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Vol. XLIX.

# Rural TelephonesHelptoMake 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.

To-day, farmers who are living in districts with telephone service can get together on very short notice when there is anything of importance to be discussed. The secretary of any co-operative club can reach any farmer on the line at once and advise him of any advantageous buying opportunities that may occur. He can also telephone farmers the moment a shipment arrives, so that they can send for their portions at once.

The rural telephone is a true friend of the farmers' co-operative clubs. It is an ally that all live, progressive farmers appreciate, for it enables them to buy and sell to best advantage

If there is a farmers' club in your district, it needs telephone survice between the members to insure its best success. We would bu glad to send a competent man to explain the advantages of an (1) Jependent municipal or local telephone system to the members the club. Just write us.


Our telephones are serving the majority of the independent municipal and local telephone systems in operation in Ontario. Their high-class features are appreciated by every user. We will be pleased to send our literature describing them to anyone who will write for it.

## 'anadian Independent Telephone



Read this list-it will stir old memories


A5602 The Messiah-Handel. (Rejoice Greatly,
O Daughter of Zion.) Orchestra accompani-
ment.
Walter Lawrence, Boy Soprano
 HEAR THESE BEAUTIFUL CHPIST MAS REGCORDS FROM THE OLD COUNTRY. THIS IS A PARTIAL LIST,
ONLY.
Walter Lawrence. Boy Soprano
1076 Christmas Carols-Medley. Mixed Quar
tette. Unaccompanied. Agnes Kimball Soprano tette. Unaccompanied. Agnes Kimball. Soprano
Nevada Van der Veer. Alto, Reed Miller, Tenor
and Frank Nevada Van der Veer, Alto,
and Frank Croxton, Bass
Star of the East-Kennedy. Orchestra
accompaniment. Roma Devonne, Contralto, and
1088 Ringing the Old Year Out-Currie
Descriptive. Snow Time-Arndt. Orchestra accom paniment. Columbia Quartette chestra accompaniment. Andrea Sarto, Baritone.
and Columbia Mixed Ouartette and Columbia Mixed Quartette chestra accompanime

1736 Christmas Memories-Part 1., Introducing the Carols-"The first Nowell." "Good Christian Men Rejoice," "Good King Wen
ceslas," "A Child This Day is Born", Regimental Band of His Majesty's Scots Guards Cucing the Carols-"God From on High Hath ducing the Carols-" God From on High Hath Heard," "See Amid the Winter Snow"
Bells), "God Rest ye Merry Gentlem Hear Along the Street,", Merry Gentlemen," " Regimental Band of His Majesty's Scots Guards
R1471 Christians Awake. The Church Quartette.
with Brass Ouartet with Brass Quartet and Organ
with Brass Quartette and Organ Church Quartette.
R1472 Good King Wenceslas. The Church
THINK OF THE KIDDIES. THESE
WILL MAKE CHRISTMAS JOLLIER
FOR THEM.
A1605 A visit from St. Nicholas-Moore. While Shepherds Watched. The Church
Quartette, with Brass Quartette and Organ
R1474 God Rest Ye Merry Gentlemen
Church Quartette, with Brass Quartette and Organ Good Christian Men, Rejoice. The Church Quartette,with Brass Quartette and Organ R2030 We Miss Her Most at Christmas Time. Donnelly and Wright. Will Norrie. Harold
Wood. Baritone, with Orchestral accompaniment Little Shepherdess of Devon. Harold Wood, Bawne, with Orchestral Accompaniment
R349 Dick Whittington. A Pantomime in two Acts. Act 1. H. C. Ridout. Columbia
Pantomime Company and the Cat, with Orchestra Dick Whittington. A Pantomime in two Pantomime Company and the Cat, with Orchestra 2348 Scrooge, from "A Christmas Carol.' Dickens. The Awakening. Dramatic Recital.
Minstrels with Orchestra Micawber's Advice to David Copper-
Recita from "David Copperfield." Dramatic
In addition to these there are thousands of other Columbia Records awaiting your choice COLUMBIA GRAPHOPHONE COMPANY, 365-367 Sorauren Avenue, TORONTO


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pries BEAUTIFUL CHRIST--
SROM THE OLD IS IS A PARTIAL LIST,

Memories-Part 1.; Intro-
-"The first Nowell." "Good Rejoice," "Good King WenThis Day is Born."
of His Majesty's Scots Guards Memories-Part 2. Intronid the Winter Snow" (with t ye Merry Gentlemen," " of His Majesty's Scots Guards Wake. The Church Quartette. Noel. The Church Quartette, Wenceslas. The Church is Ouartette and Organ
Merry Gentlemen. The tian Men, Rejoice The th Brass Quartette and Organ Most at Christmas Time. ight. Will Norrie. Harold
th Orchestral accompaniment erdess of Devon. Harold n. A Pantomime in two Ridout. Columbia gton. A Pantomime in two $y$ and the Cat, with Orchestra "A Christmas Carol. Minstrels with Orchestra avice to David CopperCopperfield." Dramatic g your choice ,TORONTO
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LONDON, ONTARIO, DECEMBER 16, 1915

## EDITORIAL.

Everyone seemed pleased with our jubile

Keep the stock free of lice.
Give, other Farmer's Advocate readers the benefit of some of your experience

Actend the winter conventions.
always more to be learn d about farming.
Make the plans early for putting in ice thls year,
comes.
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 highwa

As a winter live stock conditioner put near curry-comb and brush.

Readers are inv9ted to help us make this profitable winter in so far as the best of agri cultural reading is concerned.
We are told that the Allies already have supremacy in munitions. What will it be by the

The stable may be a little cool and still be comfortable and well suited for the stock, but i improve it and too warm better ventllation would

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 leatures in this country. The farmer has time to look the stock over and listen to a few pracIt 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 should at this season weigh things in a fair
balance and decide that we have many things hich should aid toward a iorous (1iristmas.

It has been predicted that the war would but who would have dreamed that the brushes of eflounty army horse dealers would have re-from Canada and the tinited States to see Canstock given a daily outdoor run, or are they conlinumusly confined during the winter months? A these and reasons therefor would be read in the C.N.R. road. At one tactical stroxe they
ada from East to West ard tell the people about it, but we still contend that such was a minor consideration on the part of the C. N. R. on arians and senators first, and the press to tell the people about the speeches of these men and
Certainly, They Were At It Again. ished a letter trom W. H. Moore, Secretary of the Canadian Northern Railway, complaining which was published in our issue of November 4 shortly after the Canadian Northern's fifteen coach special loaded with free-trip Parliamen carians and Senators arrived back from its rul adian Northern do not like to be called "lobbyl ists," but as his Busine calted louby ists, but, as real Big Business min are no in the press, we fecl flattered to thin" that there inust have been even more in what we said than we at first believed. The cap must have fit all too well to suit those for whom it was made. possess passes over all Canadian Railroads. This being true why did not these same Members so ansious and fecling duty bound to see the road cake a trip over it at their own convenience, pay sleeping car service and return with a fair, un biased view of the whole matter? If these memher have passes and do not use them they get ghod of their country why should service as these men got on this trip would cost if pald for at regular dining and sleeping car rates, a great deal more than the railway tickets to the coast and return.
Our Editorial in mo 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 lotoyist works to secure what he is after and Mr. 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 ney do right out in broad dayight, perhaps many rotunda of the Chateau Laurier before this eles. The pubic are more easily rooled by 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. ... took the press along to advertise the urp and prepare the people for the next shock they may give parliament. the lobwists wost effective in securing aid for the $C$, $B$ is joke we remember heving read somewhere, that upon one occasion two deputations of farmers from dreen parts of the branch line run up into their country. While there a farmer from one of these deputations was asked which way ho thoucht the road would go, and his reply was something like this: don't know but the other fellows paid their own fare while the railroad paid ours. Readers can

opmon, and the rest,
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 policy of the C.N. R. In asking them and about the handicap which that company ha placed against the free thinking of those who took the trip when next Sir William and S onald ask for go ernment aid
The story has just reached us that the man whose duty it was to introduce the trainload of notables in Winnipeg, put it abou Wit in his introductory speech when he said and have here senator so and So, ond Mr. So and so. Member of Parliament,
FRIENDS of Sir Wm. Mackenzie.
A trip like this shnuld be a good way make friends which dare not but stand together whether it be in the wrst. In the East, or on the loor 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 th

## Are Cobs Necessary?

In the Farm Department of this issue there peors an article dealing with an experiment carried on at Weldwood with thick-sown and hill planted corn. We haven't the least doubt hut that the findings in this experiment will caume some to say, "I don't belleve it," and yet the cales, and the analysis made at the Ontario Agricultural College of the two samples sent own there prove that the thick-sown corn, with ut cobs, has just as much silage feeding value pound for pound as has the heavily-cobbed corn from the hills. It is not neressary to go into detalls here. The article contains these. But we should like to emphasize the fact that the corn from the thick-sown rows which was sent or analysis contalined 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 ex periment that the corn in drills has the same muber of days to mature as the corn in hill has. If it has and also has an equal chance in culivation. soil and fertilizer, then our experi ment hears out the theory that thick-sown col he stocks as much feeding value as the hill corn does in stocks and cobs tother io misunderstand our statement. This corn though not cohbed was ripe, even riper to all appearances than the cotbed corn. It grew nearly as tall as the hill corn, was very thick in the rows, and fielded 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 trans ferred from the stock to the cob in the plant's exort to produce seed is borme out ty our test. lieve such can be the case." It is lime now for them to start some experiments and either further prove or disprove this work. We qntend to carry own corn seems to have mado almost ideal ilage and mors have made almost idea profitable. Fead the results of the experiment

The Farmer's Advocate AND HOME MAGAZINE.

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THE WHI Published weekly

Agents for "The Farmer's, Advocate and
the farmer's advocatr and home magazine publighed every Thurgday.
It is impartial and independent of all cliyues and parties,
handsomely illustrated with original engravings, and fur






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## Always Plow Under Something

 eply to a aucicansiom corncerning his succeess as as Parmer: "I, always plow under something."There is no secret farmers not only in the United Sitates but aito in in Canada owe their success to the same princip 1 lowed, to the derree that good crops are grown on well fertilized land. soil fertility is the lis Sactor toward returns in general farming prar
tice and the fermer who always plows something under is on the ripht road.
during that tume on is imporiant in that it manure is made and this is yet the mormy im-
 pends somewhat upon the soil
and sticky a man it it the hare of a

 in this, siveading Erven n mantece on the sho and in
down of manure, clover, or other thin:s a old down of manure, clover, or other thin:s a. old
the mistake of turning them under at too grea depth. The fertilizing properties of these maroots the the them down below There are other this level at plowing time. turned under. On a light soll fall rye, pastured for a time in the spring and later allowed to grow up after which it is plowed down, improves It is a very sand physical conalion of the some soils. We have sien exhausted sand lands brought back to usefulness iy this inethod. There are still other crops, which, under certain conditions, prove good soil builders wh.n flowed down.

Then there are the artificial manures both orkanic and inorganic. Undoubtedly they are culture as the years lass in canadian agticomes more familiar with thelir various uses and advantages, and also knows more of the spccific 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 fer tilizer for his own special requirements. It would ay every farmer this winter to study fertilizers and next summer to find out what his land nceds. We are told that most Ontario soil3, light or heavy, require lime. If so, the farmer should maze himself familiar with the best forms of lime to avply, having in mind the source of the lime as it affects the cost of transportalion. thing in the growing of big crofs. Ii e stoc's is a great aid to chead and valuable fertilization. However it is accomplished, flow under some-

The C. N. R. Attempts to Justify Its Trip.

## I have read in a recent issue of your paper article in which you refer to the Canadian No ern parliamentary and press trip across the Con

 tinent. I think you have been very unfair i.your comments on that trip, and let me tell you In the first place you insinuate that the Memtrip to the "Coast." 1 I buppose you by a 'free
in under the law Members and Sena o.s already
possess passes over every railway in Canadla. Conefore, so far as the trans:ortation and is Senators nothing except that wh ch they already
possessed. There were, of course, meals which were furnished on the trip free, and which are
not ordinarily so. I presume that bo' h you and
I have attend out in any way surrendering our independence " thought or action.
o! We, naturally, wanted to in quence the minds to the extent that we wished to prove that the structed, , possessing the most favorable grades
of any railway on the continent, and was licated thro gh territory which is. and will was lisated
tixe of tratfic. Or in other words. from Parliament had not only gone in'o the rail as but had gone into a railway which, from
to lobbying. Now if that the trip was devoted was conducted, you must admit, under the the ful glare of the arc-lights of publicity. There full
from twenty sleeping and eating in all of the cais, on woard, awake newspaper men cognizant of and widethat happened. We po nted out the advantagg of the Canadian Northern, it is true, to Members and Senators and to newspaper men. That was the object of the trip; but we did it fairly was
openly, and no efforts were made judgment that was not based upon facts secure a As a matcer of fact, the lobbyists been most effective in securing aid for the Can adian Northern in the past, have leen the farm-
ers of Canada: I can assure you that the of them have signed assure you that thou ands and to the Governments, as' ing for the Company Northern Railway to be built by the Canadian Northern Railway. Deputations have waited upun Governments asking for ass:stance. With-
out the aid of the farmers of Western Cand the railway lines could never have been built You will realize that this country is, to linge extent, dependent upon the markets of the acceptance of our invitation by the Members and Serators 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 the Canadian Northern; they came to see the country and its productiveness. They returned home, not only to say complimentary things alout the Canadian Northern, but things about
the country and its stability which must be benefit to Canada, to the provinces, to the municipalities, and to all the institutions of Canaid. 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 Seators 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 railand by your judgment we must necessarily stand."; your judgment
S Secretary Canadian Norlhern Ra'lway System.
Nature's Diary

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 for several hours. There it sat, of a branch only some fifteen feet from1 the ground, perfectly on-
concerned as people passed beneath it, or stood and looked up at 1t. Occasionally it turned its head round and looked directly over its back, body, in the peculiar way that ow:s have. It remained until a ladder was placed against the tree by an enthusiastic photogranher, wi:h a diew to obtaining a close-range photograph, when it
flew to another tree some hundred vards away, This species is a large owl, ei rhtcen to twenty inches in length. Above it is ashy-brown barred white and the abdomen is light tawny with dark stripes. It has no "horns," as the father tufts on the heads of many speries of owls are callsd, striking appearance by the large face is given a 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 th's eve is blac's, not yelThe range of the Barred Owi in Canada is The range of the Barred Ow1 in Canada is
from Nova scot.1a to Manitothard as far north
as Parry Sound as Parry Cound. It is fairly common in some
localities, but is not an abundant siesis anyThe voice of this suecies is a loud, far-carry-
ing "Who-to-who-to-who-whoooo." the last note being long-d awn-out and usually higher pitched
than the rest. While in campat
thent than the rest. While in camp at Brule I are this
fall one of these owls gave vocal performance fall one of these owls qave vocal performance
ceres night, and sent its notos echoin 5 through the stillness for miles up and cown the lake.
Considered from the standpoint of tle farmer this owl must he counted as one of his friends, ior though it does occasionally a e poultry and Tor though it does oceasionally ta e pontry and
game-hirds, creful in estigation has shown that
these items make up only four and a half per
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THE FARMER'S ADVOCATE.


## LIVE STOCK.

Dates of the Live-Stock Meetings. The following is a list of the dates of 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, Dfrectors'
Meeting; Association, p.m., Dominion Cattle Breeders Hackney Horse Society, Annual Meeting: 7.00 p.m., Camadian Jersey Cattle Club, Directors' Meeting; '7.00 p.m., Canadian; Thoroughbred Horse Society, DIrectors' Meeting; 8.00 p.m., Dominion
Shorthorn Breeders' Associattion, Directors' MeetShorthorn Breeders $^{\text {A Associattion, Directors' }}$ Meet-
ing; 8.30 p.m., Canadian Thoroughbred Horse Society, Annual Meeting.
Tuesday, Feb. 1, 11.00 a.m., Dominion Short horn "Breeders" Association. Annual Meeting 11.00 a.m., Canadian Jersey Cattle Club, Annual Meeting; 2.00 p.m., Canadian Standard-bred Horse Society, Directors' Meellng; 3.00, Canadian
Standard-bred Horse Society, Annual Meeting. Wednesday, Feb. 2, 10.30 a.m., Canadian Ayr shire Breeders' Association, Directors', Meeting;
1.1.00 a.m., Canalian Hereford Breders, 11. 1.00 a.m., Canadian Hereford Breeders' Associa-
tion, Directors' Meeting; 2.00 p.m. Canadian tion, Directors' Meeting; 2.00 p.m., Canadian
Hereford Breeders' Association, Annual Mezting 3.00 p.im., Canadian Kennel Club Annual Meet
 Canadian Pony Society, Dirzctors' Meeting; 8.00 8.00 p.m., Canadian Pony Society, Annual Meet ing; 8.00 p.m., Clydesdale Horse Assoclation Canada, Directors' Meeting
$\begin{array}{llll}\text { Thursday, Feb. 3, } 9.00 \text { a.m, Ontario } & \text { Sheep } \\ \text { Breeders' Association, Directors' Meeting; } & 10.00\end{array}$ a.m., Canadian Ayrshire Breeders' Association ers' Association, Annual Meeting; 1.30 p.m. Dominion Sheep Breeders' Association, Dlrectors Meeting; 1.30 p.m., Clydesdale Horse Association Shire Horse Association, Directors' Meeting. 8.00 p.m., Canadian Shire Horse Association, Annual Meeting; 8.00 p.m., Dominion Sheep Breeders' As Fin, Anual Meeting
Friday, Feb. 4, 9.00 a.m., Ontario Berkshire tors' Meeting; 10.00 a.m., Ontario Yorehin Direc 110.30 a.m. Ontario Horse Breeders' Annual Meeting; 111.00 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 sumned. During the 16 weeks or 336 feeds they feens. or 1.025 thes. of whey. which is 3 Dbs. a feel. or of a It. per hog. The grain averaked
$9-10$ of a th. per hog. This looks like only a
maintenance ration. The ths.- the weight at 6 The four hogs weighed 832 25 this., making 732 Its. gain ior the placed at 1 m . gain for $1 \frac{1}{\mathrm{~s}}$ lbs. of grain plus $11-3 \mathrm{~ns}$. whey. How does this compare with the results
of official tests with hogs on pasture NOR on pasture

INote.-These pigs we understood we ghed considerably more than 25 lis. each wherr started.
Lut even so the gains were phenomenally high and the pasture they ate must have been high
goory
good feed. We invite those who fed the pigs to give us more details.-Editor. 1

## A few days ago we read a long harangue about the high prices farmers were sald to be

 about the high prices farmers were sald to begetting because of the war, and the big profits
they were making at the eynd they, were making at the expense of the "halp-
less", consumer. Of course, as usual, it was writ-
ten by a man who never farmed and wever tended to. The funny thing alsout 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, littla capital, a m
profit. Now
the overalls.

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

## In the Stable and Feed Lot.



Arkell's Winning Ewe at Toronto, 1915.
his raw commodity if he cares to; a good farmer
cannot afford it
it cannot afford it. Neither can a twentieth-
century stock farmer afford Every pound of grain and hay must be fed so that it will do its tit. Cheap roughages, where possible, must replace expensive hay; grains must
be blended to make the proper be bended to make the proper mixtures while
roots and silage must be administered daily to nours and silage must be administered daily to
needing and maintain the health of the animal. herdsman is a science that only the wido-awaike nowledge of food constituents and the veterinanimal body are not experts in actua of the However, science has rendered invaluable servico The information we have gained about ballanced. rations would alone pay for the inception and
up-keep of our arricultaral ap-keep of our agricultural colleges and experi-
ment stations for some time farmers is to mix scientific information with as perience and common sense, and from this ex-
should compound economical gains.


John=Duck's Champion Yorkshire Boar at
This season there is a quantity of sprouted or
unmarketable owheat and discolored bailey ty
feed. The former is uncole feed. The former is uncomnoon and balley to
necessary to modify our old est in many regards so we can matablished rations
possible out of the grain as
the market direct.

