at the early week prices were quoted at \$3.50 to \$3.90. Butcher cows and bulls were the least affected at the close. Stockers and feeders have been very quiet all week, and, in the face of the general outlook for cattle in Canada, should be doing business. Milkers and springers still active and firm, except for late springers. Milk cows are at a premium, and subject to strong competitive bidding on this market. Cows with roomy bodies and milking prospects are bringing from \$90 to \$125, if at all breedy looking. Calves are very slow, speculators alone doing any business worth mentioning. On the other hand, lambs and sheep are still soaring, and are 50c. per cwt. higher than in our last letter, and a few 90-lb. Southdowns sold at \$10.35, and light sheep up to \$7.50. The majority of the lambs are quoted at \$9.75 to \$10.25, and handy sheep at \$6.75 to \$7.25; common and heavy sheep, \$3 to \$5. Hogs have had a very unsettled week, and trade has been sluggish. The previous week's receipts of 13,000, coupled with direct shipments to packers' plants, has tamed the activities of the buyers a great deal, and live pork has dropped from \$9.50 to \$8.85,

and still easy and slow. Butchers' Cattle.-Choice heavy steers at \$7.75 to \$8.15; choice butchers' cattle at \$7.15 to \$7.40; good at \$6.75 to \$7; medium at \$6 to \$6.50; common at \$5.25 to \$5.75; light steers and heifers \$4.90 to \$5.20; choice cows, \$6 to \$6.50; good cows, \$5.50 to \$6; medium cows, \$4.90 to \$5.40; common cows, \$4.25 to

Stockers and Feeders.-Heavy feeders, a few only, weighing 1,000 to 1,050 lbs., \$6.50 to \$6.65; choice feeders, 900 to Buffalo firms. The top price for heavy 950 lbs., \$6 to \$6.25; good feeders, 800 steers fit for export was \$8.40, and the to 900 lbs., \$5.50 to \$6; stockers, 700 bulk of this kind, if well finished, went to 800 lbs., \$5 to \$5.50; common stocker

> Milkers and Springers.-Choice milkers and springers at \$90 to \$100; good cows at \$70 to \$85; common cows at \$45 to \$65.

Veal Calves .- Extra choice veal, \$10; best veal calves, \$9 to \$9.50; good, \$7.25 to \$8.50; medium, \$5.75 to \$6.75; heavy fat calves, \$5.75 to \$7; common calves, \$4.75 to \$5.25; grassers, \$3.75 to \$4.50. Grass calves stand over at prices quoted.

Sheep and Lambs.-Light sheep at \$6.75 to \$7.50; heavy sheep at \$4.50 to \$5.50; lambs at \$9.75 to \$10.35; cull lambs at \$6.75 to \$7.50.

Hogs.-Selects, fed and watered, at \$8.85 to \$9; 50 cents is being deducted for heavy, fat hogs, and thin, light hogs; \$2.50 off for sows, and \$4 off for stags, from prices paid for selects.

BREADSTUFFS.

Wheat.-Ontario, No. 2 winter, per car lot, 99c. to \$1.02; slightly sprouted, 96c. to 99c., according to sample; sprouted, smutty and tough, 80c. to 90c., according to sample. Manitoba, No. 1 northern, \$1.221, track, lake ports, immediate shipment; No. 2 northern, \$1.20, track, lake ports, immediate shipment; No. 3 northern, \$1.161, track, lake ports, immediate shipment.

Oats.-Ontario No. 3 white, 37c. to 39c., according to freights outside; commercial oats, 36c. to 38c.; No. 2 Canada Western, 511c., track, lake ports.

Rye.-No. 1 commercial, 86c. to 87c. rejected, 70c. to 80c., according to sam-

Buckwheat.-Nominal, car lots, 75c. to 76c., according to freights outside. Barley .- Ontario, good malting, 57c. to 60c.; feed barley, 50c. to 55c., according

to freights outside. American Corn.-No. 3, new, 76c. track, Toronto. Canadian Corn.-No. 2 yellow, old,

75c., nominal, track, Toronto.

Peas.-No. 2, nominal, per car lot, \$2; sample peas, according to sample, \$1.50 to \$1.75. Flour. — Ontario, winter, 90 - per - cent.

patents, \$4.20 to \$4.50, according to \$6.20; second patents, \$5.70 in jute; strong bakers', \$5.50 in jute; in cotton,

HAY AND MILLFEED.

Hay.-Baled, car lots, track, Toronto, No. 1, \$17 to \$18.50; No. 2, \$18 to \$14, track, Toronto, per ton.

Straw.—Baled, car lots, \$6.50 to \$7, track, Toronto. Bran.-\$23 in bags, delivered, Montreal

freight; shorts, \$24 delivered, Montreal freight; middlings, \$26 delivered, Montreal freight; good feed flour, per bag, \$1.55, Montreal freight.

COUNTRY PRODUCE.

Butter.—Prices remained stationary during the past week. Creamery fresh made, pound squares, 33c. to 34c.; creamery, cut, 32c. to 38c.; creamery solids, 32c.; separator dairy, 30c. to 32c.

Eggs.-New-laid eggs remained stationary on the wholesales, selling at 45c. to 50c. per dozen; cold-storage eggs, 80c. to 33c. per dozen; cold-storage, seconds, 24c. to 25c. per dozen.

Cheese.—New, large, 18ic.; twins, 18ic. per lb. Honey.-Extracted, 10c. and 11c. per

lb.; combs, per dozen sections, \$2.40 Beans.—Primes, \$4; hand - picked, \$4.25

per bushel. Potataes.-Ontario, per bag, car lot, \$1.25 and \$1.30; New Brunswick, per bag, car lot, \$1.40 and \$1.45.

HIDES AND SKINS.

City hides, flat 18c.; country hides, cured, 17c.; country hides, part cured, 16c.; country hides, green, 15c.; calf skins, per lb., 18c.; kip skins, per lb., 16c.; sheep skins, \$1.50 to \$2; lamb skins and pelts, \$1.20 to \$1.35; horse hair, per lb., 35c.; horse hides, No. 1, \$3.50 to \$4.50. Deer skins, green, 7c.; deer skins, dry, 20c.; 'deer skins, wet salted, 5c.; deer skins, dry salted, 15c.

Ontario pears are still coming on the market, some Anjous of choice quality selling at 75c. per 11-quart basket. Holly is arriving quite freely, selling

at \$4 per case. Oranges, both Navels and Floridas, are coming in in large quantities, the Navels selling at \$3.25 to \$4 per case, and Floridas at \$2.75 to \$3.25 per case.

Apples.-25c. to 35c. per 11-quart basket; Snows, 50c. per 11-quart basket, and \$8 to \$6 per barrel; Spys, \$4 to \$6 per barrel: Greenings and Baldwins, \$3 to \$4.50 per barrel; Russets, \$3 to \$4.50 per barrel; imported, \$2.25 to \$3 per box; British Columbia, \$2.25 to \$2.50 per box; Ontario, \$1.50, \$2 and \$2.25 per box.

Pears.-California, \$4 to \$4.50 per case; Canadian, Anjous, half - boxes, \$1.25 to \$1.50; full, \$2.75 to \$3.

Tomatoes.-Hot-house, No. 1's, 18c. to 20c. per lb.; No. 2's, 16c. to 17c. per lb. Artichokes .- 25c. to 30c. per 11-quart basket.

Beets.-50c. to 60c. per bag. Beans,-Green, \$4 and \$5 per hamper;

wax, \$4 per hamper. Brussels Sprouts .- 10c. to 12c. per quart; \$1.25 to \$1.50 per four-basket

crates; imported, 22c. per box. Cabbage.-30c. to 40c. per dozen, \$1

per crate and barrel. Cauliflower.-\$3.50 to \$4 per barrel; imported, \$3.75 per case of two dozen.

Carrots.-60c. to 75c. per bag; a few Celery.-17ic. to 30. per dozen; Thed-

ford, \$3.50 to \$4 per large and \$2 per small case; York State, \$5 per case; California, \$5.75 per case. Cucumbers.-Hot-house, \$1.75 to \$2.25

per dozen, \$5 per hamper. Lettuce.-Boston head, \$5 per hamper; leaf lettuce, 20c. to 30c. per dozen.

Mushrooms.-Imported, \$2.25, \$2.50 and \$2.75 per 6-quart basket.

Onions.-25c. to 35c. per 11-quart basket; No. 1's, \$1.25 to \$1.35 per sack; other grades, 90c. to \$1.15 per sack; Spanish, \$4.75 per large case. Parsnips.-75c. to 85c. per bag

Potatoes.-New Brunswick Delawares \$1.55 to \$1.60 per bag; Ontarios, \$1.40 per bag; British Columbias, \$1.50 per 100-lb. sack.

Potatoes.—Sweets, \$1.25 to \$1.35 per hamper.

Montreal.

Live Stock.-The holiday season is now approaching, and choice beef is being held back for shipment a week or two Meantime some fairly good steers are being offered on the local cattle market, and prices ranged from 71c. to 73c. per lb. for choicest offered. Good steers ranged from 7c. to 74c. per lb., and medium sold all the way down to Butchers' cows and bulls sold from 41c. to 6c., according to quality. There was a very good demand for canning stock, and the market was cleared up at 31c. to 31c. per lb. for cows, and 4c. to 41c. for bulls. Sheep and lambs were none too plentiful, and the market for them was firm. Ontario lambs sold 9½c. per lb., while Quebe brought 9c. to 91c. Sheep sold a 5%c. to 64c. per lb. Demand for calves continued good, and sales of milk fed stock took place at Sc. to Sc. per lb., and of grass-fed at 4c. to 7c. per lb. Offerings of dressed hogs were fairly plentiful, and selects sold at 9½c. to 9%c. per lb., weighed off cars.

Horses.-Prices were steady, as follows: Heavy draft, weighing from 1,500 to 1,700 lbs., \$225 to \$275 each; light draft, 1,400 to 1,500 lbs., \$175 to \$225 small horses, \$100 to \$150 each; culls, \$50 to \$75, and fine saddle and car riage animals, \$200 to \$250 each.

Dressed Hogs.-There was very little change to be noted in the market for dressed hogs. Prices continued almost unchanged. Abattoir-dressed, fresh-killed stock sold at 13%c, to 13%c. Some country - dressed hogs were offered here and light stock sold at 12½c., with heavies at 11c. per lb.

Poultry.-The weather and the season were favorable to trade in poultry, and prices gradually firmed. Choice turkers were quoted at 21c. to 211c. per lb. ordinary grades selling at 19c. to 20c. Chickens and ducks sold at 15c. up to 18c., according to quality, and geese and fowl at 12c. to 14c.

tains were \$1.40 per bag of 90 lbs., extrack, those for Quebec stock being \$1.30. Dealers add about 10c. to these figures for smaller lots.

Honey and Syrup.—The market for both honey and syrup was steady, and demand was fair. Prices were 14c. to 141c. per lb. for white clover comb honey, and 111c. to 121c. for brown, white extracted being 111c. to 12c., and brown extracted 10c. Buckwheat honey was 8c. to 81c. per lb. Maple syrup sold at 90c. to 95c. per 8-lb. tin: \$1.05 for 10-lb. tins; \$1.45 for 12-lb. tins, and 12½c. per lb. for sugar.

Eggs.-Production of eggs has fallen off rapidly in the present more wintry weather, and prices advanced in marked manner. New-laid eggs were quoted at 50c. to 52c. per dozen. Selected eggs showed no change, being 33c. per dozen; No. 1 candled were 30c., and No. 2 were 27c. to 28c.

Butter.—Creamery butter was in good demand in anticipation of the approaching season. Prices advanced a full cent, and the outlook is for firmness. Choicest creamery was quoted at 331c. to 34c. in a wholesale way, while fine was 321c to 331c., and seconds 311c. to 32c. Dairy butter was unchanged, selling at 26c. to 27c. per lb.

Cheese Continued in good demand, and the market was quite firm. Prices were 4c. higher. Finest Western colored cheese was quoted at 17 c. to 18c. per lb., white being about &c. below these prices. Finest Eastern cheese was 17½c. to 17½c.

Grain.-The wheat market was strong last week, but the market for oats held steady. No. 2 white, Ontario and Quebec oats, were 45½c.; No. 3 white, 44½c. and No. 4 white, 431c. per bushel, ex store. Dealers quoted tough No. 2 Canadian Western, and tough extra No. 1 feed at 46c.

Flour.-The market for flour was very strong, and Manitoba brands were 40c. per barrel higher. Manitoba first patents were \$6.50; seconds \$6, and strong bakers' \$5.80 per harrel, in tags, flour in wood being 30c. per barrel extra. Ontario patents were \$6.20, and straight rollers \$5.50 to \$5.60 per barrel, in wood, the latter being \$2.65 per bag.

Millfeed.—The market for bran was strong, and higher prices were obtainable. Millers were only filling car lots for future delivery. Bran was \$23 per ton; shorts \$23 also; middlings \$29 to \$30; pure grain mouille \$32, and mixed \$30 per ton in bags.

Hay.—Baled hay was steady last week at \$20 per ton for No. 1 baled hav \$19.50 for extra good No. 2; \$19 for No. 2, and \$17.50 per ton ex track for

Hides.-The market for hides was very satisfactory, and prices were firm and unchanged. Nos. 3, 2 and 1 hides were 20c., 21c. and 22c. per lb., respectively; Nos. 2 and 1 calf skins were 18c. and 20c. per lb.; lamb skins were \$1.75 each; horse hides were \$1.75 and \$2.50each for Nos. 2 and 1. Rough tallow sold at 1½c. to 2½c. per lb., and rendered at 6c. to 7c. per lb.

Buffalo.

Cattle.—Trade last week, with very excessive receipts West, Chicago reporting 34,000 head, was almost as bad as any previous time this year. Buffalo's run Monday did not exceed 185 loads. However, the supply proved in excess of the demand, and as conditions at other points were such as to cause a bearish feeling among buyers, sellers were up against a bad deal, and the result was that big concessions had to be made, compared with the previous week, in order to make any headway. Around twenty cars of shipping steers were offered, but precious few of the good kinds were included. As a rule, the shipping steers ran toward a medium and common class of stuff, being the kind that were not wanted by Eastern buyers, and on these prices were regarded fully 25c. to 50c. lower than the week before. Best native steers offered sold from \$9.35 to \$8.65, and some coarse, weighty Canadian steers, averaging around 1,400 poends, sold down to \$7.15. Some few early sales on butchering cattle were made at about steady rates, but the bulk showed a 15c. to 25c. decline. Fat Potatoes.—Demand was good, and prices being steady, and on canners it was an across the river, landed at \$6. cow star sold the best, trade on these

held steady. Quotations for Green Moun- uneven deal, latter kinds landing mostly at \$3.35. Not many good stockers or feeders were here, and the trade on the kind offered, which was medium and common, was slow, and if anything a shade lower. Bull supply was light, and best in this line showed a strong market, and the common, light ones, were jumped a quarter. Fresh cows and springers, with a moderate number offered, sold about like they did a week ago. Receipts last week were 5,900 head, previous week there were 3,775 head, and for the same week a year ago the run reached 4,746 head.

Shipping Steers .- Choice to prime. natives, \$9 to \$9.35; fair to good, \$8.25 to \$8.50; plain, \$7.25 to \$7.50; very coarse and common, \$6 to \$7; best Canadians, \$8 to \$8.50; fair to good, \$7.25 to \$7.75; common and plain, \$6 to

Butchering Steers.-Choice heavy, \$7.50 to \$8; fair to good, \$6.75 to 7.25; hest handy, \$7.50 to \$7.75; common to good, \$6.25 to \$6.75; light, thin, \$5.25 to \$5.50; yearlings, prime, \$8 to \$8.75; yearlings, common to good, \$7 to \$7.75. Cows and Heifers .- Prime weighty heifers, \$6.50 to \$7; best handy butcher heifers, \$6.75 to \$7; common to good, \$4.50 to \$6.50; best heavy fat cows, \$5.75 to \$6.25; good butchering cows, \$5 to \$5.50; medium to good, \$4.25 to \$4.75; cutters, \$3.75 to \$4.25; canners, \$2.50 to \$3.35.

Bulls.-Best heavy, \$6.75 to \$7; good butchering, \$6.25 to \$6.50.

Stockers and Feeders.-Best feeders \$6.25 to \$6.50; common to good, \$5.25 to \$6; best stockers, \$5.50 to \$6.25; common to good, \$3.50 to \$5.40; good yearlings, \$5.75 to \$6.15; common, \$3.75 to \$4.50.

Milkers and Springers.-Good to best, in small lots, \$90 to \$100; in carloads, \$65 to \$75; medium to fair, in small lots, \$55 to \$65.

Hogs.-Prices the first two days of last week were as low as any previous time this year, but the following three days the market showed quite a bit of strength, and during Friday's session some sales were made as much as fifty cents higher than the opening day of the week. Monday and Tuesday the bulk of the crop sold at \$6.50, a few scattering sales at \$6.60, with three or four lots at \$6.65 and \$6.75, and Wednesday the general range in prices was from \$6.60 to \$6.75, with one deck reaching \$6.80 Thursday one deck of heavies made \$7.05 few decks moved at \$6.90 and \$7, and the bulk went at \$6.85, while on Friday the general run of sales were made from 66.90 to \$7, with three decks \$7,0 Monday pigs sold at \$5.50; Tuesday they brought up to \$5.75; Wednesday bulk moved at \$6, and Thursday and Friday they landed at \$6.25. Roughs the fore part of the week sold at \$5.50, and before the week was out prices were as much as fifty cents higher. Receipts last week were 56,700 head, as compared with 56,481 head for the week he fore, and 20,072 head for the same week a year ago.

Sheep and Lambs.-A booming trade was witnessed in the sheep and lamb department last week. Monday top lambs sold mostly at \$9.35; Tuesday the top was \$9.50; Wednesday best lots made \$9.65; Thursday some reached \$9.75, and Friday the best lots scored \$9.90. Cull lambs the first half of the week went from \$8.50 down, and during Friday's session they reached up around \$9, with some selling as high as \$9.25. Top quotation for yearlings last week was \$8, wether sheep were quoted up to \$6.50, and ewes made \$6. Receipts last week were 21,200 head, being against 21,284 head for the previous week, and 13,727 head for the same week a year ago.

Calves.—Supply last week shows a grand total of approximately 2,150 head, as compared with 2,131 head for the week before, and 1,710 head for the corresponding week a year ago. Top veals the first four days of last week sold generally at \$11, and Friday, under a red-hot demand, best sorted lots sold up to \$12. Cull grades went from \$9 down, and the range on grassers was from \$4 to \$5. Friday's receipts included a mixed deck of Canadian calves, and they sold at three different prices, the top yeals, which were only fair, going at \$11.25, with the cull end, which was pretty common, moving at \$7.50, and some on the heavy, fat order, from

Chicago.

Cattle.—Beeves, \$5.50 to \$10.50; cows and heifers, \$2.60 to \$3.25; calves, \$6.50 to \$10.35.

Hogs.—Light, \$5.50 to \$6.35; mixed, \$5.85 to \$6.85; heavy, \$6.10 to \$6.65; rough, \$6.10 to \$6.25; pigs, \$4.15 to \$5.50; bulk of sales, \$5.90 to \$6.45.
Sheep.—Native, \$6.20 to \$6.85; lambs, native, \$7.25 to \$9.50.

Questions and Answers. 1st—Questions asked by bona-fide subscribers
"The Farmer's Advocate" are answered in this

department free.

2nd—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and and must be accompanied by the full name and address of the writer.

3rd—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

Miscellaneous.

Snow Road.

My farm is on the lake shore. The concession line being flooded, the Township Council bought a road between B and C's farm. When this road becomes impassable with snow drifts, can I lay down the fences and make a winter road wherever I think best without being under any obligations to B or C? Ontario.

Ans.-No. It is for the Council to deal with the matter.

Ditching.

A stream runs through farms of A, B, C, D and E, in order named. On C, D and E the channel requires a bridge over twenty feet to carry it, being upper part of S. river. A and B ask construction of a ditch, meaning that the channel be lowered on C, D and E, who already have sufficient fall and outlet for their drains.

1. If B has enough fall for an outlet on his own property, can he compel deepening of channel on C, D and E?

2. A and B brought on Engineer, who made survey of stream. When he premade survey of stream. sents estimate of cost of work, have interested parties (over twenty) the right to decide by vote whether they go on with work or not?

3. C, D and E depend on stream to water live stock. Proposed change will cause stream to dry up part of summer. Does water right prevent this?

Ontario. Ans.-1. It is a matter to be disposed of by the Engineer.

2. No.

3. We doubt it. However, this and forth as grounds of appeal if one should be taken against the award of the Engineer. Under the Ditches and Watercourses Act (R. S. O., 1914, Chap. 260) any owner affected by the award may appeal therefrom to the County Judge within fifteen days from service of the last of the notices of filing of the award.

Gossip.

COMING EVENTS. Eastern Ontario Dairymen's Association Convention at Renfrew, January 5

Western Ontario Dairymen's Association Convention at St. Mary's, January 12 and 13.

Ottawa Winter Fair, January 18-21,

SALE DATES CLAIMED. Dec. 21.-T. F. Kingsmill, London, Ont.; Shorthorns. Dec. 22.—Geo. Kilgour, Mount Elgin;

Holsteins. Dec. 30.—Southern Counties Ayrshire Breeders' Club Consignment Sale, at Tillsonburg; John McKee, Norwich, Sec-

Jan. 19, 1916.-Jas. Binnie, Erin, Ont.; Aberdeen-Angus cattle and Oxford Down

Jan. 26, 1916.—Brant District Holstein Consignment Sale of Holsteins, Brantford; N. P. Sager, St. George, Ont., Secretary.

Feb. 2, 1916.—Canadian Sale of Scotch Shorthorns, Union Stock Yards, Toronto; Robt. Miller, Stouffville, Manager.

Southern Ontario Consignment Sale Company's Annual Sale of Holsteins at Tillsonburg, first Tuesday after the annual meeting of the Canadian Holstein Association; R. J. Kelly, Culloden, Ont., Secretary.

Ge General Joffre mand of all cept

DECEMBER

A thousand cre A thousand A thousand ne And twenty t Each on his o From the old

By

Our ruined wor License, once But ah, beneat When storm ar How quietly th

And how the d

And we who m Destroying on The law, the la Which moves We, that like f

Because we b We only fight t A great reuni Reunion in the When all our

Reunion of the

And of the pr Reunion in the The common s Reunion of our In the one Go

Forward !-what Forward, O w There will be b When that new -From "The L Poems."

Browsin

GENE [From . "War Lo Was farers' Lib J. M. De Pric

It is more i you nemy says friends say. It For he aim of УОП the aim o ma: you; and SCT. lous and 'l help you

Chicago,

eeves, \$5.50 to \$10.50; cows \$2.60 to \$3.25; calves, \$6.50

ht, \$5.50 to \$6.35; mixed, 3.85; heavy, \$6.10 to \$6.65; 0 to \$6.25; pigs, \$4.15 to of sales, \$5.90 to \$6.45. tive, \$6.20 to \$6.85; lambs, 5 to \$9.50.

ons and Answers. ns asked by bona-fide subscribers er's Advocate" are answered in this

ens should be clearly stated and one side of the paper only, companied by the full name and

vertier.

erinary questions, the symptoms be fully and clearly stated, other-yr replies cannot be given.

reply by mail is required to urgent legal enquiries, \$1.00 must be

Miscellaneous.