## To some it might anpear like ethreshing old straw to discuss feeding fat cattle, nevertheless

 buyers cannot secure the same spread or maresinthey Cormerly could, and consequently must feed
as cconomicall A pound of kain will cost the average feeder in in the vicinity of 12 centst If he herage foeder in
cheaply so much the better; if it conts it more he must needs pay strict attention to his balanceeg
sheet, for at mingit be too heary on the wrong
side. Oat and harley co good old orthodorey rations as in well as corn are
Iany a country.
their feeding days they were from which in
kernels. Nowadays the market here asiory wants more meat, but it asks here at home the sappy
smooth, well-fleshed yearling or well from a calf up on silage, roots, str-old, fed no sllage The steers of years ago got roow, chop none yet. and some, we are sorry to record but erecting more silos year after year farmers are There is poverty-stricken will be without day courage the production ancational campalgn to th. roots and silage. With preater quantities of
essentials or either of these wintered on exceedingly plain ferds catlle can be while with them fattening animals wifl do well, finlsh and weight more cheaply than can be on
complished in any other way. labor during the growing season enters into the proposition, more particularly with roots, but
that problem can be solved if plans for the It is assumed that every stockman of this silage. Generally speaking there is ner roots or a lack of them. Then there is the timethonored mixxture 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 it 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 as $\$ 1.05$. Corn is plentiful in some sections, but
in those districts steer feeding is not practiced as Kent, La elsewhere in Ontario. Throughout County considerable corn is stored in cribs to be it which is not fed from the shock goes into the silo. Essex County, of course, groes into the
grows corn abundantly but there beef takes second place to. pork. Corn may almost be considered as king of the grains in the feed runs; it is a staniard
hy 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 oil cake and feed along with usually report a profit from the use of cottonseedt
even when and in mind an nice lot of steers that. Were finished last spring in Lambton County on wilage, hay anid per day per steer of the concentrate. That oo when where the farm grains were scarce and well and were a was cheap. The steers did cite this circumstance onty when finished. We can feed steers without the corn, wheat, oats or barley if necessary, but, of course, the ' aliage
would contain ingredients common to shelled corn plus succulency

Admitting then that corn, when available, common grains usually fed. Oat and barley chop probably most common and it gives good results,
lut 'wheat would improve it as a fattening but wheat would improve it as a fattening
ration. The latter graln by some is considered 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 probein
and less fat. Consequently it is superior to corn and less fat. Consequently it is superior to corn
for feeding store cattle or growing animals, and should be used in that capaclty so far as needed. When mixed with oats and barley, wheat is quitit the equal of corn and steer feeders can use it to
exceedingly good advantage if they have it on exceedingly good advantage if they hare it on
hand this winter. Equal parts of the three grains, ground together, fed along with about 30 lios.
silage and 20 tbs . of roots to each $1,000-\mathrm{Hb}$. ster 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 $1 \frac{1}{2}$ rbs. of oil cake in addition to oat and bar'ey chop and
pot profitable gains. Silape and roots were fed got profitable gains. Silage and roots were fed
in the amounts previously mentioned and the
steers amor steers gained on the average 235 and two-fifths Its. in $3 \frac{1}{2}$ months, or 2.2 . Ibs. each per day. 2.5 lbs.; a fourth mained almost 2 ths. and and other which did not do well galncd 1.6 tbs. per
or day. These were, as previously stated, young
steers welghing about 1 , 000 ths. 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 ing clover to start heavily on roaghages, includthey will consume without wasting anv. In addition start with 2 its. corn per steer per day, increasing 1 It . daily until 10 Ths . are fed. After
3 days increase 1 3 days increase 1 It. daily until 17 tos. are fed;
15 days later let this be increased to 22 its. per
day. Although this is quite applicable to our


Founded 1866

## Feed Lot

and


december 16, 1915
THE FARMER'S ADVOCATE
conditions at the start, the quantity soon mount
up to an allowance thato a great many feeder Would not care to dole out in this country
Where the cattle are to be fed for 6 months,
upon full feed. In the meantime they should upon plenty of roots and silage, clover or alfalf
have
hay, and failing these some nitrogenous concen-
trate.
The
The quantity of grain that should be fed per
oterer must be decided by the man in charge. He
must be afble to detect an animal as soon as it must be alble to detect an animal as soon as it both be read in the individual steer or heifer if therred to in a preceding paragraph were getting ferred to in a preceding paragraph were getting
9 quarts of chop, $1 \frac{1}{\text { Ibs. of oil cake, } 30 \text { tbs. }}$
silage and 21 ths. of roots each after the firg silage and 21 ths. of roots each after the first
month, and in addition to this their hay allowance was increased till they received about 10
ins. per day each in the last month. So long as 10s. 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 appetite keen he is not getting too much; many
steers will handle even more grain. Cattle fat tened 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 is a very large part of the profits which accrue trom the feeding operation.

> MAKING BABY BEEF.

Whole milk is one prime essentlal in making relieve the dams of some responsibility and force
the calves along with grain the calves along with grain and roots or silage
Finely-ground oats and bran are very good at
frrst, and the calves will till arst, 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 of oil cake will encourage the production of flesh
and supply all necessary ingredients. and supply all necessary ingredients. There is
no reason why a portion of the ration should no reason why a portion of the ration should
not bround wheat. It is fattening, but at
the same time it is very appropriate for growing animals.
nice lot of haby a Middlesex farm we saw a very
bees ready for market. They eroximately 900 tbs. oach. and would weigh ap time they got very little hay, silage weing the
chief roughage. Mixed grains or chop were fed steers and heifers in the stalls, at that time about 5 months old were getting 2 its. of chop per day, and this would be increased to 6 or
tiss. 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 ecomomical bee
Store cattle should not be allowed to stand still as regards growth and gains during the
winter, neither should they be fed expensive feeds.
Rough, oughages such as silage and roots should form a arge part of their daily meals, and with plenty
of these they should assist in cleaning up considerable straw or poor-quallty hay if it be o
hand. We have seen steers and heifers tha hand. We have seen steers and heifers that
butchers would not reject in the spring wintered 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 all iberal allowance of silage and some dry fodder quite satisfactorily, but if substantial gains are
desired a little chop will give good returns. desired a little chop will give good returns.
Wheat in such a case would be very appropriate it to is this class of cattle kind that can utilize ing bonest advantage. The stocik would be mascle, for which reason, whea 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 barles. Alone it is pasty and sticky in
the mouth, and when in use in this stable this Winter, especially for growing stock, it would
wise to mix it with a small quantity of oats or
barley or such fattening cattle it should not form so large a

## percentage of the ration as is recommended fo

that newspaper report from Boston, Mass,, claims in tank cars, and in consequence cows are disap-
pearing from the state hillsides to the extent that
there a the poplation of the commonwealth. The problor hac got into politics, the republican candidial
tion, if nor having promised constructive legisla-
that will be fair to the consum-

## FARM.

## The Institute Problem

Editor "The Farmer's Advocate". ".
In a recent issue of "'The Farmer's Advo you Invite a discussion of the proposed re
organization of the Farmers' forming of the proposed County Boards of Agri-
culture. whything pertaining to Farmers' Institutes, of the rural community in the past , prosperit, Interest to all agriculturnsts. That tinterest in ract to meetfings is waning seems, on the sur-
fact. $I_{n}$ many cases this is so, and yet in others, much interest is yet manifested; at but limilted experience in Institute work I find that in the older, more thickly-populated districts mote and comparatively thinly-p the more te tricts. In these places interest is shown by the
numbers attending, and by the many questions numbers
asked.
It seems to me that there are several reqsons Por the lack of interest in these former districts. among which might be mentioned the following:
1, the influence of the press. owing to rural depopulation; 3, lack of ample re wards in farming
In the first
papers, in ever tncreasing find our agricultural ni the homes of most of our farmers by a perSistent number of canvassers and otherwise. and findings in science in regard to asticulture o that it is very difficult for institute lecturers o bring anything new before an audience.
Then perhaps we forget that there are not so

Federal Government is allowing ind while ou burdens to be placed upon them? Are we being My opinion is that conomic 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 Institut work, unless it would be to employ more demon With regard to the new scheme, it no doubt is advisable in many districts. But why not have with territory covered by these Boards coincide with the territory covered by the District Repre ridings. For instance, my own township is in Russell Riding, but is tincluded in the territory One of the objects of the new scheme is to velop local talent, which would be a is to de It should also result in the discusston of and the remedying of difficulties, which may be purely
local, and of which an outside delegate might know
Carleto

Ont.

S. F. FERGUSON

## About a Corn Experiment

## ditor "uThe Farm

n your issue of Nov. 11 you gave an acoount is not my desire to critleize I. B. Whale, who conducted the experiment, nor to boom one ariety 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 therealoute; also
that they were all harvested
 ${ }_{\text {manner. }}^{\text {and in }}$ impartial
 ou to have delayed arvesting the Dont
arieties, your teest was very unfair and atal to the larmaturing varietiee. I basts of merti. note that had Quebec
 test, it
cuught
would have
Longlellow happing, to say nothing of
 d that Longfellow ome of the Dhent
arieties. The write


The number of discarded churches and schoois are not so many to attend our Institute meet ings. In this township can be counted block after block of one thousand acres being worked The last reason is the chief one, however, and is the cause of the second one. The rural problem is purely economic. There is an important work ahead of the new Government Comm9ssion,
viz. to find out what is the matter with Canviz, to find out what is the matter with Can-
adian agriculture. If they find out, as many of us are convinced, that farmers are seriously handicapped by our economic laws, and can in duce the powers that be to remedy the matter
then the Institute problem will also be solved. Perhaps there will be a difference of opinion fegarding the third reason, viz., that farming of us not yield sufficient returns. The majorit, necessity continue so. How many men on the average frarm are making any more wages than a
good hired man? A good man receives by the year three hundred dollars, with heceives bord and
washing thrown in, if living with the family, thus costing the farmer about five hundred dollars. en years of five thousand dollars. Perhaps in
ome cases we may, if we count the increasel value of land. The fact remains that if our have nothing. Now, in view of this fact, is it any wonder
that interest in farming thelf is waning, and if
matured.
I wo desex county grown well up to maturity in I am glad to note that the test wa made in
a field. Too many testa have been conducted with one or two rows of each variety, as it is strip of corn corn to select the earliest growers of Dent seed each variety. I do not wish to be strains of stood, as I have always advised the mrowing such varieties as will properly mature, whether it be in the seed corn or silage belt. Government for silage purposes. Talue of well-matured corn important factors in determining scesults. Essex Co., Ont. ROBT. W. KNISTER. [Note.-It was unnecessary to "infer" anything
as the corn was grown on our own farm "Weldwood," and it stated explicitly in the article de y 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 28, at the time our corn was belng safely purposes, and surely as late as one could
safely leave corn on heavy land in Middlesex county. We simply gave the results of the test. air to the varieties as they showed up this year was carefully conducted and the results carperiment compiled. It is only one test. Others another

$$
\begin{aligned}
& \begin{array}{c}
\text { was grown at Hunt } \\
\text { ingdon, Quelec, and } \\
\text { int }
\end{array} \\
& \begin{array}{l}
\text { ingdon, Quelvec, amd } \\
\text { which was quite well }
\end{array}
\end{aligned}
$$

Another Experiment with Corn Editor "'The Farmer's Advoca
After reading the result of experiments with oorn atember 11, I thought it would be of interest to your readers to learn the result of my,
tests, carried out under the supervision of R. Hare, District Representative for Halton. planted in a heavy clay loam, which was a clove sod, ploughed in the fall and manured during the
winter, with a mixed manure at the rate of 12 winter, with a mixed manure at the

|  | L.bs. of | Lbs. of |  | Germin |
| :---: | :---: | :---: | :---: | :---: |
|  | Stalis and | corn or | Total | ing pow |
| Variety. | leaves. | cobs. | Yield. |  |
| Compton's Early | 12,912 | 7,488 | 20,400 | 85 |
| Wisconsin.. | 9,312 | 7,488 | 16,300 | 85 |
| Longfellow. | 10,504 | 5,616 | 16,120 | 97 |
| Saltzer's No:th Dako a | 9,784 | 5,616 | 15,400 | 98 |
| Bailey..... | ,7,243 | 6,360 | 13,600 | 93 |
| White Cap Yellow Dent.. | 8,184 | 5,616 | 13,800 | 70 |
| Golden Glow lton Co., Ont. | 68,000 | 5,360 | $\begin{gathered} 12,160 \\ \text { T. A } \end{gathered}$ | 85 |

## An Important Experiment with Corn.

Some months ago in "The F'armer's Advocat
an article appeared dealing with the flanting an article appeared dealing with the planting of
corn in hills and in drills.' The writer a ttempted gator 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 es mature but the food constituents were in the leaves and stals instead of ears and kernels. The corn grown thickly in drils gave, as one would expect, small stalks, pllniy of leaves, 'but few ears. This made ideal silage. Howerer, exce;tion was taken to such corn on the grounds that it contained few ears and consequeatly did not carry the quantity, ton per ton, of food materials such as proteins, carbohydra es and fais. The experimenter, however, deslared that be 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 gan and in as dizestible form as did the hill-grown product. So far as a form as have been able to ascertain our experiment stations in Canada tabooed such a thing and have not yet attempted to confirm their own bellef or dissipate their own prejudices by giling the prac ers might have the facts relative to the methods herein outlined.
with different methods of growing corn the staff of "The Farmer's Ad ocate" considered there was something in the assertion of the United States
experimenter and anxious that corn growers in experimenter and anxious that corn growers
Canada might have the result of some tests conducted on C'anadian soil undertook in the spring of 1915 to prove or disprove the contention of
our neighbor across the line Corn was planted our neighbor across the line 'orn was planted
at "Weldxood" both in hills und dirl:s. while some of the latter planting was don... thic 1 ,
that few ears formed. At harvest time. Septem-

## be as well matured as that grown in dri!ls. Prof. Henry, in "Feeds and Feding" (alulats the re-

 Henry, in "Feeds and Feeding" tablatats the re-sults of the analysis of a corn crop in all its
various stages of maturity, an increase in protein and a marked incrcase in
carbohydrates as the corn carbohydrates as the corn approaches the ripe
condition. Relative to the experiment in ques-
tion tion the dr1ll-grown corn showed lesi protein but considerably more starches and sugars, which
are classed under the name oar'iohydratcs. Fibre are classed under the name oar"ohydratcs. Fibp
also indicates maturity, but one would expict th
coarse, growthy stal is produced in fi!ls io co coarse, growthy stal is produced in rills io
tain more fibre than the \&l. nder dri l-grown
duct; it would requi'e an excxis of fible to the stal's in order that it mizht $s$ n n?
significance can be attached to the exczss of in one sample over the other. Henry's analys
show the fat content of samples show the fat content of samples at various stages of maturity to be almost constant. In connec
tion with the ash the table favo s the hill-grown product for maturity. To be consistent through out the ash, carbohydrates and yrot lin should have all been greater in one than in the other
but such is not the case, and we are left clude that one is as well maturcd as the other but the drill-grown corn has more starches and
sugars, a very important item in silage sugars, a very important item in silage. Further
more, by adding the proteids, ash, fat more, by adding the proteids, ash, fat and carbo
hydrates (the moisture and fibre being unin portant as food) we find this quantity of the ea less corn to contain 71.66 parts of actual feeding constituents, while a like weight of eare
corn contained 69.90 parts. There is ervidentl corn contained 69.90 parts. There is erid
little difference in the two samples as feed. The tonnage grown per acre is anothir
in favor of the drilled corn. in favor of the drilled corn. Ay Enother itenn
weighing it was estimated that 32 iom; were and weighing it was estimated that 32 tons were pro-
duced on an acre when sown in driils.
while 174 and while 17.4 an acre when sown in driils
from any tons of the otest yield
one of seven different valifeties grown under the cecker different valietie
3 feet 6 inches by 3 feet 2 inches. stem in hill
cue differen cuttings were made in the drill-planted differen each case taking a distance of 42 inches which represented a hill of corn. The a verage of th che
three samples was 15 tis. The total three samples was $15 \frac{1}{1} 11 \mathrm{~s}$. The total per acre
of course, appears high but the rows were onls
of feet apart and the corn was as tinick in thi drills as it could stand. When seeding the cicce.
row planter was driven twice over the same row
dromping each time dropping each time to its capacitr. In addition
to being thick in the row the corn arew hi h in the ma ority of places comparing quite fa orath
with the product of the hills. Allowing for an
discrepancies that micht crap hiscrepancios that might creep into the calcula-
ions the drill-grown corn far out-yielded that Hons the drill-grown corn far out-yielded that
produced in hillo This was evident in the fill
and we were not surprised that the scales showel
$\qquad$
$\qquad$
the objection to matured com in ing that the kernels pass through the animuls ndijested. . If
we can obtain a goody amoun, of corsooydrates
good silage is assured, and whin it is contain n the leaf and stalk it wi l ma it ial containad The corn grown under these 1 wo systems was
ensiled and during the winter anily ensiled and during the winter a analyses will was
made of enough samples of each 10 inform to the feading value of the silage and how us as
has behaved in the silo.

## ha be

China Adopting American Plans. The Ch1nese Government has creatsd a
Ministry of Agriculture and coa me ce and in-
augurated a system of extension teaceing, begin-
ning with a training school ning with a training school for traveling lacmethods. Four classes of experiment stations are
being organized, devoled being organized, devoted respectively to cotton,
sugar, forestry, and pasturage. H. H. Jobson,
of College Station, Texas anal of College station, Texas, has bsen engaged on
a three-year contract as a cotton-grouig e enpert,
and a model ranch under another American has and a model ranch under another American has
been established at Chu Chow deroted to cereal and horticulture, chiefly fruit groxing. The ap-
pointees for extension work are rezuir. over 25 years of age and must have had prac-
tical experlence in farming 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 natưral calamities and pests and (5) plan for the gradual improve-
ment of various farming. methods.

## THE DAIRY

A New Canadian Milk Record. Canadian Holstein breeders will be glad, to
learn that the cow Rauwerd No 1.2462, exhlbited
by G. A. Brethen, Norwood, Ont., at both Torby G. A. Brethen, Norwood, Ont., at both Tor-
onto and Ottawa Exhibitions has completed her test, finishing with a wide margin $\mathbf{0}$. er previous Canadian records. In the semi-otticial A. R. 0 .
test beginning the third has produced $29,000.7 \mathrm{Hs}$. milk and 890.6 she fat in 365 consecutive days. Calculating butter as 80 per cent. fat, her production is equivalent
to $1,113.25$ ths. ceeding all other yearly this time. Besides exRauwerd's production has been exceeded Canada three other cows in the world. Her performanc is also noteworthy in that she sient nearly a mon 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 ths. she possessed sufficient type and bloom to win second
place at Toronto and first in Ottawa in what
was considered was considered very strong Holstein competition. A daughter of Rauwerd, De Kol Mutual
Countess, as a junior three-year-old, im R. O.P. made 20,679 tbs. mil : and 694 ths. fat, exceeding
my a substantial margin the bect heifers of her age on both sides of the line, including the pres Thus World's champion milk cow, Tilly Aleartra. mature class in a period of 8 months in the the full year have the unique distinction of beatclasses. world's $30,000-\mathrm{th}$. milk cow in these two Throughout the year Rauwerd was fed the
Thes. ordinary home-grown feeds such as, silage, tur-
nips, mangels and clover hay in winter. She was nips, mangels and clover hay in winter. She was
out on pasture cach day in summer up till the
time she was taken to ation consisted of "ran and oat and barley chop as a basis with the ordinary dairy feeds on the
market such as oil meal, cottonsecd meal, glutin
meal, brewers' and distileos' time to time so that distlens never grains varied from one feed. On account of the roughage, her mix-
ture of conzentrates and general care the cow

AFe

THE FARMER'S ADVOCATE.

POULTRY.
A Few Points Regarding Duck
accumulated and as the demand for properly fat-
toned fowl has increased, ducts have risen in
tend fowl has increased, daces have risen in
popularity among growers of the feathered kind
Formerly ducks ran more or less
Formerly ducks ran more or less wild and their
flesh did not acquire that nice flavor that is
given to it today by parting
$\qquad$
ting American Plans.
$\qquad$
$\qquad$
ad pasturage. H. H. H. cotton,
ad, robson,
n, Texas, has been engaged
$\qquad$
$\qquad$
$\qquad$
$\qquad$
radian Milk Record. Rauwerd No 12462 , exhibited
Norwood, Ont. Exhibitions has completed her he semi-otticial A. R. 0 .
day after calving
$\qquad$
$\qquad$
$\qquad$ hiv wo
moly ea la
hale couch year.
ea little
calf than
ven greater
than
greater
荮
$\qquad$ From twenty to forty-two days old gi e the
$\qquad$
$\qquad$


Rauwerd.
Canadian champion milk and butter producer as she appeared at Toronto Exhi-
bition, where she stood second. coarse sand or grit, 5 per cent.; green fez, 10 the cost of construction
per cent. Mix with water to a dry, crumbly Small flocks usually
ones. A flock of tween
lay more eggs per bird


Housing the Poultry. One of the things upon which proitable egg
production depends is a geod, comfortable house.
The more eggs laid during the winter months
$\qquad$ the hens are allowed to roost in a drafty shed,
and on other farms the hens are kept in the horse
or cow stable
$\qquad$ low winter production from a food floc for a

$\square$ narrow house is colder than a short, deep one,
because it has a larger area of exposed surface The shape of the roof influences the
$\qquad$
$\qquad$ the pitch the longer it will last. Most roofs are
one fourth pitch', while shingle roofs should be A poultry-house should the of simple construe-
Lion, and the fewer permanent ifiturs the better. The feeding hoppers, dis ing boxes
$\qquad$
$\qquad$

Winter Feeding for Eggs. We need not expect a hen to lay eggs roosting
 pail rumning around the straw, stack in winter.
Now, In the first place I will give the dimensions Now, in the first place I will give the dimensions
of the hen-house
feot, mostly insed which was frame $9 \times 30$ feet, mostly inside another building witi little
outside wall excepting on the south side. About outside wall excepting on the south side. About
12 feot of the ppace was for roosting and the re 12 feet of the space was ior roosting and the re
mainder ${ }^{\text {a }}$ gratching pen littered with chaft into
which the grain teed was seatered maindie a seratching pen littered with chaff into
which the grain feed was scattered. Fresh water
tor drinder for drinking was supplied every day, and if any remained unused it was emptied out side. The
henthouse should be kept clean the same as the
 permitted it would pay to do it oftener, in tact
it ought to bo idone every day.
 hoeang was to give the Hock of over seventy-ive
hens in the morning seven pounds of barley and
afteer breakkast a drink which consisted of toparator skim-milk warmed. The monid--day meal mel
was six pounds of chop composed in the proporwas six pounds of chop composed in the propor-
tions of one part corn to two parts oats mixed with warm water. The evening feed consisted of seven pounds of whole corn. For green teed
geve themd small apples, apple chippping and cab
bages culled dut from many which we grew grit I kept a small box two by three fee sup.
plied with coal ashes. Hens require a little plied with coal ashes. Hens require a little
meat, and after butchering we zaved the scrape
and pluokk for them. The grain feed amounted to about twenty pounds per day for the flock,
thich consisted of Barred Plymouth Rocks which had been graded up for some three ye what the birds were laying. In the fall the old heng, had been sold off leaving nothing but
pullets, and from forty of them in January, we got 96 eggs. We kept those ' 40 young hens hatched birds which we raised that speason. In the months of January and February 'we reaged per dozens, from the storekeeper brought $\$ 22.10$ Counting the fed at 20 cents per day
or the flock the cost was $\$ 11.80$, leaving ay profit of $\$ 10.30$ for the two months. During the the whole year from 40 hens 5,000 eggs, which
 25.05, whick at eggs now a very much better snowing could
made.

## HORTICULTURE.

Bordeaux and Sawdust for Storing Apples.
of "fearm apple storage" has been conducted at the Vermont Agricultural Experiment Station and their results have been recorded in Bulletin No. meroial storage. They are expertments with dips,
and mechanical mixtures or unedia which might and mechanical mixtures or media which might
contribute toward the preservation of apples Readers will wee at once that such methods of storing
ditions.
Among the protective dips used may be men-
tioned Bordeaux mixture, lime water and parafflin while some of the mechanical media were cork
 Bordeaux mixture was the only one that gave
enything like satisfactory results. This seemed to anything like satisfactory results. This seemed to
wara off fungus and preserve the fruit. Further-
 Bordeaux mixture seemed to be retained to arer rer
markable extent.
Sawdust was the best mechanimarkable extent.
cal medium tried.
wood successes with Bordeaux mixture and hard wood sawdust suggested a combination of the
two. Apples were frrst dipped in the Bordeaux mixture and then paoked in hardwood sawdust. It
was found that this combination and this metho of storage proservod the fruit longer and more
satisfactorily than any one process or any satisfactorily than any one processe or any orther
combination of dips and materials. The authors combination of dips and materials. The authors
desceribe their methods in the following paragraphs
he Bordeaux-gawdust treate results obtained with as to the use a farmer or or orchardist may makike of this discovery. It is not the present purpose $t$ t.
diecuass the full range of application of this new principle of apple storage; but a single suggues-
tion may be of interest. In the first I place the
In
 ration of the family supply and who lack proser
torage facilities. May varlities keep till mid-wind
ter in moderately good storage quarters. It is the
late winter, spring or even early summer supply that calls for special treatment. It will, therelore the necessary only to give spocial attention
to thuit designed for late use. To this ond the author suggests, first of all, the careful grading of the fruit and the use only of perfect speci-
mens. The apples may then be immersed 5-5-50 Bordeaux mixture for ten minutes. The use or a gunny sack expedites the immersion. They
should then be allowed to dry and bofore pack-
ing, should be cooled to as low a temperature ing, should be cooled to as low a temperature as
practicable, so be it they do not freeze. As the practicable, so be it they do not freeze. As the
packing in hardwood sawdust proceods, a plent1 ful supply of the filling material should be used in order to keep the indlyidual specimens somewhat
assunder. The sawdust should be well firmed. assunder. The sawdust should be well firmed
The barrel should ly stored in a cool and cleanly Phae barrel should be stored in a cool and cleanly
has been on proply of good hardwood sawdust has beon provilided, it may be used repeatedly." with the use of Bordeaux. The apples will be septic solution. Chemical analyses were antle late in the storage period with a view of ascer-
taining the amount or copper salts on the appled and scarcely a trace could be detected. Ho apever in the apples are pared no possible danger car
befall. It thould ve remembened that a much wonger interim elapses between immersion
and use in the case of storage, than elapses be
tween orchard utilization of fall apples which go into markeet at an early date. No one who was not looking for
Bordeaux aould bo likely to observe the faint
apote in the cavities of apple

## FARM BULLETIN.

Just Before Christmas.
the wee lads noo aboot the time o' year when
 will be bringin' them for a present, gin they be-
have themselves an' dinna' mak' ony troublo their feyther or mither between noo an' the 25 th
 straight an' narrow way sae sudden like. At, starts I took at tryin' tae reform. Monys the
time I hae spoiled my chances for on Christmas mornin' by ma tendency tae get in an' I were sent oot tae the barn tae hunither eggs. It was wel alang in December an' what
eggs there was laytn ${ }^{\prime}$ aboot were Hajle tae be irozen, but I didna' ken aboot that then. I found
 wee Dougal wi' it. He's over prood o' that new
coat
 in tae dae na mair than soill the looks o, that
coat. But the egr took him tair coat. But the egg took him fair on the side o
the heid, for I hadna' been vera coretw
 a pile. I was unco, frichted an' ran intae the hoose tae get ma feyther. He cam' oot tae the born an picked wee Dougal , up an' carried him
in wr me mollowin' him. an' wishin' it was day
after to-morrow after to-morrow. Weem, it was muin nur nor has day
oor afore Dougal cam' oot on
o' his faint eor it ore Dougal cam' ot ot his faint, or what-
ever it was an' began tae tak' notice or what
was gaein' was gein' on. He had a big lump on his heid aboot the size o' a plum, but when ma feyther again, an' was likely tae pull through, cheer up
gan tae think oo ket ither things ma share o" attention. "Will ye tell me," says
ma
ma
feyther, "what stanes at poor Dougal ??" "It whena' a stane; an egg. I'll be saw a way wot. "It was just Plymouth Rock hen laid it an that wis why it egy wis hard," says It beginnin' tae cry. "The "The
eevther "Can, ye little scallywag," says ma leyther. "Gang' awa' tae the bedroom till I hae
time tae attend tae ve" min's' there's na guessin' aboot that. But what
was worse, wee Dougal got my share o, Christ mas presents that year an' I foond naething mair
 them baith awar, I wis wad mad enench tae fing
while I changed mat mind thinkm, abooot it an
 scrape 1 got intae wh ma we writhrod ougal.
especially $g I^{\prime}$ the egy happens tae be hard-boiled
 parents an' brithers. ${ }^{\top}$ mind anithers time , mat iust
alooot a year aifter the frozen egry accident, ma
auntio haponed a couple o' weeks or so. an, although fhe for for
na bairns. had hor ain she had great ide
nat trainin' those that belonged tae ithers. Theas oris
time Thim tellin' ye aboot wa the day afore
Christmas, an' ma auntie, bein' unco lusy wi' the

 Weel, the thing looked a' richt tae yer dinner,",
ways than one, an we went in mat ways than one, an' we went at it. me in mair
wis a smart little chap an' he worl
these arither these raisins wi' his mind on the worked awa' at a bet-up till his share was on the ple, an' never
for me, dinner an' the pie seemed
 tae a percentage on a a jol like this., I'mm goin'
I did. But third raisin for masel., '
 "Sandy," says she, "yerk dinna, says she tae me, the
mony as Dougal. Where the as ma Itauls I hadna' gote are the rest to", Wi' a

 y's rather work. on commission thay mant, "foin ye can gae wiot yer pie for dinner. Dougal can
hae youre as well as his ain.",
It was a hard blo up wi, it. Dougal ate the twap ites and ave thery ance na while he would te tellin' me how very
they were. I didna' say onything, hoover. alang in the aifternoon Dougal commeover, an
complain o' feelin' sick. 'I Mae anm oned the

 close quarters. Yeen maybe ken better than tae
eat my pie the next time., says I . Poor Dougal had a bad nicht
some time the next day afore he was feolin' wis
 me a guld while aifterwards, when we was talkin'
aboot auld times, ${ }^{\text {. }}$. was lreglnnin' was a pretty tough auld warld onyway. Warkin' for salary wasna muckle betters than warkin' on commission. It's as luad to hae too much as to hae
 An' I gometimes get
thing ever comes tae us in this silie that hanai' got its lesson tacked on tae it somewhere, gin we
will only take the tronble tae look for 1 t.
This warld is nalthing mair than a big school in which punishments an terpiences a kinds, an' oor them, sae far as I can see Frae as we deserve
 them untii we try ore last examination an' pass
oot 0 , this school intae sone 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
Dounal the farm thestither that I dinnag remember. There isna', mucklo ${ }^{\text {and }}$ 'itian reminds me o' one time we were diggin' a dellar
for the new hoose we were gaein'tae tuild ant Dougal an' me were sittin' on the bank takln'
 meenute or so an' tak' a bit or a a sleep, sae ho
stritched himsel' wi' his hat over his face an' in aboot ten seconds he was dreamin "o 'hame an' mither." The
chance was too the temptation tae pit oo ma wee push, juist eneuch tae send him over the edge short in the rain was evilar. He was mighty, short in the grain, was, Dougal, an' when he cam
up oot $\mathrm{o}^{\prime}$ the mud am' dirt he juist made one

 on the ground. In oor struggles we got near tae the edge o' the cellar again, an' as luck wad hao it over we went an' Dougal got his second mud-
bath that day. I wisna' muckle better myyel' an' when we got up an looked at one anither
we juist had tae laugh an' ca' the thing of. we juist had tae laugh an' ca' the thing of.
Dougal had a seratch on his nose an' 1 lost ${ }^{\text {a }}$
handful ${ }^{\prime}$,

Some folks canna' see ony use in fightin' un-
 it. Thike tae see a chap stan up for himser an
for what he think is richt even gio he has the
use his fists tae dae tit. Wy school-days were
 rary, I'm pretty sure ony hid me guid ane that r'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 in' we auit growin' in mistak' aboot that.
 ouldna' be settled by war. But I maun stap moralizin', Mr. Editor. I was juist intendin, tas
tell ye a wee bit story ye ken.



|  |
| :---: |

## 



## He







story ye ken. ${ }_{\text {SANDY }}$ FRASER.
 tenit oot mat fot ar, it him
 me on the spot. Hoe intention
dyin' ' juist then Dougal an' as got not near tad has second mud
wisna' muckle better mysel',
wish anither ratch on an ca' the thing ofl. an

DECEMBER 16, 1915
 Mr. Harding spoke of the marketing cf lambs
and referred to the fact that the demand, as it now exists, was for the light lamb, a condilion
which he believed was due to the fact that all
kinds of sheep and lamb had heen sold in the past, and the housekeeper, thin'king to make sure of getting lamb, had got in the habit
of asking for the lighter weight. All lamiss
should be well fisher should be well finished ard should not be
marketed in a thin condition in order to keep
somewhere near the ket demands. Lainbs make their best and cheap-



BEEF CATTLE.
Duncan Anderson, of Orillia, Ont., srove on
the fitting of beef cattle. He dividcd hise sub ject into four principal points, namely: he sus subbred steer, butchers' cattle, export stear, and caty beef. In his opinion the outlook for leef the Dominion, but owing to the fact that dairymarket had been glutted with these cattle the ferior from a beef standpoint, to such an extent
that at some times 90 per cent. of the cattle going on the market are dairy-bred stuff,
which final which finally goes into soup or is used for can-
ning purposes. The man who keeps a dairy-
bred steer and attempts to male red steer and attempts to male beef out of him
does not know his business, according to Mr .
Anderson. At the present time the market demands
butchers' cattle at from 850 to 1,100 tos. Iive
weight-cattle which will dress out weight-cattle which will dress out 450 to 600
tos. each. The very fat ones are discarded. The lis. each. The very fat ones are discarded. The
handy carcass with no waste is what ifs desired. Export cattle are not very much in demand. 113,000 cattle, while in 1913 less than 3,000 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 far the most profitable form in which the grower and feeder can market hls 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
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
the corn-growing sections to the South, and we the corn-growing sections to the South, and we
can produce the bacon hog more chaply than it
can be done in Denmark and the old can be done in Denmark and the old Land, so

Shipping and Marketing Live Stock Perhaps the hest meeting the stockmen had
was that addressed by Thos. McMillan, Seaforth, The Shipping and Marketing of Live Stock.
terest was displayed throughout. terest was displayed throughout. We are giving
Mr. Ferguson's address in full that our readers may have the privilege of reading and keeping it. Dominion and Provincial Governments are the directed toward increased production and being proved quality of all farm products, the time is
ripe for farmers and stockmen to study carefully everything which can hielp them to produce more
and better crops and live stock. Better product would sell for higher prices, which means more moner for the farmer and more, comforts for the Canada is already fortunate in having a splendid equipment of modern stork yards and packing
houses, which pro ife open competitive market for the purchace of live stock and the sale of live-stock products every working day in the
year, but we believe Canadian farmers and stock
men have not yet their central markets as have the stockmen the United States. Much imnrovement would re
sult from a bettor underctandina ing relations between the producers and Can The Management of Public Stock Yards and the owners of Packing Houses invite visits from show their friends from the country just how the commercial end of the live-stock business is
In the production of cattle, sheep and swine,
for meat purposes, no one any longer questlions the value of well-bred sires of the most approved of the anplemented by judicial and liberal freeding long been a ready for market. Canada has so fine, pure-bred stock that breeding and feeding of connection might seem unnecessary wero in this for the fact that there is a very wide spread be live stock in Canada and producers of cattle,
shepp and swine for commercial market purposes: KINDS OF LIVE STOCK WANTED BY
Camadian packers are only middlemen. or
agents, between the producers, who raise stock
for market. and the for market, and the consumers who buy meats
and meat products. Packers buy stock on the
open market on the basis of its degirability to the ultimate consumer. Public taste and demand order to please his customers, must the packect, as far will yield the kind and quality of product which
desired by the consumer
$\qquad$ wanten anywhere. For the products from thenecially With world wide market outlets must be tound.
connections, Canadlan have a wide varict in mark, ts. co that ultimate
ly a place is fot nd for all kinds, grades and not for this open world-wide market if it which less desirable kinw of live stock would suffer
greatly. Althouch all kinds and grades of live
stock clear throuch the modern packing house
$\qquad$hogs for market would occasionally visit the
large livestock markets and watch the packers'
buyers grade and sollect the kind their business
calls for and ior which the market pays the best
prices, a great im! roventent would so son develop
in the trades and quality of live stock produced
 per cont faster gains than ram lambs and cause produce the bacon hog as we cannot hope, in this
not nearly so cood th that from liwhter, younger
fpecial purposes. There is a demand every day from $900-1,050$ pounds. The packer has no partícular choice as to breed, but his customers pre fer meats from well-bred animals of beef quality with a rating probably as follows: Aberdeen-
Angus, Shorthorn, Hereford, Galloway, followed 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 standpoint.
Cattle which are hornless, either maturally or
from operation, feed better and ship much better tham operation, fith horns. Cattle feeders have no than animals with horns. Cattle feeders have no house resulting from hooks and bruises inflicted by horns during shipment. Durling the past year particularly, Toronto market has received large have been retained on the farms for breeding purposes. These cattie usually arrive thin, shrink badly, yifld poorly, and do not furnish beef of high quality. With prospects so bright for beef rcept 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 slaughter. Animals in this condition are worth much less in the packing house, and as this is a condition which is easily
give it more attention.
SHEEP.-Eastern Canada probably produces a SHEEP.-Eastern Canada probably produces a
larger percentage of desirable lamts 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 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 possil)le, anxious to market as much weight as possible will averace over $\mathbf{1 0 0}$ pounds. It is a question or the farmer to decide whether he wants heavle total weight at slightly lower price or to sell and ship the kind that will command top prices ing ewes, either thin or fat, are not wanted any market, usually handled under protest. mav seem unnecessary to add that the talls o
all lambs for market should be docked and al all lambs for market should be docked an
so long been recognized as the world's finest ea port bacon that little can be said in the way o suggestion for improvement. There is a ten thin hogs to market. This has been speciall 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 welght on his hogs 225 pounds. However, individual farm conditions should in
every case control the time and welght at which every case controt the tarmer markets his hogs.

Every shipper should insist on the rallroad supplying him clean, disinfected cars for moving ticularly careful to know that cars which they Intend loading have not come from districts
where any live stock epidemic is prevalent without being thoroughlv disinfected and insnected well bedded during the summer months, preferably
with sand which is cool and sanitary. From hay are lest. Clean, well-bedded cars improve at market, help prevent hruices and iniuries, and
undoubtedly favorably affect selling prices of the
animal. Shippers should insist, with transportation
companies, on promnt handling ni their stock in transit. Unreasonably lonq delavs -t shinning points, in transit or destinatinn chould he re If improvement on the next min does no ${ }^{+}$result the matter should be reoorted to the Ra9 lwav
Board, as every hour of unnecessary delay means
direct financial loss direct. financial loss to the shipper.
SELLING ON MARKET
$\qquad$ 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 ad-
vantage to the shipper than the shipper can
handle it for himself shlpper, 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 paid to the farmers are
ou quality of the stock.

SHRINK AND FILL.-It is the aim and pur as much feed and water into his anlmals befor they leave home as they can possibly carry. The able, as stock over-fillcd do not handle well, do in a very unattractive condition. The usual feed in a very unattractive condition. The usual feed say much about the relative merits of selling weighed off cars as against selling fed-and watered, as both practices have ardent champions ay the time is might well be considered. Large photograr hs wer on view illustrating leading commercial cradcs o beef, mutton and pork. These were explained ${ }^{1}$,
detail to give stockmen an understanding of th relative value and desirability of the differen public markets
Mr. McMillan pointed out that the shipping and fitting ing of live stock involves fattenimg out for exercise each day for several days before going to mariset. Without exercise the animals shipment depends upon the feeding just beforo they are loaded. It is never good po'icy to is always well, where at all possible, to deliver Where in the morning, to avoid over-heating. grass, they should be taken off pasture and the hay just previous to shipping, as this will pre-
vent too great loss in shrinkace. The cattle should be weighed as soon as delivered, as they standing after being dri der no consideration should the animals be
abused, and the cars should be comfortably abused, and the cars should be comfortably age of 80 from pasture direct showed a shrinkpasture and fed hay, under the same conditions, ping, the cattle should always be graded shipcwt to quality, as this means 10 to 20 cents per is, in Mr. McMillan's opinion, most profitalle, as

Canada's Live Stock Markets
of the best addresses of the sertes, given by prof H. S. Arkell, Assistant Live-Stock live stock in Canada at approximately threecapitars of a billion dollars, which represents the capital of the farmers invested in stock and does annually, but in live animals, dressed meat, milk, portion of this total amount is annually turned A contrast is immediately suggested between the farm and the price pald whon it reaches the
consumer consumer. This problem is really the cost of dis-
tribution, which includes the legitimate services rendered by the commission man in sel:1ng the product, by the packers in transforming it into carrying it, by the banks and financial trans in lons, together with all speculative profits at which result in depressing the price to the proeorecognized at once that distribution cannot be packing firms, commission agents and all legitithe toll taken in distribution too great, and to be charged and what is the remedy? These questions cannot be satisfactorily answered. In Mr. taken without reasonable compensation or service
being given therefor. These are frequently offset, little. Rates are sometimes hich, but Mr knows the people emeaged in the different phases hody, However, an investigation is necesrary, as the prohlems connect-d with the cost of distribution point of view is simply the problem of market movement in Prince Edward Island, where, at the farmers as members and half the area of the ment which has led to such imerations, a move-
duction and quality tween firms in Montreal and Boston has resulted sthese circles the value of the eges. Lasin vear
dollars, this year they will of a quarter million
do wetween three and four hundred thousand dollars worth of business
This movement, undertaken by the farmere the
selves, has done wonderful thin duction. The sale of wool has also been pro lutionized, which is a result of two yearg' work
Different grades of wool have been stand throughout the Province, and an increase ardized the members of the association been realized by product of Canada has been able to secure satis factory markets. Mr. Arkell believed that many
losses not directly houses, transportation companies to the financial industry could be averted without or the pacing profits of any of those engaged in the businese The speaker advantage of the farmer.
resulting from the producticn and sele business stock meant to the financial statue of live Dominion. Between 1890 and 1905 Canad the ported stock in large numbers to Great Britain 1911 this export fall. From 1905 to 1910 and mentloned there was practically the latter year again in 1913 we started to export nothing, but ports have increased in 1914 and 1915 . Before
1905 Canada was little cultural country but from that except as an agri tion increased with from that time on immigralabor employment went from the farm to and ndustries and consumers increased more rapidly han producers. Conditions at the present time serve our national credit. Prices of foodstuffs ay for theme the ability of the consumer to With the curtailment of consumption at home The Hon. W. T. White has stated that abort abroad. of munitions and of agricultural and the export ducts has saved the credit of Canada. The manuacture of munitions will cease when the war ends, but the manufacture and export of foodstuffis it. This means that the attention of the nation financially and industrially is being turned toward the importance of agriculture as the source opportunity to come to that agriculture has an therefore, the business of governments. It is, Federal and Provincial, to give to agriculture better facilities for carrying out its business than tural exports amounted to 53 19 1911-12 acricultotal export business, in 1912-13 to 58 per cant n 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 By building up a live-stock, 1 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 Paul market, butchers' cattle to the Chicago market, 10,679 head have gone to France and moderate number of high-class export cattle have market with into the kosher trade on the local We exported in canned of cutters and canners. dressed beef to the amount of 21,753,672 DDs. The Department has made great effort to secure the sake of Canadian beef in Britain, and is hopeda now has an opportunity to establish an export dressed meat trade such as she may not expect to obtain were operations delayed. If Canthe trade. The former Minister in and secure France estimates that his country will need to import annua'ly at least 200,000 tons of cold storage meats from the present until some years these European countries requires little comment meat will be required from outside in all of them. Grem Britain has already taken all the surplus Argentine the world's price will have the effect of rupty of meat are apparently unarle to meet the domands, so that it seems to be Canada's opportunada suppl her share of this business. If Can pect, then, to receive an exrout trade, and competition must be met from other sources of supmand the price in Canada will naturally fall, but this will not be for some years. to the nig market. Prior to the war Denmark was killing 60,000 pigs a week. It is now estimated that she is onlv killiny, 30,000 a week, To
the end of October, 1915, Denmark killed 700,000 fewer pigs than in the same period in 1914. This American corn or Russian barley and to the regulation of war. By a Danish Governneent
ardird the supplv must be sent to Great Britain, one-third retaincd at home, and
the other third likely goes to Germany. The GerDanish bacon. It is easily seen, that part of
Great Britain's supply is cut off. The other mGreat Britain's supply is cut off. The other im-
one wonderful things for egr pro-
sale of wool has als a result of two yeang revo.
wool have been stand work. oer and an increase In indizad he association, and realized by
has been able to se the wool
 be averted witheos or the financilily
imparting sing
of those enw at advantagegeo of in the thairigg thesineese then illustrated what the bus
the productic een 1890 nancial statue of live
 rt fell off until in the lo latter and
re wear
practically Was practically nothing, yar
we started to export
nand the reased in 1914 and 1915 . 1 . Beare
as litte
known except as ut from that time on an an agriwent from the farm to to other
sumers increased more ot onditions at the present time ional credit. Prices of foodstuffs
e the ability of and consumption is cut in two. s are available for export abroad. d of agricultural and animal pro the aredicut or oral and animal pro-
itions will canala. The manuanufacture and export of the war that the arld market demands industrially is being turned tohad that agriculture has an come to its own in Canada. has an
tis.
business
of governments both
rovincial


 amount of $\$ 35$ export
ock trade we shall add Ill aidd
The
The
and want gold it wants 'food, and
position to help produce it. eding cattle have gone to the Ste.
tchers' cattle to te Che d have gone to France, and
d of high
d the kigh-class export cattle have
number er tracie on the loca
num number of crater on the local
canned beef 9,620 and canners.
the has made opportunity $\qquad$
 orm the present until some years
coasses.
The destruction in all countries requires 11 title comment;
col in all or them
nin the surplus
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that
 varently unafe to meet the do do