Snow Road.

s on the lake shore. The ne being flooded, the Townbought a road between B . When this road becomes ith snow drifts, can I lay ces and make a winter road ink best without being under ns to B or C?

t is for the Council to deal ter.

Ditching.

uns through farms of A, B, in order named. On C, D annel requires a bridge over o carry it, being upper part A and B ask construction neaning that the channel be D and E, who already have and outlet for their drains. s enough fall for an outlet property, can he compel channel on C, D and E? B brought on Engineer, who

of stream. When he pree of cost of work, have ines (over twenty) the right vote whether they go on

nd E depend on stream to ock. Proposed change will to dry up part of summer. ght prevent this ?

is a matter to be disposed gineer.

t it. However, this and nds of appeal if one should nst the award of the Engithe Ditches and Water-R. S. O., 1914, Chap. 260) ffected by the award may om to the County Judge days from service of the tices of filing of the award.

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J. Kelly, Culloden, Ont.,

DECEMBER 16, 1915



General Joffre.

General Joffre has been placed in command of all the French armies except those in Africa.

Forward.

By Alfred Noyes.

A thousand creeds and battle-cries, A thousand warring social schemes, A thousand new moralities, And twenty thousand thousand dreams.

Each on his own anarchic way, From the old order breaking free-Our ruined world desires, you say, License, once more, not Liberty.

But ah, beneath the struggling foam, When storm and change are on the deep, How quietly the tides come home, And how the depths of sea-shine sla

And we who march toward a goal, Destroying only to fulfil The law, the law of that great soul Which moves beneath your alien will;

We, that like foemen meet the past Because we bring the future, know We only fight to achieve at last A great reunion with our foe;

Reunion in the truths that stand When all our wars are rolled away; Reunion of the heart and hand And of the prayers wherewith we pray;

Reunion in the common needs, The common strivings of mankind Reunion of our warring creeds In the one God that dwells behind. .

Forward !- what use in idle words ? Forward, O warriors of the soul! There will be breaking up of swords When that new morning makes us whole. -From "The Lord of Misrule and Other Poems."

Browsings Among the Books.

GENERAL JOFFRE.

[From. "War Lords," by A. G. Gardiner, Was farers' Library Series. Published J. M. Dent & Sons, Toronto. Price, 25 cents.]

It is more interesting to know what you nemy says of you than what your say. It is even more important. he aim of your friend is to shield the aim of your enemy is to unyou; and though he may be unlous and mendacious in the task, 'l help you to a truer understandcaricatures may be more revealing than

the most flattering of portraits. him "General Two-divisions-short-andtwo-minutes-late." (It must be remembered that this was written before the development of the past few weeks.-Ed.) It sounds a formidable indictment. If we accepted it au pied de la lettre, there would seem to be nothing more to be said, for it would predicate the most complete incapacity for generalship that could be conceived. But while the phrase reflects a certain truth, it refects it only as the distorting mirror reflects the human form, preserving a sort of grotesque likeness in the midst of its trimming the name to that of General is what the phrase means. It means eral Joffre's caution is excessive, that he avoids risks that ought to be taken, that he allows opportunities that ought to be seized to pass without profit, that, in the language of Scotlard, he is "gey

slow in the uptak'." It is an arguable view on which time alone can give the final judgment. General Joffre would himself probably admit that he is the least adventurous general who ever played a great part on the tributed to him, about "nibbling" at the rounds himself with busts of Napoleon

is prima facie suspect. From this disease no one is more entirely free then General Joffre. It was said of Campbell-Bannerman, of whom, allowing for differences of race and training, he is reminiscent, that he had talked less nonsense than any man of his time. General Joffre not only talks no nonsense; ;he thin's none. His habit of mind is plain to pedestrianism, and his view of his profession is as practical as that of a plumber. No one could be more remote from the military tradition of his country. The tradition of France is the tradition of the romance of war, just as the tradition of Prussia is the tradition of the business of war. Frederick the Great prided himself on the fact that, while his French opponent took the field with a hundred coo's, he too's the field with a hundred spies. Napoleon, though no more forgetful than Frederick of the business of war, knew how to exploit its "glory," and to fire his soldiery with historic appeals to their imaginative and romantic sense.

Now, General Joffre, although he was born in the hot South, is as dour as a Scotch elder, as unemotional as Wellington or Washington. There is, I think, only one recorded address by him to his army. It was that which he made when, after the famous retreat from Charleroi, his army had taken up the position on the Marne. It was the crisis, and Joffre spoke the one public word that has fallen from his lips. It was characteristic in its directness and brevity. "You must be prepared to die rather than yield Weakness will not be tolerground.

ated." This cold, undemonstrative temper is significant of much. It shows that General Joffre is not out for popularity, has

your friends, just as the most savage of seen later, is a fact of profound importance. It is significant, too, of the change that has come over the whole Now the enemies of General Joffre call spirit and method of war. The art of war is governed by the material of war, and the discoveries of recent years have revolutionized the conception of the art. The element of surprise has vanished with the use of the aeroplane, wireless, and the telephone. The wonderful Ulm-Austerlitz campaign of Napoleon would have been impossible with the conditions of to-day. Equally impossible would have been Stonewall Jackson's march by the plank road that won the Battle of Chancellorsville, or his brilliant exploit at Thoroughfare Gap.

We have seen again and again, in the wild exaggerations. The truth which is course of this war, how diffcult it is, caricatured may be best expressed by even with the most rigorous suppression of news, for a commander to effect a Caution. That, stripped of its malice, vital movement in secret, unless one side has an overwhelming advantage in milithat, in the opinion of his critics, Gen- tary railways as is the case with Germany on the Polish frontier. The transfer of the English army from the Aisne to Flanders was carried out with the most elaborate precautions; but in vain. The Germans were there as soon as the British. Moreover, the enormous development in artillery has not only made the fortress obsolete, but has changed the character of fighting in the open from a swift clash of infantry and cavalry to a slow struggle for entrenchments. Add stage of war. The famous phrase at- to all this the gigantic scale of the armies and the vast line of battle, and enemy ("Je les grignotte"), expresses it will be seen that the art of generalvery truly the spirit of his policy. It ship has fundamentally changed. You is not merely that his genius is static could walk over the field of Waterloo in rather than dynamic; it is that his tem- a morning, but it would take you many perament is severely serious and un- weeks to walk over the field of battle theatrical. There is a common disease that extends from the Vosges to the in these days which one may call Yser. When Napoleon ordered the ad-Napoleonism. It afflicts a certain type vance of the Imperial Guard at Waterloo of person of great executive capacity and he had the whole field of battle and all boundless ambition, but little moral bal- the conditions in view; but the French last or social conscience. It is a very advance at Soissons in March was only ous disease, and anyone who sur- part of a scheme which included the English advance at Neuve Chapelle, a hundred miles away, and considerations as remote as the situation in Alsace and Hindenburg's new lunge at Warsaw from the North. The corollary of this is that the commander is no longer a personality, but an abstraction-not a visible inspiration, but a thought working in some remote background, with maps and telephones, aeroplanes and wireless. General Joffre's greatness is shown in his appreciation of the view conditions, and his stern rejection of the old ostentation of generalship which was proper to "a

creed out-worn." But the main significance of this aloofness and sobriety goes deeper than this. The temper of General Joffre reflects a profound change in the spirit of France. Like Lord Kitchener, the French Commander had his first experience of war in the tragic year of 1870, when, as a lad from the Ecole Polytechnique, he did active service with a battery during the siege of Paris. How deeply the iron of that terrible winter burned itself into gered one morning to learn that five the soul of France, is evident in the stress of to-day. Every observer agrees in commenting on the changed temper of the country, its freedom from excitement and alarms, its quiet gravity, as of a nation steeled to endure the worst blows

How different it all is from the levity of 1870, when France danced out gaily to the cry of "A Berlin!" and in a few short weeks saw her armies shattered by a series of defeats without parallel in Political intrigues, but fighting them history. Even in the midst of the frightful overthrow, the spirit of Paris unchallenged autocrat of the army, carrywas true to its past. It plunged into a revolution and swept away the shoddy structure of Imperialism; but even in ing to allow the very considerable victory that thrilling time it mingled a wild and at Guise to modify his plan; avoiding irresponsible gaiety with its panics and the failures of 1870 by giving the fatal

ing of yourself than all the adulation of no Napoleonic designs. That, as will be despairs. . . . Bismarck, waiting grimly outside, was sure of his estate; but Paris would not be denied its laugh, even though it was at its own misfortunes and its own preposterous Generals. Perhaps young Joffre joined in the laugh, too, but he learned the lesson of that gigantic frivolity, and France learned it with him. It is to-day the most serious nation in Europe. It has lost its gaiety, but it has found its soul.

> And General Loffre is a symbol of the victory. I think he is an assurance, too, that France will keep its soul. For his importance is not confined to the battlefield. Behind the immediate issue of the war of the nations are many issues affecting many lands. Who shall say what influences will emerge triumphant in this country, in Germany, in Russia, in France? Everywhere we see new hopes blossoming-nowhere more than in France, where the school of Clericalist reactionaries are busy anticipating that the war will bring the downfall of the Republic, and that with the army victorious and under their control, they will at last have the democracy well in hand. The political struggle in France has always centered in the army, for the Clericalists know that if they can possess the army, as the Kaiser and his Junkers possess it, Parliament, like the Reichstag, will cease to be the instrument of power. It was the exposure of the Dreyfus conspiracy that prevented the fall of the Republic nearly twenty years ago, but since then the attempts to capture the army for the Clerical cause have not ceased, and there have not been wanting many signs of its

Through this atmosphere of political intrigue, General Joffre has come slowly to the front,-a silent, determined man, given wholly to his profession, famous as an engineer and scientist, having seen service in the East, and in command of the expedition to Timbuctoo. Though not a politician, he was known as a Republican and a Freemason, and it was not until the regime of General Andre at the War Office had destroyed the Clericalist patronage in the Army that he obtained the epaulettes of a brigadier - general. When the Council of War was reorganized in 1911, he was made Chief of the General Staff, General Pau, who is a well-known Clerical, having first refused the post, whether on grounds of age only, or because he would not accept the conditions which accompanied the office, is not quite clear. But whatever the cause, the result was that when the crisis came, a Republican was in command of the Republican army.

It is a good omen for France-all the better because General Joffre is too good a Republican to allow political motives to interfere with his duty to the State. The spirit in which he conceives his office, as well as the ruthlessness of his hand in dealing with incompetence, was revealed soon after his appointment as head of the army. France was staggenerals who had been found incompetent in manœuvres had been dismissed.

. . That is the man. Cautious. self-reliant, indifferent to applause, careless of criticism, slow to arrive at a decision, but, the decision once taken, "fighting it out on that I'me" with the grim tenacity of Grant. "No weakness will be tolerated." We see the qualities of the man all through the campaign-at. the beginning his authority menaced by down with masterful hand and emerging ing out his scheme of retreat to the Marne with inflexible purpose and refusfortresses a wide berth; allowing the whole of Northern France to be wasted rather than meet the enemy except under his own conditions; when the tide had been checked, never losing his head or sacrificing his scheme of slow attrition to a theatrical move; a man with a long vision, a calm mind, and a will of

Few men in history have been subjected to such an ordeal as that which came during the unforgettable fortnight that followed the retreat from Charleroi. Day by day the tide of invasion swept nearer Paris. The Meuse and the Sambre were crossed, the line of great fortresses along the frontier was engulfed, wave followed wave with seemingly resistless impetus. Each bulletin recorded with cold formality some new advance. Soon Paris itself heard the guns, and in the woods not far to the north of the city patrols of Uhlans were to be seen, the first messengers of the coming terror. No, not the first, for the aeroplanes of the enemy were before them. To appreciate the effect of all this, it must be remembered that the French public had looked for success, believed in the fortresses, knew nothing of strategy. They knew still less, if that were possible, of the man who had the fate of the country in his keeping. To the Parisians he was little more than a name. They had seen his bulky figure, no doubt, cantering in the Bois and down the Champs Elysees in company with his two stepdaughters, but only the initiated had seen in him anything more than a superior officer of unknown name and rank. Even the initiated might have been excused for entertaining fears, for what was there in the record of this man to give that popular assurance of victory that means so much. There was no fact on which to hang a legend, no anecdote that gave a clue to character. Born among the mountaineers of Roussillon in the Pyrenees, the son-one of eleven children-of a cooper of Rivesaltes, he was as remote in tradition and temperament from the France of Paris as the fisherman of Loch Erribol is from the Englishman of Balham or Putney. native speech was not French, but a dialect akin to the Catalan speech on the Spanish side of the Pyrenees. 'He had, through his gift for mathematics, got his foot on the ladder at the Ecole Polytechnique, and he had slowly climbed the ladder till now, a man of sixtythree, he was supreme. But there was not a sensation or a dazzling incident in all his career. Only once (for, though he was in one of the forts during the of Paris in 1870 - 71, he saw nothing of the field operations) had he qualify its terrible import. Then, on pass over."-Chas. Kingsley. been under fire, and that only when he led his little column of 400 men (chiefly natives) through 500 miles of desert and wilderness by the Niger to Timbuctoo and overcame the war-like tribes of the Touareg. It was a remarkable achievement, as a perusal of his very simple, unaffected story of "My March to Timbuctoo" will show. But it was a small apprenticeship for the command of millions. Nor was there anything peculiarly attractive in his personality to distinguish him. He had no gift of words, and no arts of the adventurer. He was said to be lazy, and his entire lack of showy qualities made his progress incomprehensible to people who had known him, and who, judging from externals, saw little in him. It was only those who knew this silent enigma intimately and were able to see behind appearances who understood his worth-his incomparable common sense, his cool judgment, his essentially scientific and practical genius, his strength of will which would have been a dangerous obstinacy had it not been informed by such a spacious understanding of the factors involved, and such a decisive instinct for the essentials of a situation.

But Paris knew nothing of this. It only heard vague rumors of that great defeat to the east near Metz, only saw the French army in the north retreating, almost in flight, day by day, only felt the doom approaching with frightful swiftness. The faith in Joffre, unsustained by knowledge of the man, was vanishing. Was he, after all, only another Bazaine? It was a moment when the artist of war would have made a dramatic stroke at all costs "to stop the rot." In the mood of the public and of the army, this appearance of overwhelming disaster might be instantly

fatal to him. And it was in this mofound the man she needed. It is said, I do not know with what truth, that he was opposed to the earlier strategy of the war. Certainly that strategy does not accord with all that we know of the cautious temper of the man. It had in it an element of recklessness, a subservience to political aims, that contrasts strikingly with all that has happened since. Being inferior, both in numbers and equipment, the French were in no position to take the offensive, yet they took the offensive in no fewer than three directions-in Alsace against Mulhausen, in Lorraine against Metz, and against the German center in Luxembourg, upon which 500,000 men were flung. The result was disastrous. On August 20th (1914), the French suffered a severe defeat near Metz, and on the 22nd the attack on the German center had collapsed. Meanwhile Namur fell, and on the Sambre the French and the British left felt the shock of the German offensive through Belgium, and on the 23rd were in full retreat from the line Charleroi-Mons. The failure of the French center has been explained with ruthless frankness in the official French record of the war. was due to "individual and collective failures, imprudences committed under the fire of the enemy, divisions ill-engaged, rash deployments, precipitate retreats, premature waste of men, the inadequacy of certain troops, and the incompetence of their leaders in the use of both infantry and artillery." It is a terrible indictment, and the failure in generalship led to a complete change in the chief commands. But can it be doubted that the fundamental mistake was in the strategy which squandered an inferior force on a series of daring offensive movements? It is hard to believe that the cautious Joffre was the author of that scheme. It has much more the stamp of political expediency than of that calculating prudence that is the characteristic of the commander-in-chief. But whatever the truth about this, the

authentic Joffre emerged with the great retreat. That revealed a man with the rare courage to do an unpopular thing in circumstances of unprecedented trial, and to do it unflinchingly. The brilliant thing has failed, whether it was his own or another's: now he needed the higher courage to do the thing that looked to waiting Paris like complete disaster, and to do it thoroughly. Step by step he gave France up to be ravaged and desolated; night by night he issued his bulletin that told the truth to the anxious without one word to

the position he had prepared on the ment that Joffre showed that France had Marne, with his hidden reserve at hand, with the enemy's communications dangerously extended, with his own line resting on Paris and Verdun, he called the halt and issued the most momentous order in the history of war. And from that day the cause of the Allies never looked back. The strategy that wrought the change was not original. The lessons of 1870 had been learned, and the doctrine of the retreat had been much discussed. But the discussion of that doctrine was one thing: the capacity to carry it into effect with steady disregard of all the sentiment to the contrary and amidst all the agitations of that terrible time, was the achievement of a man of rare genius, but still more rare character. It discovered Joffre to France, and gave it that confidence in his generalship that has never since been questioned.

Fortunate for France that the most celebrated soldier since Napoleon, he is free alike from Napoleonism and Clericalism. For when the war is over he will be the supreme figure in the Republic. He will have something of the power that General Monk had when the sceptre of the great Protector had fallen to the nerveless hand of Richard Cromwell and the State was subservient to the Army and the Army to its chief. It will be the moment for a coup d' etat, and in that moment France will have reason to be grateful that in her supreme necessity her fate was in the hands not only of a great soldier, but of a faithful citizen. For the dream of this plain son of the mountains, with the frank and kindly smile and transparent blue eyes, is not of political power, but of loyal service to the Republic, followed by the repose of "the peaceful shepherd." He has himself confided to M. Arthur Huc, his friend since boyhood, what his dream is like. A lover of the country, he looks forward to the possession of a small vessel which would carry a crew of two, his wife, and a couple of friends. On this they would spend the fine weather navigating the rivers with no end in view but the enjoyment of the beauty of the scenery, the seduction of the sky, the freshness of the nights. It is the dream of a wise and healthy mind. May it soon be realized.

The men whom I have seen succeed best in life have always been cheerful and hopeful men, who went about their business with a smile and took the changes of their mortal life like men, facing rough and smooth alike, as it came, and so found the truth of the proverb, that "good times and bad times and all

Hope's Quiet Hour. A Voice From the **Trenches**

I have just received a copy of some poems by a Canadian soldier, who was formerly a rancher in Alberta. "Johnnie Canucks' was written in a box-car in France, and the original-sent to his friends in Toronto-showed that it was jotted down under difficulties. The car, evidently, was jolting along in a rough fashion. The poems speak for them-

Johnnie Canucks.

Johnnie Canucks, our time has come; Enough we've had of fife and drum; Stern is the work where bullets hum, That leads to victory.

Johnnie Canucks, we're now in France (Gun and bayonet and shining lance) Marching on to the Devil's dance On Belgium's blood-soaked lea

We've tried our best to play our part; Now shoulder to shoulder, heart to heart, Till Belgium shall be free. Johnnie Canucks, our country's fair;

Johnnie Canucks, right from the start

May thought of her be as a prayer To help us do our duty there, Oh, Canada, for thee.

Bravely, facing death we stand, Doing our bit for the mother land ; Oh, God, the issue is in Thy hand; We place our trust in Thee. OLIVER E. BAILLIE. (France, February, 1915.)

To Canadians Who Fell Near Ypres. Mourn for your dead, Oh, Canada, Yet not as the hopeless weep, In a noble cause, for a country's love, They passed to their quiet sleep.

Pray for your dead, Oh, Canada, Yet not as the hopeless pray, For theirs was a death for a living hope They died for the coming day.

Remember vour dead, Oh, Canada, Yet not as the hopeless do. For the God above saw how they died, And His judgment is kind and true.

Think on these words, Oh, Canada, Christ died Himself to send; No man hath greater love than this, That he giveth his life for his friend OLIVER E. BAILLIE. (Ypres, April 26th, 1915.).



Where the British are Fighting in Mesopotamia. The river shown is the Tigris, flooded during the summer rains.

Of countless ge Thou art our o While striking love, We lift our that The Wouldst touch rend the

DECEMBER

. . Oh God o

An only Son,

Didst Thou no

That tells us v

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(Belgium, Jul

Oh, many there

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On a venture We crossed the Glad of the We thought of Of charges an

Of the battle's

And the chan We knew we can To fight for o In a glorious g And our home

But now, alas, We fight not And the colors In the mud o

In helmets for We parade at With a curse of We march to

We fight like and cold Our battles a Romance's day With the chee

Farewell Roman

The flag and When a day of Repaid the tre But we should hurry To join these

That we were (Belgium, Aug

I wonder how

In a hundred

tears.

started off on merry glee," "looked for cro crushed upon t thorns. Like th to sit on the r of their King, a share in H boyish was the "homeland's wil with the gloric cry to God from those we leave us, who must d be holy, May it How Christ-lil the firing line great severity, home. Do you spent the last e Read that wor how earnestly H fort the trouble ing forward to car was for the you My peace Le: not your h

1 111

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Himself to send; greater love than this, eth his life for his friend. OLIVER E. BAILLIE. 26th, 1915.).



1 1 1?

A Soldier's Prayer. Oh God of Peace and Love, Who gave An only Son, that we might learn to love,

Didst Thou not also give this instinct, old as life,

That tells us we must keep inviolate our land,

And live our lives in our own way beneath Thy guiding Hand, And firmly hold the freedom, made sacred by the blood

Of countless generations gone before?

Thou art our only hope, and even now, While striking for our lives and all we We lift our faltering prayer, and ask

that Thou Wouldst touch the heart of man, and rend the veil Of ignorance, that hides Thy face from

God of Mercy, God of Love, Hear us as we humbly cry, Comfort those we leave behind us,

Closely hold us, who must die.

him.

God of Battles, give us courage, Truth and justice to maintain, May our sacrifice be holy, May it not be made in vain. OLIVER E. BAILLIE.

The Day of Romance.

(Belgium, July, 1915.)

Oh, many there be, who came with me On a venture far from home, We crossed the sea in merry glee, Glad of the chance to roam.

We thought of war as it was of yore, Of charges and red high lights, Of the battle's roar, with the flag before, And the chance of a thousand fights.

We knew we came, in our country's name, To fight for our country's cause, In a glorious game to win our fame And our homeland's wild applause.

But now, alas, it comes to pass, We fight not with ringing steel, And the colors bright fade out of sight In the mud of the battle field.

In helmets for gas, with their isinglass, We parade at the daw_n of day, With a curse of hate for our respirator We march to the field of fray.

We fight like the mole, in the gloom and cold, Our battles are underground,

Romance's day has passed away With the cheery bugle's sound.

Farewell Romance, with the shining lance, The flag and the pennant flying, When a day of life in the glorious strife, Repaid the trouble of dying.

But we should not worry, nor seek to hurry

To join these warriors bold, In a hundred years they'll repeat with tears.

That we were the heroes of old. OLIVER E. BAILLIE. (Belgium, August, 1915.)