 Yor some years.
ing
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tigures were
Prior to the war in regard
weamark
 that Denimark cannot get
Russian barley
and to
By
a Danish
Government
 paying 40 cents a pound for or
It is easily sennt that part ol
supply is cut oot The other
suply
supply is Ireland. To the ead

DECKMMBER 16, 1915
of October, 1915, Ireland killed
This resen
repesents
an increase of not more tha 200,000 as against the same period last year
From what source then is Great Britain obtain ting her bacon? Canada's sates of hain obtainto October aggregate. $\$ 16,000,000$, or an in rease
of between 3 BO and 400 per cent. as compared with a similar period last year. Danish bacon is
now bringing from 95 to 99 shil
no dred and 83 , and United States from 72 between The United States is clearly unable to compete
with Canada on an equal basls, in the Old Coun with Canadad on an equal basis, in tinte old Coun
try market.
Every indication points to the wis dom of increasing our hog production in Can-
eda, but we must sticket to the pronounced bacon
lt may surprise some readers to know that the
exportation of sheep for the months of Septemexportation of sheep for the months of Septem-
ber and October, 1915, amounted to 47 ,000 head.
Ordinarily the surplus would ordinariy the surplus would go noto cold stor-
pge, 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 hortage on this continent of small meats, and the price 1s high. It is doubtiul if any more
profitable animal than sheep can be kept on the
Ontario farm ontario farm
The develo
The development of agriculture is a first con-
sideration as a source of economical revenue to sideration as a source of economical revenue to to
the country and fundamental to the peramanent
etathlishment of the commercial status of the establishment of the commercial status of the people. We must increase the productivity of the stootk marketing question is a national quention.
Violent fluctuations of markets must be avoided o order to secure steady business for the middlenan and a permanent pront for the producer. with a permanent surplus available for export. the price in Canada may be governed steadily by
the world's market.
Unless we have an unpre codented immigration to this country after the war, we may e.zpect to establish our live stock in Can-
There must be more co-operation between ada. There must be more co-operation between
the producer and the middleman, and recognition must be given of these four facts: 1 , that the asteady profit; 2 , that the packers render a
legitimate service in the livestock trade in the distribution of the product; 3 , that the railways as carriers of the goods to the consumer; 4, that the banks can render emficient help in providing
facililties under reasonable terms for the financing thesery great and industrial bodles must be clearly allied ln attaining the end in view. Each unit

## Poultry Men in Session.

Monday evening the lecture room was given
over to a series of talks on poultry.
F. N. Marcellus, in his address on Poultry Production
divided the subject into two branches: the pro duction of egus, and the production of meat. The
factors affectung egg production Iactors affectung egg production were given as :
breeding feedinge esercisect housing and environ-
ment, each and all important, and the maximum production is not possible un.eess due considera-
tion 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 is important to pay attentlon to eggs which hatch strong, vigor-
ous 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
hat hatched. Such results cause excessive national
Waste, and it it itecsaary that conditons be
much improved.
Also, the standard for Canaucian improved. Also, the standard for Can-
forlo be considered a factor in
freding coeding operations, and to get eggs whtch wis
conform to the standards now set it is necessary
 are good representatives for the bred laying
them. It must be remembered that birds in close
confinement generally produce eggs with lighter
 heavy laving qualities from the parent to the oft-


 head and beak and have clear, bright, alert eyes,
and a well-flled fare in front of the eve trin, with
The common grains grown on the farm,
green food or succulonce, meat food, shill and grit green food or succullonce, meat food, shill and grit
will make an excllent ratlon for laving hens.
Sour mile an or buttermilk makes a pood animal


## THE FARMER'S ADVOCATE

sults secured. The dry mash should be fed from
the hopper and accessible to the birds at all times. Boper and accessible to the, birds at al to induce them to take it is to cover the morn
ing feed in the litter late the night before. Th hatching power of eggs is lowered materially
where birds are closely confined in small pens
throughor Housing is generally
breeding and feeter understood than
foeding. ventilated, free from dampness and free from
drafts. The cheaper and more drafts.
house
house a consequence, the dirtcult to ventiate, and, as
tuberculosis and disease and humid, and Alwass keep the dirds comfortaile and the pens
clean, and the attendant should his work and be careful around the birds not production from first to last requires close atten

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 toultry Division, Live Stock Branch, the foultry Division, Live Stock Branch, Ottawa, who pointed out that Great Britain was the
ing, in $1 y 13$, $215,79 y$ country in the world, takdisrupted this trade, and supplies which formerly 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 Canad imHigh prices and increased demand, however have increased production, and had it not been for the egg prices this year would likely have been lower and eggs dropping in price, many farmers did not set as many eggs as they intended. Prices were of stability in the poultry business. is the undertaking steps must be taken to place the Canadian product on the British market in such the highest possible prices. Canada has all facilities for the production of high quality eggs, and the industry in this country, at present, is were taken of our present opportunities. Accordmore poultry in the single State of Missouri than industry of the western provinces is still in its anfancy, and these provinces are well situated for
both high summer and winter egg production. Canada must produce, prepare, grade, market, in brisk demand on the markets of the world.
We now have access to the Briti h market in a way and to an extent, which, under normal con-
ditions, would have been difficult to obtain. Canadian surplus of eggs has been entirely in-
adequate to meet the demands on that market. Canadian storage eggs intended for home contake their place. Also large quantities of United States eggs have entered Canada in bond for re-shipment to the Old Coun-
try, but the British market has not taken favorpreferred because they are larger, as not show shrinkaze, and can be laid down in beteggs is from 2 to 4 cents per dozen higher than Canadian dealers have re-packed United States eggs in Canadian cases. Such practices and the
sending of Canadian eggs of decidedly inferior great national importance as the development this export trade in the hands of a few men must be increased, quality improved, national standards provided, the quality of export reguprov1ded and Canadian ergs widely and appropri-
ately advertised. The hour of opportunity has John Porter, of Toronto, gave a very interest-
ing address and threw out several valuable hints on the marketing of poultry, one of the most im Seed Growers' Meeting. On Tuesday at 10 a.m. the first soed growers' several papers and addresses were given which
were listened to with much interest by the small Some practical experience in seed potafo grow-
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 preters a sandy loam for potatoes, lay loam the the land he plows down clover from the first to works the land until late in the fall, wnen it is plowed at greater depth. It is disked early in
the spring and harrowed at intervals to kill 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 later than May 24th in dril.s 28 inches apart and 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 dinls crosswise with the drag harrow. One weak afler kept up they are harrowed, and cultivation is
slightly to the rows. . Mr. Goltz uses the the dirt nly in spraying. He never uses a potato digger, and selects his seed by forking out the best number of unitorm tubers. He has grown Firly Rose and Empire Stabers. varieties for twenty-three Eears without a change of seed, and has grown Early Eureka and Early Ohio for ten years. He using nothing but the best. We might have ceatd that in the fall, at the time of the tirst plowing, he applies from ten to fifteen loads of manure per
acre
believing that the soil must The potatoes for seed are pitted in be well lid. sand, and they are left there until nearly time oo plant. Mr. Goltz does not like to have his Alex Lamont, a successful grower of Mount rown in his section the discussion is The va clusively Dooley. Potatoes are planted after fall they are put in following wheat, the land is well clean Is plowed again later in the season if not wet in twenty-five tons of manure per acre ar the spring and the potatoes planted about in very about fifteen inches apart. Bordeauz deep and sed in spraying, and in Mr. Lamont's mixture is disease. The potatoes are dug tubers free from 15 th. The best hills turned out with e fork to sed for seed for the coming year. Mr. Lamont had
good word to say for the a
competition and what it has done to develop enIn the 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 ear this one Centre will have present. This nore good seed of Benner oats than will be required for its own use. The Centre was pointed Nowman, in commenting on thris worls, Wat bought from some growers in the West, who trom British Columbia, which were finall orders plied from the same strain of seed arown supNorth Gower Seed Centre. In Mr. Newman's opinion, when these Centres are scattered over age 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
gave some of his observations on the growing of experience and much experimental work ten years ${ }^{2}$ some very interesting facts relative to the adthe country. Back in 1906 the dealers supplied moth Southern Sweet, Red Cob Ensilage amd White Cob Ensilage. The good varieties only ditions have now changed untile corn sold. Conthe early maturing varieties and in place of corn the ear, for seed. Corn, to keep well, should when it is cut it contains from 20 to 25 per cent. of their own seed. A larger acreage of much now grown in Eastern Ontario than before and corn in Eastern Ontario was grown in drills from feet 6 inches. During the last from years the hill Raynar's oninlon the hill-grown corn makes bet-
ter silage than the drill corn. He has found the ber results from planting corn 3 feet 6 inches best each way for both silage and husking purposes
and also that there is 11 tille difference between
Wisconsin No. 7 . Balley and Golden

THE FARMER'S ADVOCATE:
quantity and quality of silage are considered.
Golden Glow matured earlier and Wisconsin grew
more fodder, but was not so ripe. White Cap
seemed to be a long way behind the others lin
quantity of fodder but had an early maturity of
ear. The Leaming variety gives a good account
of itself. Of the three Flints, Longfellow was
placed first, Salzer's next, and Compton's third
in maturity, but as an all round corn he favored
Salzer's and recommended the planting of one-
third Flint and two-thirds Dent to be mixed for
silage purposes.
THE VALUE OF GOOD SEED.
At the evening seed meeting Prof. C.A. Zavitz
growers' associations and organications for the
work they were doing. His subject was deal
with under six headings, namely : good varieties;
purity from other varieties; large, plump, sound,
well-matured seed; seed of strong vicality; free-
dom from diseases such as smut, scab, etc.; and
freedom from weed seeds.

Prof. Zavitz made it plain that the farmer, i
he does not secure the best varieties of crops fo
his farm, is certainly living below his opporcuni-
ties, and there is very
who is not wide awake to the value of the varie-
ties which will best meet the syscem of farmung
which he is carrying out. In nearly all classes
of farm crops, according to Prof. Lavitz, there
are far too many variecias grown on the farms o
Ontario. The number should be cut down as
much as possiule and only the best varieties used,
ties best suited for the district in which mey
are grown. Proi. Zavitz referred to varietles
which are best for Ontario generally, recommend-
ing O. A. C. No. 72 oats, U. A. U. No. 3 oats,
Mandschueri and O. A. U. No. 21 barley, Daw-
Wheat, Mammoth Wincer Rye, O. A. U. No. 61
Spring Rye, Commoñ Emmer, Rye buckwneat,
New Canadian Beauty and Larly Britain Peas,
Pearce's lmproved Tree Beans, Hairy Vetcnes,
Early Yellow soy Beans, Whice Cap lellow Lent
and Wisconsin No. 7 Uent coin, Salcer's North
Dakota Flint corn, Golden Bantam Sweet corn,
Dakota Hlint corn, Golden Bantam Sweet corn,
Early Amber Sugar Cane, Ontario Variegated
and Grimm Alfalfa, Yellow Leviathan Mangels,
Empire State, Davies' Warrior and Extra Early
Eureka Potatoes. He also recommended the
Eureka Potatoes. He also recommended
Marquis Spring Wheat and the Arthur variety of
field peas from the Central Experimental Harm at
Ottawa. By the way, the Maryuis variety re-
ter Fair. At the O. A. Couldge, O. A. U. 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 Banuer in each of
the nine years in which they have been tilad, and
varieties of oats, 57 being No. 72 . The 0 . A. C.
No. 72 had more than four times as many entries
as any other variety of oats. Prof. Lavitz went
into the yields of the leading varieties already
mentioned, as they have been woraed out on the
college plots this year. At the Winter Fair this
name occured with the exception of $O$. A. C. No.
increase in yield of barley in the last 16 years as
$\qquad$
acre this season, and has given an a era
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grain per acre per annum
in oa
winter wheat, 5.1 in pea
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15.4
8 inp
8 $\qquad$
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$\qquad$ Shefford Co., Que. $\qquad$ . FOWLER. Good Prices.
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$\qquad$
$\qquad$ $\$ 11.60$ per cwt. There was keen competition in
the bidding for the prize stock, all of which sold
high.

a in Quebes

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Prices.
s was sold at Tor
46 cents per pound.
224 cents per pound
he third highest was
steer under one
steers brought
ompetition in
of which sold

Canada's Greatest Winter Live-stock Show.

fittingly diver! No other word or words coul. ter Fair held at Guelph last week Guelchal Winhas a great fat stock show, but, with added d classes,
larger entries, more uniformly good fitting increased accommodation for exhibits and sper tators, last week's show eclipsed all other fat
stock exhibitions ever held in Canada, and smal Wonder was it that the face of the enthusiastic
capable and always energetic secetary,
Wade, beamed with a broad smile of satisfaction
Attendance records were broken. were smashed; history was made; and everyone
was pleased. Many difficulties were overcome in putting on this great fair, for, up to a a late date
the Military occupied the buildings and uncer
tainty prevailed. Much hard work hat the Military occupied the buildings and uncer
tainty 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 the ring-side gallery was increased by onecthird
catte 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 room, and a new room was provided in the cit
hall. more entries were handled, and all wa
ready so that the great show ran smoothly from
frrst to last. The only appeal heard was for
more room and when conditions right themselve
this will surely come. first to last. The only appeal heard was for
more room and when conditions right themselves
this will surely come. Everything possiblee was
done to help people see the educa ional side of
the fair. There were no weak features. The disthe fair. There were no weak features. The dis
play of horses in numbers and quality never wa
equalled at Guelph. The cattle classes show play on horses in numbers and quality never wa
equalled at Guelph. The cattle classes showed
big step forward, for, from end to end of the lon 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
when with just a little better exhibi's than ever. Th9
bacon hog, in all his breed, kept pace with the
edvancement shown in other departments. Poultry broke the Canadian show records; and tho grain
and seed exhilit was a marel in quality and
arrangement. Top this off with vlgorous ad-
dresses on live agricultural subjects, and the Win-

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## are being made, but there are still the big classes and the same keen contests. It is customary for the and the same keen contests. It is customary for the Canadian-bred animals to out-number those

 wide open classes, and they did in 1915 by awing. Prof. W. J. Rutherford, Saskatoon Sask., made the awards S. Rutherford, the Saskatoon, classes, while
Canad1an-breds were judged by J. M. Gardhouse,
Weston

$$
\begin{aligned}
& \text { In the line-up of aged imported stallions were } \\
& \text { entries that had met on difierent occasions in }
\end{aligned}
$$ the past. Lord Gleniffier, a Tifferent occasions and Chicago

grand champion, went to the top, but not on ac-
count of action, for the majority of his competitors and had lost som the 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 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

Hugo. Stallion foaled in 1913: 1, Graham Bros.
on Cedric King by Cedric's Baron ; 2, Hassard
on on Cedric King by Cedric's Baron; 2, Hassard,
on The Count of Hillcrest by The Bruce; 3 and 4,
Smith \& Richardson,
Bith Baron Kipling by Baron's Pride, and Everard by Everlasting Stallion foaled in 1914: 1, Smith \& Richardson, Graham Bros., on MacQueen of Atha by Galliant Carruchan. Aged mare: 1, Hogg, on Royalette
by Royal Edward;
2, Smith \& Richardson, 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 Auchen-
olieth by Scotland's King; 6, Boag \& Son, on Popular
Polly Polly by Sir Hugo. Mare foaled in 1912: 1 .
Graham Bros., on Quenelda. of Petty by Baron
O'Buchlyvie; 2, Smith \& Richardson, on MandoGraham Bros., on Quenelda of Petty by Baron
O'Buchlyvie; 2 , Smith \& Richardson, on Mando-
line by Mendel; 3, Hogg, on Lady Mary Aberdeen
hy Rubio; 4, Boag \& Son, on Solway Duchess by hy Rubio; 4, Boar \& Son, on Solway Duchess by
T9tle Deeds. Mare foaled in 1913: 1, Boag \& Mn Blink of Airmont , iy The Right Holurable.
Mare foaled in 1914, 1,Mason on Heather Moon
by Macaroon; 2 and 3, Hogg, on Jean Armour by Dunure David, and Denholmhill Blossom
Marmarides. Mare and two of her progeny : MeGibbon, on Young Jess of Whitefauld; 2,
Wilson, on Fanny Clark; 3, Batty, on Newbiging 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.
Champlon stallion: Graham Bros., on Baron Champlon stallion: Graham Bros., on
Ascot. Champion mare: Hogg, on Royalette. CANADIAN-BRED CLYDESDALES. - There were in all an even dozen classes for Canadian-
bred Clydesdales, and all except two were well
filled. This part of the horse classification is important, for it allows the wreeder of a eew or
many horses, as the case may be, to exhibit
what can be produced in this country. The entries what can be produced in this country. The entries
were well fitted and well brought out, which retion of prize money. J. M. Gardhouse, of
Weston, Ont., made the awards in tris division. The aged class of stallions
tncluded in its
number of six Lord Ronald nnd (ilen Rae, stalle mates from Seaforth, Peerless Ascot and Baron
Rozelle. There was no animal present that was outstanding for quallty, but as a whole the entries were the good, useful kind. Lord Ronald, a good mover, went first, with Baron Rozelle, an-
a goer strongly-coupled animal, standing second. other strongly-coupled animal, standing second.
Peerless Ascot, a shade more upstanding than the two ahove him, was moved into third place, and
Glen Rap. 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 fourth. Orla's Boy was fifth and Honest John 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 ernational, a fine type of as the winner, stood second, with Ross MacSeventeen two-year-old stallions made a grand
display. They were a good lot, and a good 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 his action that he was entitled to a position well
up in the line, and he was ultimately piven first place. Sir Acme was a strong individual in loin, chest and breast, and otherwi e worthy of the
blue ribhon. Canada's Glory. another solid fellue ribhon. Canada s Glory, another solid felAppolo, a shade smaller animal but endowed with Appolo, able 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 Tommy Atkins, with get, went to the top to move properly and possessing quality and good underpinning, went second, while in third yiace
was found, at the last, Grandee's First, one o 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 first-
slass individuals. Dairy Dean by Dunure Baron was ofven premier place; Queen of Tuan, a smooth
thing of fair quality, received the blue ribbon thing of fair quality, received the blue ribbon,
and Charm, last year's champion female, went
third: Queen Maud was fourth, and Bess Gartly
was firth A strong class of two-year-old fillies came for-
ward, and for a time Lady Bydand by Bydand and Scotland's Charm by Kinpurnie, strove for the red ritbon. The latter filly was exceedingly
well fitted and showed well in action, but she did
thought were wrapped up in the Bydand mare.
t.ady Bydand was not
 Charm, but among the breeders close in thers way, , feiling that the thineer mare was entited to frrst place. However, Scotland ds charm rex
ceived the honor, and was later made champion
 and Jenmie crawiord another stron, , truemov,
ing fill, was deoorated with the white ribon.
 Brookinin. In everass particiclar-s.so arpeared ripht,
but she did
not fill the eve oi the clydeghale breeder quite so well as others in her clasess. Nillie Carruchan, one of the Brooklin fllies by
Gallant Carruchan, was considered levest oit siv
 quality stuff. Fllora Dora, with considerable sub-
stance and good bone, was second rwhie
sum

 s, sift
 Fancy Baroness third.
Exhhibitors. - . $\&$. Wrm. Columusus; R.'.C. Rogaerson, Fergus. son, Ashburn; T. H. Hassard, Mariham; Hodgkin-
 Unionvilie; Robtt, Nichol, Hageerssilie, J. J. Innes Bright; Wr. . B. Mckay. Embro. Fred. J. Wilson
Rohsay: Peter Christie Manchester. Robt The






 Brampton, Arthur Sayles. Parise, Arbogast Bror
Sobringylile; Harves Hastings, Schomberg; R. A.

 Ormiston, Burketor Jetc; W. W. R. Beatio, Elora;
H. A. Mason, Scarboro, WW. H. D. Steen, Bramm.

Awards.-Aged stallion: 1 and 4 , Mchichenel
 Rozelle o by Rozelle; 3 , Woodley, on Peerless Asco
by Pring by Prince Ascot; 5 , Rogerson, on Orla's Boy by
Prince Orra: 6 , Gray, on Honest John by Yallial

 Richardson,
Georgen
on
Ross MacGregor, by Lord
Ho


















get of sire : 1 and 2, McMichael, on get of Gl
Rae. Mare and two of her progeny 1 , Mille
on Charm; 2, McMichael; on Princess Glendrie; on Charm; 2, Mc Michael; on Princess Glendrie;
Gray on Minnie. Champion stalifion: Hassard, Randolph Romeo. Champion mare: Miller, Graham Bros., on Baron Ascot. Grand champio : female: Hogg, on Royalette
 the Shire classes. These were John Gardhouse H. Folliott, King. J. In Gardhouse, Weston, and more than one entry. Watnall King shown bere for Gardhouse \& Sons, was alone in the clas and J. M. Gardhouse's Dunsmore Nateby 1913 the only stallion foaled in 1913. This horse was made champion stallion. Rokeby Halo, Nicausis
Queen and Bonny Jess were the thre fore that respouded to the class for mare ioaled pre vious to January 1, 1913 . Rokeby Halo won this class and was later made champion female,
for J. M. Gardhousé, Weston. Nicausis Queen and Bonny place for John Gardhouse \& Sons 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. Tuttletrook Dina was the only mare lin the class for those foaled
on or after January 8, 1914. Although the numbers
in this in this breed displayed were small yet there were
some good individuals, and it was t\%o bad that PERCHERONS.-Breeders of the Percheron
horse took advantage of the Gulph Winter Fair to exhibit some of the good horss which thes
have had in this country for some time, or hav purchased within the last few years, some of the
animals which were brought out ara well to horsemen, while others more or liss un' nown
came forward and heloed to maree an excellent
exhibit of this larger and the quality was hetter than has been Fourteen excellent horses were forward in the class for aged stallions, and it was indeed a
wonderful sight to se? the arena filled from end
to end with these big, maiestic orave and blacks Ichnobate, a horse which has lean rhamion on line-up, while Irade, another large gray sired by
Sahara, was moved into socond place. These horses were strongly coupled, and nicely turned,
but in this regard Kavaignac was considered, and he was given third place in as
good a class as ever lined up at Guelph. Avoca-
tion was fourth first-prize entry, was ultimately imade champion In female
chosen for champion. She won wher 1911, was
which there were agałnst Lady Empresse which won in the came up mares foaled in 1913 or later. Although there were points about the former mare that could be criticised, yet the judige prefer
Empress for premier position.
 Hogate, Weston; Shantz, \& Block, New Dundee; R.
Hamilton \& Son. Simcoe; Hodgkinson \& Tlsdale Beaverton; Levi Good, Greenoch. Wm. Pears, Wesit Elliott, Bolton; F. J. Sullivan, Windsor; Mrs. E. Awards.-Aged stallion: 1, Hodgkinson \& Tis dale, on Ichnobate by Alger: 2 , Elliott, on Irade
by Sahara; 3 , Hamilton \& Sons, on Kavaignac
$\qquad$
$\qquad$ \& Tisdale, on Molitor by Imnosant. Stallion
foaled on or after Jan. 1, 1912,1 , Hodgkinson
\& Tisdale. General Cormier hy Cormier-3, 3, Mrs., Hoaate, on Beauchemier hy Indigo. Aged mare 1, Hogate,
On Lacune by Gorel; 2, Pears, on Iady Gres hy
Incivil: 3 Callender, on Junette by Casino. Nare foaled on or after Jan. 1, 1913: 1 and 2 ,
Mears, on I.ady Fmpresie by Cormier and Lady
Julia 2. Pears. on the get of Cormier, Mare and two Ichnolsate. Champion Mare: I I acume. Stallion:
Robt Xiraham. Toronto. heen such a shectacular Hact ney show staged in
Ontarin as that witnessed at the Winter Fair
this war. ()n Wednesdan at anine whon con

 Prickutilow Connaught after
Cively contrint with Anticipator. Won the class ly-built fellow that could step high and muve
straight and quickly. The two-year-old stallions
also made an interesting also made an interesting bunch. Whitegate Excelsior, a dark, bay youngster of phitegate
symmetry and grand style, won his perfest easily with Oscar, a well-built horse, in second
place. The three winners previously mention Nilton. Prickwillow Connaught and Whitegate the visitors off a championship class that lifted a wonderful exhibition of Hacknoy ent. After performance Prickwillow Connaught was action and ribbon for which they had all competed so
strenuously. some excellent animals appeared in the female mare foaled previous to January winning yeld
made champion over all her competith 1913 , was of her conformation and ability to monaccount ery pleasing manner. Other females of excellen merit were Bobcaygeon Empress, Model's Queen whole it was a splendid display of Hackneys.
Exhibitors.-Jas. Tilt, Bramptont Bros., Claremont: Jas. Milt, Bemple, Milverton
Rohe Robt. M. Ross, Paris: H. M. Douglas, Frmvale; Eden Mills; John D. McGibbon, Milton; Crow \& Osier, Cairo; J. M. Gardhouse, Weston; W. W. Rogg, Thamesford: John Bingham, Georgetown ton; John A. Hoargus; H. Blackstock, Thorn
Mason, Scarborough. Son, Quee svile; H. A Mason, Scarborough; Geo. M. Anderson, Guelph. Semple, on De Wilton by Drumlanrig: 2, Tilt, on Spartan by Polonius; 3, Ross, on Warwick Albert
by Warwick Premier; (Crow \& Murray, on Prickwillow Connaught by
Forest King; 2. Douglas, Forest King; 2 Douglas, on Anticipator by
Rosador; 3, McGibbon, on Warwic: Performer Warwick Model; 4 and 5, Telfer, on Harry Lauder hy Warwick Model and Paderews' i by Vanguard.
Stallion foaled in $1913: 1$, Gardhouse, on Whiteon Oscar by Terrington Semaphore; 3 , Telfer, on Model's Best by Warwick Model; 4, Osier, on Burntwood Modsl by Anticipator. Stallion foaled Spartan by Spartan; 2, Gardhouse, on Avondare Sensation by Anticipator. $\quad$ Brood mare: 1. Bingham,
2,
Gardhouse,
on $\quad \begin{aligned} & \text { Bobcaygeon Empresse ; } \\ & \text { Whitegate }\end{aligned}$ Tilt, on Miss Derwent by Derwent Yeld mare foaled previous to Jan. 1, 1913: 1, Husband, on Princess Winyard by Warwick Model;
2. Telfer, on Princess Euroda by Vangurd; 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, Boary \& Son, on Derwiew Lady; 3, T11t, on Minnie Derwent by Dalton King. Mare foaled on or after Jan. 1, 1914: 1, Mason, on Misty Morn by Harviestown Fanatic. 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 Gertruder 2, Osier, on Burntwocd Lily, Champion stallion: Crow \& Murray, on Prickwillow
Connaught. Champion mare: Hushand, on Connaught. Champion mare: $\begin{gathered}\text { Husband, on } \\ \text { Princess } \\ \text { Winyard. }\end{gathered}$ Judge, Robt. Graham,
STANDARD-BREDS -The number of Stan-dard-breds which were led into the ring was not
great, but amony them were individuals that had wrea 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. Jism 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 formation, stylish and of superb quality.
Exh1hitors.-Ashley Stock Farm, Foxboro; L O. Charlsworth, Blyth; Chas. Sewers, Greenock M. S. Goodison, Dixie; Miss K. L. Wilkes, Galtz
M. P. Marry \& Co., Rockwood; Jas. J. Fitzpatrick, Halloway; Patterson Bros., Agincourt;
Geo. F. Stevens, Galt; Crow \& Murray, Toronto; wood.
 $y^{2}=4$ patrick, on Harford Ashley My McMartin; 3, McKingey wo Jim Todd; \& Murra) Brerette, an Mingara: 2 and 4 , Miss Wilkes, on Okom Belle, and
Mary Rerin

DECEMBEIK 16, 1915
THE FARMER'S ADVOCATE.
on Philly Winkle by McKenzie. Mare foaled 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 b Ingara. Three get of sire: 1, Miss Wilkes, o
get of Jim Todd; 2, ishley Stock Farm, on ge of Alick; 3, Barry \& Co., on get of Michael
Grattan. Mare and two of her promen. Ashley Stock Farm, on Noble Lottie. Champion
stallion: Miss Wilkes on J1m Todd. Champlater female: Crow \& Muriay, on Brerette. Judge, THOROUGHBREDS.--In numbers the Thoroughbred division was the wea;est of the light-horse
classification; only in two classes were there more than one entry. Guelph; F. D. Parsons, Guelph; E. B. Currie,
$\qquad$
$\qquad$ Masetto; 2, Parsons, on Toritona by Satsuma; by
Mctrae, on Percy by Per Se. Stallion foaled on
or after January 1, $1913:$ 1, Clancy, on Master
Fox. Mare foaled previous to 1 and 3, Clancy, on Carrillon by Chuctawunda, Diffident by Ardon. Mare foaled on or after
January 1, 1913: 1, Bovaid January 1, $1913:$ 1, Bovaird, on Miss Grizel by
Selwick. Three, the get of one stire: 1, Arthur bros., on the get of Earl G. Mare and two of
her progeny : , Clancy, on Miss Morgan. Cham-
pion stallion and mare ( lancy pion staltion and mare: Clancy, on Master Fox
and Carrillon. Ponies.- Even the diminutive ponies seamed to increase
trend very lar ticular be Talke Fire Alarm, the dignified and trappy little couple of years has tein unbeaten, again went to males. same stables Welsh ponies were femalas. The Shetland and Fxhibitors.-.J. M. Gardhouse, Weston; J. \&
L. C. Wilkin, Myrtle Station; H. M. Robinson Toronto; R. Ballagh \& Son, Guelph; J. Lloyd-
Jones, Buriord. 1 inch and under: 1, Gardhouse age, 14 hands inson, on Folly's on Whitegate Pimple; 3, Robare: 1, Gardhouse on Whiteqate Queen Victoria. boy F.; 2, 3 and 4, Ballagh on Shade land Royal, any age: 1, Wi'kin, on Intellizent; 2 and 3, Balanv age: 1, Wilkin, on Forest Dawn: 2, L'oyd1. Gardhouse, on Forest Pretty Lee 3rd; 2, WilkBeauty. Thres, the get of one sire: 1, Ballagh Gardhouse: 2, Wilkin. Champion stallion: Gard
house. on Talke Fire Alarm. Champlon Gardhouso, on Forest Protty Lee 3rd. Judge: HEAVY-DRAFT HORSES were the best that ever occured at the Winter
Fair.

"Wee McGregor.
n in teams or sincle few first-class steer feeders and fed, or bred and
occured at the Winter which they had purchased and
there were seventeen fed, but some of the foremost breeders of the


Beef Cattle.
ter fair showed a vast improvenent oner wh
It was not a show of commonly-fitted steers ande.
heifers with one outstanding animal as the grand
champion, for in almost every class were a num- tention in the keenest competition. In two or appeared at all rough or unfitted. Only by elimthe judge, Peter White, of Pembroke, Ont., work 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-well-fitted class of stock. It was outotandingly seen at that exhibition before. Not only did a


Colantha Butter Girl
$\square$

Grerporns. - Tn the Herctord breed the herds
 throuthout the eummer and ant hame were ter he

 mode emmpion of thist bored.









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 equal the shorthomess bey they mot ouver


 Davise soust Eriot










 was the aim here as well as in the line-uls in
pure-lreds. Exxhibitors.







HE FARMER'S ADVOCATE

Mackie, Ariss; E. Brien \& Sons, Ridgetown; John J. Graham, Georgetown; Geo. Henderson, Guelph;
Milton; Kylerson, Guelph; Maurice Readhead,
Mros., Drumbo. Awards.-Steers, two years: 1, McGregor;
Brown; 3, Leask; 4, Russell. Steer, senior year
ling: 1 and 2, McGregor: 3 , Leask; 4, Pritchar Brown; 3, Leask; 4, Russell. Steer, senior year-
ling. 1 and 2, McGGregor, 3, Leask; 4, Pritchard;
5, Sifton; 6, Brown; 7, Marquis. Steer, junior 5, Sifton; 6, Brown; 7, Marquis. Steer, junior
yearling: 1, Leask; 2, Hales; 3, McGregor ; 4, yearling: 1, Leask; 2, Hales; 3, McGregor; 4,
Russell;
5, Gerrie; 6, Armmstrong. Ster, senior Russell; 5, Gerrie; 6, Armstrong. Steer, senior
calf: 1, Stewart, 2, Guthrie; 3, LLeas ${ }^{2}$, Mc- Mc-
Gregor; 5, Hossfeld; 6, Turnbull; 7 , Woods. Gregor; 5, Hossfeld; 6, Turnbull; 7, Woods.
Steer, junior calf: 1, Lowe; 2, Rotertson ; 3, Steer, junior calf: 1, Lowe; 2, Rotertson; 3,
Amos. Heifer, two years, I, MeGroger; 2,
Campbell; 3, Taylor \& Evans; 4, Brown; 5, ArmCampbell; 3, Taylor \& Evans; 4, Brown; 5, Arm
strong. Heifer, yearling: 1, Oke; 2, Brown; strong. Heifer, yearling: 1, Oke; 2, Brown; 3,
Hales; 4, Leask; 5, Whitelaw; 6, Fackie. Heifer
calf: 1, J. P. Henderson; calf. 1, J. P. Henderson; ${ }^{2}$ and 5, Leask; 8, ${ }^{\text {Genderson; 4, Guthrle; }} 5$, Woods; 7 , Marquis, Champion steer or heifer (a cross): McGregor, on
the two-year-old steer. Champton s'eer or heifer the two-year-old steer. Champton ${ }^{\text {s }}$ 'e
(grade) $:$ Stewart, on the senior calf.
PURE BREDS OR GRADES AND CROSSES ONL,Y).-The cattle of this division AMATEUR ond grade by any means, if they were exhibited by amateurs. They were well fitted, and some of
the winners in different classes were pood enoug the winners in different classes were good enough
to win championships in competition less keen
than what prevaile than what prevailed at the Winter Fair. Exhibitors.-W. E. W. Steen, Streetsville; Wm
Marquis \& Sons, Sunderland; Henry Larter, Rock
wood; Firnest Flemling, Tara; Jas, Scott, Puswood; Firnest Feming, Tara; Jas, Scott, Pus
 son, Ariss; Falph Fried, New Dundee: Clayton son, Arisst Talph Fried, New Dundee; Clayton
Fried, New Dundee; Russell Fried, 'New Dundee
Gordon Fried, wood; J. \& T, Lloyd-Jones, Burford W. \&ock Whitelaw, Elora; Hampton Bros., Fergus: A.
Turnuill \& Sons, Galt; W. Guthrie, New Dundee David Robertson, Guelph; Boyd Portious, Owen Sound A. C. Hallman, Breslau: J. \& A. Goddall,
Belwood; J. K. Campleell, Paimerston ; Edward Dennis, New Market; J. W. Burt \& Cons, Hills
burg; Andrew Mackie, Ariss; John H. Graham, burg, Andrew Nacke, Ariss, John H. Graham,
Georgetown; Henry Waters, Guelph; Geo. Hender-
son, Guelph. Alex Maurice Readhead, Milton; Geo. Davis \& Sons,
Erin; Wm Guthrie, New Dundee; A. Sifton, High Awards.-Steer, two years: 1, Mar Muis;
Larter; 3, Steen. Steer, senior yearling: Sifton; 2 and 4, Marquis; 3, Scott; 5 , Larter
Steer, junior yearling: 1, Gerrie; 2 , scot Steer, senior calf: 1 , Guthrie; 2, Hossfeld $\quad 23$
Whitelaw; 4, Wood. Steer, junior calf. Robertson; 2, Goodall; 3, Portious. He fre two
years: 1, Camphell; 2, Dennis. Heifer, yearling, 1, Camptell; 2, Whitelaw; 3, Waters: 4 and
Marquis. Heifer, calf: 1, Geo. Henderson ;
Guthrie; 3, Murdock; 4, Wood: 5 Waters
 Gregor,
INTER-COUNTRY BABY BEAF.-A class was who had fed young animals for various counties tion. The winners were : 1, Wm. Guthrie, New Dundee; 2, John Hossfeld, Walkerton; 3, L. W J. G. Wilson, Georgetown; 6, Clayton Fried, New Turnbull, Galt; 9, Gordon Frizd, Rosevilla,

## Dairy Bull Calves

## Was made this year in the form of classes for both senior and bull calves. This was a strengthening feature tor the feature, for the fact that breeding stock could be ex- hibited in the show-ring drew breeders who otherwis

 would not have appeared. Their appreciation of thisprivilege was evidenced $i_{n}$ the response of the exhikit ors, and in the splendid line-ups they provided. Both AYRSHIRES.-Eight senior and eleven junior bul alves constituted their respective classes, and they Swell, winning in the senior class, was indeed Master A1 Masterpiece, and, as the Ayrshire admirers said, In every way, with abundance of type and and strong King, in second place were not challenged. Snow Earl, third in order, also good type, while Springbank not the quality to match those above him. Humes tinished the line so far as ribbons were dispersed.
The winhing bull in this class was given the cham $0=$ veras= 2- $=$ He is by 1 dessheessock quality that is seldom duplicated
ying, and is still quite
was also one of the quality kind and typey. Victer third and fourth, respectively, with Springbank came winning two, and much to recommend them. Earl Ex Hilliker, Burgessville; F. H. Harris, Mt. Elyin. W Stewart \& Son, Campbel.ford; H. M. Hamill, Wm.
 Collier Bros., Beachville; Blake Pierce, Norwich.
 Turner, on Springbank Earl; 4, Hume King; 8 bull calveg-1, Begg, on Belton of City View. Junior Fon White Duke of Menie; 3, Collier Bros. Fernbrook; 4, Ross, on Heather King of Springtank;
5, Pierce, on Earl of Sunnybrook. Judge $-\mathbb{W}$ win HOLSTEINS.-The Holstein bull classes were even
stronger in numbers than were the stronger in numbers than were the Ayrshires. Thirteon
senior calves and eleven juniors came forward. They
were the cor the class that supplies the herd-headers for them judged, and if interested in ony ortunity to see it in the stables. Plus Inka Artis, a strong fellow, character, was best of the seniors. Second came Korndyke, with good length and conformation, while
third place fell to Prince Fayne junior champion last September. He did the Toronto the bloom in which he showed at the Cariadian 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 a number of young fellows that were sent back with-
out ribbons to show they cout ribbons to show they were among the first to
compete at Guelph in a breeding class. Exhibitors.-Robt. Ehellinzton, Hatchley; Martin
McDowell, Oxford Centre: C. E, Smith, Scotlend Jos G. Currie, Ingersoll; A. E. Hulet, Norwich; C. C. . Ket-
tee, Wilsonville; S. Lemon \& Sons, Lynden; Rettie
Bros. Rurges Bros., Burgessille; J. K. \& C. E. Moore, Peter-
borough; R. M. Holtby, Port Perry; A. C. Hallman,
Breslau; W. H. Cherry Sreslau; W. H. Cherry, Hagersville; M. H. Haley,
Sprinyfond: W. H. D. Stenn Brampt Gooderham, Clarkson; W. W. Sien, Brampar \& Sons, Gordon
H. Lipsit, Strafiordville: Hiram Awards.-Senior bull calves-1, Lemon, on Plus Inka
Artis; 2, Rettie Bros., on Korndyke -; 3, Shellington, Artis; 2, Rettie Bros., on Korndyke - ; 3, Shellington,
on Prince Fayne Harland; 4, Hulet, on Gerben Canary
Prince 5 , Currie Prince; 5, Currie, on Sir Midnight Comet Ormsby.
Junior bull calves-1, Haley, on Baron Colantha Abbekerk; 2, Hallman, on Sir Korndyke Gerben; 3, Biggar, on Leota's Colantha Lad; , Steen, on Faul, Savange-
line De Boer; 5, Hulet, on Prince Ecio Segis. Judge-

## The Dairy Test

Considerable extra slacs was necessitated this sear to accommodate the increased number of dairy cattle compcting in the test. Good work was done throughout but better results could no doult have been obtained if some of the entries, whici were obliged to occupy the improvisel quarters, had been provided with some he be; that could be done under the circumb stances but it was simply another instance of here a department had outgrown its allotte STace and accommodation. Holsteins through hain Ther by gain. This cow a three-year-o.d owned
H. Haley, Springford, Ont., totalld 302.13 points winning over the aced cows of her breed and representatives of other breads. She gave 181.4 los. of milk testing 5.3 per cent As best, being a deep rugged individual of the utility kind possessing Holstein tyre. The highest scoring Ayrshine was Lady Jane, an aged couers, Ont. She is a typical Ayrshire of the kind seen in the ring yet, according to breeders who the highest scone ever recorded in a Canadian Primios standing totalling 217.65 points. She was able to produce the milk yet her conformation and hatural fleshing is such that one would arposes. She was indeed dual-purpose. In the three breed Holsteins, Ayrshires and Shorthorns the acore 1915 are in excess of those recorded last year.
This vear's hiphest score surpasses that' of 1914 by 4.65 points.
Tho test is of three days duration' and the scale oints for each pound of solids not fat (S. N. F.) and point for eaeh ten days the cow has been fo mil't,

ree; 3 , Gosnall. Wether under 1 year: -1 , Lin
den; 2 and 3 , Lee. 1, yearling:-1, 3 elaw law; 2, Clar'z.
OXFORDS:-Wether, yearling:- 1 and 2, Cer3-
well; 3, Wright; 4, Barbour. Wether under 1 ear:-1, 2 and 4, Barbour; 3 and 5, Cerswell. SHROPSHIREES:-Wether, yearing:-1 and 3 under nder 1 year:- 1 , Wrig
loyd-Jones; 4 , Kelsey
SOUTHDOWN:- Theth Ewen; 3, Brethour, 4, Baker. Wether under ear:-1 and 2, Lloyd-Joncs; 3, MoEwen; 4, Baker. DORSET HORN:-Wether vearling:-1, 2 and 3, Wright. Wether under 11 year: $-1,2$ and 3 , HAM
HAMPSHIRE \& SUFFOLK:-Wlether, year
 Grade or Cross-(Long-woolled breed). Wether, yearling:-1, Brien; 2, Lee; 3, Whitelaw. Wether
under 1 year:-1, Brien: 2, Lee 3 Col Whder 1 year:-1, Brien; 2, Lee; 3, Camppell; Wether, yearling:-1, Wright; 2, Kelsey; 3, Lloy Jones, Wearther under 1 year:- 1 , Lioyd-Jones 2, Kelsey; 3, Wright; 4, Henderson; 5, McEwen. The judges in the various classis were: Cots-
wolds, C. Shore, Glanworth; Lincolns, J. T. Gibson, Denfield; Leicesters and long-woolled grades Jas. Douglas, Caledonia; Oxfords, W. H. Beatti Wilton Grove; Shropshires, Hampshires and Sufi olks, W. A. Dryden, Brooklin; Southdowns, J
Ayre, Bowmanville: grades, R. H. Harding, Thorndale; Sheep carcass es, Geo.
Guelph.