I wonder how many daring young men started off on their great adventure "in merry glee," finding that where they "looked for crowns to fall," the garland crushed upon their heads was made of thorns. Like the two apostles who asked to sit on the right hand and on the left of their King, they were offered instead a share in His baptism of fire. How boyish was the ambition of winning the "homeland's wild applause," as compared with the glorious manhood which could cry to God from the trenches: "Comfort those we leave behind us, Closely hold us, who must die. . . . May our sacrifice be holy, May it not be made in vain."

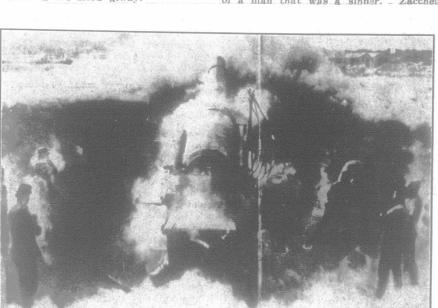
How Christ-like it is of the soldier on the firing line, enduring hardships of great severity, to pray for the friends at home. Do you remember how our Lord spent the last evening before His agony? Read that wonderful fourteenth chapter of St. John's Gospel, and you will see how earnestly He tried to cheer and comfort the troubled disciples. He was going forward to a terrible death, yet His car was for them : "Peace I leave with you My peace I give unto you. Le not your heart be troubled, neither

THE FARMER'S ADVOCATE

let it be afraid." It is a mistable to at the right moment, which melted his There is the best kind of romance in a life laid down for others.

How many are loo'ting anyiously for news from their boys, hoping for good tidings, with an unconfessed dread of the worst? They are so far away, and we feel so powerless to help them. There are others who bear heavy burdens of anxiety, pain or sorrow, feeling as though it were impossible to obey the command: "Rejoice in the Lord alway."

think that the age of romance is over. heart and brought back his loyalty. There was tenderness, as well as miraculous power, in the hand laid on the loathsome leper from whom all others shrank in horror-that touch must have gone straight to the heart. There was brotherly affection in the words to Zaccheus, the hated publican, who was accustomed only to contempt and scorn. Others might say scornfully that the great Prophet had gone to be the Guest of a man that was a sinner. Zaccheus



One of the Guns that Open the Way for the Charges of the French Infantry.

Here is a wonderful action picture from the Champagne front. A heavy French gun is shelling the German treaches. Each well-placed shot means death to scores of German soldiers. It is these heavy guns that prepare the way for the "big drives" of the infantry. After a constant shelling of about forty-eight hours' duration, the trenches are in such battered shape, and many of their defenders so injured and disorganized, that a quick charge easily gains the coveted position for the offensive.-Photo, Underwood & Underwood.

Are you anxious about a dear friend, uncertain of his fate? Remember that wh_0 offered t_0 abide with him. God knows, if you do not, and He cares far more than you do. If you are same yesterday, to-day, and forever." powerless to help," He is not. Did you He loves each of us with an everlasting ever read the wonderful story of our love, and we an trust Him to stand be-Lord's life with the special purpose of side the men in the trenches, as they can noticing His sympathy? Sometimes, as trust Him to comfort and cheer the in the case of the widow who was anxious hearts at home. His Presence mourning for an only son, it is directly holds us near each other. stated that He had compassion on her. Sometimes His sympathy was shown in look, act or word, which revealed the quick insight and tender consideration of our Elder Brother. In the midst of the terrible excitement of the mock trial He was thinking of the weak disciple instead of His own danger, and gave him a look

What He was then He is now-"the

"The dawn is not distant, Nor is the night starless God is still God, and His faith shall not fail us! Christ is eternal! DORA FARNCOMB.



Great Slabs of Copper that Will be Converted into Bullets for the Allies.

In every port in the United States the shipping facilities are being used to their utmost capacity in keeping abreast with the great shipments of war munitions which are leaving this country every minute of the day. Railroad lines are pleading the lack of freight cars for handling the enormous amount of freight, while steamship lines admit that there are not enough vessels to handle the freight. This photograph shows but one of many shipments of copper consigned to the Allies. The great copper slabs seen here on the Erie Basin Docks in Brooklyn, N. Y., weigh 280 pounds each, and are ready to be shipped to France, where they will be converted into bullets and shells.-Photo, Underwood & Underwood.

A Christmas Bale.

I have received a wonderful bale of clothing for the needy from "The Maple Leaf Sewing Circle," Thornbury, Ont. Many hearts will be cheered this Christmas by the kindness of these good Canadians. I will try to do my pleasant share of the work in "passing on" their

The Windrow.

"Nothing is more remarkable than the relative disappearance of the Emperor and Crown Prince-and Gott-from this struggle."-G. K. Chesterton.

.

The latest machine gun adopted by the War Office is known as the Caldwell machine gun, being named after its inventor, a mechanic of Victoria, Australia. It can fire at the rate of 1,000 shots per minute (it is said the speed has been increased to 1,800 shots per minute);;has two barrels, which can each be fired independently of the other; and is air cooled, which does away with the necessity for carrying water to cool the barrel while working. Caldwell sold the patent rights of this gun early this year to the War Office for the sum of \$325. 000 and \$25 royalty on each gun manufactured, and has been appointed manager of the workshops where they are turned out, at a salary of \$5,000 a year.

. Madame Miropoisky, a brilliantly beautiful brunette, is the leading divorcelawyer for the smart set in Paris. When she entered the profession five years ago. she was the first woman to be admitted to practice at the Palais de Justice; now there are twenty-five. . . A married woman's right to her own wages was only recently secured in France, and that through the energy of another woman, Madame Jeanne Schmahl, who agitated the matter for twenty years.

. . . .

"I am profoundly persuaded that the French are going to lead Europe yet Their faults come from being in the core of reality, in the place where things happen. It is their misfortune that they have not the poetry of the islands, the mysticism that comes from living on the edges of things. But they are the better placed for purging democracy of some of the dreamy pedantries into which more elusive societies have perverted it, and showing what can really be done with liberty, equality, and fraternity. As it happens, the Allies rather specially illustrate that famous trinity. Few have loved liberty so much as the English; none have understood fraternity so well as the Russians. Both have still to grasp the real meaning of equality-that mankind has been made by men."-G. K. Chesterton, in Illustrated London News.

A prominent English physician, writing of diseases that attack armies in the field, says that four-cholera, typhoid fever, dysentery, and pneumonia-stand out so prominently that all others may be practically neglected. They are all caused by Lacilli, which are often carried by the myriads of flies bred in the carrion and filth that invariably collect round camps and bivouacs, and are particularly likely to settle upon men weakened by exposure or bad feeding. far as possible, soldiers attacked by any of these diseases are isolated. Inoculation against typhoid has proved very effective, also great care that only boiled and filtered water is used.

Sir Edward Grey.

A mistake occurred in our Christmas Number page of "Some Leading Figures in the Great War." "Earl Grey" should have been "Sir Edward Grey."

HOW TO ORDER PATTERNS.

Order by number, giving age or meas urement as required, and allowing at least ten days to receive pattern. Also state in which issue rattern appeared. Price ten cents PER PATTERN. numbers appear for the one suit, one for coat, the other for skirt, twenty cents must be sent. Address Fashion Department, "The Farmer's Advocate and Home Magazine," London, Ont. Be sure to sign your name when ordering patterns. Many forget to do this.

When ordering, please use this form :-Send the following pattern to:

Name	
Post Office.	
County	
Province	
Number of pattern	
Age (if child or misses' pattern	1)

Measurement-Waist, Bust, Date of issue in which pattern appeared.



8825 (With Basting Line and Added Seam Allowance) Girl's Coat, 10 to 14 years.



8837 (With Basting Lies and Added Seam Allowance) Doll's Cost and Jam o' Shanter, 13 in., 22 in., 26 in.



8823 (With Basting Line and Added Seam Allowance) Girl's Sailor Dress. 6 to 12 years.



8845 (With Basting Line and Added Seam Allowance) Girl's Dress, 8 to 14 years.

The Dollar Chain

A fund maintained by readers of "The Farmer's Advocate and Home Magazine" for (1) Belgian Relief; (2) Soldiers' Comforts: (3) Red Cross Supplies.

The approach of Christmas appears to have deadened enthusiasm for the Dollar Chain, but so long as the Great Need lasts, and ever so little filters in, it will be kept open. Every dollar counts in reducing the intolerable miscry in Europe. Contributions during the week from

Dev. 3 to Dec. 10, were as follows: "Unknown," 82.00; "A Wellwisher," Alma, Ont., 91.25.

Amount previously acknowl-

Kindly address contributions to "The Farm r's Advocate and Home Magazine," London, Ont.

We have to acknowledge a shipment of nine barrels and a box of jam, maple syrup and honey, sent through Mr. Fred Smith, of Gore Bay, from the Women's Institutes of Barrie Island, Poplar, Gore Bay, Gorden, Spring Bay, and Ice Lake; also a contribution of a barrel of jelly from Sandfield, Ont.

These are splendid contributions, but we must repeat again that, by order from the Red Cross and C. W. C. A., no more jam for overseas shipment is required until further notice. Some difficulty in regard to transportation makes this necessary for a time.

The following letter has been received by Mrs. H. A. Boomer, who is in charge of the Belgian Relief Fund in this city, who desires to thank "Farmer's Advocate" contributors for their generous assistance :

Dear Madam,-I am instructed by the Lord Mayor of London, Chairman of the National Committee for Relief in Belgium, to acknowledge with grateful thanks, cheque valued at £212 (1,000 dollars), \mathbf{s}_{0} generously subscribed by the people of London, Ontario, and its neighborhood, through the local Council of Women. The Lord Mayor wishes me to tell you that he was much gratified by this further proof of the magnificent generosity of the people of Canada, and to assure you that every half-penny is urgently required at the present moment, if the National Committee is to succeed in its gigantic task of feeding close upon three million Belgians who are on the verge of starvation in their conquered country. The Lord Mayor trusts you will continue the splendid work you have started on behalf of this sorely-tried people, for it is only by regular contributions that we shall be able to succeed in feeding these people who otherwise will surely starve.

Under separate cover I am sending you a copy of our illustrated pamphlet, which wi,l show you clearly how the food gets into Belgium, also a selection of the many striking speeches which have been made on behalf of the fund.

I have pleasure in enclosing herewith, the Honorary Treasurer's formal receipt. Believe me, yours faithfully,

W. A. M. GOODE. Hon. Secretary, National Committee of Relief in Belgium.

Re Parcels for the Soldiers.

Post Office Department, Ottawa, Canada.

Newspapers are constantly urging the Department, and applications are still being received here, to have all parcels addressed to our soldiers in France sent free, or at reduced rates of postage, there evidently being the impression that the Post Office Department of Canada has control of this, and can do as it This is not correct, inasmuch as the

transference of parcels de ends on a special convention, under the terms of which all parcels are transmitted, and under the terms of which ONLY can parcels be transmitted to England and France. As House of Commons at Ottawa. Dr. Canada is only one party to this agreement, it is not possible for her to take independent action and lower the rates. If Canada did this, the parcels would simply not be received, or, if delivered in England, would not be transmitted to France nor distributed in England.

Application has already been made by the Canadian Post Office Department for a reduction of the rates of postage on parcels posted in Canada and destined for France, and this has been refused by England and France on the ground that the amount of parcels and mail matter presented at the present time is such as to strain almost to the breaking point the transport service, and the War Office has stated publicly that it cannot and will not transport more parce's than it has been doing.

. . . The number of parcels is so edged S1,914.85 many, and the strain on the transport system is so great at the present time, that the British Government has notified the Post Office Department of Canada that temporarily all parcels are reduced to seven pounds for the present.

The British War Office has notified the Post Office Department of Carada that it is necessary to limit the amount of parcel traffic for the troops during the Christmas and New Year's Season, in the interest of military efficiency. The War Office points out that the great bulk of mail matter dealt with in normal times is already a severe tax on the transport service; that the amount which the roads will carry without breaking up is limited; that ammunition, food and stores for the army must necessarily have preference over the mails; that any increase in the volume of mail traffic must cause delay in the forwarding of these necessary equipments for war.

The public are, therefore, appealed to in their own interest, as well as in the interest of military efficiency, to limit the use of parcel post to articles of real utility.

Fruit, perishable articles of all descriptions, bottles and earthenware jars, and like articles, are prohibited, and will not be accepted for transportation; and, until further notice, no parcel exceeding seven pounds can or will be accepted for transmission to the forces in France or Flanders.

. All parcels must be strongly and securely packed in covers of canvas, linen, or other strong material. Parcels which do not comply with these requirements are unlikely to reach their destination safely. The name and address of the sender must be written on the outside; and parcels which do not comply with this condition will be refused.

Post Office Department,

Ottawa, Canada. The Honorable T. Chase Casgrain, Postmaster-General of Canada, has been successful, as a result of negotiations entered into with the Imperial Postal Authorities, in effecting an arrangement with the British Government whereby parcels from Canada for Canadian soldiers in France and Flanders will be carried at the same rate of postage as applies to parcels from the United Kingdom for the Expeditionary Forces on the Continent; that is:

For parcels weighing up to three pounds24 cents For parcels weighing over three pounds, and not more than seven pounds......32 cents

For parcels weighing over seven pounds, and not more than eleven pounds......38 cents

This means a material reduction on the cost of parcels, and it is to be hoped it will be a source of satisfaction to the Canadian public. This reduction has been brought about by Canada foregoing all postal charges for the conveyance of these parcels in Canada and on the Atlantic.

The public are reminded, however, in accordance with the circular issued by the Department recently, that until further notice, no parcels can be sent weighing over seven pounds.

News of the Week

Mr. Albert Sevigny, M. P., will succeed Dr. Sproule as Speaker of the Sproule has been appointed to the Senate.

As an effect of the German Chancellor's speech on Dec. 9th, the recruiting offices in Great Britain, during the last days of Lord Derby's recruiting campaign, were stormed by vast numbers of men seeking to enlist.

President Yuan Shi Kai has been elected Emperor of China.

Official messages from the Balkans clear up, somewhat, occurrences that have been described by Berlin as a headlong rout of the Allies. "As soon as it was demonstrated," runs one dispatch, "that the junction that had been attempted with the right wing of the Serbian army was no longer feasible, the commander decided to evacuate the advance positions occupied by our troops on the Cerna River and toward Krivolak." The Allied troops, it appears, are now occupying a new front, part of

DECEMBER

them on Greek ble that they r Salonika, holdin inforcements arr the Greeks wil from that po drawal, our pelled to resis the Bulgars,, ar whelmed by r Heavy German from Uskub in in Bulgaria. R Serbs are safe more in the Alb will send supplied

TheBe OUR SEN

[For all pupi Continuation Cla

Dear Beavers,vers have formed of self - constitut you live in the how useful the d rades are in eat on our crops ar what would sp happy songs?

I wish that al would follow the in Norway, who every Christmas birds. They tie take great pleasu hop and twitter a recipe for a poured over you explained, or tie bags, that will for a long tim coax the birds al ing them and p bird-boxes for th you many times

HOMEMADE The following r for the winter bi other similar cold ed by various stantially the sa Von Berlepsch on Thuring White bread (

ounces. Meat (scrap ch: Hemp seed, 6 Maw (poppy se Millet (white F Japanese millet Oats, 11 ounces Dried elderberry Sunflower seeds Suet, twice tot Great latitude this food, but t and fat, are essen melted and the d

thoroughly. A bird tree is p mixture hot over This hot soup sh tree only, as it A food stick i series of auger ho the holes with When it cools, the out by the birds, cannot carry it o

Fu Little Minnie ca

with soiled, clami "Mama," she God keep on mak toads won't sit o

A little girl who read her primer, "('-)-w," she re "How do you s "C-O-W, C-O-W, C

Senior Beav

Dear Puck and I have nothing els a letter to your c will send supplies.

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the Greeks will remove their troops arrives. from that port. During the withdrawal, our forces have been compelled to resist repeated attacks from the Bulgars,, and at one point, overwhelmed by numbers, lost ten guns. Heavy German concentration is reported from Uskub in Serbia, and Philippopolis in Bulgaria. Rome reports that 40,000 Serbs are safe at Scutari, and 200,000 more in the Albanian Mountains. Italy

TheBeaverCircle OUR SENIOR BEAVERS.

[For all pupils from Senior Third to Continuation Classes, inclusive.]

Dear Beavers,-I hope all of you Beavers have formed yourselves into a body of self - constituted bird - protectors. As you live in the country you must know how useful the dear little feathered comrades are in eating the insects that prey the drive leading to the house. We have on our crops and fruit trees. Besides, a "Self-Activity" Club at our school. I what would spring be without their am president of it. We all like it very happy songs?

I wish that all the Beavers in Canada would follow the example of the children in Norway, who put up a sheaf of grain every Christmas for a "dinner" for the birds. They tie the sheaf to a post, and take great pleasure in watching the birds hop and twitter about it. Here, too, is a recipe for a pudding that may be poured over your old Christmas tree as explained, or tied to it in little open bags, that will give the birds picking for a long time. You know you can coax the birds about your home by feeding them and putting up safe, suitable bird-boxes for them; and they will repay you many times over.

HOMEMADE BIRD PUDDING.

The following recipe for a food adapted for the winter birds of New England and other similar cold climates is recommended by various bird clubs. It is substantially the same as that prepared by didn't like it, and after that he never Von Berlepsch on his extensive estates in was the same. One day he went away Thuringia White bread (dried and ground), 41

Meat (scrap chicken food), 3 ounces.

Hemp seed, 6 ounces.

Maw (poppy seed), 3 ounces. Millet (white French), 3 ounces.

Japanese millet, 3 ounces. Oats, 11 ounces.

Dried elderberry, 11 ounces.

Sunflower seeds, 11 ounces. Suet, twice total bulk. Great latitude is possible in making

this food, but the hemp, meat, bread. and fat, are essential. The fat must be melted and the dry materials stirred in thoroughly.

A bird tree is prepared by pouring this mixture hot over an old Christmas tree. This hot soup should be put on a dead tree only, as it will kill any living one. A food stick is made by making a series of auger holes in a log and filling the holes with this mixture when hot. When it cools, the material can be picked out by the birds, but squirrels and crows cannot carry it off in bulk.

Funnies.

Little Minnie came in from the garden with soiled, clammy hands and perplexed I could climb down to China so!

"Mama," she propounded, "why does God keep on making toadstools when the toads won't sit on them?'

A little girl who was just beginning to I do not like the dark at allread her primer, was asked to spell cow. It makes me 'fraid 'cause I'm so small-' she replied promptly.

"How do you spell cows?" "C-o-w, c-o-w, c-o-w."

Senior Beavers' Letter Box. Junior Beavers' Letter Box.

Dear Puck and Beavers,—I thought as Dear Beavers,—It is a long time since I have nothing else to do I would write I wrote to you last, so I think I will a letter to your charming Circle. I have make up for lost time by writing a long not room in the Christmas Number.

them on Greek territory, and it is possi- written quite a few letters to the Circle, letter. There has been nothing happenble that they may retire altogether to but that old w.-p. b. got some. I hope, Salonika, holding it as a base until re- however, it will be out attending to inforcements arrive. It is reported that some other business when my letter

> We are going to have an entertainment for the Red Cross on the evening of the twenty-first of December. We have dialogues, songs and recitations. We are going to have a good programme. The admission is ten cents for everybody. We practice every night for about an

> I am in a dialogue called "His Sweet Bouquet." It is a very funny dialogue. We have a drill called "The Excelsior Band Drill." It is a good drill. When the programme is over we have the Christmas tree.

I intend to write Entrance next summer. Well, I guess I will close. ROBERT RIPLEY (age 11, Bk. IV.). Wallacetown, Ont.

Dear Puck and Beavers,-I have just been reading over the letters to the Beaver Circle, and I thought that I would like to write one. We are having cold weather at present, but I am hoping it will be warmer. I haven't very far to go to school, like some of the Beavers have. It is just at the end of much. We just started when our new school teacher came, Miss Williams. We all like her; she is very jolly; most teachers are not, are they, Puck? If any other school has a "Self-Activity" Club, I wish they would kindly tell me about theirs. Well, I must close and leave room for other Beavers, wishing the Beaver Circle every success.

CLARA B. R. SNARR. (Age 14, Sr. IV.) Harold, Ont., R. R. 2.

Dear Puck,-This is the first letter I have written to the Beaver Circle. am twelve years old and am in the Senior Third class. My father has taken "The Farmer's Advocate" for a long time and I like it fine. I like reading the Beavers' letters. I had a dog once who would pull me in the sleigh, and who would draw me in a wagon in the summer. One day when the law that a muzzle had to be put on dogs was passed, we put one on our dog and he couldn't find him anywhere. He went out into the bush and died. For pets, I have a cat and some pigeons. Hoping this will escape the w.-p. b., I am yours truly.

ANDREW ORCHARD. Minesing, Ont.

Beaver Circle Notes.

Letters written by Florence Schell and others, had to be left out because written on both sides of the paper-which is very awkward for the busy printers.

Honor Roll.

Ray Clothier, John Brent, Margaret Cecil, Hildred Parsons.

OUR JUNIOR BEAVERS. print.

[For all pupils from the First Book to Junior Third, inclusive.]

Digging to China.

If I should dig an' dig all day, Right in the garden where I play, An' dig a great deep hole, I know

I'd like to try it, yet somehow I'm 'most afraid to try it now; The sun is shining here so bright, I know down there it's dark midnight!

Maybe, if I was brave an' big, That then I'd dare to dig an' dig! -New York Evening Post.

ing since I wrote last, so I was puzzled until now for something to write about.

I am going to tell you about our School Fair. There were mine schools competing. The exhibits chiefly consisted of crops of: (1) Mangels, potatoes, oats, barley and corn; (2) fruit; (3) pies, biscuits, bread, and layer cakes; (4) different kinds of apples; (5) collections of weeds and weed seeds; (6) handy farmdevices and tool-boxes. In prize money I received one dollar and ninety cents. The representative of our Rural School Fair offered a magazine for the person who won the most money at the Fair, and it was given to one of our school pupils. At 1 p. m. the parade was held, but our school did not get a prize. The most interesting thing of the whole Fair was to watch the calves being led by a halter. Some would balk on the boys, and some would go ahead first rate. One boy's calf kicked frightfully when he wanted it to make the figure "eight." I guess this is all I can tell this time about the Fair.

Beavers, I am going to send some money to the soldiers who are wounded. This money will be my prize money. Well, I guess I will close, so good-bye.

DOUGLAS WESTINGTON. Welcome, Ont.

Dear Puck and Beavers,-This is my first letter to your charming Circle. I enjoy reading your letters. I have intended to write for a long time. I go to school, and I have a nice teacher; her name is Miss Bickan. I have one sister; her name is Mary Thorp. She is eight years old. I have half a mile to go to school. I like reading riddles. I hope this will escape the w.-p. basket. As my letter is getting long, I will close with a riddle.

What goes in and out and yet never moves? Ans.-A fence.

I wish some of the Beavers would

CONSTANCE SEWARD.

(Age 9, Sr. II. Class.) Maltby House, Maple Grove, Bowmanville, Ont.