## Swine.

It was truly expansion year in the swine exhibit,
the entry being by far the largest of any year in the the entry being by far the largeet of any year in the
show's history. The two principal faotors reszonsible for the increased entry were the high prices that have ruled for the past. year for marketable hogs, and the naturatly increased tnterest in. the swine - breeding in-
dustry, to classes, notably that for boars, other distinct breeds pleasing feature of the exhibit was the extremely hig quality and fitting which was of a standard seldom, ever before seen in a Canadian show-ring, and again
stamps Canada as the premier breeding ground of th 3
world's beat. Yorkshires were out strong, and made an exhibit
that reflected much credit on their breeders and exhibitors. Every class was a strong reders and cial mention should be made of any it was that fo sows under fifteen months, the line-up being a trul grand one of remarkable uniformity and perfection type. The e
Streatsville; Streatsvilie; J. E. Brethour \& Nephews, Burford; A Wilson, Fergus; G. N. Graham, Udora; Wm. Murdock Palmerston, ar.d Henry Wilson, Georgetown.
Berkshires, as usual, were both numerous and Berkshires, as usual, were both numerous and
high quality, Every entry in every class was up t
the standard, and presented a problem for any judg to face to pick the winners. The exhibitors were
John S. Cowan, Atwood; E. Brien \& Sons, Ridgetown Adam Thompson, Stratiord: P. J. McEwen, Wyomin
Sam Dolson \& Sons, Norval Station, and W. W Thamborths weore never beter, but more and






 | Thine oex |
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| broests. |

## Grades and Croseses had a large eatry on wirt tive




 uatity the ohighast. The extititic
nentioneti in the tormer classs
Butcherrs Hoge was a new class, ani

Judge. - Bacon Hogs, Butcorer Ho
 and 5, Brothour A Mardib-Boar 6 months and under $9-$




 5. A. Stoven:on. Sow under 6 month -1 and 2 . te
 Faetherston \& Son. Three pigs of on, hiter -1
Featherston \& Son; 2 and 5 , Jobn Duck; 3 , Brothour Foatherston $\&$, Son 2 and 5 , John Duck, 8 , Brethour
$\& \in$ Nephews; 4, A. Steveneson. Champion boorr Brothour $\&$ Nephews, 4 , A. Stevenson. Champion boar, Brethour
\& Nephe reserve, Brethour \& Nephews. Champion sow. A. Stevenson; reserve, John Duck.
BERKSHIRES.-Boar 6 months and under 9-1, P.
J. McEwen; 2, E. Brien $\&$ Son; 3, Sam Dolson; 4, J. McEwen; 2, E. Brien \&
Actam Thompson; 5, J. $\begin{gathered}\text { Son; 3, Sam Dolson; } \\ \text { Cowan. Boar under }\end{gathered}$ Actam Thompson; 5, J. S. Cowan. Boar under
monthe-1, S. Dolson; 2, J. S. Cowan: 3 and 5 , Brien \& Sons;4, P. J. McEwen. Barrow under months-1
Thompsun; 4, 4 , $2, ~ J . ~ W . ~ W . ~ B r o w n r i d g e ; ~$
3 Thompsun; 4, P. J. McEwen. Sow under 15 monthe
1, A. Thompson; 2, W. W. Brownridge; 3 and 5, J. S Cowan; 4, S. Dolson. Sow, 6 months and under 91 and 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-
and 4, A. Thompson; 2, W. W. Brownidge; 3, P. J.
McEwen. Champion boar, P. J. McEwen; reserve, Dolson. Champion bow, A. Thomson; reserve, S. TAMWORTHS.-Boar 6 months and under 9-1,
 Barrow; under 6 months $-1,2,43$ and
Douglas; 5, Readman. $\quad$ Sow under 15 months $-1,2$, and 4, Douglas. Sow 6 months and under $9-1,2$,
and 4, Douglas. Sow under 6 months $-1,2,3$ and Douglas, 5, Dolson. Three pigs of one ilitter-1, 2 , and 5, Douglas; 4, Readman. Champion borar, Dolson;
reserve, Readman. Champion sow, Douglas, Deasery, reserve,
Douglas.
CHESTER WHITES.-Boar 6 months and under 9 1 and 2, W. E. Wright \& Son; 3 and 4, D. De Cour
sey. Boar under 6 months-1, Wright; 2, Henry Cape sey. Boar under 6 months-1, Wright; 2, Henry Cape
3 and 4, De Coursey. Barrow under 6 months-1 an
2 an 2, De Coursey; 3 and 4 , Wright. 6 months- 1 an


A Yorkshire Champion. Champion Yorkshire boar at the Guelph Hinter Fait
for J. E. Brethour \& Nephews, Burford, Ont. Gould. Sow 6 months and under $9-1$ and 3, 1)
Coursey; 2 and 4 , Wright. sow under 6 months- -1 an
2 2, De Coarsey; 3 and 4 Wripht.
$\square$ reserve, Ie Coursey.
OTIIER DISTINCT BREEDS.-Boar 6 months an under $9-1$, Mac Campbell \& Sons; 2 and 3 , Hastings
Bros., 4, Geo. G. Gould. Boar under 6 months -1 and
4 Golst. Cal 4. Ciould; 2 , Campleell; 3, Hastings. Bar.ow under nouths-1, Hastings; 2 and 3 , Campbell; 4, Gourd
3, 1 , months and under $9-1$ and 4, Canpebll; 2 an



## Grames OR Crosses, -Barrow 6 months and




 and Duck; 7 and 8, Pritchard
Burche Mons-1, W. W. Brownridge; 2, P. J
citaris nomens an

DRESSED CARCASSES,-VXI ort bacon hog
$-1, \mathrm{~J}$. E. Brethour \& $^{\text {\& }}$ Nephews, Burford. John S. Cowan, Atwood; 3 and 4, 1', ii chard Bros Jos. Featherston \& Sons, Streetsville, 7 and 12 Lerch, Preston; 9, D. Douglas \& Sons, 10 , Jacob Butcher hogs-1, P. J. McF, Norvall Station Butcher hogs-1, P. J. McEwen, Wyoming ;
Mac Campbell \& Sons, Northwood; 3, S. Dolzon \&

## Poultry

Canada has had many good poultry exhibtions
and Guelph has put up the best, but and Guelph has put up the best, but this year th
exhibit of the feathersd trise at the Guaiph winter continent. Five tho in its class on the American birds were in the crates, and the quality and firty live best described in the words of an American wudgerhaps has acted as judge at exhibitions Ame continent judge, who when he said that he never saw sach quality in an Square Garden Exhibition was put in the Mand Madiso Square Garden Exhibition was put in the shade both
as regards quality and numbers, there being from 800
to to 1,000 more birds than is commonly seen at the big
New York Sho $x$. There were New York Shox. There were approxinately as many
entries at the Guelph Winter Fair in the partment as there were in this department aut the Do World's Fair now drawing to a close at San Frannotwithstanding there earlier hatched this year, and not withstanding, the great amount of wet weather, thioy
were better doveloped and showed much better quality than was the case a year ago. Single-combed whility Leghorns were che strongest class at the Show, with 255 entries. There we e 210 Barred Rocks, 200 White
Wyandottes, and 180 Single - comb Nyandottes, and 180 Single - comb Rhode Island Reds
Black Minorcas showed great improvenent with entries. There were 140 entries in Buff Orpingtons, and 90 in White Rocks. The total showed 1,400 en,
tries 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

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



A Great Seed Exhibit
object of much Deartment, 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 exhition his opinion, there had not been a more nicely-arran jed exhbits of seeds made in Canada. He had s:en 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. Potaabout the same number of entries as last year. Pota-
toes and corn were not quite so numerous, de, no
doubt, to the unfavcrable season. The grains were doubt, to the unfavcrable season. $\begin{aligned} & \text { numerous, dae, no } \\ & \text { Thell of grains were }\end{aligned}$
and sample, slightly
discolored, but remarkably all of good sample, slightly discolored, but remarkably
free from weed seids. In this particular the Winier free from weed seds. In this particular the Winier
Fair shows great improvement.
grain entries this year than last. There were more bags in the this year than last. There were 112
crop competition, and 163 in tha
open competition. There were 25 entries in corn in open competition. There, were 25 entries in corn in
the field crop competition, and 74 entries in the open
competition. 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 seand
erected to show the exhibit off to advantage, but erected to show the exhibit off to advantage, but
simall samples placed below were intended to obviate
this. The Secd Department was one of the main

## HPEN CLASSES IN GRALN. Fall Wheat, White.-1, A. Limon, Strathroy; 2,

 Fall Wheat, White.-1, A. Limon, Strathroy; 2, P.I. McEwen, Wyoning; 3, John W. Hutton, Mt.
Brydges; 4, Atex. Morison, Creemore; J, John Mc-
Diarmid, Lucknow; 6, W. J. Douglas, Galt. Fall 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. Schmidt, Mildmay; 3, J. S. Waugh, Chatham; 4, A.
Eicoat, Seaforth; 5, J. \& H. Laidlaw, Walton; 6, Milton Backus, Chatham; championship, G. A. Burns.
Spring Wheat, except Goose-1, Wm. Naismith, Falken burgy 2 . S. W. Bingham \& Sons, Hinlsburg; 3, Geo. E.
Foster, Honeywood; 4, F. Buckland, Wiarton; 5, Geo. Oster, Honeywood; 4, F. Buckland, Wiarton; 5, Geo.
R. Barrie, Galt; championship, Wm. Naismith.
Goose Wheat-1, Wm. Roth, Fisherville; 2, R. M. Mortimer, Loneywood. Oats, Banner-1, A. Schmidt, 2 , Jach
Lerch, Preston; 3, J. M. Fisher, Mildmay; 4, A. Elcoat, eaforth; 5, Jas. H. Wilson, Milton; 6, S. W. Bingham Sons; ${ }^{7}$, Dougal Kennedy, Dryden. Oats, ${ }^{2}$. A. A.
No. $72-1$, Jacob Lerch; 2, Wm. J. Douglas; 3, J. A. Cockburn, Puslinch; 4, A. Elcoat; 5, D. A. McNaug
ton, Puslinch; 6, Jas. Carter, Haversvile, Palmer \& Son, Norwich; 8, F. W. Oke, Alvington. Oats, any other white-1, S. E. Grifin \& Son, Acton
2, A. Schmidt: 3, R. M. Mortimer; 4, H. L. Goltz Bardsville; 5, John Winer, Guelph; ${ }^{6,}$, John
Schweyer, Fisherville. 7 . John Mcliarmid; 8, H. Whar Schweyer, Fisherville; 7, John Mchiarmid; 8, H. What
ton, Eden Mills; 9, J. M. Fischer. Oats, Bhack-
 son, Aurora: championship, A. Schmidt. Barley, Six-rowed-1, A. W. Cohoe, S. Woodslee; 2, D. F. MC Kenzie, Eagle River; 3, A. Schmidt: 4, Geo. A. Barrie
Galt; 5, Jacob Lerch; 6, C. M. Graham, Peterboro;


## No. 21. sohmidt <br> 

Naismith; 2,
D. Hamilton
potas I
Potatoos, La
McConnell

| Son, |
| :--- |
| ers, Ltd |
| Potato |

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## Fos




The Toronto Fat Stock Show

A Big Success
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 ing the show for the purpose of more closely bringing ing 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 smallerentry 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 never higher. Following, as it dia, directly after the close of the thass that competed for honors at Guelph
class of ants
again met in competition here, strengthened by again met in competition here, strengthened by
many extra entries. There was a large attendance, and many extra entries. ste manifested spoke well for the
the increased interest
future of the live stock interests of this country. Wee future of the live stock interests of this country. Wee
McGregor, the grand champion, at Guelph, was also McGregor, the grand
champion at this Show.
he following are the awards:
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. Russelt, 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; 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 \& Boack, Fergus; 2, W. Heifer, yearling, - 1, John Black \& Sons, Weston. Heiler, yearling, -1, \&ohn Back;
2, A. White, Guelph; 3 Wm. Marquis \& Son. Fat
Heifer, under one year-1, Jas. Leask \& Sons, Seagrave; Heifer, under one year-1, Jas. Leask \& Sons, Seagrave;
2, John Black; 3, R. F. Duncan. Champion Pure Bred Barber.
GRADES AND CROSSES-Steer, two years-1 Jas. D. McGregor; 2, Jas. Leask \& Sons; 3, T. A. Rus
sell; 4, D. Ferguson, Mapleton; 5, Wm. Oke, Centralia sell; 4, D. Ferguson, Mapleton; 5, Wm. Oke, Centrania
Stere, yearling-1, Pritchard Bros.; 2, John Brown \& 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
. Leal \& Guthrie, Galt; 2, Peter Stewart, Guelph; 3, Jas
Leask \& Sons ; 4, F. C. Willmott \& Son, Milton Leask \& Slack. Fat Cow, aged-1, A. White;
F. John Billat
F. Wilmott \& Son, Milton; 3, Leo. Chard, Lamb F. C. Willmott \& Son, Milton; 3, Leo. Chard, Lamb-
ton Mills. Heifer, two years-1, Jas. D. McGregor
 Fat Heifer, yearing
Sons; , 3, John Brown \& Sons; 4, P. Lamont, Zurich.
Heifer, under one year-1, A. White; 2, Jas. Leask \& Heifer, under one year-1, A. White; 2, Jas. Leask \&
Sons; 3, John Brown \& Sons; ; Jacob By, Emira. T. Eaton Co., Special, for best dehorned butcher steer any breed or cross, under one year, a CAR LOTS-Fifteen Steers, $1250-\mathrm{lbs}$. and over-
1, J. D. Ferguson, Mapleton; 2, John Black; 3, P. J.
Hes. Henry, Ridgetown. Fifteen Steers, under 1250 -lbs.
1, John Black; 2 , A. White; 3 , John Brown \& Son 1, John Black; 2, A. White; 3 , John Brown \& Son Marris Abattoir Co., Limited, Special for best carload
of 15 Steers without horns, weighing under 1330 -lbs. of 15 Steers without horns, welghing under
each John Brown \& Son. Mathews-Blackwell, Ltd.,
Special: Ten best Steers, without horns, averaging pecial: Ten best Steers, without horns, averaging
1050 lbs.-A. White. Armour \& Company, Special, 1050 lbs.-A. White. Armour as, eampany, Special,
15 Butcher Steers without horns. each 1100 Ils. and
under-A. White. Swift Canadian Co., Ltd., Special, under-A. White. Swift Canadian Co., Ltd., Special,
15 Butcher Cattle, steers or heifers or mixed steers and heifers, without horns, under 100 Ibs., each-1, A. - 1 , A. White; 2, M. Thompson; 3 , Wm. Pridham. horns, each 1100 lbs . and under
LONG WOOLS-Three Wethers or Ewes, year-
lings-J. D. Ferguson. Three Wether or Ewe Lambs, lings-J. D. Ferguson. Three Wether or Ewe Lambs,
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-lings- 1, J. S. Baker, Burford; 2, J. Lloyd Jones, Bur-
ford; 3, C. F. Jackson, Port Stanley. Three Wether or Ewe Lambs-1, J. S. Baker; 2, J. W. Spring-
sted \& Sons, Caistor Centre; 3, A. Ayre \& Co, Bowman-
 2, Brown \& Cowan; 3, C. F. Jackson. Swift Canadian Co.. Ltd., Furmer 100 Ibs. each, bred; fed and owned by
or Exibitor - 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 Ils. each, bred,
fed and owned by exhibitor-1, J. Lloyd Jones; 2, J. W. fed and owned by exhibitor-1, J.
Springsted \& Sons; 3, J. Houston.
Three Barrows, $170-225$ Ibs.-1, T. Readman \& Sons, Streetsville; 2, J. K. Featherston, Strect-ville;
3, Chas. B. Boynton, Dollar; , John Duck, Por Credit.
Boys' Hog Feeding Competition-Pen 3 Barows,
Bots Boys' Hog Feeding lis; must have been fed sime
bacon type, $170-225$ lome
weaned at 6 weeks old by exhibitor- 1 , Thos. Chrd,
Lambton Mills; 2 , Geo. Williams, Streetsville; 3 , Chas.

Farmers' Special Pen 3 Barrows, bacon type, $170-225$
lbs. 1 , T. Readman \& Sons; 2, Chas. B. Boynton. lbs.-1, T. Readman \& Sons; 2 Chas. B. Boynton.
Gunns, Limited, "Tankage Special," Pen 3 Barrows,
range $170-225-G$. N. Graham, Sunderland Swift Gunns, Limited, "Tankage Special, Pen ${ }^{3}$ Barrows,
range $110-225-$. ... Graham, Sunderland. Switt
Canadian Co., Limited, Farmers'. Special: Pen of 10 Hogs, bred, fed and owned by exhibitor, 170-225 lbs.Wm. Davies Co., Limited, Special, Pen of 5 . Barrows,
individual weights, $170-200$ lbs.; must have been fed 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. men under 25 years-Pen containing litter of one brood. Entire litter must be shown irrespective of number and weights 170-200 lbs.-1, Chas. B. Boynton; 2, S. Broad. Graham; 2, H. Wade. Gunns Limited, Special-Car load 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 proved 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 he atcendance of farmers withi railway, however, were well patronized and the attendance was better than an average.
Beef cattle were more in number and of better 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 a good quality. Mr. Etter also showed a two-year-old heifer calf, winning the Shorthorn sweepstake with the Hazen Etter of Westmorland Point, N. B., showed on each of his Shorthorns. Harry Caster of a Point de
Bute, N. B., a new exhibitor Bute, N. B., a new exhibitor, won first on Shorthorn heiter calt, and was also an exhibitor in the grade class. horns and two grades.
Forrest Bros., Amherst Point, put up the strongest in the lot that any, breeder need feel ashaned to lead into the ring. Messrs. Forrest won first on two-year yearling heifer; and in the grades they won first on firsts on yearlings and calves two-year-old steer, and year-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, Moncto
and won first in the section open wed three Shorthorns 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. P. E. I., and C. S. Corbett, Amherst Point. Wm. O'Brien \& Sons of Windsor Forks, N.S., although new judging rings, and showed a splendid herd of Herefords. the special prize for best animal in the Aberdeen Angus

Hereford class shown by a new exhibito
Angus in good show condition, and took the lion's
share of the prize in this chated in this class.
of the Amherst Show, and this year it was bigger and most every section, and cows that was keener in althis 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 maki 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 threee-year--lds.
Wm. S. Harding, Hammond's River, N. B., won frst on three-ycar-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, Fowler Bros, Amsecond and third in yearlings. Holstein, with a score of $151.7,140.9$ milk on yearling
also third on three-year-old Holstein fat year-old Holsteins and first on two-year-old thard on two a score of 189.4 points, and fourth on yeald grade, with
with a score of 160.9 points.

Lee \& Clark, Victoria, P. E. I., won third oñ aged
w and second on three-year-old Holstein, and had strong exhibit in the young Holstein classes. and had Guernsey three-year-ontd, making a score of 224.3 first on 146.6 lbs milk, 7.45 lbs , fatt, this was the highest scoring
Guernsey any age. Mr. Dickie also same class, and second on two-year-old and third the
yearling. second and fourth on Guernsey cows, four yean first, old
and over, second on three-year-old and first Roper Bros., Charlottetown, won third in agraged
Guernseys and first on two-year Guernseys and first on two-year-old Guernseys, and Ayrshires were a particularly strong class; in fact,
we have never seen so much Ayrshire auality with real utility, as was shown at this Fair. on aged cows in a very close contest. The firsecond winner was "Mona D,"" score 221.3 , with 173.7 prize
milk and 7.06 lbs . fat. McIntyres also won fourth in mire-yd $.06 \mathrm{los}. \mathrm{fat} .\mathrm{McIntyres} \mathrm{also} \mathrm{won} \mathrm{fourths}$. Fred S. Black won fourth in aged Ayrshire class,
and first in yearling class with "Peach with a yield of 114.9 lbs. milk, "Peach of Springvale,"
153.96 lbs . fat, a score of in aged Ayrshires, first on three-yettetown, won fifth a good strong exhibit in the young dairy cattle class fourth in aged Ayrshires, second in three-year-olds, and second in the two-year-olds; also fourth in in grade
aged cows. John Ritson won sixth on aged Ayrhire In Ierseys W. . E. Harding, Amherst Point, won first and breed champion with his three-year-old cow, 6.47 lbs . fat, and a total score of 198.3 . Ab. Harding N. S., won sixth in aged Jerseys, second in three-yearthe grade class.
H. S. Pipes \& Son, Amherst, won fourth and fifth in aged Jerseys and third and fourth in three-year-olds, second and third in yearling Jerseys. J. E. Baker \& 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 "May Morid", Point, who won frrst in aged cows with 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
fourth on aged cow and first on three-year-ld, and Geo. B. Etter won second on two-year-old. with a yield of $215.2 \mathrm{lbs} . \mathrm{milk}, 7.34 \mathrm{lbs}$. fat and a score
of 233.6 , Geo. M. Holmes of 233.6, Geo. M. Holmes second, McIntyres third, The Sheep Show was the best and largest yet.
C. D. Pugsley, Barronsfield, N. S., showed Lincolns and grades and won second, third and fourth on ewe aged ewe. Lincolns were also shown ewe, and first on 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; N. S.; Cheviots by Chas. Symes and Cephus Nunn Leiceters by Albert Boswell and John Retson, and uffolks by Albert Boswell.
Hogs were not as nume
but the quality was the best yet. The principal esI. W. Callbe: Peter Brodie, York, P. E. I., with grades; of the prizes for Yorkshires wind the the largest share three bacon hogs. Wallace Stead. Tamworths were shown by -Fowler
Bros, and Berkshires by I. Samare 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 shonld and 8 month instead of 6 , and they claim this is the reason the hog classes are not better filled. year (about 1,500 birds), and the quality better. White Leghorns were the most numerous, with Barred Rock The Dominion Live Stock Department put on an interesting exhibit, illustrating the marketing of eggs, 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.