Dear Beavers,-This is my first letter to your charming Circle. My father has taken "The Farmer's Advocate" as long as I can remember, and we like it fine. For pets, I have two kittens and a rabbit. My kittens' names are Tabby and Fluff, and my rabbit's name is Mop. My kittens' names are Tabby and Our teacher's name is Miss Quinlin; we like her fine. I have two miles to go to school, and go every day. We had a school fair on the 18th of October, and got many prizes. I will close, wishing the Beaver Circle every success. Hope this letter will escape the jaws of AGNES MURRAY. the w.-p. b. (Age 9, Book II.)

Downeyville, Ont.

Dear Puck and Beavers,-This is my first letter to your Circle. For pets, I have four cats; their names are Minnie, Bessie, Darkey and Tiny. Tiny is just a kitten, and very playful. I have a good watch dog named Bingo. I also have a calf called Snowball. I will close now, hoping to see this letter in ROBBIE T. CAIN.

R. R. 5, Cookstown, Ont.

Riddles.

What is smaller than an ant's mouth? Ans.-What goes in it. Sent by Rhea Minshall.

What comes in the morning and goes at night? Ans.-The sun. Sent by Merton Penny.

The Ingle Nook.

[Rules for correspondence in this and other Departments: (1) Kindly write on one side of paper only. (2) Always send name and address with communications. If pen name is also given, the real name will not be published. (3) When enclosing a letter to be forwarded to anyone place it in stamped envelope ready to be sent on (4) Allow one month in this Department for answers to questions to appear.]

some of the letters for which there was to get "My Solitary Summer.

FLOWERS AND BOOKS.

Dear Junia,-In the issue of September twenty-third you asked for letters for the Christmas Number. I was very glad you wanted letters, because we have had so few of them lately, and I always enjoyed them. Being a member of a family where the "yellow cover" is read and enjoyed from cover to cover, I take this opportunity of writing to the "Nook."

We have had a delightful summer, and as the winter draws nearer I cannot help but wish for once that I lived in a southern clime. Still, it must be very monotonous to have always summer or always winter.

Our flowers were lovely this year. What a lot of care, and what a lot of pleasure they are! The pansies lift up their bright little faces and seem to say, 'Aren't you glad you have us'? Here are the faithful, sturdy zinnias, nodding to the trim nasturtiums, and over yonder the sweet peas climbing higher and higher, too proud to stay and mingle with the lower flowers. They are all dear to me, but I think I love the pansies best. This winter I am going to have a box in the house to have blossoms all winter. Junia wanted to know some flowers that would withstand Jack Frost's raids. I will mention a few I have had in my own garden that seem to be frost-proof,-stocks, lavender, hollyhocks, and pansies. The latter will blossom even after the snow makes its appearance, and I have seen them peep out as fresh as ever from under the snowy carpet. Personally, I think there is nothing prettier for a table center than pansies in the bowls especially made for them. I am afraid I have not Junia's love of petunias. I have had both the single and double varieties. They seem to fill me with depression, and I cannot help but associate them with funerals. Besides, you cannot touch them without having your fingers smeared with a sticky substance. Junia spoke once of the superstition of weeds and flowers. I wonder if you have ever heard of the fuchsia. The story is that when Christ was crucified they were so ashamed that they hung their heads and have never since raised them. However that may be, it is a pretty sentiment.

Were not the woods beautiful when they were changing their coloring? And what a joy to walk through them! I felt sometimes as though I could shout and dance. Then, again, I would have liked to roll on the soft turf and get close to mother earth as when a child. I am afraid it would not be very dignified, but I think I shall have to try it when alone some time.

We did not have much time for books in the summer, but had to steal away once in a while with them. I wonder how many of you have had the idea you could write. I have felt that if I only could write something worth while, something to bring cheer and laughter to a poor lonely soul, my cup of joy would overflow. So much good can be done through the pen. If my name had only been "Robert"! What with Stevenson, Service, Norwood, Burns and Browning, there certainly must be something in a name. I have found that writing the best essays at school is not always an indication that you will be an author, as it was with George Elliot. Don't you just love her books? "Mill on the Floss" is one of my favorites, and I have read it many times. Can not you just see Tom and Maggie sitting in the tree eating the tarts which he stole, and rebuking Maggie for taking the biggest? Then comes Thackeray with his Becky Sharp; you don't know whether to love or hate her; and kind, unselfish, Lady Castlewood. I must not forget dear old Dickens, whose books I have read over and over, and never tire of. Who could help loving. Florence Dombey, Esther Somerville, and Amy Dorrit? Many of the books of present authors do not appeal to me. I do not care for a story you can read to-day and willingly forget to-morrow, but I like Harold Bell Wright's books, and Countess Von Arnhim's, and Gene Stratton-Porter's.

Just in closing I wish to thank Junia for the pleasure her articles have given Today's Ingle Nook is given over to us. Also, I would like to know where

"VIOLETTE."

A PIANO THAT YOU AND

YOUR FRIENDS

CAN PLAY AND

ENJOY

asked us to give our views concerning 'The Best Thing in Life." Why, Junia, the best thing in life is a

baby, of course. Those who don't possess one of their own may be inclined to doubt the statement.

Bachelors (Do bachelors ever invade the Nook, Junia?) who have lived next door to a sickly, fretting baby, will think the author of such a statement a fit subject for the lunatic asylum. The mothers, who have cuddled the warm little bodies next to their own, who have felt the pat of soft wee hands on their breasts; who have wondered at the strength of tiny fingers around their own, will know that it is true. Especially will the mothers who have followed a tiny, white coffin from their homes know that the "Best Thing in Life" is a baby. The grandmothers know it best of all, for they have seen their babies grow up and grow away from them. Perhaps they did not realize the worth of the babies when they were younger. Perhaps they were so busy getting necessary work done that they really did not have time to spend enjoying the tiny tots. By the time that Tom's boy and Jennie's girl arrive they have learned some of life's lessons, the work has been taken from the toilworn fingers and grandmother renews some of her youth in the love and pride she bears towards her grandchildren.

We who inhabit this whirling old planet have a habit of measuring the preciousness of a thing by its cost. Is there anything on which we expend more in time, money, care, and costliest of all things—suffering—than a baby?

A baby is a great fun-provoker. man once said that he always pitied the baby of a family because it had to make fun for the whole crowd. The marvel is that the baby always succeeds in doing so, too. A baby is the tie that binds a household together. Statistics show the greatest number of divorces is among childless couples.

A baby tends to raise our ideals. Which of us is there who bends over a tiny form and does not see life from a higher point of view than before?

A baby rouses ambition, es ecially in a man, and brings out latent powers he hardly suspected that he possessed.

A baby brings us nearer to God. there who watches white and pink bundle of innocence who does not feel for that other mother who watched over the Babe in a manger? We never know or guess the extent of the Heavenly love till we have felt the force of the earthly. "Like as a father pitieth his children," falls on ears that lack understanding till we know what it means to protect and care for the little ones. A baby tends to keep us humble. As we look at the tiny face, fresh and pure as a rose petal, we see how soulstained and sin-smirched we have become. Our faults soon become reflected in one of these little looking - glasses. Hence a baby helps us to see ourselves as others see us.

A baby helps to keep us from becoming selfish and hard. It brings out in parents a depth of self-sacrifice their best friends never guessed at.

A baby is altogether the most lovable, teachable, little bundle of joy that ever blest this old earth. On baby's shoulders the welfare of the nations depends. Yours very truly

MRS. J. H. TAYLOR.

FROM OUR SHUT-IN FRIEND, LANKSHIRE LASS.

Dear Junia and Chatterers,-Well, dears, it seems early to write a Christmas letter in October, but as Junia requested letters, I decided to make an effort to comply with her wish, though it may prove a failure, for I think over so often: what can I write about? I have no ights or good times away to write you about, never being off the farm, but I will try to write what I can, and believe me, dears, the lass, though always at dry. It is best to keep newly-potted home, tries to make the most of all plants in a shady place for a couple of cheer coming her way. She tries to be weeks. When either shifting or recontent, and make others glad in every potting, do not use pots that are too

How quickly the summer went by, and this one, so cool and wet, has been such an anxious time to farmers; but after all the worry, the promise held good of "seed - time and harvest shall not fail," and a bountiful crop was given. The trees now are beautiful with manycolored leaves, and inside the bay window is lovely with bloom. A friend came in an auto, not quite sure of the place, and at last she said, "That is the house. Look at the lovely flowers." Inside, behind the bloom, is one who is so often reading with glad heart, over and over, the kind, cheery letters sent her by so many. They often cheer and help me, and I am so grateful, though it is impossible to answer all.

Junia wishes each to say what is the best thing in life. Well, to me, it is, "Emmanuel, God with us"; for life, when having Jesus, at all times is light in darkness, and a comfort in shadow. There are heartaches and pains as well as trials in many ways, but all who can trust Jesus fully will find in Him an ever-present help. May the brave soldiers of war, too, feel the presence of Jesus with them at all times, also those who are left behind. May each one daily grow in grace and faith in the service of the Master, and "Be ye kind one to another." Kindness does help so

Now, I will ask if any of you can tell me how to make beets cook more quickly? The old way takes so long.

I will give you an idea that saves a lot of work, and helped me once. I had a quilt, large size, for comfort on bed. Both ends got badly worn and I got more print, just as near like it as I could, and put a wide strip across top and bottom, covered both sides, and bound on sides, too. It was nearly as good as new, and easily done, with little

I have, like others, received much good from "The Farmer's Advocate." May it still keep on the good old way. I thank again each one for letters and all kindness. May the New Year be a happy LANKSHIRE LASS. one to all.

Care of House-Plants in Winter.

To have fine, luxuriant house-plants in winter, it is absolutely necessary in the first place that the soil be good, and, as a rule, loose. Plants with stiff, woody soil, and a few firm roots, like a firm propagated by dividing the roots. soil, but others with fine, fibrous roots, great many may be "slipped." When require a light soil, or one made friable by adding sharp sand. Very rich garden soil usually fills all requirements, but if one cannot get it, soil for potting may be made as follows (Eben Rexford's recipe): One part garden soil, one part leaf mould or turfy soil from sods, onepart well-rotted cow manure and sand, half and half.

To obviate the possibility of worms developing in the soil, some take the precautions to bake it in the oven of the kitchen stove, opening the windows wide to permit the odor to escape. Others use, instead of the manure, bone meal, a pound to a bushel of soil. Always avoid giving too much fertilizer,

as this has a tendency to kill the plants by over-feeding. Sometimes, however, a plant exhausts the nutriment in the soil in which it is growing, and in that case it is necessary to provide more. This may be done occasionally by removing some of the soil from the top and adding fresh, or by mixing in a little fertilizer, or pouring on weak liquid manure. But it may be that the plant requires shifting to a larger pot, or even re-potting. To ascertain if it needs shifting, hit the edge of the pot a sharp rap on a table or other hard surface, then place the hand over the surface and invert the pot. The soil should turn out easily in a mass. If roots appear all about the outside, the mass should be placed in a larger pot with fresh soil below and about.

About once a year plants may be repotted. In this case, shake off part of the soil and pot at once. Water well, then give no more water until growth has begun,-unless the soil becomes very large; the plants will do better if moved

to pots only a size or two larger.

An inch or two of drainage material,broken crockery covered with moss is good-should be put in the bottom of

In regard to the watering of windowplants, it may be said that the amount of water given must depend on the nature of the plant. Bog plants, such as the calla, need to have the soil wet all the time during the growing season; indeed, the "umbrella plant" does best if the pot is set in a pail kept filled with water. Plants from dry countries, on the other hand, such as the cactus, need comparatively little water. Just here may be well to state that the calla and cyclamen need to be "rested" in the summer; i. e., the pots should be put out in the garden and given practically no attention, so that the leaves drop off and the plants seem to die. It is only sleeping, as it would do in its own country of hot, dry summers. For the greater number of plants, a good general rule is to water well, so that a little of the water runs through at the bottom of the pot, then give no more until the soil is dry.

A prime essential to the successful growth of house-plants is plenty of light. Without this they will soon become weak and spindling. Some, however, like more sunshine than others. For this reason, put geraniums and other lusty blossoms in the south and west windows. Begonias and fuchsias do well in an east window, while ferns, Rex begonias, leopard plants and tradescantia may be relegated to the north. All plants, also, need plenty of fresh

air; they never do well in dry, badlyventilated, overheated rooms. A draught of cold air, however, should never be permitted to blow upon them; the fresh air should be admitted, rather, through adjoining rooms, or by opening the top of the window alove them a very little. All plants are the better for moisture in the air, and so do best in a kitchenprovided gas is not used there. It is helpful to shower or spray the foliage every day, as this helps to keep off both dust and insects. Once a week, too, on "wash-day," they may be taken to a tub of lukewarm suds, the foliage dipped and washed well, and the soil saturated.

Some plants with fibrous roots - the chrysanthemum for instance-may be taking slips or cuttings, choose branches that are neither too young nor too old, those that are firm but not tough, cut off sharply and start in sharp sand kept continually wet in a warm, sunny place. Among plants that may be started in this way are geraniums, heliotrope, fuchsias, pelargoniums, and abutilons. New Rex begonia plants may be started by slashing a few cuts in a leaf and pinning it down on wet sand.

To make plants assume a compact, shrubby growth, begin when the plant is young. When it is five or six inches high, nip off the top. This will make

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branches sprout have attained s tops off them. All of the pla excellent for w

wishes to make dow one must h haps, are better and hoya or w Occasionally house-plants, ap red spiders, mea To keep red tiny dots of ca spray the foliag

day, with clear Thrips, mealy way before va Eben Rexford re the best, a soa as follows : Sha of a pound of I a pailful of wate Scale, which farns, palms, etc lemon oil or firpurpose. Direct pany. Occasion itself on so tight to use a stiff h remedy.

The I

The great Conve The women are Back to the 1 sprung, From where their

They came from With lightsome h No doubt they v But still with zea

Zeal for their ho To find out more And tell of thing And work accom

Canadian women,

Great credit sare

A noble, willing, Untiring, spreadi They do not boar Nor are they high

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Will bless the "W The name shall st For "Forward, good,

And like sweet in O'er all the earth Canadian women,

And hope, and t pray; Keep on, and wor You're sure to rea

MRS. W Ravenna, Ont.

Seasona

Steamed Christm ful and one-half fl ful salt, one teas baking powder, or one-half cupful mi spoonful mixed spi melted butter, on one-half cupful dat ful figs. Mix and Combine milk, egg to dry ingredients fruit thoroughly a mixture. Place in steam three hour

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day, with clear water.

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. . . .

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Scale, which frequently appears on

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itself on so tightly that it is necessary

to use a stiff brush when applying the

The Last Echo.

Back to the land from whence they

From where their lives are far out-flung.

They came from many a country place,

With lightsome heart and smiling face,

Zeal for their homes, and country, too,

To find out more that they could do,

And tell of things so great, so vast,

And work accomplished in the past.

Canadian women, staunch and true,

Great credit sare belongs to you,

Untiring, spreading o er the land.

They do not boast ancestral names,

But they, the salt of all the earth,

me native, some of alien birt

All working with a purpose grand,

The betterment of this fair land.

And whether it is war or peace,

In rain, or sline, whate er letice,

Will thankful and delighted be,

Will bless the "Women's Institute."

And like sweet incense yet shall roll

O'er all the earth from pole to pole.

And e'en the veriest "galoot"

Pride.

good,

Their strenuous efforts ne er shall cease,

They've well been nick-named "Putnam's

In days to come, there's more than He

The name shall stand as it has stood,

For "Forward, March!" in all things

Nor do they come their hora to toot,

Nor are they high-strung, haughty dames,

A noble, willing, working tand,

Those women of the Institute.

No doubt they were a trine tired, But still with zeal their hearts were fired.

The great Convention now is o'er,

The women are at home once more,

red spiders, mealy bug, and scale.

tops off them.

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MRS. WALTER BUCHANAN. Ravenna, Ont. of and Alfalfa Cloversand Ti**mothy** Seasonable Recipes. Steamed Christmas Pudding .- One cup-Toronto

ful and one-half flour; one-half teaspoonful salt, one teaspoonful and one-half baking powder, one-half cupful molasses, one-half cupful milk, one egg, one teaspoonful mixed spices, two tablespoonfuls melted butter, one-half cupful raisins, one-half cupful date paste, one-half cupful figs. Mix and sift dry ingredients. Combine milk, egg and molasses and add to dry ingredients. Flour the cut-up mixture. Place in a buttered mold and Steam three bound of the first NEW steam three hours. Serve with hard

half a cupful of lard into a deep, gran- the following way: Melt a little ordi- Please mention "The Farmer's Advocate.

branches sprout out below. When these iteware basin, and bring it to a boil have attained sufficient length, nip the with a cupful each of hot water and brown sugar. Chop one cupful each of raisins and currants, half a cupful each of pitted dates and nut-meats, quarter All of the plants mentioned above are of a cupful of sliced candied citron and excellent for window plants, but if one preserved orange peel and dredge all wishes to make a real picture of a winlightly with flour until each bit of fruit dow one must have vines, and none, peris coated. When the liquid is lukewarm, haps, are better than ivy, ivy geranium, stir in two cupfuls of flour with which have been twice sifted the following ingredients: A heaping teaspoonful of cinnamon, a level teaspoonful of soda, half a teaspoonful each of salt and ginger. All superfluous flour is quickly shaken out of the fruit and a teaspoon-To keep red spiders, which look like ful of baking powder is thoroughly tiny dots of cayenne pepper, in check, stirred in. This practice is peculiar, but very effective for keeping the fruit from settling at the bottom of the cake. The fruit, with a teaspoonful of lemon extract and half a teaspoonful of almond extract, is beaten into the dough last of all. It requires about an hour in a moderate oven to bake this cake in one loaf, which weighs nearly three pounds.

Ravensworth Pudding .- Bake three large apples and take all the pulp out of them. Boil one cupful of milk and pour it over a quarter of a pound of fine bread-crumbs. Allow it to soak for twenty minutes; then add the yolks of three eggs, one by one, the grated rind and strained juice of one lemon, the apple pulp, and a little grated nutmey. Whip up the whites of the eggs to a stiff froth, and add this after all the other ingredients are in. Grease the inside of a plain pudding mold; dust it o er with breadcrumbs, shaking out all the saperfluous ones. Por in the pudding and bake forty-five minutes. Turn out, and pour swelt sauce around it.

Dry Cake Pudding .- Pieces of stale cake may be used in place of bread for tread and cabinet puddings if the sigar is omitted. Rub the cake until the piccas are rather fine. To each two capfals of the crumbs thus obtained, add half a cupful of chopped almonds, one tallespoonful of grated lenion rind, one tablespoonful of lemon juice, and sufficient milk to moisten the crumbs. Put this mixture into a saucepan and heat it; let it boil for a minute and then remove from the fire. Add the yolks of two eggs. When the mixture is cool, form it into neat croquettes. Brush these over with beaten egg-white, roll in fine breadcrumbs, and fry in smok.n;-hot fat. Serve with powdered sugar, with a pud-

ding sauce, or with a puree of peaches. Beefsteak Smothered in Onions.-Cut beef suet in small pieces and try out, drain off three tables optills of the fat and put in hot frying-pan. Remove skins from six medium-sized onions, slice thin, and put in pan with fat. Sprinkle with one terspoonful of salt, cover and cook until soft. It may be necessary to add a small quantity of boiling water to prevent onions from burning. Remove cover, and continue cooking, stirring occasionally, until onions are slightly browned. Spread over a hot broiled round or flank steak and set in the oven for five minutes.

Apple Sauce.-After cooking the peeled apples until they are very tender, stir them thoroughly to remove the lumps. Add sugar according to taste and a little gelatine dissolved in warm water (use about a tablespoonful of gelatine to a pint of sauce). Pour the sauce into a bowl and set it away to cool and jell. When ready to use turn out on a plate. Sausages .- To twenty pounds of meat put three level tablespoonfuls of pepper and eight level tablespoonfuls of salt, and from one to three tablespoonfuls of sage, as to taste. This is a very nice

The Scrap Bag.

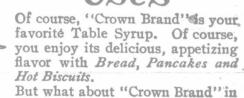
WHAT TO SERVE. With mutton: current jelly; capers. With lamb: mint; currant jelly; peas. With beefsteak : fried potatoes (French).

With veal: tomato sauce. With chicken: rice; currant jelly; corn fritters.

With turkey: cranberries. With goose or pork: baked apples or fried apples; sausage.

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LAND PLASTER

in their stables during the winter months. This plaster will absorb from 20 to 25 percent of moisture and will take up all the liquid manures, as well as cleaning the stables. Lime is sometimes used for this purpose, but is injurious to the feet of stock, while land-plaster has no bad effect what-ever." Alabastine Co., Ltd. Caledonia, Ont.

Send for the 1915-16 Edition of our

FUR STYLE BOOK

34 pages, illustrated, of beautiful fur sets and fur garments for men, women and children. IT IS FREE. Address: JOHN HALLAM, LIMITED Room 162, Hallam Building TORONTO

Louden Barn Equipments

SAVE Time-Save Labor-Save Expense Our new catalogue describes every kind of device for money-making and labor-saving on farms. Write to:

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FETHERSTONHAUGH & CO., PATENT Solicitors—The Old Established Firm. Head Office: Royal Bank Building, Toronto, and 5 Elgin St., Ottawa, and other principal cities.

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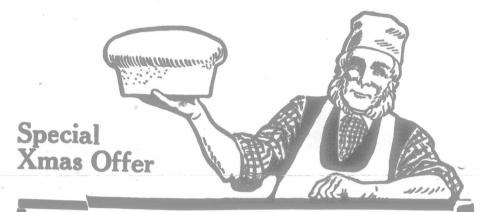
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Farmer's WANTE



Here is a special Christmas gift offer to our farmer friends, and only good for the month of December. With every 98-lb. bag of flour ordered between now and the end of the month we will give an interesting novel or cook book free. On and after Jan. 1st, 1916, only one book will be given with every four bags. Make out your order and select your books from list at bottom of ad. Do it now.

Cream of West Flour

The hard wheat flour guaranteed for bread

GUARANTEED FLOURS	Per 98-1b
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Norwegian Rolled Oats (per 90-lb. bag)	3.00				
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Whole Colli	1 70
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Prices on Ton Lots: We cannot make any reduction on above prices, even if you purchase five or ten tons. The only reduction from the above prices would be on carload orders.

Terms Cash with Order: Orders may be assorted as desired. On shipments up to five bags, buyer pays freight charges. On shipments over five bags we will prepay freight to any station in Ontario, east of Sudbury and south of North Bay. West of Sudbury and New Ontario, add 15 cents per bag. Prices are subject to market changes.

LIST OF FAMOUS BOOKS:

Ye Olde Miller's Household Book.—Over 1,000 tested recipes, and large medical section. Enclose 10 cents to pay postage and packing on this book. No postage asked for on other books.

Black Beauty, by Anna Sewell. Rebecca of Sunnybrook Farm, by Kate Douglas Wiggin.

Little Women, by Louisa Alcott. Innocents Abroad, by Mark

The Lilac Sunbonnet, by S. R.

Crockett.
Quo Vadis, by Sienkiewicz. Lorna Doone, by R. D. Black-

The Three Musketeers, by Alexandre Dumas.

The Mighty Atom, by Marie Corelli Mr. Potter of Texas, by A. C.

Gunter. Beautiful Joe, by Marshall Saunders

A Welsh Singer, by Allen Raine. Adam Bede, by George Eliot. Helen's Babies, by John Habberton.

Tom Brown's School Days, by Thos. Hughes. David Harum, by E. N. Westcott The Scarlet Pimpernell, by

Baroness Orczy. The Mill on the Floss, by George Eliot.

Jess, by Rider Haggard. The Story of an African Farm, by Olive Schriner.

The Campbell Flour Mills Company LIMITED

(WEST) TORONTO

ONTARIO

nary glue in a pint of water, letting it stand on the top of the oven until dis-Wash the oilcloth thoroughly and let it dry. Then at night, when the traffic of the day ceases, go over the whole carefully with a flannel dipped in the glue water. Choose a fine day for it, and by the morning the glue will be hard, and will have put on a fine gloss as good as new.-Selected.

00 UNIQUE HAT-PINS.

I had a set of large and expensive buttons in green and white enamel; which I no longer cared to use for the purpose for which they were designed. fifteen cents apiece, a jeweler made them into hat-pins, which proved very acceptable gifts for my young nieces. A friend had a half-dozen very old-fashioned but handsome buttons made into a shirtwaist set. In many homes there are buttons fifty or a hundred years old, which could be turned into very effective jewelry at small expense.-Selected.

A GRAVE ERROR.

If I were asked what is the worst feature about British feeding habits, I should point, not to meat-eating or porridge-bolting, nor even to beer-drinking, although I believe all these are harmful mistakes. I should point to our method of cooking vegetables and our neglect of salads. I do not mean that vegetables should not be cooked at all, although I am sure there are very few vegetables that are not better for being eaten in uncooked salad form. What I do mean is that boiling vegetables in salted water and soda and throwing away the liquor is a grave error, grave because it has so intimate a bearing upon the health of the people. To be more explicit, with the exception of beans and peas, vegetables are valuable to our bodies chiefly -almost entirely-because of the organic mineral substances which they contain .-Edgar J. Saxon, in Food and Cookery. . In expansion of the above, it may be said that vegetables should be cooked in just as little water as possible, or, still better, should be steamed. Often the water used for boiling may be mixed with milk and flour and made into

THE KITCHEN SINK.

about keeping all the meat drippings and fields, Hampstead way, boys trudging other grease from getting into the kitchen sink the drain pipe will occasionally become clogged.

The first thing to do when this happens is to open up the screw-plug of the trap. This will be found at the bottom of the U-shaped bend in the pipe just under the sink. Do not neglect the precaution of placing an old bucket under this plug before opening it, for all the water that is backed up in the sink will flow out. If this rush of water does not come when the plug is removed, the pipe is, of course, stopped up in its first downward length. This obstruction, of cold, thick grease probably, must be cleared out with a stiff wire. Clean out also as much of the upward bend of the U as the wire will reach. Upon closing the trap plug again, the water will, in all probability, flow freely through the drain. Allow the hot water to run for a time to clean out the grease still more thoroughly.

If, however, the water again backs up in the sink, the obstruction lies further along in the pipe. Once more unscrew the trap plug to get rid of the backedup water. Then replace the plug and pour into the sink a cold solution of copperas that has been dissolved in boiling water, one pound to the gallon, If this does not eat through the obstruction, allow the sink to fill up for three or four inches with water. Then take a board, say eight inches square, lay it on the surface of the water directly over the drain pipe, from which the strainer has, if possible, been removed. Take a short piece of broom-stick and, holding one end on the board just over the pipe opening, strike it a quick, sharp blow on the other end. If the blow is quick enough the water will not splash over the side of the sink, but the force will be transmitted through the water itself to the obstruction. If this device, too, fails, we shall have to call in a plumber .-Suburban Life.

Moving Pictures: A Memory Film.

Continued. BY AN OLD ENGRAVER. At the close of the year 1851 my

parents left Kilburn and went to Highgate, taking a shop in the High Street. At that period this was still called a village. It was surrounded by woods and fields; London a long way off, almost as far away as when Whittington sat on a mile-stone and listened to the sound of bow-bells. A "legendary" stone still stood at the side of the footpath on the hill side, and still more of a legend, the mummy of his wonderful cat, preserved in a glass case, to be seen by customers, occupied a place of honour behind the bar in an Inn called after it. Many old customs were still kept up at Highgate. The stage coaches still ran, and every evening one punctually arrived from the far north, heralded by the music of the guard's long horn. The Autumn hiring of men for reaping and mowing still took place in the High Street. The men arrived from all parts, each with his sickle or scythe. They sat on the curb of the footway, which rose some eighteen inches above the road, and there waited for the farmers to hire them. They were poor and hungry, so the tradesmen subscribed a sum of money to give them bread. The bread was distributed at one of the many Inns, and, to prevent any getting more than his share, when all had entered the inn yard, the great gates were closed and a small side gate opened, out of which the men passed one by one, each getting as he passed his loaf-sometimes, when the funds afforded it, cheese also. Now and again the Militia was summoned to meet at the village. A ragged lot most of them. They got their uniforms distributed in this same inn yard. These were all made of one size, and it was amusing to see men with trousers too long, or too short, walking about until, by "hook or by crook," they got them If the cook is not particularly careful all to fit. They used to drill on the along by their side thinking it an honour if they were allowed to help carry the gun. Another institution was the Parish Fire-engine, kept in one half of the barber's shop. It was worked by hand, and kept in the charge of the Parish Beadle. I remember when one alarm was given. A fire had broken out in a carpenter's shed, caused by the overturning of his glue-pot. It was quite two miles away-down what was then a narrow country lane-and the engine had to be pulled the whole way by the Beadle, a whole troop of boys in his wake. The fire was still smouldering when we arrived, the engine had to be filled by buckets, passed from hand to hand by a row of volunteers who also pumped the water on to the fire. The Town Crier was still in existence—an old man with a bell which he rang to call attention; then in a loud voice gave notice of meetings, sales, or advertised for things lost, stolen or strayed. He always ended up by saying, "God Save the Queen!" When a mixed audience of boys and girls annoyed him by shouting a chorus-"And hang the

There were many interesting scenes in the winter-time, ice-gathering; there was no artificial ice then, so it had to be collected off the ponds and buried in holes dug deep down, for use when the days grew hot. The pastrycook next door had such a cellar, and many times I, with other boys, helped to fill the barrrows which wheeled the ice to the cellar-top, there to be dropped through, as we now drop coals. Opposite the famous "Gate House Inn," where in Olden Times every stage coach (and there were many) stopped for the passengers to be sworn in, stood the Highgate Grammar School similar to those of Eton and Harrow, and equally select. There was no love lost betwixt the school and the town boys. Fights were frequent when they met. The town boys disliked them because of

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Raised Without Milk! Her name is "Daisy" and her owner, W. A. Ridds, of Chapin, Iowa, reised her on Blatchford's Calf Meal, which costs less than half as much as milk.

Blatchford's Calf Meal

A useful preventive of scouring. Calves nised "The Blatchford's Way" are heavier, bigger-bund and healthier. Known as the complete milk embiliate since the year 1875. Sold by your dealer or direct from the manufacturer. Blatchford's Fig Meal insures rapid, sturdy growth of young pigs at weaning time. Prevents se_back. See Actual Figures -based on re-nu how to increase your calf profits. Write today. besie Briggs Seed Co., Dept. 68, Toronto, Ont.



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted and Pet Stock.

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cath must always accompany the order. No advertisement inserted for less than 50 cents.

FERRETS—Either color, large or small, single pairs or dozen lots. Catalogue free. C. H. Keefer & Co., Greenwich, Ohio.

O's shares—50 acres, dairy farm, in Huron Co.; fine buildings, location and soil; all stock and mplements supplied, except horses. Tenant with some stock preferred. Apply Box 10, Farmer's Advocate, London, Ont.

WANTED—Farm foreman; married or single.

Must be progressive, ambitious, and experienced in handling and feeding dairy cattle. Apply with references, stating wages expected. Box 12, Farmer's Advocate, London.

WANTED to rent, with the option of buying; good farm, near to a good town. Apply R. S. c.o. Farmer's Advocate, London, Ont. WANTED—Custom Tanning. Horse hides and Cattle hides for robes and coats; also all kinds of skins and furs. Send them to me and have them tanned soft and pliable. Address B. F. BELL, Delhi, Ont.

WANTED—By married man, position as farm Foreman or farm Manager, good all round man, strictly temperate, can commence duties first day of February, can furnish references. Apply to Box 308, Brantford Post Office.

We require parties to knit men's wool socks for us at home, either with machine or by hand; send stamp for information.

The Canadian Whoisesale Dis. Company Dept. S. Orillia, Ont.

Three Horse Tread Power For Sale

Apply to WM. BRIEN & SON, Ridgetown Ont. Wanted—Second-hand machinery for a Creamery. Must be in good condition. Apply L. J. LOOBY, Dublin, Ontario Learn to Remember—facts, figures, faces, so that you will never forget. Our Pelman Mind and Memory Training course will teach you. Write CANADIAN CORRESPONDENCE COLLEGE, LIMITED, DEPT. E.E. TORONTO, CANADA.





Send for Catalogue No. 1B. LONDON CONCRETEIMACHINERY CO., Ltd.
Dept. B, London, Ontario
World's Largest Manufacturers of Concrete
Machinery.

BERKSHIRES AND **SHORTHORNS**

Boars and sows—10 weeks to 8 months—Sire and dam 1st prize winners at Toronto. First-class Shorthorn bull by Sea Foam, (Dark Roan, 12 months old).

Industrial Farm, Muncey, Ont.



their contempt and aloofness-perhaps, also, from jealousy ,for they always appeared to have plenty of money to spend on the good things of this life, and could be seen, when off duty, sitting in the aforesaid confectioner's shop eating tarts Any one of them would have served for a type of the schoolboy at the pastry-cook's counter who tells the saleswoman that he will have "Two jellies, seven of them, and eleven of them, and six of those, and four bath-buns, a sausage-roll, ten almond cakes and a bottle of ginger beer." No wonder that they were nicknamed "Grammar Grubs."

Highgate possessed several noted old

houses; one with a yew tree at its side had been the residence of Ireton, Cromwell's famous general and son-in-law. In my time it was a private school. Op-posite to it stood the cottage where the celebrated Francis Bacon died, having, so it is said, caught cold through stuffing a dead fowl with snow in order to test its preservative power. "Holly Lodge," the residence of the Baroness Coutts, was another famous building—and there were others. Sir Thomas Gresham, who built the first "Royal Exchange" and founded Gresham College, lived at Highgate. He was a foundling—a boy who had been deserted by his mother in a field and owed his life to the chirping of a "grasshopper", whose song attracted the attention of a wealthy old couple passing by, and who, finding the child, adopted him, gave him their name and brought him up as their own son. It is this incident that accounts for the number of grass-hoppers that ornament the "Royal Exchange," from basement to weathercock, and perhaps caused the selection of the text over the main entrance: "The earth is the Lord's and the fulness thereof, the world and they that dwell therein. In a lane that led through the field to Hampstead stood "Caen Wood," concealing within its leafy depths the country house of Lord Mansfield, which, as Dickens describes in his "Tale of Barnaby Rudge," the mob set out to burn during the "No Popery" Riots. Further on was the "Spaniard's Inn," where the landlord opened his cellars to the rioters, whilst he secretly sent for aid, and so saved the Mansion. Many a bird's nest have I taken in that wood, for I collected eggs. One especially gave me pleasure: that of the "butcher bird," for its nests were scarce. My neighbour's son, George Potter, and I, amateur geologists, often went out in the early mornings hunting for fossils. When the "Archway Road" was dug through the hill, to connect Holloway with Finchley, numerous fossil shells were found, also sharks' teeth of great size. I had a perfect specimen completely turned to stone dug up in the making of that road. I was sent to the "North London Collegiate School" in the High St., Camden Town, to finish my education. Strange, there were three of us at that school who afterwards were connected with "Punch." Frederick Walker, Gordon Thomson and myself-Walker was the same age as I. His father was a working jeweller in a small way. Frederick was an active, slightly-built lad, with long hair and a face that spoke of genius. In after years he became an A.R.A., painting many beautiful pictures. He was reputed to be the original of "Little Billy" in Du Maurier's "Trilby." Walker was the only artist that satisfied Thackeray; previously Thackeray's works were either illustrated by his own crude drawings or from his own sketches supplied to other artists for their guidance. Walker refused to do his drawings in that way or to be cramped up with others ideas, even that of the author; so he had his way, and his way proved satisfactory. He illustrated "The Adventures of Philip," also "Denis Duval" and Miss Thackeray's "Story of Elizabeth." Gordon Thomson did but little for "Punch." He failed to please Thackeray, but he became for many years the cartoonist for "Fun," "Punch's" comic rival. As for myself!—Well, that these

moving pictures will reveal. (TO BE CONTINUED).

Candies for Christmas.

Packed in pasteboard boxes prettily covered with crinkle paper and decorated with holly or pine, home-made candies always make suitable Christmas gifts for old or young. In choosing paper for covering the boxes, be sure to get a color that will harmonize_nicely with the candies. White is always safe, and is, perhaps, prettiest of all when tied with red baby-ribbon and decorated with green leaves.

The following candies are sure to be appreciated:

SEA-FOAM FUDGE—Take 1 cup chopped walnuts, pecans or hazelnuts; if you have gathered butternuts or hickory nuts, use them; 3 cups light brown sugar, 1 cup cold water, 2 eggs, 1 teaspoon vanilla, 1 tablespoon vinegar. Mix together sugar, water and vinegar and place on the fire. Bring gradually to a boil, and do not stir after the mixture is heated. Boil steadily and test a bit in cold water. When it forms a ball, it is ready and must be removed from the fire. Next have the whites of the eggs beaten stiff, and when the candy has stopped bubbling, pour it on the eggs and beat. When the mixture becomes stiff, add the vanilla and the nuts. Drop from a spoon on waxed or

buttered paper.
FIG FUDGE—2 cups light brown sugar, 1 cup chopped figs, 1/4 teaspoon cream of tartar, ½ teaspoon ginger, 1 tablespoon butter, 1 teaspoon vanilla, ½ cup nut meats, 1 cup milk. Put all the ingredients, except the vanilla and nuts, in a saucepan and boil until it makes a soft ball when dropped into cold water, stirring often enough to keep the mixture from sticking. Remove from the fire, add the vanilla and nuts and beat until creamy. Pour into buttered pans and

cut in squares. STRAWBERRY CARAMELS—1 cup sugar, 1 cup corn syrup, 1 glassful preserved strawberries, 1 tablespoon butter, ½ cup milk, 1 teaspoon strawberry extract, 1/2 teaspoon cream of tartar. Put the sugar, syrup, milk and cream of tartar in a saucepan. After boiling to the soft-ball stage, add the preserved strawberries and boil until the mixture will harden when tested in water. Remove from the fire and add the strawberry extract. Boil up, but do not stir; then pour immediately into buttered pans about a half-inch in depth. Mark off into small squares.

Snow Corn Balls—2 cups sugar, ½ cup corn syrup, 2 eggs, 2 cups popcorn, ½ cup water, ½ teaspoon vanilla, ¼ easpoon cream of tartar, cocoanut. Boil together the corn syrup, sugar, water and cream of tartar until it will form a soft ball when tested in water, then flavor with vanilla. Pour over the stiffly beaten whites of the eggs. Beat until light, and when it begins to harden, stir in the crisp popcorn. Dip the hands into cornstarch and mould into balls while the corn is still warm. Roll balls in grated cocoanut. Wrap in paraffin paper until

STUFFED DATES—1 lb. dates, ½ lb. walnuts, confectioners' sugar. With a sharp knife carefully slit the dates enough to remove the stones. Cut the nut meats into strips the size of the date stones and put in the dates. Press the edges together and roll in confectioners' sugar. This is a wholesome and delicious

confection for the children. PANOCHE-1 cup sweet milk, 3 cups brown sugar, 1 teaspoon butter, 2 cups chopped nuts, I teaspoon vanilla. Put the milk and sugar over the fire in a saucepan and boil until a little dropped in cold water forms a ball. Add the butter, take from the fire and add the vanilla and nuts, beating the mixture very hard. Turn into buttered pans and mark off into squares.

Christmas, 1915.

A word about our Christmas Number Home Department.

With the war-note everwhere, it has been impossible, even on this the fiftieth "jubilee" celebration of the founding of our journal, to eliminate it altogether, and so give you a wholly "merry" Christmas Number—that would not be fitting in the face of the world's terrific happenings—and so it appears in Mr. Norwood's fine poem with which our Home Department opens, in our article on Serbia, and even in our Christmas story, by the well-known Canadian writer, "Marian Keith."

But, although the war-note is present there is no pessimism connected with it. Mr. Norwood is of those who believe in singing rather than bewailing. The world must go forward; it cannot go back. Every individual soul must go forward. And so he declares "you will not do this thing again." In Marian Keith's this thing again." In Marian Keith's sweet tale, too, rings the vibrant note of optimism. We were forgetting how to keep a real Christmas, but the war has hurled away false values, and through it

EGGS ARE EGGS. At the big winter price of eggs, you can't afford to let hens loaf. PRATTS **Poultry Regulator** will start them lay-ing and keep them at it. Money Back Guarantee. Pratt Food Co. of Can., Ltd., Toronto.



Condensed advertisements will be inserted under this heading at three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisements inserted for less than 50 cents.

BRED-TO-LAY Strain—White Leghorn cock-erels, one dollar each. Brahmas, Spanish, Giant Bronze turkeys, Indian Runner ducks, bred from winners at London, Ottawa, Hamilton, De-troit. John Annesser, Tilbury, Ont.

EXTRA fine pure-bred Bronse turkeys for sale at very low prices. Grand birds bred from stock of Guelph and Ottawa winners, all ages. Old customers back for more. Wm. T. Ferguson,

customers back for more. Wm. T. Ferguson, Spencerville, Ont.

OR SALE—Purebred Emden geese, \$5 per pa ir or \$3 each. Robert Cleland, Listowel, Ont.

OR SALE—"Dul-Mage" White Rock utility birds from prize-winning stock. Male birds \$3.00 to \$4.00 each. Females from \$2.00 to \$3.00 each. All 1914 and 1915 hatched. These low prices are for quick delivery to make room for our breeding pens. McConnell and Ferguson, P. O. Box 505, London, Ont.

Box 505, London, Ont.

FOR Sale, Choice S. C. R. I. Red Cockerels (Mahood's, St. Louis, best strain of bred-to-lay and prise stock) at \$2.50 to \$5.09 each. I. W. Dunkin, R.R. No. 2, Dundas, Ont.

MPORTED S. C. W. Leghorns, Tom Barron's winners, dam of cock bird, authentic pedigree 282 eggs in 12 months. Sire's dam laid 254 eggs in year. Dam of my hen's pedigree 272. Cockerels and pullets strictly from above for sale. Choice show birds March and April hatch. These cockerels would make an extremely desirable outcross. Garnet L. Doherty, Clinton, Ont.

MAMMOTH Bronse Turkeys, both sexes. Utility Barred Rock and S. C. Brown Leghorn Cockerels. Satisfaction guaranteed. David Ashworth and Son, Denfield Ont.

worth and Son, Denfield Ont.

MAMMOTH Bronze turkeys—Bred from best imported stock. Free from disease. Satisfied customers. Order early—get first choice. Mrs. W. R. Armstrong, Newmarket, Ont.

MAMMOTH Bronze Turkeys—Fine heavy birds bred from prize stock. W. W. Hodgins Denfield, Ont. R. R. No. 4.

TOULOUSE Geese for sale—Some fine heavy ganders, \$5 each. Write quickly. Philip Ferris, Arner, Ont., Essex Co.

WHITE Holland Turkeys—A few for sale. Order before they are all gone. Chas. Heipel, Baden, Ont.

WHITE Wyandottes, (Martin strain) Prize Winners. Dunc. McTavish, Chesley, Ont.

to Stockmen and Poultrymen, our 80-page Illustrated Booklet on feeding. How to construct a house which will accommodate 100 hens; gives dimensions and measurements of every piece of lumber required. Deals with the common diseases of stock and poultry and the remedies. Tells how to cure roup in four days. Contains full information about Royal Purple Stock and Poultry Foods and Remedies. THE W. A. JENKINS MANUFACTURING CO. London, Canada

Chickens 18c. Per lb.

Crate Fatted Chickens, 18c. per lb., bled. picked clean to wing tips. Choice Hen Turkeys are 20c. per lb., bled and picked clean to wing tips.

HORACE WALLER, 700 Spadina Ave. Toronto

"1900" Gravity Washer

Sent free for one month's trial. Write for particulars.

" 1900 " WASHER COMPANY 357 Yonge Street, Toronto, Ontario (Factory 79-81 Portland Street, Toronto)

Harab-Davies Fertilizers Big Results

Write for Booklet. THE ONTARIO FERTILIZERS, LTD

GOOD CROPS Year After Year

What a difference that would make to many a farmer's bank balance. Well, it's possible, and the SPRAMOTOR can bring it about. We are sole makers of the world's foremost spraying machines, the



in many styles and sizes from \$6.00 up and we will forward by return mail, absolutely free, a copy of our valuable illustrated work on Crop Diseases; also full details of a Spramotor that will hest do your work. Write to-day.

Made in Canada. No duty to pay.

B. H. HEARD, SPRAMOTOR, 2721 King St. - - London, Canada

When writing advertisers, will you kindly mention "The Farmer's Advocate."

we are learning the road to the real spirit of the sacred festival.

With these, and the article on Serbia, the war-shadow drifts away, and in Margaret McKone's "Garden of Delight" one may forget for a little the clangor and strife. Among the flowers and birds there one may find, perchance, a new or renewed interest that will mean inspira-tion to "go and do likewise" when the winter has gone, and the plantlets are creeping upward through the brown soil, and, it may be, the war shall be over.

It is with pleasure, too, that we have opened our columns to a discussion, by some of our readers, of the question, "What is the Best Thing in Life?" It is a question well worth considering, and very pertinent in these days, when the order of even one short year ago has been shaken to its foundations.

We may not this year celebrate Christmas in the old way, but, if we cannot have a "merry" Christmas, we can, as someone has said, hold "Christ-Mass." And never can a Christ-Mass be held without a better realization of the Christspirit. Long before the opening of the war, a noted journalist, William Fayes Ward, wrote these words: "Christianity is still the struggle between gentleness and brute force. It is peace and endurance against pride and revenge. It is the world against the clans. It calls us, again and again, to the proclamation, 'On Earth Peace, Good Will to Men.''' Since then the gigantic struggle has come. The clans have arisen. The international mind sleeps. Christianity itself, it seems, has been forced to don the sword to save itself. But let us not be downcast. Not a soldier slain who does not live-and with better opportunities before him. The sacrifice has not been in vain. The war cannot last forever, and, perchance, we, all over the earth, "will not do this thing again." The day must come when we will reign forever "Peace and Good Will to Men.

Our Serial Story "THE CHAPERON."

By C. N. AND A. M. WILLIAMSON.

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CHAPTER XXVII.