THE FARMER'S ADVOCATE.
FOUNDED 1866

$\square$
Founded 1868


General Joffre
General Joffre has been placed in co
mand of all the French armies ex-
oept those in Africa.
Forward.

| Forward. | eral Joffre would himself probably admit |
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| ar Lords," by A. G. |  |
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| J. M. Dent \& Sons, Yoronto. |  |
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| (trie say. It is even more imp | ground. Weakness will not be toler- |
| yoil the aim of your |  |
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ing of yourself than all the adulation of
your friends, just as the most savage of
no Napoleonic designs. That, as will be
secn later, is a fact of sect later, is a fact of profound im- outside,
portance. It is significant change that is significant, too, of the spirit and method of war. The art of
war is governed by the material of war, war is goveraned by the material of war,
and the discoveries of recent years have
revolutionized the conception of the art revolutionized the conception of the art.
The element of surprise has vamished The element of surprise has vainished
with the use of the aeroplane, wireless, and the telephone. The wonderful Ulm Austerlitz campaign of Napoleon would
have been impossible with the conditions 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 o
Chancellorsville Chancellorsville, or his brilliant exploit
at Thoroughfare Gap.
 course of this war, how diffcult it is,
even with the most rigorous suppression of news, for a commander to effect a vital movement in secret, unless one side
has an overwhelming advantage in mili-
tary railways as is the case with Germany on the Polish frontier. The trans-
fer of the Eng lish army from the Aisae most elaborate precautions; but in vain.
The Germans were there as soon as the 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 the fortress obsolete, but has changed the
character of fighting in the open trom
swift clash of infantry and cavalry to swift clash of infantry and cavalry to a
slow struggle for entrenchments. Add to all this the gigantic sca'e of the armieg and the vast line of battle, and
it will be seen that the art of general-
ship has fundamentally changed. You ship has fundamentally changed. You
could walk over the field of Waterloo in a morning, but it would take you many weeks to walk over the field of battle
that extends from the Vosges to the that extends from the Vosges to the
Yser. When Napoleon ordered the adYser. When Napoleon ordered the ad-
vance of the Imperial Guard at Waterloo he had the whole field of battle and all
the conditions in view; but the French the conditions in view; but the French
advance at Soissons in March was only part of a scheme wh.ch included the English advance at Neuve Chapele, a hun-
dred miles away, and considerations as remote as the situation in Asace and
Hindenburg's new lunge at Warsaw from Hendenburg's new lunge at warsaw fron
the North. The corollary of this is that
the commander is no longer a persoiality, but an abstraction-not a visible
inspiration, but a thought working in inspiration, but a thought working in
some remote background, with maps and
telephones, aeroplanes and wireless. Gentelephones, aeroplanes and wireless. Gen-
eral Joffre's greatness is shown in his eral Jofire's greatness is shown ha and
appreciation of the view conditions, and
bis stern rejection of the old ostentation of generalship
creed out-worn."
$\qquad$ ness and sobriety goes deeper than this
The temper of General Joffre reflects profound change in the spirit of France mander had his first experience of war in
the tragic year of 1870 , when, as a lad trom the Ecole Polytechnique, he did ac-
five service with a battery during the
tive siege oo Paris. How deeply the iron that terrible winter burned itself in
$\qquad$ atress 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
of fortune. How different it all is from the levity
of 1870 , when France danced out gaily 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 history. Even in the midst of the
frightful overthrow, the spirit of Paris was true to its past. It plunged into
a revolution and swept away the shoddy structure of Imperialism; but even in
that thrilling time it mingled a wild and
 rould not be denied its laugh, Paren though it was at its own misfortunes and loo, "but he learned the lesson of that sigantic frivolity, and France learned it with him. It is to-day the most serious
ation in Europe. It has lost its gaiety, but it has found its soul.

$$
\begin{aligned}
& \text { And General Lofre is a symbol of the } \\
& \text { ietory. I think he is an assurance, }
\end{aligned}
$$ victory. 1 think he is an assurance,

too, that France will keep its soul. For is importance is not confined to the
attlefield. Behind the immediate issue of the war of the nations are many issues affiecting many lands. Who shall say what influences will emerge triumph-
ant in this country, in Germany, in Russia, in France? .Everywhere we see Rew hopes blossoming-Dowhere more then in France, where the school of Clericalist the war will bring the downeting of the
Republic, and that with the army vic. orious and under their control, they hand. The political struggle in France has alwass centered in the army, for the
Clericalists know that if they can Clericalists know that if they can pos-
sess the army, as the Kaiser and his Junkers formess it, Parliament, hike the Reichstag. will cease to be the instru-
ment of power. It was the exposure of ment of power. It was the exposure of 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 cause have not ceased, and there have
not been wanting many signs of its
success. political Through this atmosphere of political intrigue, General Jotire has
come slowly to the front, -a silent, deternined man, given wholly to his profession, famous as an engineer and
scientist, having seen service in the 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 destroyed the Clericalist patronage in the Arny that he obtained the epaulettes of a brigadier-general. When the Coancil
of War was reorganized in 1911, he wa made Chief of the General Staff, General
Pau, who is a well-known Clerical, havgrounds of age only, or because he on not accept the conditions which accom-
panied But whatever the cause, the result was was in command of the Republican army It is a good omen for France-all the a Republican to allow onlitical motive o interfere with his duty to the State office, as well as the ruthlessness of hi hand in dealing with incompetence, wa
revealed soon after his appointment head of the army. France was stag gered one morning to learn that flve generals who had been found incomp
in mancouvres had been dismiseed. self-reliant, That is the man. Cautious, iferent to applause, care less of criticism, slow to applause, care
cision, but, the decision ane "fighting it out on that 1 ne" " with the grim tenacity of Grant. "No weakness of the man all through the campaign-at
the beginning his authority menad The beginning his authority menacod by
political intrigues, but tighting them
down with masterful hand and down with masteriul hand and emerging
unchallenged autocrat of the army, carrying out his scherme of retreat to the ing to allow the very considerable victory
at Guise to modily h/s plan; avoliding
fortresses a wide berth; allowing the fatal to him. And it was in this mo the position he had prepared on the whole of Northern France to be wasted ment that Jofire showed that France had Marne, with his hidden resarve at hand,
rather than meet the enemy except under found the man she nseded. It is said, with the enemy's communications dangerhis own conditions; when the tide had I do not know with what truth, that he ously extended, with his own line resting 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 o
iron. Few men in history have been subjected 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 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 eneny were before them. To app bered 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, canterElysees in company with his two stepdaughters, but only the initiated had seen in him anything more than a superior officer of unknown name and
cank. Even the initiated rank. Even the initiated might have
been excused for entertaining fears, for what was there in. the record of this man $\mathbf{t}_{0}$ give that popular assurance of victory
that means so much.
There was no fact that means so much. There was no fact that gave a clue to character. Bor among the mountaineers of Roussillon in the Pyrenees, the son-one of eleven chilas remote in tradition and temperament man of Loch Erribol is from the fisher lishman of Balham or Putney. His native speech was not French, but a
dialect akin to the Catalan speech dialect akin to the Catalan speech on
the Spanish side of the Pyrenees. He had, through his gift for mathematic 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 investment of Paris in 1870-71, he saw been under fire, and that only whad ho ed his little column of 400 men (chiefly natives) through 500 miles of desert and and overcame the war-like tribes of the Touareg. It was a remarkable achieve ment, as a perusal of his very simple uctoo" will show. But it was a sma apprenticeship for the command of mil lions. Nor was there anything peculiar
ly attractive in his personality to dis
tinguish him. nd no arts. He had no gift of wora, said to be lazy, and his entire lack of
showy qualities made his progress incomrehensible to people who had know him, and who, judging from externals, saw hittle in him. It was only those
who knew this silent enigma intimately ad were able to see behind appearances able common sense, his cool judgment is essentially scientific and practic enius, his strength of will which wou ave been a dangerous obstinacy had urderstanding of the factors involved, an
such a decisive instinct for the essential of a situation.
But Paris knew nothing of this. defeat to the east near Metz, only saw the French army in the north retreating almost in flight, day by day, only fel
the doom approaching with fright?
 ained by knowledge of the man, wa vanishing. Was he, after all, only an he artist of war would have made dramatic stroke at all costs "to stop the

Hope's Quiet Hour.

## A Voice From the

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

Johnnie Canucks.
Johnmie Canucks, our time has come
Enough. we've had of fife and drum 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 Marching on to the Devil's dance
On Belgium's blood-soaked lea.

Johnnie Canucks, right from the start We ve tried our best to play our part Now shoull Belgium shall, heart to hear

Johnnie Canucks, our country's fair May thought of her be as a prayer
To help us do our duty there, 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. BAILIIE. 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,
Pray for your dead, Oh, Canada, Yet not as the hopeless pray,
For theirs was a death for living hop They died for the coming day. Remember your dead, Oh, Canada For the God above saw how they died, For the God above saw how they died,
And His judgment is kind and true, Think on these words, Oh, Canada, No man hath greater love than this, That he giveth his life for his friend.
OLIVER E. BAILLIE. 5men

An only Son,
love,
pidst Thou
Didst old as
land,
And live our
And firmly hol

Thou art our
While striking
We lift our
Wouldst touch
of ignorance,
God of Mer
Hear us
Comfort th

God of Bat
$M$ ar our sa
May it
(Belgium,
The On a ventur
We crossed th Glad of the of charges Of the battle's
And the cha
We knew we In a gight for
And our
Anom But now, alas And the color
In the mud In helmets for With a curse We fight . and col
Our battles
Romance's day Romance's day
With the che Farewell Roma When a day of
Repaid the t
$\qquad$


Where the British are Fighting in Mesopotamia.


pe's Quiet Hour.
oice From the Trenches
$\qquad$
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$\qquad$ as jolting along in a rough
e poems speak for them-
Innmie Canucks.
$\qquad$ work where bullets hum
$\qquad$ yonet and shining lance)
to the Devil's dance
$\qquad$ ur best to play our part gium shall be free.
$\qquad$ lo our duty there,
ada, for thee.
$\qquad$ issue is in Thy hand, OLIVER E. BAILLIE. ns Who Fell Near Ypres. ur dead, Oh, Canada, ause, for a country's love,
to their quiet sleep. ir dead, Oh, Canada, s a death for a living hope;
or the coming day.
$\qquad$ above saw how they died, gmant is kind and true e words, Oh, Canada,
Himself to send;
$\qquad$ $126 \mathrm{th}, 1915$.).

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THE FARMER'S ADVOCATE.



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 shalling the German treaches. Each well-placed shot means death French gun is shalling 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 de-
fenders so injured and disorganized, that a quick charge easily gains the coveted
$\qquad$
$\qquad$ certain of his fate? Remember that who offered to abide with him.
God knows, if you do not, and He cares What He was then He is now-"the
far more than you do. If you are same yesterday, to-day, and forever."
$\qquad$
$\qquad$ 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 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. stated that He had compassion on her. quick insight and
our Elder Brother. terrible excitement of the mock trial He


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 tions 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 conin 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

Fashion Dept.



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



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


8845 (With Basting Line and Added
Seam Allowance) Girl's Dress, 8 to
The Dollar Chain
$\qquad$
$\qquad$


FOUNDED 1866
december 16, 1915
then on Greek territory, and it is possi-
ble that they may retire altogether to


## TheBeaverCircle

 OUR SENIOR BEAVERS.[For all pupils from Senior
Contifnuation Cliasses, inclusive.] Dear Beavers,-I hope all of you Beaof self - constituted birs -protectors. As you live in the country you must know
how useful the dear little feathered com-
rades are in eating the insects that prey on our crops and fruit trees. Besides, what would
happy songs? I wish that all the Beavers in Canada
would follow the example of the children 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, an 1 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 cor a long time. you know you can
coax the birds about your home by fead-
ing them and putting up safe, suitable ing them and putting up safe, suitable
bird-boxes for them; and they will repay

the German cruiting offices
2th, the recring the last days
recruiting campaign,
tho Week


| Funnies. <br> Little Minnie came in from the garden with sailed, clammy hands and perplexel eyes. <br> Mama," she propounded, "why does God heep on making toadstools when the toads won't sit on them? |
| :---: |
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A Whle girl who was just beginning to
read ther primer, was asked to spell cow.

## others, had to be e eltt out kecause written on both sides of the paper-which is very

Leters written by Florence Schell and
Lethers, had to be left out teeause written

| Honor Roll. <br> Ray Clothier , Brent, warg Cecil, Hildred Parsons. <br> OUR JUNIOR BEAVER <br> [For all pupils from the First Boo Junior Third, inclusive.] |
| :---: |
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## Digging to China



THE FARMER'S ADVOCATE
 We are eoing to have an entertainment
for the Red Cross on the evening of the
twenty-first of Deember. We have dia-
logues, songs and recitations. We are
one going to have a good programme. Whe The
admession is ten cents for everybody.
Whe We practice teery cents for everybody.
night for about an
hour.
 Band Drill." It is a good drill. When
the programme is over we have the
Chrismas tree.
I intend to
 Wallacetown, ont. (age 11, Bk. IV.).
 cold weather at present, but I am hop-
ing it will be warmer. I haven't very
far to bo to schol, like soune of the
Beavers have. It it in iut Beavers have. It is just at the end of
the rovive leading to to house. We have am president of it. We anl like it very
much. We just started when our new school teacher came, Miss williams. We we
all like her, she is very iollly. most all like her; she is very jolly; most
teachers are not. are they, Fuck? If
any other school has a Sell-Activity" Club, 1 wish they would kindly tell me
about theirs.
leoll, I I must
leaut cose and leave room for other Beavers, wishin
the Beaver Circle every sucess.
CLARA B. R. SNARR.
Harold, Ont., R. R. ${ }^{\text {(Age 14, Sr. IV.) }}$
Dear Puck, - This is the frst letter
have written to the Beaver Circle.
ame twalve years
am twelve years old and am in the
Senior Third class. My father has taken
"The Farmer's
 The Beavers' letters. I had a dog once
who would putl me in the sleigh, and
who would draw me in Who would draw me in a wagon in the
summer. 0 ne day when the law summer. One day when the law that a
muzzle had to be put on dogs was passed, we put one on our dogg and he
didn't like it, and after that he never was the same. One day he went away
and we couldn't find him anywhere. Ho
 am yours truly. andrew orchard.

## Honor Roll

OUR JUNIOR BEAVERS


## The Ingle Nook.

## 

 I am going to tell you about ourSchool Fair.
There our mine shour
competing. competing. The exhibits chiefly consist-
ed of orops of: (1) Mangels, potatoos,
oats oats, barley and corn; (2) fruite (3) pies,
biscuits, bread, and layer biscuits, bread, and layer cakes; (4) di
lerent kind of apples; (5) collections
weedd weeds and weed seeds; ( 6 ) handy sarm.
devices and tool-tooxer I reecived one dollas. In prize money
Thinety conts. The representative of our Rural School
Fair offered a magazine for the person who ofiered a magazine for the person
who wo the most money at the Fair.
and it was given tion and it was given to one of our sochool
pupils. At 1 p . m . the parade was
held. held, but our school did not get a prize.
The most interesting thing of the whole
Fair was Fair was to watch the calles being led
by a halter. Some would balk on the boys, and some would go ahead frst
rate. © one boy's calf kicked trightrust when he wanted it to make the figure Ceight." I guess this is all I can tell Boavers, I am going to send some
money money to the soldiers. who are wounded.
This money will be my prize money.
Wed Will, I guess I will close, so good-bye.
DOUGLAS WESTINGTON

## Welcome, Ont.

Dear Puck and Beavers,-This is my enjoy reading your charming Circle.
tended to write
I have intondec oo write for a long time. I. go name is Miss Bickan. I have one sister;
her neme is Mary Thorp. She is eight years old.
school.
I hike reave ralf a mile to go to
Io this will escape the w.p. . basket. As
my letter is getting long, I will close What goes in and out and yet never
moves? Ans. -A tence. write to me. CONSTANCE SEWARD. Maltby House, Maple Grove, Bowmen-
$\qquad$ to your charming Circle. My father has taken "The Farmer's Advocate"" as long as I can remember, and we like of fing For pets, I have two kittens and a rab
bit. My kittens' names aro Tabby and Fluff, and my rabbit's name is Mop
 to school, and go every day. We had
a school fair on the 13 th of october and got many prizes. I will close, wish-
ing' the Beaver Circle every encoese. Hope this letter will eecape the javass
AGNES MURRAY.
the w.-p. b. the w.-p. b. AGNES MURRAY.
Dear Puck and Beavers,-This is my
first letter to your Corcle. 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 call oalled Snowball. I will
close now, hoping to see this letter in
ROBBIE T. CAIN.
print.
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 Ey

## enowers to questions to appear.]

FLOWERS AND books. Dear Junia, -In the issue of September
twenty-ter Cwenty-third you asked for letters for the
whanted as Number
weters, because was very glad you wanted letters, because wo have had so
few of them lately, and I allways onjoyed
them ew of them lately, and I always enjoyed
them. Being a menber of a family where the "yellow cover" is read and
enjoyed from cover to cover, Itace this opportunity of writing to the "Nook." We have had a delightul summer, and
as the winter draws nearer I cunnot hell but wish for onee that I lived in
southern clime southern clime. Still, it must be very
monotonous to have always summer monotonous
always winter.
Our flowers ware lovely this year
What a lot of care, and what a lot pleasure they are : The pansies lift up
Lheir bright little their bright little faces and seem to say,
Aren't you glad you have us"? "Aren't you glad you have us"? Herd
are the laithful, sturdy zinnias, nodding to the trim nasturtiums, and over yonder
the sweet peas climbing higher and the sweot peas climbing higher and
highor, too proud to stay and mingle
with the with the lower flowers. They are al
dear to me, but I think I Iove the pansies best. This winter 1 am going to have a box in the house to have
blossoms all winter.
Junie wanted to know some flowers that would withstand few I have had in my own garden that seem to be frost-proot,-stocks, lavender hollyhocks, and panites. The latter will
blossom even atter the snow makes its appearance, and I have seen them peop appearance, and I have seen them peop
out as tresh as ever rrom under the
snowy carpet. Personaly, I think there snowy carpet. Personaly, I think there
is nothing prettier for ar table center than pansies in the bowls espestally made Junia's love' of petunias. In have had both the single and double varietioe
They seem to fill
me
mith and I cannot help but associate them with funerals. Besidies, you cannot touch them without having your fingers smeared with a stichy rubutance. Junti
spoke once of the sumersitition of weade and flowers. I wonder if you have ever heard of the fuchisi. The story is' that When Christ was crucited they wero so
ashamed that they hung their heads and ashamed that they hung their heads avd
have never since raísed them. Howerer that may be, it is a pretty sentiment.
Wero not the woods beautiful when whey were chang ing the.. coloring?
what a joy to walk through them Yelt sometimes as though $I$ could ohout
and dance. Then, again, I would have
 close to mother earth as when a ohlid. ged, but I think I shall have to try it whenvalone some time.
We did not have much time for books in the summer, but had to atoal avay
once in a while with them. I wonder how many of you have had the foea you could write. I have fem that if I only culd writo gomething worth white, some
thing to bring hhere and haughter too thing to bring cheer and laughter to a
poor lonely zoul, my cup of joy would overflow. so much good can be done through the pen. If my name had only
been "Robert" What wthe stevenson, been "Robert" What with stevenson,
Service, Norwood, Burns and Browning. there certainly must be something in a
 best eesays at school is not always an
indication that you will be an author, as indidation that you will be an author, as
it was with Goorge Elliot.
Don't you
 have read it many times. Can not you
fust see Tom and Magkie sitting in the jree 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, unselifh, Lady and


$\qquad$



Senior Beavers' Letter Box. Junior Beavers' Letter Box

THE FARMER'S ADVOCATE.

"Your Barn's, on Fire!"


MILTON BRICK
milton pressed brick compan

## FURNITURE?

Write for our large Photo-illuatrated
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Here is a special Christmas gift offer to our far mer friends, and only good for the month of December. With every $98-\mathrm{lb}$. 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.