RONALD LESTER STARR'S POINT

I should think few men ever loved more' passionately, yet picturesquely, than I loved those two beautiful stepsisters when for their sakes I started out upon a criminal, motor-boating career.

To have their society, to gaze daily upon their lovely faces, to hear their charming voices, and to find out which girl I really loved more than the other, I willingly stole an aunt and then lied about her so often, that eventually I almost began to believe she was my aunt. Perhaps—I said to myself, when any barking dogs escaped from the kennel of my conscience to be soothed-perhaps she had been my aunt in another state of existence. But, then, I would have said anything about her, to my self or others, by way of furthering the cause; and the game was well worth the candle for the first part of the trip.

Alb being frankly and openly a worship-per of the adorable Nell Van Buren, my own countrywoman, I saw that, out of all the girls I ever loved, including her stepsister, she was the only one it would be impossible for me to live without.

That state of mind lasted up to the

night when we arrived at the deadest of all Dead Cities of the Zuider Zee, Enk-huisen. There it broke upon me out of a clear sky that my Burne-Jones angel, Phyllis Rivers, loved and was loved by another; that other, a graven image of a Vik ng, who could never appreciate her as she deserved.

Until the blow fell, I had always, half unconsciously, felt that she was there; that if I lost the incomparable Nell, the exquisite Phyllis was on the spot to console me; and she is at her best as a consoler. But suddenly, at a moment when I was soaked with rain, snubbed by Nell, as well as foolishly concerned about the fate of that white man's burden, my

Albatross, and altogether ill-fitted to bear further misfortunes, I learnt that Phyllis regarded me as a brother.

I hid my chagrin in sympathy for hers, but Phyllis in tears proved distracting. She is the one girl I have ever seen who can cry without a deplorable redness of the nose. Tears rolled like pearls over the nose. Tears rolled like fearls over her lower lashes, which are almost as long as the fringe of the upper lids, and I wondered how I could ever have thought another girl more desirable. Too late for my comfort did she assure me that, in her opinion, my case was not hopeless with her stepsister. It was Fhyllis, not Nell, whom I now wished to snatch from the arms of a hated rival (not that she was in them yet, but she might be at any minute unless I secured her) ard it was painful that at such a crisis she should throw her once unattainable stepsister at

Next day, to be sure, when Alb brought the motor-boat to our rescue at Urk, the way Nell's big hazel eyes lit up at sight of him, set my heart vibrating again like a rendulum, and I found myself much in the same condition I had been in at first; unable to decide which, after all, was the more indispensable of the two girls. But this return to chaos did not make for peace of mind, because, though I could not bear to lose either, I should be lucky if I contrived to keep one. Eesides, there was the worry about Sir Alec MacNairne, and the danger that he might pounce down upon us to destroy the fabric I had so carefully woven.

Altogether, the features of Friesland were not cut with the same cameo-clear-ness upon my perception that other parts of Holland had taken a few weeks or even

days ago, when I was young and happy.

As I remarked early in our black partnership, even an Albatross can have its uses. Perhaps, if the truth were known, the Ancient Mariner occasionally fell down and would have broken by fell down and would have broken a bone if the Albatross, tied around his neck, had not acted as a kind of cushion for his protection. At Amsterdam, in a moment of peril for our plot, Alb acted somewhat in this capacity for me, showing himself to be possessed of all that shrewd adroitness which should furnish the equipment of every well-regulated villain. At Leeuwarden, therefore, it was for me to do something desperate when desperate preed arose.

I shall never cease to applaud my own presence of mind in the matter of turning the enemy's flank. My wrists were lame for days after that famous handshake with Aunt Fay's husband which, in his surprise, spun the big fellow round like a teetotum, and gave Alb a chance to vanish with the girls.

If Aunt Fay had indeed been on board "Lorelei," re-named "Mascotte"; if the "M," late "L," had been Brederode's boat, and he had really been flirting with my aunt through the waterways of Holland, according to Sir Alec's wild impression, I couldn't have been more anxious to save her from his jealous wrath by giving him the slip.

Alb had never spoken of a flirtation, and though at the time it was first sprung upon me by Sir Alec, I was angry with the Albatross for his close mouthedness, my inconvenient sense of justice forced me to admit afterwards that it wasn't exactly the kind of thing he could have confided to me of all others.

When that peppery Scotsman opened his heart, and poured forth the true story of Aunt Fay's mysterious disappearance from the scene, for a minute or two any feather floating in my direction could have knocked me down; but I hung on to my captive uncle all the same, while I rearranged my ideas of the universe at large, and my corner of it in particular.

I told him it was nonsense to be jealous

of Aunt Fay. Of course such a pretty, jolly woman as she, full of life and fun as a girl, was bound to be popular with men, and to flirt with them a little. There was nothing in that to make a fuss about, said I. As for Brederode (whom had to admit knowing, since we must have been seen together) I assured Sir Alec that, if he could hear Rudolph talk in a friendly way about my aunt, he wouldn't have the slightest uneasiness. Finally I made the fiery fellow confess that Aunt Fay's last little flirtation—the most innocent in the world, like all her "affairs"—was not with brederede but with an Englishman, an officer in some crack regiment. Sir Alce did not deny that he had really the wife. He said that he had scolded his wife. He said that she had "answered him back," that there had been "words" on both sides, that she had stamped her foot and thrown

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a bunch of roses at him-middle-aged, wet-footed roses snatched from a vase which happened to be handy. That he had called her a minx; that she had retorted with "beast"? that he had stalked out of the room and then out of the house, slamming doors as hard as he could; that when he returned, not exactly to apologise, but to make up at any price, it was to find her gone, with her maid and several boxes, leaving no address; that he had tracked her to London, and eventually—as he believed—to Paris; that while there he had seen a newspaper paragraph announcing that Lady Mac-Nairne was traveling through Dutch waterways on a motor-boat belonging to Jonkheer Brederode; that he had taken possence brederode; that he had taken train for Amsterdam, where he had presently discovered that "Lorelei" had been; that he had visited all hotels, hoping to find the names of the party in the visitors' book, but had not been able to discover them (luckily we hadn't put our names down, and on leaving Alb had tactfully hinted to the manager that no inquiries concerning us were to be answered); that since then all trace of "Lorelei" had been lost.

I replied that it was probably a mistake made by some journalist, and that Lady MacNaine had never been on board Brederode's boat. I was going on to say more things, when Sir Alec exclaimed, "Why, you ought to know where the boat is and who's on board her. You boat is, and who's on board her. You and Brederode were together to-night,

"We hadn't been together for ten minutes, "I vowed; and kept to the strict letter of the truth, for I had been smoking alone in the garden when Brederode came back and proposed that after all we should have a stroll round the fair. It hadn't taken us ten minutes to get there from the hotel.

"I didn't ask Brederode any questions about himself after meeting him," I went on; and that also was strictly true. "But," I hurriedly added, seeing a loophole of escape, "I can look him up, if you like, and, without mentioning your name, find out whether Aunt Fay is, or ever has been, with his party, which I doubt. Don't you think, for the sake of her name and yours, that would be better than for you to seek him out and make a row, before you're sure whether there's anything to row about?"

Sir Alec reflected for a minute, which was evidently an effort, then answered that perhaps I was right. But supposing I missed Brederode, whose haste to slip away went far to prove his guilt?

I would not miss him, said I. And his disappearance proved nothing. There were those pretty Frisian girls that he— Sir Alec—had been protecting when Rudolph and I came along. Brederode had probably escorted them home, not seeing any reason why he should interrupt our conversation.

My innocent surprise on hearing that, despite their costumes, the girls were not Frisian girls, but English or American ladies he had met in Amsterdam, convinced Sir Alec that they were strangers to me. And finally the scene ended by my promising to find Brederode, who was certainly—I said—stopping in the town, whether or no he had brought a motorboat to Leeuwarden. I was to question Brederode in a diplomatic manner, and then to report to Sir Alec, on a motorlaunch he had hired in Amsterdam, as the best means of tracking down the craft for which he sought. This boat, "Wilhelmina," was now in the canal at Leeuwarden, but, for reasons intimately concerning that canal, he had taken a room for the night at a hotel recommended by his chaffeur.

Fortunate it was for us that the chauffeur did not happen to prefer our hotel; and almost equally fortunate that Sir Alec was not spending much time on board his hired vessel, for, were he lurking there, it would be difficult to slip past without being followed. He had perhaps seen "Mascotte" on entering the canal (as it appeared that he had come in only toward evening), but he had not suspected the innocent-looking little creature, with her fat chaperon, "Waterspin," of having an alias. If, however, a motor-boat attempted to glide past his in the night, he would give chase, and see us on board "Mascotte." For this reason I was delighted to hear that he was at a hotel for the night, and I advised him to go there at once to await my coming.
"How long shall you be," he asked

impatiently. I assured him that all I had to do might keep me an hour; but I saved a few tattered rags of conscience by evading a verbal promise to call on him at the end of that hour. So much he took for granted, and, as the things I really had to do were to get the whole party on to "Mascotte" and out of the capital of Friesland, I left my uncle-in-law without much ceremony.

Nothing could have been neater than the way we gave him the slip, flying by his deserted motor-boat without a qualm, and, I hoped, beyond his reach at the

Never, during the whole course of the trip, had I been so glad to arrive at a place as I was to arrive at Groningen.

We ought, according to the program of our itinerary mapped out by Alb, to have reached the big town in the afternoon instead of morning, and to have spent the time till evening in seeing sights. But all was changed now. Luckily Alb (who is an uncomfortable stickler for truth at all costs) could conscientiously inform the girls that Groningen's principal attrac-

tions might be seen in a couple of hours. We tore round the place in the fastest cab to be got, I having bribed the driver not to spare his horse; yet it was at Alb the girls looked reproachfully, when they were allowed but three minutes in the largest market-place of Holland, five for St. Martin's Church and the organ praised by diplomatic Erasmus, two to search vainly for diamond-gleaming glass tiles on houses which Amici admired forty years ago; and another grudging two for a gallop through the Noorden Plantation, of which the rich town is proud. There must be something about my appearance which convinces people that, whatever evil is afoot, I, at least, am innocent. I have noticed this since boyhood, the phenomenon being most conspicuous when I was least deserving; whereas, with Alb, it is the other way round. His darkly handsome face, with its severely clear-cut features, his black hair and brows, his somber eyes, are the legitimate qualifications of the stage villain. Even the well-known cigarette is seldom lacking; therefore, if I wished for revenge, I have often had it. When I am to blame for anything, Alb is sure to be suspected.

Indeed, any one might have thought, from the impatient fire in his eyes, as he steered "Lorelei" (alias "Mascotte") through the canal after leaving Groningen, that his was the secret need for haste, his the guilty desire to escape.

As for me, I hid my rage at the legal

mandate which here compelled us to "go no faster than a man can walk." Under an air of blithe insouciance I disguised my fears never starting perceptibly at "any toot" behind us which might mean Sir Alec on our track, and appearing to enjoy with the free spirit of a boy, the one great amusement of the day.

This consisted in surprising and making happy many families of children on board the lighters we passed by bestowing upon them toys and strange sugary cakes bought at Leeuwarden Kermess. Not all the lighters had children, but those that had, owned dozens, and all the ugly ones

had whooping cough.

If I had been given my way, only the pretty children and those who did not whoop should have got presents; but the extraordinary lady who plays the part of aunt to me, and chaperon to the Angels, said that the uglier you are, the more gifts you need. Perhaps it is on this principle she has demanded so many from me. But—is she ugly? I hardly know. She has one of those strange little faces which do not seem to express the soul behind them—a face whose features I can't see when I shut my eyes. I should like, by the way, to know what hers are like, behind her big blue spectacles; but she says they are not strong, so possibly the blue glass is a merciful dispensation.

Her mildest hints, as well as her

commands, are invariably acted upon, and though she seldom insists, she magnetizes. Accordingly, the ugliest children got the best things; but as there were more pretty than ugly ones, the toys lasted all the way along the somewhat monotonous canal to Assen, a little town half lost in its own forests.

It took us till evening to get there, and as we were to sleep on the boats, rather than risk the hotel, I proposed to Alb that we should start again early the next morning, before the ladies waked.
"There can't be much to see at Assen," said I, "and if, after he'd been given the slip, my peppery Scotch uncle tumbled to the idea of 'Lorelei' and 'Mascotte' being

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"That would be reason enough for topping at Assen," said Brederode. 'There are things to see there, very good and unique things; but ordinary tourists don't often hear about them, and if Sir Alec Mac Nairne is chasing us, he'll glide by Assen without a thought.

This put a different face on the matter and I was able to smile calmly when Alb whetted the Angels' appetite by describing the treasures concealed among the groves surrounding Assen. They were not They were not exactly at Assen, it seemed, but Assen was the starting point, and from there you set forth in carriages to Rolde, for the purpose of gazing upon Hunnebetten.

What these might be, when you found them, I had not an idea, though pride for bade me to inquire of Alb, especially before the girls. But pride never forbids Aunt Fay's little counterfeit presentment (pernaps it will save time if in the future I allude to her as the L.C.P.) to ask any question. She is never satisfied with guide-books, but demands and absorbs information about every place we visit, scribbling down notes in the book she wears on her chatelaine. (There must have been dozens of "refills" fitted in between the silver covers since we started, though what she wants of the stuff she collects I can't imagine.) She did not hesitate to exclaim 'What on earth are Hunnebetten?" And there was no ignominy in listening, with a bored air of having been born knowing these things, while Alb described the objects as supposed graves of Huns, built of glacier-borne stones.

Next morning we drove out to worship at these ancient shrines, winding along a charming, wooded road, through avenues of young oaks, balsamic pine forests, and acres of purple heather, to say nothing of a certain pink flower which must be heather's Dutch cousin.

Some of the Hunnebetten were hidden in the woods, others rose gloomily out of the sweet simplicity of a hayfield, but each contrived to give the effect of a miniature Stonehenge, and had there been only one monument instead of three, it would have been worth the trouble we took to see it. Besides, our expedition was rewarded in another way. When we returned to the boats after breakfasting at a cafe in the woods, it was to hear that a motor-launch, patriotically bearing the name of "Wilhelmina," had gone by, faster than the legal limit, as if in haste to reach Meppel. According to Hendrik and Toon, a tall gentleman had sprung up from the deck-chair rushed to the rail, and stared hard at "Mascotte"; but "Wilhelmina" had not slowed down.

On hearing this news make an excuse for lingering at Assen; but Alb was of opinion that it would be as safe, and far less dull, to go on. "Wilhelmina" was well ahead; and in any case we did not mean to stop the night at Meppel. If we saw Sir Alec's launch there, we could easily slip past, all ras-sengers in the cabin and Hendrik at the helm; whereas, if we did not see her, she would not be able to see us.

We were in the province of Drenthe now and it looked as little Dutch as might be. Even the canal had the air of disguising itself as the Long Water at Hampton Court, instead of being content to seem what it was; and after we had passed a few dignified mansions and farmhouses, we came to a region of squalid cottages with sullen-faced, shorthaired women, and children shy as wild creatures of the wood, staring at us from low-browed doorways. It was not until we were far on our eight hours' journey to Meppel, that we slipped once more into a characteristic region of peace and plenty; marching lines of dark trees, with fore-grounds of pink and azure flowers, or golden grain; mossy, thatched roofs, and red tiles crusted with golden lichen. But fortunately for the disposal of our toy supply, renewed at Assen, the watery way was starred with red, green and blue barges inhabited by large families of violet-eyed, tow-headed infants. If by hance we en ountered a childless barge, chared resentment at the grown-ups. were they thinking of, not to have

canal, into the freedom of the Ober Issel, wider glitter of water, noble as the Frisian meers we had left.

Never was there an evening more exquisite than this, as we floated on through the sunset, with the old town of Zwolle for our night goal.

We were in the Swarzermeer, said Brederode; but there was nothing black about it, except the name. Sky and water had all the rich colors of an opal, and so clear were they, so alike in tints and brightness, that we seemed to hang in the midst of a rainbow bubble.

Yellow water-lilies lay on a surface of glass, like scattered gold, and the tall, thin grasses were gold-green wires in the level light of the sun. Each village we passed was a picture far beyond my art to paint; and hayricks under their thatches or piles of corn stacked in rows close to the water's edge, shone like a spray of fireworks as the darkening sky above slowly turned to a bank of hya cinths. Passing sails were gold at first then brown, then pansy-purple, piercing the water with their sharp and deep reflections. The shore-line was crowded thick with pink and violet flower-spears, as if—said Nell—ranks of fairy soldiers had turned out in our honor for a review.

She and Phyllis stood near me, drinking in the delicious water-smell that mingled with the faint fragrance of closing lilies. and watching the sun, as beaten into copper, it sent a sudden stream of flame across the glittering crystal. I tried to feel alone with them, in a wonderful world which was for us three and nobody else except a few swans, and tiny water creatures rustling among the reeds. But there was Alb at the wheel, looking handsomer and more inscrutable than could ever look, if I practiced for hours on end before a flattering mirror. How could I help spoiling everything by wonder ing if Nell Van Buren were thinking about him while she talked with me fitfully, dreamily? And how could I help asking myself whether the image of the liking did not come blundering between Phyllis's violet eyes and mine, when she seemed to look sweetly at me?

But it was the sort of evening when one thoroughly enjoys being restless and unhappy, and I reveled in my pain.

Little yellow birds, yellow as the lilies which made a blazing line of gold between green reeds and amethyst water, flitted fearlessly about the boat, until at last the sun went down like a ruby necklace falling into a crystal box. Then we moved through mysterious masses of purple shadow, with here and there a diamond-gleam, or the wing of a swan like the moon rising. And then our own little lights dipped trailing golden tassels

under the surface of the water.
"Let us anchor," said Nell, at last,
"and put out our lights again, and watch the moon rise. Oh, let us stay here all night, and wake early—early, to see the

I loved her for thinking of it, and so, I fear did Alb. We dined on such picnic things as we happened to have on board, and when a pale light, like the reflection of pearls in a mirror, began to tremble in the east, out went the lights. The moon rose, and Phyllis let me hold her hand, which would have made me happy if I hadn't been almost sure she was feeling sisterly. And afterwards I dreamed about both girls. They were both in love with me, and, after all, I was in love with some one else whose name I did not seem to know, of whose face I could call up no

It was Alb who waked me by pounding on the door of my cabin on "Waterspin," and shouting-

"Get up, if you want to see the sun-

So I bounded out of bed, wishing I could recall that dream-face, just to make sure whether or no it was more beautiful than either of the girls. And by the time I had dressed, and gone across to "Mascotte's" deck, the two I loved were on deck also, with the first light of dawn shining in their eyes

What did it matter that we had engaged rooms at Zwolle, which we had not occupied? We breakfasted there instead, and saw a beautiful water-gate, together with a few other good and very ancient things, about which Alb seemed to know

There were no signs of "Wilhelmina, and my heart felt light as we went through a great lock into the Geldern Yssel, which would bear us to Holland's most beautiful province, Calderland.

To be continued.



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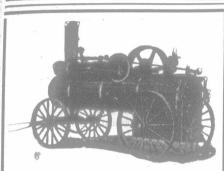
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anclosing.

Veterinary.

Ophthalmia.

Four-year-old horse has gone almost blind the last few days. There is a white scum over each eye, and the eye is quite inflamed. What is the cause and cure? W. J. L.

Ans.-There are two forms of this disease, viz.: simple ophthalmia and periodi: ophthalmia. The former is caused by direct irritation or possibly by catarrhal affection. The latter is a constitutional disease, and appears periodically without apparent cause, and after a few attacks usually results in blindness from cataract. Treatment in either case consists in administering a laxative, as 11 pints raw linseed oil. Keep him in a comfortable stall excluded from drafts and direct sunlight, and still better if it be partially darkened. Get a lotion made of 10 grains sulphate of zinc, 20 drops fluid extract of belladorna, and 2 ounces distilled water. Bathe the eyes well three times daily with hot water, and after bathing put a few drops of the lotion into each eye. In some cases recovery is slow, so have patience and continue treatment.

Gossip.

F. Martindale & Son, Shorthorn breeders, Caledonia, Ont., report the following sales of Shorthorns: To John Walker, Nanticoke, Ont., four head, including the grand, big, roan cow Florence 93901, and her nine-months-old heifer calf, by King's Cup 81597. These belong to our good old Waterloo Daisy family, and are extra good individuals, and will make good foundation stock. Mr. Walker sl got the two-year-old heifer Rose of York, a daughter of Alice of York 82056, which produced nearly 10,000 pounds of milk in one season in R. O. P. She also belongs to the Waterloo Daisy family. Lady Laura 98460 also goes to Mr. Walker. She is a grand big cow, a very heavy milker, and carrying a calf by a Dairymaid, 'a cow' that produced 13,500 lbs. in 11 months. A. S. Pelton, Paris, bought the red helfer Lady Diamond. She is a straight, thick heifer, of grand quality, and from a reliable family of good milkers. R. J. Moore, Kingston, got a pair of yearling heifers, one a red of the Lavinia family, and from one of our best milkers; the other a roan, a good, thick, smooth heifer of the Beauty family. In bulls, we have sold the calf Bessie's King, nine months old, to Alvin Culp, Vineland. This calf is from the prizewinning cow Bessie of Lowbanks 2nd 92106, first at Ontario Provincial Fair dairy test in 1913, and with an official R. O. P. record of 11,636 lbs. milk in 11 months. Mr. Culp is to be commended on the purchase of such an animal to improve the stock in his community. The bull, Lord Derby, went to Joseph H. Martindale, York, Ont. This bull is a roan, an extra good individual, and choicely bred, his grandam being Snow Beauty (imp.) 48662, an extra good cow and a heavy milker. Mr. Martindale has started a herd of Shorthorns and has selected this bull to head his herd. We still have a few females and three young bulls for sale.

While Jane, the new maid, was taking her first lesson on arranging the dining table, some one in the basement kitchen put something upon the dumb-waiter below. What's that noise?" asked Jane, quickly. "Why, that's the damb-waiter," responded the mistress. "Well," sail J. n. he's a-cratchin' to git out.

Little Filel Then't you dank I ought to have a new dol', mamma ""

Mamma - "Why, derr, our old one, is

Little Ethel-"W.P. I'm just as good as ever, too, but the angels trought you

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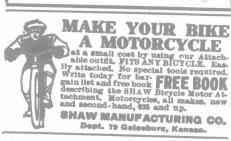
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Ouestions and Answers.

Partial Paralysis.

Veterinary.

Sow that would have been due to farrow on Dec. 11, aborted on Oct. 22, and for two weeks afterwards appeared greatly emaciated and unable to stand. She

has improved some, but staggers about in a weak and drunken manner. She is fed bran and chop twice daily, and roots at noon. C. M. C.

Ans.—She is partially paralyzed. Mix equal parts of Epsom salts, sulphur and powdered charcoal, and give her a tablespoonful twice daily in her food. causes her to purge, lessen the dose. Simply give her sufficient to keep her bowels loose. In addition, give her five grains of nux vomica three times daily. If she recovers, it will be wise to fit her for the butcher rather than breed her

Fatality in Calves.

Last spring two of my calves began to cough. They were treated for inflammation of the lungs. They also had diarrhea. Their appetite remained good, but the cough continued. They became very thin, and died in two months. About a month ago another calf began to cough. I treated the same as the others, but he also died. I have six calves left and they are now coughing, but have no diarrhea. They eat and drink well. R. K.

Ans.-It would require a careful postmortem examination to enable a man to determine with certainty the cause of death and nature of the disease. The symptoms indicate hoose, which is caused by a parasite which gains entrance to the lungs and bronchial tubes through the circulation. It is not contagious in the ordinary manner, but the parasites discharged from the sick may be eaten by the healthy and cause the disease. Hence all affected animals should be isolated in comfortable buildings. Treatment is often unsuccessful. Inhalations of sulphurous acid are highly recommended. This is done by closing the patients in a close compartment and burning sulphur so long as you can stand the fumes, then opening a door or windows to admit air. This may be repeated once weekly as long as necessary. Another method of treatment is the administration of oil of turpentine, about a dessertspoonful in about six ounces raw linseed oil once daily. The fumigation, if carefully carried out, generally

Miscellaneous.

1. Cow bloated badly in October. I punctured her with a knife, which gave relief, but gas continued to escape through the wound. She became constipated, and I called my veterinarian, who treated her and she got better, but gas began to escape again, and a little pus also escapes. Her appetite is good and she chews her cud, but I have to give her purgatives every week to prevent constipation.

2. Mare in good condition stocks in hind legs when she stands in the stable. 3. Give recipe for condition powder for a run-down horse. T. J. W.

Ans.-1. A veterinarian could cut through the skin and muscles to expose the rumen, then scarify and stitch the wound in it and then stitch muscles and skin, but probably the better way would be to dress the external wound three times daily with a five-per-cent. solution of carbolic acid, and if the wound refuses to heal, as probably it will, endeavor to fit her for the butcher. the meantime, of course, give sufficient laxatives to prevent constipation. When a sinus like this forms after puncturing with a knife, it often refuses to heal unless healing takes place promptly. Of course, a veterinarian can operate as stated, and you must decide what will be done.

2. Purge her with 8 drams aloes and 2 drains ginger, and follow up with 4 drams nitrate of potassium twice daily for three days. Feed lightly and exercise daily. Hand rub and bandage the legs when she is in the stable.

3. Mix equal parts of powdered sulphate of iron, gentian, ginger, nux vomica, and bicarbonate of soda, and give her a tablespoonful three times

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My driving h against the fr this forging or it called? 1. Is this jus

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th-class pure Scotch herd header; also one Scotch-topped out of dam, a show bull too. Every

aremont, Ont., C. P. R. RES

ality, choice breeding and from and fillies. Prices reasonable. Electric Railway L-D Phone.

The Farmer's Advocate.

Ouestions and Answers. Miscelloneous.

DECEMBER 16, 1915

War Tax.

Is a man living on a rented farm in the County of Victoria, obliged to pay the Provincial and County War Tax, or is it the landlord's duty to pay it? A. E. D.

Ans .- If the lease reads that the tenant must pay all taxes, then the tenant is entitled to pay.

Ducks.

Would you please let me know, through "The Farmer's Advocate," the right color of Indian Runner ducks? Is there any breed of ducks pure black with white breast? Let me know the difference between pencilled Indian Runner ducks and the other kind. M. M.

Ans.-Indian Runner ducks, according to Standard of Perfection, have a fawnand-white head, greenish - yellow beak, dark-brown eyes, white neck, fawn-andwhite breast, fawn shoulders, and even. fawn back, with a white body and fluff. The shanks and toes should be orangered. The tail of the drake is bronzegreen, and of the duck a light fawn. We would advise you to get in touch with some of the breeders of ducks if you are interested. There is a black duck known as the Black East India

Heaves.

We have a 12-year-old mare, 1,600 lbs., a free worker, but has been troubled with heaves for some time and has become worse. She also has a cough. Can you kindly tell me, through your valuable paper, what may relieve this? She is supposed to be in foal, due end Have a great deal of heavy log and bark hauling for the winter. Can you also tell me how to make tarwater for horses to drink? J. J. R.

Ans.—This mare seems to have heaves thoroughly established. If such is the case, the trouble is generally looked upon as incurable. The trouble can be much relieved by careful feeding, watering and driving. Feed only the best quality of feed; shake the dust out of the hay, and in place of tar water, dampen all feed with lime water. Always water before feeding, allowing only an ordinary Pailful at a time, and avoid driving fast or pulling heavily just after a meal. Smaller quantities of hay and more oats should be fed.

Forging.

My driving horse strikes the hind shoe against the front when travelling. Is this forging or clacking as I have heard it called?

1. Is this just a habit? If so, how can it be remedied?

2. Can the horse be shod to stop this? It so, how? SUBSCRIBER. Ans.-1 and 2. We have seen several horses with the minor defect shown by this animal, which is generally called forging. Careful shoeing may have some effect, and your blacksmith will be able to tell you how to shoe the horse. The hind shoe strikes underneath the uplift of the front shoe and makes the click. If he can some way shoe to prevent this you will have no more trouble, but different cases require different treatments, and the shoeing-smith accustomed to your horse will be in a better position than anyone else to overcome this habit, if such it may be called. We advise that you explain the matter to him and let him see how the horse goes. It is not a bad fault at all, and it may be that the horse cannot be so shod as to altogether prevent it.

We are in receipt of the catalogue describing the Ayrshires to be sold at Montreal on Thursday, December 16. Approximately eighty head will be sold. Extra copies of the catalogue can be procured from A. E. D. Holden, Room 805, McGill Building, 211 McGill Street, Montreal.

"A farmer predicts an open winter because his old gray goose has begun laying again." But don't take this sign too seriously, is the advice of the Parry Sound North Star. The good old girl, it may be, has heard her country's call for increased production, and is trying to do her bit !-Orillia Packet.

Draw on PAGE for Power Facts

THE rapidly-growing tendency to substitute gasolene power for horse power and man power on the farm must have sound reasoning back of it.

Surely this is a subject on which you should become posted. Surely you ought to be fully informed as to the extent to which a gasolene engine would help you toward more profitable farming.

If you have not yet installed a gasolene engine, take advantage of our Free Information Bureau—we maintain it for the spread of knowledge about gasolene power on the farm.

You can write freely, unreservedly, telling us about present conditions on your farm. We promise you that your confidences will be respected, and we'll likely be able to give you valuable information.

We can tell you, for instance, all the many practical uses to which you can put an engine—some of these uses being quite unknown to the average man. We can tell you what to look for when buying an engine—and how to get the most out of it

FARM POWER INFORMATION BUREAU

engine you need or just some advice, this is the place to come. Address:

We have made a deep study of the farmer's requirements—and whether it's an

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Wire Fence, Concrete Reinforcement, Wood Saws, Farm Trucks, Feed Grinders, Pumping Outfits, Roofing, Marine Engines, etc., etc.

Escana Farm Shorthorns

For Sale—15 bulls 8 to 14 months old, several of them prize-winners at Toronto and London, sired by the noted Imported bulls Right Sort and Raphael. Also for sale—20 heifers and cows of choice breeding and quality for show or foundation purposes. State your wants and we will send copy of pedigree and prices. Mail orders a specialty, satisfaction guaranteed.

Jos. McCrudden, Manager. Farm 1/2 mile from Burlington Jct.

20 IMPORTED BULLS

These imported bulls, along with 10 home bred bulls may now be seen at our farms. There are some choice ones among them. We also imported four cows and a heifer, all of which are forward in calf. An invitation is extended to anyone interested in this class of stock to visit us at any time. Correspondence will receive our most careful attention.

Burlington Jct. G. T. R. Burlington phone or telegraph.

MITCHELL BROS.

J. A. & H. M. PETTIT, Freeman, Ont.

Burlington P.O., Ontario

A Reasonable Chance to Buy a Well-bred, Good, Young SHORTHORN BULL

at a small price; I have three January calves which I want to move at once Also four or five a little older.

Will A. Dryden, Maple Shade Farm, Brooklin, Ont. Brooklin, G. T. R., C. N. R. Myrtle, C. P. R.

GLENGOW SHORTHORNS

For this season's trade we have the best lot of young bulls we ever bred. Wedding Gifts, Strathallans, Crimson Flowers and Kilblean Beautys, sired by Broadhooks Prime. These are a thick, mellow, well bred lot. Heifers from calves up.

WM. SMITH & SON.

COLUMBUS. ONTARIO

Rosedale Stock Farm offers for quick sale at low prices one 2-year-old Shire stallion, champion at Toronto. One 2-year-old and one yearling Hackney stallions, both imp. and both first at Toronto. One Hackney pony horse foal, dam champion at Toronto. Two Clyde. horse foals, sire and dam imp. Ten Shorthorn bulls. A few choice Leicester ram lambs.

J. M. GARDHOUSE, Weston, Ont. G.T.R., C.P.R. and Electric Line.

PLEASANT VALLEY FARM SHORTHORNS

Your opportunity to buy a good shorthorn bull as a herd header or to raise better steers is right now, We have ten good ones for either purpose by imp. Loyal Scot, also several cows and heifers. Write us (before buying. GEO. AMOS & SONS, Moffat Station, Ont,.C.P.R. (11 miles east of Guelph.

SHORTHORNS AND CLYDESDALES 10 Bulls serviceable age, all good ones (some herd headers) and are offering females of all ages. Have a choice lot of heifers bred to Clansman =87809=; also four choice fillies all from imported stock.

A. B. & T. W. DOUGLAS

Long-Distance Phone

STRATHROY, ONTARIO

Plaster Hill Shorthorns

Six young bulls 8 to 14 months. Eight females, those of breeding age in calf. Some qualified in R. O. P. and others from R. O. P. cows. Among these some choice show animals. Prices right. Terms to suit purchaser.

F. Martindale & Son, Caledonia, Ont. Station and P.O. Long-Distance Phone

Lynnore Stock Farm

Pure bred Dairy Shorthorn Cattle Imported English Stock. Pure bred English Berkshire pigs Pure bred imported Clydesdale horses.

F. Wallace Cockshutt, Brantford

Glenlea Shorthorns

Herd headed by the grand show bull, Prince Ury (92621).—For Sale—2 yearling bulls, 2 10-months old bulls, a few 2-year-old heifers, lately bred, and some cows, nearly due to calf: also 1 2-year-old Clyde stallion, by Imp. sire and dam, Prices easy for quick sale.

John McLean & Son, Rodney, Ont. Shorthorns high class young bulls from 7 to 18 months, 15 young cows and heifers, straight, smooth big kinds of choicest breeding including several families that have produced dairy test winners. I never was in a better position to supply you with a good young bull at a more reasonable price. Write me or come and see them

Stewart M. Graham

them.

Long distance Phone, Lindsay, Ont.

FLETCHER'S SHORTHORNS Our herd of pure Scotch shorthorns are mostly direct from (imp.) stock. Three very choice bulls for sale, also females. GEO. D. FLETCHER, R. R. I, Erin, Ont. L. D. Phone. Erin Sta. C.P.R.

SHORTHORNS, bulls, females, reds, roans, size. quality, breeding milkers over 40 years, cows milking 50 lbs. a day. The English, Rothchild's bull Mortimere in herd, the kind you want. Prices easy. Thomas Graham. R.R.3. Port Perry. Ont.

Scotch Shorthorns Bred direct from (imp.) stock, 6. Bulls from 8 to 10 mths. old from heavy milking dams, cows and heifers due to calf in March and April at prices that will please the buyer.

L. K. Weber, Hawkesville, Ont.

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COLD MEDAL White Light at World's

Send No Money, We Prepay Charges We don't ask you to pay us a cent until you have used this wonderful modern light in your have used this wonderful modern light in your own home ten days—we even prepay transportation charges. You may return it at our expense if not perfectly satisfied after putting it to every possible test for 10 nights. You can't possibly lose a cent. We want to prove to you that it makes an ordinary oil lamp look like a candle; beats electric, gasoline or acetylene. Lights and is put out like old oil lamp. Tests at 33 leading Universities and Government Bureau of Standards show that it

Burns 70 Hours on 1 Gallon common coal oil, and gives more than twice as much light as the best round wick open flame lamps. No odor, smoke or noise, simple, clean, no pressure, won't explode. Children run it. Several million people already enjoying this powerful, white, steady light, nearest to sunlight. Guaranteed.

to the person who shows us an oil lamp equal to the new Aladdin (details of offer given in our circular.) Would we dare make such a challenge if there were the slightest doubt as to the merits of the Aladdin?

Men Make \$50 to \$300.00 per Month With Rigs or Autos Delivering the ALADDIN on our easy plan. No previous experience necessary. Practically every farm home and small town home will buy after trying. One farmer who had never sold anything in his life before writes: "I sold is lamps the first seven days." Another seys: "I disposed of 34 lamps out of 31 calls.". Thousands who are coining money endorse the ALADDIN just as strongly.

No Money Required We furnish capital to reliable men to get started. Ask for our distributor's plan, and learn how to make big money in unoccupied territory Sample Lamp sent for 10 days FREE Trial

We want one user in each locality to whom we can refer customers. Be the first and get our special introductory offer, under which you get your own lamp free for showing it to a few neighbors and sending in their orders. Write quick tor our 10-day Absolutely Pree Trial. Send coupon to nearest office.

MANTLE LAMP CO. 221 Aladia Building. MANTLE LAMP CO.. 221 Aladdin Building Largest Kerosene (Coal Oil) Mantle Lamp House in the World. Montreal, Can. Winnipeg, Can.

10-Day FREE TRIAL Coupon 221 I would like to know more about the Aladdin and your Easy Delivery Plan, under which inexperienced men with rigs make big money without capital. This in no way obligates me.

Cotton Seed Meal LINSEED AND FLAX SEED

H. Fraleigh, Box I. Forest, Ont.

One yearling bull by King Seels Pontiac Duplicate whose dam is a g. daughter or isong Secret 18 bull-under a year old, one from a 20 fb, new and smod by a son of Pontiac Kornelyka. Feel to the contract of t R. M. HOLTEN

Print on the state of

Pedigreed Hols

Questions and Answers. Miscellaneous.

Free Martins Breeding.

We have had several inquiries at this office lately as to whether or not a heifer twin with a bull is likely not to breed. It might be of sufficient interest to answer in your Inquiries column.

Ans.-A heifer twinned with a bull generally proves barren, but in rare cases they have been known to breed. Such a heifer which fails to show cestrum is called a free martin. The bull is generally a sure breeder.

Women's Hours-House Material. 1. What are the hours for a woman in Canada to work per day?

2. How much lumber and cement blocks would be needed for a 24-foot square house (each block being 16 x 8 x 8), two floors?

Ans.-1. When women go out by day's work they usually work from eight to five or from nine to six. Of course, living in the home and working by the month the hours are longer, and are governed usually by agreement at the time of hiring.

2. Have your contractor figure this up for you. We have no details as to inside finishing, etc., so could not possibly do it. Neither do we know the height of the house.

Mare Sweats.

Could you kindly tell me, through your columns, anything I could do for a mare which sweats terribly? I bought her for fourteen years old, and she does not really look any older. She seems stiff all round, and when she has been trotting, and slow at that, for about five or ten minutes, she begins to sweat. By the time she has gone about half a mile she is white lather. She won't trot if she can help it. She is worked very little on account of that. I don't know what she did before I got her, which is six months ago. Her teeth are worn down very thin. She eats well. Could you tell me what makes her do so, and what I could do for her?

Ans .- We should not wonder but that your mare is foundered. At any rate, have her teeth attended to, and also have your veterinarian look her over for the cause of the stiffness.

Feeding Oil Cake and Cabbage.

1. I bought oil cake in sacks of 325 lbs., and it was pressed. I have to chop it to get it out, and to dissolve or soften it I poured boiling water on it. Only the surface gets soft. There must be some easier way of using it for mashing.

2. What is the feeding value of cabhage for milk? Has anyone had any experience along this line? Would 20 pounds of cabbage equal 15 pounds mash made of one part corn meal, one handful oil cake, two parts bran, and ten parts brewery grains? T. J. O.

Ans.-1. Oil cake is not usually purchased in this form by farmers. The general trade takes it in the nut form or ground to meal. In the nut form, cattle chew it and relish it. The greater part of oil cake is ground to a meal for feeding purposes. The pressed form is made use of in shipping. It can be stored then with greater economy of space than in any other condition. would suggest that you chop it up as fine as possible, but we cannot see the necessity of softening it with water.
The rattle will consume if if it is in

2. The fielding value of cubbage is considered by cattle men to be a out equal to Swede turnips, and one in estigator has declared that it requires about 400 lhs, of turnits to replace 100 lbs, of good meadow hay. It is rounds of cabbage would not compare in feding



of roots, herbs and bark. It invigorates the hens' digestive and reproductive organs, enabling them to eat and digest more food and turn a larger proportion of it into eggs. At a monthly cost of one egg per hen, Ovatum will

add several to the monthly average. Buy it from your dealer in 25c. and 50c. packages or in 10-lb. bags; or if he hasn't it, write us for prices and also for information on Gardiner's Pig Meal, Calf Meal, Sac-a-fat and Ontario Feeders' Cotton Seed Meal GARDINER BROS.

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SHIP YOUR

To the Largest, Most Reliable and Oldest House in Canada We Pay express and postage. Prompt returns

E. T. CARTER & CO., 84 Front Street E., TORONTO

Last Call for Kilgour's Dispersion Sale of

45 Registered Holsteins

Wednesday, December, 22nd, 1915

At the farm, half mile east of Mt. Elgin. Included in the bunch is our Junior Herd sire, whose dam and sire's dam have each made over 30 lbs. butter in 7 days. Write for catalogue.

L. H. LIPSIT, Sales Manager, Straffordville, Ont.

LINDSAY & POUND, GEO. KILGOUR, Prop. Mt. Elgin, Ont.

Canary Mercedes Piertje Hartog 7th heads our herd. His dam gave 116 lbs. milk in one day and 6,197 in sixty days and made 34.60 lbs. butter in 7 days. There are more cows in our herd giving over one hundred lbs. of milk a day than any other in Ontario. We have both bulls and heifers

D. C. FLATT & SON, R. R. No. 2, HAMILTON, ONTARIO Long-distance Telephone

Herd headed by King Johanna Pontiac Korndyke, a grandson of Pontiac Korndyke, and a brother of Pontiac Lady Korndyke, 38.02 lbs. butter in 7 days, 156.92 lbs. in 30 days—world's record when made.

J. W. Richardson, R. R. No. 2, Caledonia, Ontario

Cloverlea Dairy Farm offers for sale a choice 23 lb. bull ready for immediate service. Write us for price and particulars. We have also a limited number of choice young bulls from our herd Sire Pontiac Norine Korndyke, from R. O. M. dams which will be priced right. L. D. Phone.

GRIESBACH BROS..

Collingwood, Ontario.

Ourvilla Holstein Herd If you are starting a herd, or wanting to improve one, look at these young sires for sale, from Homestead Susie Colantha, at three years 26.50: Ourvilla Susie Abbekerk, at three years 26.02; Ourvilla Calamity Ormsby, 22.14 at three years; Homestead Hellon Abbekerk, at three years 23.51, and a few others. Also come and make a selection in choice Also come and make a selection in choice females from our herd of 100 head.

LAIDLAW BROS., Aylmer, Ont.

Evergreen Stock Farm - REGISTERED HOLSTEINS Present offering; Several bull and heifer calves, also a few yearling heifers bred and ready to breed. Write for prices A E Hullet Norwich Ont. A. E. Hulet, Norwich Ont. and descriptions. Bell 'phone.

Lakeview Stock Farm

Bronte, Ont. BREEDERS OF HIGH
TESTING HOLSTEIN-FRIESIAN CATTLE OFFER FOR SALE A FOUNDATION
Terms to suit purchasers HERD consisting of 1 male and 3 females all bred in the purple and backed by offi Terms to suit purchasers.

T. A. DAWSON, Manager.

Clover-Bar, Holsteins. My special offering just now are some choice young Bulls out of official record dams and sired by Count Mercedes and his sire was the great Sir Admiral Ormsby. Also a few females.

PETER SMITH, R. R. No. 3, Stratford, Ont. --- Stratford or Sebrinaville, Stations. HOLSTEIN GATTLE

Pure-bred cows, heifers and heifer calves. 66 HEAD MUST BE SOLD, having disposed of my two stock farms. Come and make your selection. Price and terms to suit. HAMILTON FARMS,

Telegraph and Phone Niagara Falls. Farm 10 minutes trolley from Niagara Falls.

For Sale---Sons of King Segis Walker

From Igh-testing dams of Pontiac Korndyke, Photo and pedigree seat on application. OSHAWA, ONTARIO A. A. FAREWELL

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Insist on " COTTON

Write for feed

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THE
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A few young bulls formance dams, i sired by Auch 35758, grand and Sherbroo GEO. H. MON Dominion Express D. McArthur,

STOCKW Sired by my royall Whitehall King of calf herfers and you D. M. Wart. St

Alderley I J. R. KENNED High-Class

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propos: matrir esteen avor, t "H: No. 17 Send

tonic composed rates the hens' ing them to eat and rtion of it into eggs. Ovatum will Buy it from



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of Mt. Elgin.

whose dam and sire's dam s. Write for catalogue.

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Mt. Elgin, Ont.

dam gave 116 lbs. milk in one day milk a day than any ls and heifers

HAMILTON, ONTARIO

lyke, a grandson of Pontiac rndyke, 38.02 lbs. butter s record when made.

Caledonia, Ontario

l ready for immediate service. Write limited number of choice young bulls O. M. dams which will be priced

Collingwood, Ontario.

a herd, or wanting to improve one, g sires for sale, from Homestead Susie three years 26.02; Ourvilla Calamity three years 23.51, and a few others. W BROS., Aylmer, Ont.

ERED HOLSTEINS o a few yearling heifers bred Hulet, Norwich Ont.

Ont. BREEDERS OF HIGH NG HOLSTEIN-FRIESIAN CAT-FER FOR SALE A FOUNDATION and backed by officially tested dams.

DV, Manager. just now are some choice young Bulls d dams and sired by Count Mercedes and a 21.06 lb. 3-year old daughters, tles.

and heifer calves. 66 HEAD MUST come n. Price and terms to suit. Cattle

sees. SOUTHEND P.O., ONT. trolley from Niegers Falls.

Segis Walker d pedigree seat on application. OSHAWA, ONTARIO

DECEMBER 16, 1915

Reduce Your Roofing

Costs, Protect Your

Buildings From Fire,

using our heavily zinc coated

Lightning and Weather

You accomplish all these results by

Eastlake

Metallic Shingles

They give longer service than any

buildings lightning fire, and weather-proof and why they

other roofing.

Insist on "GOOD LUCK" Brand

COTTON SEED MEAL

41 to 48 per cent. Protein IT MAKES RICH MILK

Write for feeding directions and prices to Crampsey & Kelly Dovercourt Torento

has found by actual experience
that dehorning cows adds to their
milking value. The KEYSTONE
DEHORNER is mentioned in the
1913 report (page 131) as a
most effective instrument for the
purpose. Write for booklet.

H. McKENNA, 219 Robert St., Toronto

Lakeside Ayrshires

A few young bulls for sale from Record of Performance dams, imported and Canadian-bred, sired by Auchenbrain Sea Foam (Imp.)

35758, grand champion at both Quebec and Sherbrooke, Write for Catalogue.

GEO. H. MONTGOMERY, Proprietor
Dominion Express Bldg. Montreal, Que.
D. McArthur, Mgr., Philipsburg, Que.

Stred by my royally bred and prizewinning bull, Whitehall King of Hearts, Imp., for sale are, in calf heifers and young bulls, out of Imp. and big producing cows.

D. M. Wart, St. Louis St. P. O., Quebec

Aderley Edge Ayrshire cattle and Yorkshire swine.
Both sexes.

J. R. KENNEDY, Knowlton, Que.

High-Class Ayrshires H you are wanting a

young bull out of a 50-lb.-a-day and aported or Canadian-bred dam or sire,

FARLANE, FARLANE, FARLANE, KELSO, QUEBEC

is that letter?" asked the busy

r to your letter to a young lady

matrimony. Replying to your

Send her our follow-up form

avor, the young lady declines.'

THE KEYSTONE DEHORNER.
The Department of Agriculture has found by actual experience

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King and Dufferin Sts., TORONTO

THE FARMER'S ADVOCATE

Questions and Answers. Miscellaneous.

Patents-Rack-Lifters and Poultry

1. Please give illustration of reins to drive four horses abreast so they will all pull evenly on the different lines. Also give length of different parts of lines.

2. Can a farmer take pattern off a rack-lifter which was patented about twenty years ago, make one, and put it up in his own barn and use it without having any trouble made by the inventor?

3. How often must a patent be renewed, if the manufacturer continues to make the article?

4. Can any of your readers give a plan for making a rack-lifter for a barn thirty feet wide, that will give perfect satisfaction in every way? What will it cost to make one complete? What size rope should be used, and where can good rope be bought cheapest?

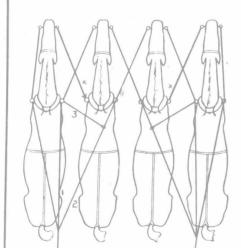
5. Please give a good recipe for a condition powder to make hens lay in winter? How much should be fed to 75 hens, and how often?

6. When is the best time to feed soft feed with equal parts corn, oats, buckwheat, wheat and barley, for their grain A READER. They give longer service than any other roofing. Cost less to lay. Are rust-proof and do not require painting. Those laid 28 years ago are still giving good service. Send for free book that shows how "Eastlake" shingles make your

Ans.-1. From time to time we have published descriptions and illustrations of reins for teaming four horses abreast. We are repeating one of these illustrations in this issue. Another way is to put the ordinary team lines on the center horses: tie the inside bits of the outside horses to the hame-rings of the horses next them, and have an adjustable strap about six feet long fastened from the outside of their bits to the main lines of the center team at or near the buckle. There are many ways of reining four horses, but this one is used by

2. It is possible that a farmer might make use of such a rack without being prosecuted for an infringement of the manufacturer's, patent rights, yet, if the inventor's patent is still operative, there is a possibility that he may be prosecuted at any time.

3. A patent will cease to be operative after two years unless the patentee or his assignee or assignees has or have within that period, commenced, and since continuously carried on in Canada the construction or the manufacture of the invention. Patents issued under any of the Acts of the several Provinces now forming the Dominion, prior to the first day of July, 1869, remain in force for the term for which they were originally granted, subject to the provisions of the



Reins for Four Horses.

new Act so far as applicable. Patents are taken out for 18 years, 12 years, 6 years, etc., and, of course, must be renewed at the expiration of those times. With this information, our correspondent may be able to gather more knowledge about the patent and decide for himself. 4. We shall be glad to publish any advice given by our readers as to the

manufacture of a rack-lifter. 5. Without proper feeding and proper care, no condition powder will make hens lay in winter, or any other time. Recently several articles have been published in this paper as to how the hens should be fed, and what their rations should consist of. Several preparations or condiments are on the market, and should, along with proper feeding, give the results which our correspondent is

Direct from the Factory to the Farmer

Made in Canada

Monarch Gasoline **Engines**

14 to 35 Horse Power Grain Grinders, En-silage Cutters, Saw Frames and Pump Jacks

11/2 H.P. Horizontal Hopper Cooled

This engine built specially for small jobs around the farm and in connection with our intermediate pulley takes care of the churning, washing, pumping, etc. Being mounted it is easily moved from place to place.

Canadian Engines Co. Ltd., Dunnville.

Dear Sirs.—I bought from your agent Mr. Roe a six H.P. Monarch Engine. I have had it two seasons and I ran a chopper, circular saw, corn blower and also a threshing machine; this engine has given me great satisfaction and I think there is no engine on the market will equal it.

Yours truly, J. G. Carter

Write for catalogue Canadian Engines Ltd., Dunnville, Ont. FROST & WOOD Co., Limited, exclusive sales agents east of Peterboro, Quebec and the Maritime Provinces.

Good live agents wanted in unrepresented territory.

DON JERSEYS

Special Offering—A few choice yearling bulls fit for serivce, also heifer calves six months old, sired by Eminent Royal Fern. Write for what you want.

Todmorden, R. R. No. 1, Duncan Sta., C.N.O.

Brampton Jerseys

We are busy. Sales were never more abundant. Our cows on yearly test never did better. We have some bulls for sale from Record of Performance cows. These bulls are fit for any show-ring.

BRAMPTON, ONTARIO

Second Annual Consignment Sale

From the herds of the Southern Counties Ayrshire Breeders' Club. To be held at the Imperial Hotel Stables, Tillsonburg, Ont.

Thursday, Dec. 30th, 1915

The offering consists of females of all ages, including a number of fresh milch cows that have either qualified or are now running in the R. O. P. test. A number of extra choice young bulls fit for service are also included. The breeding of the cattle in this consignment is of the very choicest. Note specially the breeding of the reference sires in the catalogue. The Club constitution absolutely prohibits all by-bidding or bidding in, so that every one is assured of a fair and square deal. is assured of a fair and square deal.

TERMS—Cash or credit up to 6 months on bankable paper, with

interest at 6 per cent.

W. W. BALLANTYNE, Stratford, Ont. JOHN McKEE, Norwich, Ont. Sec.-Teas. and Sale Manager. MOORE & DEAN, Auctioneers.

CITY VIEW AYRSHIRES Every cow qualified in Record of Performance, with an average of 4.5 per cent. fat. Do you want a young buil from one of them. All

ages up to 18 months. Write: JAMES BEGG & SON

R. R. 1, St. Thomas, Ont.

Excellent chance to secure good two-year-old bull at low price. Two young cows freshen in January. Several young bulls, heifers and calves. Good individuals, good pedigrees and prices right.

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Melrose Park Farm

W. J. ARKELL F. S. ARKELL



Summer Hill Stock Farm Largest and oldest importers and breeders of

OXFORDS

in Canada. Look up our show record, it will give you an idea of the kind of Oxfords we have for sale.

PETER ARKELL & SONS, Proprietors, Teeswater, Ont. Customers, beware of imitations of this advertisement

SUMMER HILL OXFORDS

Flock established many years ago on Summer Hill Stock Farm by the late Peter Arkell, now owned by his son, Peter Arkell. Rams and ewes in any quantity for sale, all recorded. Positively no grades registered as pure-breds; also no grades handled except by order.

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64 years is a long time. A product that can hold the popularity of the entire Dominion for 64 years must be meritorious-dependable.

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have been the same good matches since 1851. Like Eddy's Fibreware and Eddy's Washboards, they are considered standard by all loyal Canadians under the "Made-in-Canada" banner.



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How to erect fireproof, weatherproof, lightningproof farm buildings is explained in our FREE Barn Books.

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Pedigreed Tamworth Sows

and Boar for sale, 10 weeks old. Apply HEROLD'S FARMS Beamsville, Ont.

For Sale:—Ohio Improved Chester White Swine. The oldest established registered herd in Canada. Pairs furnished not akin 6 to 8 weeks old. te for prices.
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Morriston Tamworths and Shorthorns, bred from the prize-winning herds of England. Choice Tamworths, both sexes, all ages, 150 head to choose from. Choice Shorthorns, 3 extra fine red roan bull calves, 8 mos. old, dandies, also cows and heifers of the deep milking strain. Charles Currie, Morriston

Yorkshire Sows for Sale. Three choice Yorkshire sows, bred eight months old, weight about 275 lbs. L.D. Phone. Geo. D. Fletcher, R.R. No. 1, Erin, Ont.

Pine Grove Berkshires—Sows bred and ready to breed. Boars fit for service. Young things, both sexes, from my prize-winning herd. W. W. Brownridge, R. R. 3, Georgetown, Ont

Tamworths Boars fit for service, young sows ready to breed, pigs of all ages for sale. Before buying, write for prices.

JOHN W. TODD Corinth, Ont.

Prospect Hill Berkshires Special off-ering for Christmas trade a number of sows from first stock and bred to our stock boar Ringleader to far-row in March; also a fine lot of pigs, both sexes far-rowed in June. Terms and prices right. John Weir & Son, R.R. No. 1, Paris, Ont.

Dyke's Book—FREE
interesting, instructive—tells you to learn AUTO TRADE, how to become a chauffour and repairman—SED FOR IT—Te-day—New ALDYKE, \$15 Boo Bidg St Louis, Mo CHARTS MANIMUNEER.

Salt, pepper, mustard, etc., act as appetizers, and may be given with

6. We would advise that the hens be given their grain in litter, so they will have to scratch for it for their break-Feed their mash or soft feed at fast. noon, and grain again in the evening, placing the latter feed where they can secure it easily. It is well that hens should have a substantial meal of grain before going to roost. Mashes are too easily digested, and allow the hens to get hungry before their morning feed is acquired.

Questions and Answers. Miscellaneous.

Planting Walnuts and Seeds of Roses. Please give me advice through "The Farmer's Advocate," on the following:

1. How to plant black walnut nuts? 2. How to plant seeds of rose bushes in the pods? This year I have some pods on one of my rose bushes which resemble raspberries, and they are full of W. R. S.

Ans.-1. Walnut trees are planted when one or two years of age, preferably the latter. Where a number are being set, they are planted in orchard form, in squares 50 feet apart or less. The trees make very little growth the first year, but after that they grow rapidly. The young trees are very tender, and should be supported by a stake to prevent swaying. A strip of cloth is used to make the tree fast to the stake. Any other tying material might injure the tender bark and trunk.

2. The growing of roses from seed is not so easy as one would suppose, for one can never foretell how long it will take them to germinate. The hips containing the seed should be gathered in the autumn, the seed freed from its covering, and planted at once. They may germinate the following spring, or not till the succeeding spring. By placing the hips in warm water for a time they will ferment and the seed can be rubbed clean. The seed should be plant ed at once, either in a well-manured bed out of doors, or in flats in a cool greenhouse. It would probably be well to separate the seed and plant them in sand this fall if the ground is frozen too much to prepare a suitable bed for them. Leave the sand and seed out of doors so they will stratify or crack open, then plant in the spring.

Mare's Leg Stocks-Ferrets.

she appears to be in perfect health, but when she stands in the stable all night she stocks in one hind leg. When put to work it nearly all disappears.

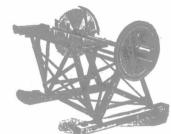
2. Also, after taking a drink she coughs two or three times.

3. What are ferrets? What size are they, what are they good for, and what are they worth? Some tell me they are for hunting, and that you can send them into a hole and they will bring out anything in it. Is that so?

Ans.-1. If not in foal, feed on bran only for 12 to 18 hours, then give a purgative of 8 drams aloes and 2 drams ginger. Feed bran only, and give water from which the chill has been taken, until purgation ceases. Give one dram iodide of potash night and morning for twelve days. Feed lightly and give regular exercise. Some horses are so predisposed to this condition of the legs that it cannot be prevented, except by pretty constant and regular exercise, while in others the above treatment will arrest the tendency for the winter.

2. This cough is probably a sequel to a cold or distemper, and such troubles are difficult to combat. Feed the animal on first-class feed only, and limit the amount of hay; dampen both hay and grain with lime water, and give night and morning two drams solid extract of belladonna, one and a half drams gum opium, one dram camphor, and twenty grains powdered digitalis; moisten with treacle and give in a ball, or shake up with a pint af water and drench.

3. Ferrets are weasal-like animals about 14 inches long, usually white or vellowish-white, with red eyes. They are used to drive rabbits out of their holes. and to destroy rats and other vermin. Prices vary considerably, depending upon whether they are scarce or plentiful in the district.



We Saw It First

Large are the sales of our \$19.00 Wood Saw. We are the first makers of saws to discover the need of such a saw—and the first to supply such an article at such a price.

Selling direct to the farm, with no middleman's profit, it is but natural that we can get the prices on saws down pretty low. But the remarkable thing is, that we've been able to include so many spiendid features in this low-priced saw. Here are a few of the outstanding ones;

Heavy angle steel bars, well braced and strongly bolted; A shaft box that is dust-proof and non-heating; Saw blade protected by heavy steel guard; Roller at one end of tilting table to facilitate handling long poles;

24 inch 4.6	26-inch

Write for descriptive folder,—and at the same time, ask for our big free general

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Flock Established in 1881 from the best flocks in England.
We are offering a splendid lot of yearling rams and ram lambs for flock headers or show purposes. We ourselves have retired from the show-ring so hold nothing back. We are also offering 80 yearling Oxford ewes and ewe lambs; a few superior Hampshire yearlings and ram lambs. All registered.

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Guelph, G.T.R.; Arkell, C.P.R. Telegraph Guelph.
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Shropshires and Cotswolds for Sale—Yearling rams and yearling ewes, a few imported 3 shear ewes, an extra good lot of ram ambs from i mported ewes. Prices very reasonable.

Claremont, C. P. R., 3 miles Pickering, G. T. R., 7 miles Greenburn, C.N.R., 4 miles

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We have on hand for sale a large number of Shearling Rams and Shearling Ewes, Ram and Ewe lambs, got by noted sires that have produced winners at Toronto for the last 3 years. highest quality.

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AGES FROM FOUR WEEKS TO SEVEN MONTHS.

Strong growthy individuals from well bred sire and dams. Inspection invited. Address-

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Farmer's Advocate, London, Ontario

Cloverdale Large English Berkshires! Sows bred, others ready to breed; boars ready for service; younger stock, both sexes, pairs not akin, All breeding stock imp. or from imp. stock. Prices reasonable. C. J. Lang, Burketon, Ont. R. R. 3.

Yorkshire Sale Do It Now. Make your choice. SPECIAL PRICES from Nov. 18th. to Dec. 18th. Will pay one way fare on purchase of \$60.00 and over.

Shropshire rams also. Inspection invited. Wm. Manning & Sons,



Spruce Lodge Stock Farm—Shorthorns and Leicester Sheep Have always on hand a few choice heifers and bulls from good milking families, In Leicesters we have the best lot we ever offered in shearlings and ram lambs and ewe and ewe lambs, all got by choice imported rams.

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Caledonia, Ont.

Newcastle Tamworths and Shorthorns

Boars ready for service. Sows due to farrow, others bred and ready to breed and a lot of both sexes ready to wean. Descendants of imp. and championship stock. Several extra choice young bulls and heifer calves, recently dropped: grand milking strain, 2 bulls 5 and 8 months old. All at reasonable prices. months old. All at reasonable prices.

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ELMHURST LARGE ENGLISH BERKSHIRES From our recent importation of sows, together with the stock boar, Suddon Torredor, we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed.

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1881 from the best flocks in England.
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Sale—Yearling rams and yearling ewes, a few corted 3 shear ewes, an extra good lot of ram

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Pays express, furnishes cans and remits weekly

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The market indicates a gradual advance. Act now.

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pay express charges and furnish cans. Remit promptly. Take all you can make. Write us.

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of farms and city properties for sale or exchange. Send to us for our catalogues—Free.

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Farmer's Advocate Pen Coupon, Value 4c. Farmer's Advocate Pen Coupon, Value 4c.

Send this coupon with remittance of only \$1.52 direct to the Fleet Pen Co.

19 Fleet Street, London, England. In acturn you will receive by registered sost, free, a splendid British-made 14ct old nibbed, self-filling Fleet Fountain Pen, value \$4 (16s. 6d.). Further coupons up to 13, will each count as 4c. of the price, so you may send 14 coupons and only \$1. Say whether you require fine, medium or broad nib. This reat offer is made to introduce the amous Fleet Pen to Canada. Over 90,000 have been sold in England Agents Wanted. Liberal Terms. Agents Wanted, Liberal Terms.

THE FARMER'S ADVOCATE

Trade Topic.

SUITS FREE!

Remarkable Cloth that Won't Wear Out! Now readers, would you like a suit or pair of pants absolutely free? A most astounding offer is being made by a wellknown English firm! They have discovered a remarkable Holeproof Cloth. You can't tear it! Yet it looks just the same as \$20 suitings. You can't wear it out no matter how hard you wear it, for if during six months of solid hard grinding work every day of the week (not just Sundays), you wear the smallest hole, another garment will be given free! The firm will send a written guarantee in every parcel. Think, readers, just \$6.50 for a man's suit, and only \$2,25 for a pair of pants, sent to you all charges and rostage paid, and guaranteed for six months' solid grinding wear. Now, don't think because you are miles away you cannot test these remarkable cloths, for you simply send a 2 - cent postal card to The Holeproof Clothing Co., 56, Theobalds Road, London, W.C., Eng., for large range of patterns, easy self - measure chart and fashions. These are absolutely free, and postage paid. Send 2-cent postal card at once! Mention "The Advocate." - Advt.

Balkan Nursery Rhymes.

(By Sir Owen Seaman, in 'Punch.') (After Tennyson's lullaby in 'Sea Dreams.')

"What does little birdie say In her nest at break of day"?

What does little Ferdie say In his tent behind the fray? "I'm afeared," says little Ferdie. "I shall lose my head some day." Ferdie, wait a little longer Till the hate of you grows stronger, And your nose a little longer-You shall lose your head some day.

What does little Tino say In his chamber, Athens way? 'Let me off," says little Tino, "I don't want to join the fray." Tino, what of Salonika? Though his fides may be Groeca, For the sake of Salonika Tino too shall join the fray.

What does little Mehmed say In his harem, far from gay? "Since you ask me, I was thinking I should like to run away. Whether England knocks me silly, Or I wipe the boots of Willy, I shall end by looking silly; I'm a loser either way.

The Spice of Life.

Miss Coy-Oh, what beautiful flowers! There's still a little dew on them. HIS NIBS (absent-mindedly)—I know; but I'll pay it to-morrow.

The teacher of natural geography directed all her pupils to write a definition of the word "geyser." Willie evolved this definition:

"A kaiser is a disturbance of the earth's surface.

Doctor-I have to report, sir, that you are the father of triplets. POLITICIAN—Impossible! I'll demand a

"There's lots of money in stocks." "Quite right; that's where mine went."

W. R. Cruse, Ontario Co., Ontario, when sending \$4.50 for three years' subscription, encloses the following verse:

Your paper takes me away, way back, to the good old times I had, When the men would come to our farm to plow the land for Dad; Sometimes I'd ride the horse's back, else

ride upon the plow: Those good old days, tho' passed away, I well remember now.

GASOLINE Engines 2, 3, 5, 7 and 9 ON SKIDS H.-P. OR TRUCKS OVER TEN THOUSAND IN USE. Write for Catalogue "G." Lister Engines,
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More Trappers and Fur Collectors send their Raw Furs to us than to any other five houses in Canada. Because they know we pay highest prices, pay mail and express charges, charge no commissions, and treat our shippers right. Result, we are the largest in our line in Canada. Thip to us today and deal with a Bellable House. Trapper's and Sportsman Supply Catalog "Raw Fur Price Lat," and latest "Fur Style Monthlights, Blabilights, Fishing Note, Fishing Tackle and Sportsman supply Catalog "Raw Fur Style Bupplies at lowest prices. CATALOG TREE."

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313 Hallam Building TORONTO



Farmers and Lumbermen!

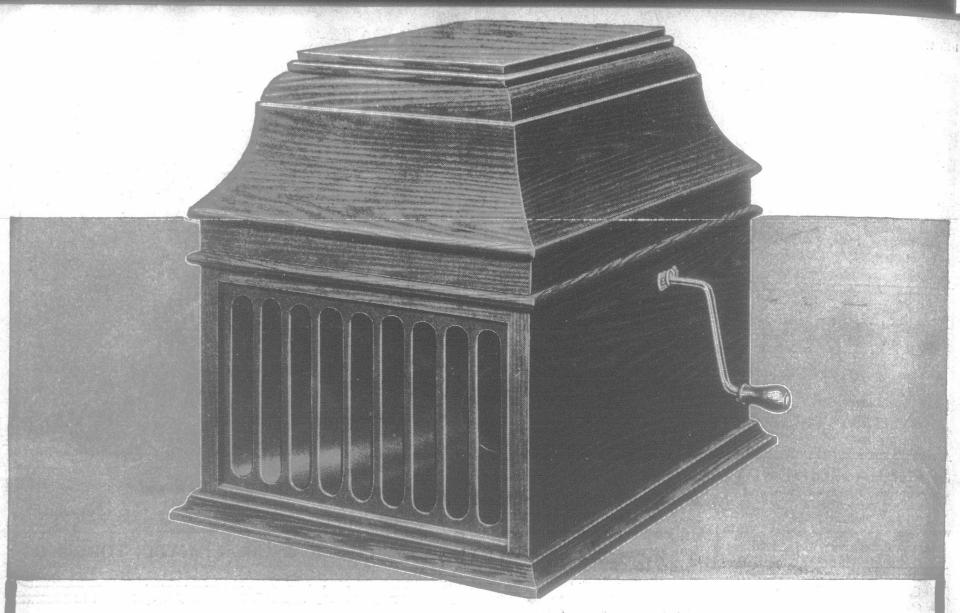
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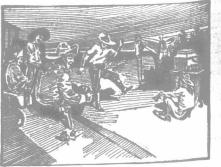
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Happiness is life—and real happiness is found only in a real home. And by a real home I do not mean a house with a yard or farm around it. Oh, no! A real home is the place where the happy and united family gather together for mutual enjoyment and recreation. And the Edison makes this possible, for it stands supreme as the greatest home entertainer. It will mean more than entertainment and merriment, more than an hour of amusement—yea, it will mean genuine pleasure of the lasting sort—helpful entertainment and culture of the most beneficial kind. It will mean the family united—a new home.



Such a variety of entertainment! Hear the latest up-to-date song hits of the big cities. Laugh until the tears stream down your face and your sides ache from laughing at the funniest of funny minstrel shows. Hear the grand old church hymns, the majestic choirs sing the famous anthems just as they sing them in the cochedrals of Europe. Hear the pealing organs, the crashing brass bands, the waltzes, the two stees, the solos, duets and quartettes. You was a westricken at the wonderful grand open saa sung by the world's greatest singers. You will be moved by the tender, sweet harmony the singing those old melodies the heard all your life. Take your call have heard all your life. Take your call of any kind of entertainment. All will be a sea with the Edison in your home. Send the content days