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The hard wheat flour guaranteed for bread GUARANTEED FLOURS
Cream of the West Flour (for bread).
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Gream of the West Wheatlets (per 6-1b. bag)..... . 30
Norwegian Rolled Oats (per 90-lb. bag)............ 3.00 3.00
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FEEDS Per 100-lb "Bullrush", Bran
"Bullirush", Midd
EEtrangs White Middlings.
"ETra Whi bag.
1.25

Whole Manitoba Oats
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Geneva Feed (crushed corn, oats and barley)
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Whed Wheat
Gracked Cor
Feed Corn Mea
eed Corn Meal.
even if you purchase five or ten tons. The any reduction on above prices
above prices would be oncarlad only reduction from the Terms Cash with Order: Orders
shipments up to five bags, buyer pays freight assorted as desired. On over five bags we will prepay freight to any station in Ontario sast Sudbury and south of North Bay. West of Sudbury and New Ontario

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Twain ${ }^{\text {The }}$ Lillac Sunbonnet, by S. R.
Crockett.
Ouo Vadis, by Sienkiewicz.
Ouck
more. Three Musketeers,

## The Campbell Flour Mills Company <br> LIMITED

(WEST) TORONTO
ONTARIO
nary glue in a pint of water, letting 1
atand on the stand on the top of the oven until dis
solved. Wash the olcloth thoroughly
 the traffc of the day ceases, go over the
whole carefully with a flannel dippad whole carefully with a flannel dipped in
the glue water.
Choose a fine day for the glue water. Choose a fine day fo
it, and by the morning the glue will b hard, and will have put on ga ine wloss
as good as new. Selected.

## unique hat-pins

I had a set of large and expensive
buttons mo green and white enamel; whicl butcons Mn green and white enamel! which
I no longer acrad to use for the purpogo
for which they were destgned. For for which they were destgned. For
fifteen cents aplece, a jeweler made them firteon cents aplece, a jeweler made them
into hatpins, which proved very acceptable gitts for my young neifese. Acreptend
had a halfodozen very oldtashioned burt handsome but ons made into a shirt waist
set. In many homes there are buttons set. In many homes there are buttons
frtty or a hundred years old, which could
fe turned into small expense.- - Selecected.
a grave error
If I were asked what is the wors
feature about British feeding habits, should point, not to meat-eating or por-
ridge-bolting, nor even to beer-drinking. although I believe all these are harmful
mistakes. I should point to our method mistakes. verould point to our method salads. I do not mean that vegetables should not be cooked at all, although 1 am sure there are very fow vegetables
that are not better for being eaten in uncooked salad form. What I do mean and soda and throwing away the liquor is a grave error, grave because it has
so intimate a bearing upon th heal so intimate a bearing upon the thealth
of the people. To be more explicit, with the exception of beans and peas, vege
tables are valuable to our bodies chiefly -almost entirely-because of the organic mineral substances which they contain.. An 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 ${ }^{\text {a }}$ sauce.

THE KITCHEN SINK
If the cook is not particularly careful about keeping all the meat drippings and
other grease from getting into the kitchen sink the drain
sionally become clogged.
The first thing gged
pens is to open up the screw-plug of the trap. This will be found at the bottom
of the U-shaped bend in the be of the U-shaped bend in the plipe just
under the sink. $D_{0}$ not neglect the preunder the sink. Do not neglect the pre-
caution of placing an old bucket under
this plug before opening it, for all the water that is backed up in the sink will
fow out. If this rush of water flow out. If this rush of water doos
not come when the plug is removed, the pipennard length. This obstruction, of
downw, thick grease probably
cold cleared out with a stiff wire. Clean out
also as much of the upward 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, howeve
in the sing, the obstruction liles further
along in the pipe. Once more unscrew the trap plug to get rid of the backed-
up water. Then replace the plug and
pour into the sink pour into the sink a cold solution of
copperas that has been dissolved in bolling water, one pound to the gallon. If this does not eat through the obstruc-
tion, 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. Trake a short
piece of broom-stick and. holding one end pliece 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 trans-
mitted through the water it obstruction. If this device, too, fails,
we shall have to call In a plumber.we shall have
Suburban Lifo.

## Moving Pictures.

 Memory Film. By AN Contiuued. At the close of the year 1851 myparents left Kilburn and gate, taking a shop in the with to HighAt that period this was still cotreet. village. It was surrounded till called a fields; London a long way off, almost and far away as when Whittincton, almost as mile-stone and listened to the sai on a bow-bells. A "legendary" tone sound of at the side of the footpath on the hill and still more of a legend, the mulime, his wonderful cat, preserved mummy of case, to be seen by customers, accuped a place of honour behind the bar in Inn called after it. Many old cust an were still kept up at Highgate. The stag coaches still ran, and every eveninag punctually arrived from the far ous heralded by the music of the guard's lon, horn. The Autumn hiring of men for reaping and mowing still took men for the High Street. The men arrived from all parts, each with his sickle or sythe They sat on the curb of the footway, which rose some eighteen inches above the road, and there waited for the farmere 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 dis tributed 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 all to fit. They used to drill on the fields, Hampstead way, boys trudging 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. 1 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 narrow country lane-and the engine had a whole troop of boys in his wake. The fire was still smouldering when we arrived,
the engine had to be filled by buckets, 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 as
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! .inls hen a mixed audience or boys and girls annoyed him 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 $\begin{aligned} & \text { other boys, helped to fill the barrows }\end{aligned}$ other boys, helped to fill the barriows
which wheeled the ice to the cellar-top, there to be dropped through, as we now drop coals., Opposite the famous "Gat
House Inn," where in Olden Times every House Inn," where in Olden Times everp-
stage coach (and there were many) stopstage coach (and there were ma sworn in,
ped for the passengers to be swar School
stood the Highate Grammar St 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. betwixt the school and whe they met.
Fights were frequent whe
The town boys disliked them because of

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Moving Pictures: A Memory Film. By AN Contiued. | 5 |  |  |  |
|  |  |  |  |  |
| BY AN OLD ENGRAVER. At the close of the year 185 |  |  |  |  |
| rate, taking a shop in the High Stree At that period this was still called village. It was surrounded by woods and |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  | sausage-rol!, ten almond cakes and a bottle of ginger beer." No wonder that they were nicknamed "Grammar Grubs." |  |  |
|  |  |  | ( Boilsteatily and teet |  |
|  |  |  | Ceremod from the free Next have the | $\left\lvert\, \begin{array}{\|l\|l\|} \hline \text { POUNTRY } \\ \text { COEGGSOD } & \text { CR } \end{array}\right.$ |
|  |  |  | on the eggs and beat. When the mixturebecomes stiff, add the vanilla and thenuts. Drop from a spoon on waxed or |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | tartar, $1 / 2$ teaspoon ginger, 1 tablespoon |  |
|  |  |  |  |  |
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|  |  |  |  |  |
|  |  |  |  | Trememe |
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|  |  |  | 蛽 |  |
|  |  | hopers that ornament the "Royal |  |  |
|  |  |  |  |  |
|  |  |  | boil tutil the mixture will harden whentested in whater. Remoe trom the frefre |  |
|  |  |  |  |  |
|  |  | cealing within its leafy depths the country house of Lord Mansfield, which, as Dickens describes in his "Tale of Barnaby | lit int do not stir: hen pour immediatey |  |
|  |  | Dickens describe," the mob set out to burn during |  |  |
|  |  | (the "Spaniards' Inn," where the 1an |  |  |
|  |  | secretly sent for aid, and so saved theMansion. Many a bird's nest have Itaken in that wood, for I collected eggs. taken in that wood, or pleasure: that |  |  |
|  |  |  |  |  |
|  |  |  | beaten whites of the evess. Beat until light, and when it begins to harden, stir in | No. |
|  |  |  | cornstarch and mould into balls while the corn is still warm. Roll balls in gratedcocoanut. Wrap in paraffin paper until |  |
|  |  | $\begin{aligned} & \text { was dug through the hill, to connect } \\ & \text { Holloway with Finchley, numerous fossil } \\ & \text { shells were found, also sharks' teeth of } \end{aligned}$ |  |  |
|  |  |  |  |  |
|  |  |  | sharp knife carefully slit the dates enough to remove the stones. Cut the |  |
|  |  |  | stones and put in the dates. Press the edges together and rolls in connectionerssusar. Th his is a wholesome and delicious | Free |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  | Frederick w |  |  |
|  |  |  | chopped nuts, 1 teaspoon vanilla. Put the milk and sugar over the frife in a |  |
|  |  |  | take from the fire and add the vanilla | $\overline{\text { Chickens 18c. Per }}$ |
|  |  | pictures " "Little Billy" in Du Maurier's origninal or ortrind Walker was the only artist |  | Crate Fatted Chickens 18 , per per 1. , bleat, |
| he rang to call a |  |  |  | HORACE WALLER, 700 Spadina Ave.$\qquad$ |
|  |  |  |  |  |
| boys and girls annoy |  |  |  |  |
|  |  |  |  |  |
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|  |  |  |  |  |
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|  |  |  |  |  |
|  |  | Candies for Christmas. <br> Packed in pasteboard boxes prettily |  |  |
|  |  |  |  |  |



GOOD CROPS
Year After Year


## Spramotore <br> IL isnt a SRRAMOTOR unless we made it

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 there one may find, perchance, a new or
renewed interest that will mean inspiration to "go and do likewise" when the 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, a ard very rertinent in these days, when the
order of even one short year ago has been
shaken to its fourdations

We may not this year celebrate Christmas in the old way, but, if we cannot
have a "merry" "Christmas, we can, as Eomeone has said, hold "Christ-Mass," And never can a Christ-Mass be held
without a better realization of the Christspirit. Long before the orening of the
war, a ncted journalist, William Fayes Ward, wrote these words: "Christianity is stime struggle between gentleness and
brute force. It is Feace and endurance against pride and revenge. It is the
world against the clans. It calls us, again and again, to the proclamation, 'On Earth the gigantic struggle has come. The
clans have arisen. The international 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 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 o Men.

## OurSerial Story

"THE CHAPERON."

By C. N. And A. M. Whliamson.

(Copyrighted).

Chapter xXVII.
RoNALD Lester STARR'S POINT
I should think few men ever loved more passionately, yet picturesquely, than
loved those two beautiful stepsisters when Tor their sakes I started out upon a crim-
inal, motor-boating career. To have their society, to gaze dailyo
upon their lovely faces, to hear their charming voices, and to find out which girl I really loved more than the other,
1 willingly stole an aunt and then lied about her so often, that eventually
almost began to believe she was my aunt. Perhaps -1 said to myself, when any barking dogs escaped from the kennel of
my conscience to be soothed-perhaps my conscience to be soothed- - perhaps
she had been my aunt in another state of
existence anything about her, to my self or orthers,
by way of furthering the cause; and the game was well worth the candle for the 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 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, Enkhuisen. There it broke upon me out of
a clear sky that my Burne-Jones angel, Phyllis Rivers, loved and was loved by
ann ther; that other, a graven image of a
Vai as she deserved.
Until the blow fell, I had always, half
unconsciously, felt that she was there: unconsciously, felt that she was there;
that if I Inst the incomparable Nell, the
exquisite Phyllis was on the spot to exquisite Phyllis was on the spot to
console me. and she is at her betst as a
consoler. But suddenly at moment
when I was soaked with rain, snubbed by


Albatross, and altos
 but Phyllis in tears proved distracting, She is the one girl I have ever seen who can cry without a def lorable redness of the nose. Tears rolled like rearls over her lower lashes, which are almostas long wordered how I could ever lids, and I another girl more desiiable. Too late for my comfort did she assure meo thate for her orinion, my case was not horeless with Ler stefsister. It was Fhyllis, not the arms of a hated rival (not that fhem minute unless 1 secured tier) ard it was painful that at such a crisis she should
hrow her once unattainable stersister my head.
the motor-boat to our rescue at Urought way. Nell's big hazel eyes lit up at sight a 1 endulum, and I found myself much in he same condition I had been in at first; more indisfensable of the two all, was the this return to chaos did not make for peace of mind, because, though I could not bear to lose either, 1 should be lucky was the worry about Sir Alec MacNairne, ard the danger that he miipht pounce,
down upon us to destroy the fabic ic had so carefully woven. Altogether, the features of Friesland
were not cut with the same cameo-clearness upon my ferception that other farts days holland had taken a few weeks or even days ago, when I was young and happy. partnership, even an Albatross can have its uses. Perhaps, if the truth were known, the Ancient Mariner occasionally fell down and would have broken a bone 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 adroitness which should furnish the equipment of every well-regulated villain. At Leeuwarden, therefore, it was for me

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 for days after that famous handshake
with Aunt Fay's husband which, in his surprise, spun the big fellow round like a vanish with the girls. "Lorelei," re-named "Mascotte"; if the "M," late "L,", had been Brederode' boat, and he had really been flirting with
my aunt through the waterways of Hol land, according to Sir Alec's wild impres to save her from his jealous wrath by giving him the slip. and though at the time it was first sprung upon me by Sir Alec, I was angry with the inconvenient sense of justice forced me to admit atterwards that it wasn't exactly
the kind of thing he could have confided to me of all others. his heart, and peppery sootsman opened of Aunt. Fay's mysterious disappearance feather floating in my direction could
have knocked me down; but I hung on to have knocked me down; but I hung on to
my captive uncle all the same, while I large, and my corner of it in particular.
I told him it was nonsense to be jealous 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 firt 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 I had to admit knowing, since ssured Sir
have been sen together I I astec that, if he could hear Rudolph talk
Ald in a friendly way about my aunt, he wouldn't have the slightest uneasiness.
Finally I made the fiery fellow confess and
ost innocent in the world, like all her
affairs". Was affairs" was not with bredercde but
with an Englishman, an off cer in some that he had scolded his wife. Fe said
that she had "answered him back," that there had been "words" on both sides,

a bunch of roses at him-middle-aged,
wet-footed roses snatched from a vase wet-footed roses snatched from a vase
which happened to be handy. That he
that called her a minx; that she had had called her "beast"? that he had
retorted with the room and then out of relorked out of the room and then out of
stalked
the house, slamming doors as hard as he to apologise, but to make up at any price, it was to find her gone, with her maid
and several boxes, leaving no address and several tracked her to London, an eventually-as he believed-to Paris
that while there he had seen a newspåper paragraph announcing that Lady Mac-
Nairne-was traveling through Dutch waterways on a motor-boat belonging to Jonkheer 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 inquiries concerning us were to be "Lorelei" had been lost. I replied that it was probably a mistake
made by some journalist, and made by some hournalist, and that Lady 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
and Brederode were together to-night, and "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 on; and that also was strictly true. "But," escape, "I can look him up, if you like, 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 now 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 wauld not miss him, said I. And his disappearance proved nothing. There
were those pretty Frisian girls that he
Sir Alec-had been protecting when 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 risian girls, but English or American
ladies he had met in Amsterdam, convinced Sir Alec that they were strangers my promising to find Brederode, who was certainly - I said -stopping in the town, boat to Leeuwartlen. I was to question brederode in a diplomatic manner, and launch 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 Leeu-
warden, 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 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 her fat chaperon, "Waterspin," of having attempted to glide past his in the night,
he would give chase, and see us on board "Mascotte." For this reason I was for the night, and I advised him to go How long shall you be," he asked
$\qquad$
$\square$ 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 the way we gave him the slip, flying by and, I hoped, beyond his reach at the
same time. 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 instead of morning, and to have spent the
time till evening in seeing sights. But all time till evening in seeing sights. But all
was changed now. Luckily Alb (who is
an costs) could conscientiously inform the girls that Groningen's principal attrac-
tions might be seen in a couple of hours. cab to be got, I having bribed the driver the girls looked reproachfully, when they largest market-place of Holland, five for by diplomatic Erasmus, two to search 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 leasc, am innocent. I
have noticed this since boyhood, the phenomenon being most conspicuous when 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 the well-known cigarette is seldom lack-
ing; 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, the guilty desire to escape.
As for me, I hid my rage at the legal no faster than a man can walk." Under fears, never starting perceptibly at "any 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 happy many families of children on board
the lighters we passed by bestowing upon
them toys and strange sugary cakes them toys and strange sugary cakes
bought at Leeuwarden Kermess. Not all
the lighters had children, but those that the lighters had children, but those that If I had been given my way, only the
pretty children and those who did not pretty children and those who
whoop should have got presents; but the
extraordinary lady who plays the part of aunt to me, and chaperon to the Angels, 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 I shut my eyes. I should like, by the her big blue spectacles; but she says they s a merciful dispensation.
Her mildest hints, as well as her commands, are the seldom insists, she
and the
nagnetizes. 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 someIt 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.; said I, '"and if, after he'd been given the
lip, my peppery Scotch uncle tumbled to the idea of 'Lorelei' and 'Mascotte' being

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OTHIT

 which would hyllis tet me me hols. The he monond mand
hadn' we the harpy if (4) passed a few dignified mand fiter we hadnt been and ane made me happy if it in

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Nalm,
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[^0]

##  <br>  <br>  in the woods, others rose gloomily out of the sweet simplicity of a hayffild, but each contrived to give the effect of a miniature Stonehenge, and had there been only one monument instead of threre, it would have been worth the trouble we ito It would have been worth the trouble we took to see it Besides, uru expedition was rewarded in another way When we returned to the boats after breakfasting at a cate in the woods, it was to hear that a motor-launch, patriotically bearing the name of " WWilhelmina," had gone the name of thelmina," had gone by, faster than the legal limit, as if in haste to reach Mepel. According to Hendrik <br> 

 fitfully, dreamily? Ahe talked with mingasking asking myself whether the imauld of the
Viking, tid not come blundering o the
Phyllis's Phyllis's volot cetes and mine, when whe
seenined to look sweetly at me? But it was the sort of evening when one
thoroughly enjoys beeing restless and un-
happy and I reveled hapy, and I reveled in my pain.
Lithe yellow birds, yellow as the lilie Which made a blazing line of gold between
green reeds and amethyst water, flitted
fearlessly about the the


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from one of our record cows.
ones, very desirabler stows.
Two some som younger
And lambs and



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## Veterinary.

## Partial Paralysis.

Sow that would have been due to tar-
row on Dec. 11, aborted on oct. 2 and and
for on two woeks atterwards appoared great.
for for two woeks atterwards appoared. great
ly emaciated and unable to stand.
She has improved some, but staggers about in a weak and drunken manner. She
is fed bran and ehop twice daily, and
roots at noon. Ans,-She is partially paralyzed. Mix
equal parts of Epsom salts, sulphur and equal parts of Epsom salts, sulphur and
powdered charcool, and give her a tablespoonful twice daity in her food it this
causes her to purge, lessen the dose. causes
Simply
Sim to purge, lessen the dose.
give her guffcient to keep her bowels loose. In addition, give her five grains of nux vomica three times dally.
If she recovers, it will be wise to fit her for the butcher rather than breed her
again.

Fatality in Calves.
Last apring two of my calves bogan to
cough They were treated tion of the lunge. They aloo hammarrhee. Their appotite remained good, but the cough continuedo The suoce bome very
thin, and died in two monthe thin, and dea in two months. About a
month ago another call began to cough montr a ao another calt began to cough
I traated the same as the others, but he also died. I have six calves left and they are
diaw coughing, but have no
diarthey eat and drink well.

Ans,-It would require a careful post motrmexamination to enable a man
dotermine with certointy the cause death and nature of the disease. Th
symptoms indicate hoose, which is caus symptoms indicatio hoose, which is caused
by a parasite which gains entrance to the
lun lungs and bronchial tubes through the circulation. It is not contagious in the
ordinary manner, but the parasites dis charged from the sick may be eaten b
the healthy and cause the disease
He Che healthy and cause the disease.
Hence all affectod animats should be
isolated in comtortable buildings. Treat isolated in comfortable buildings. Treat-
ment $\begin{gathered}\text { is } \\ \text { motten unsuccesssul. } \\ \text { Inhalatations }\end{gathered}$ of sulphurous acid are highly recom-
mended.
This is is done by closing the mented. This is done by closing the
patients in a colose compartment and
burning sulphur so long as you can stand burnhng sulphur so long as you can stand
the tumes, then opening a door or win-
do dows to admit air. This may rese rest
peated once weekly as long as necessary Another method of treatment is the ad-
ministration of oil of turpentine, about dessertspoonful in about six ounces
raw sinseed oil once daily. The fumiga-
lion gives the best results, Miscellaneous. 1. Cow bloated badly in October. I
puncturad her with a knite, which save
rolliet, but gas continued to sogn through the wound. She became consti-
pated, and I called my veterinarian, who pated, and I called my veterinarian, who
treated her and she got better, but gas began to escape again, and a little pus
also oscapes. Her appetite is good and she chews her cud, Fut I have to give
her nurgativee her purgati
constipation.
2. Mare in good condition stocks in a run-down horse.

the rumen, then and muscles to expose wound in it and then stitch muscles and
skin, but probally the better way would
hen be to dress the external wound three
times daily with times daily with a fiveper-cent. solution
of carbolic acid, and if the wound ro-
to fuses to heal, as probably it wind, en-
deavor to for her for the butcher.
In the meantime of course, bive sulficien
laxatives to prevent constipation Laxatives to prevent constipation. When
a sinus like this torms atter puncturing
with a knife, it often refuses to heal unless healing takes place promptly. ot
course, a veterinarian can operate as
cont and stated, and you must decide what will


 Sale will commence at 1 p.m. shar

4
H. SMITH RICHARDSON BROS.

## Dispersion Sale of 32 Head Shorthorns

## Tuesday, December 21, 1915

 At Bellevue Farm, London, OntThis offering comprises nine Cruickshank Duchess of Glosters and four
Buchan Lassies, as well as representatives of the Beauty, Barriint Buchan Lassies, as well as representatives of the Beauty, Batring and four and
Prinecs. families. Imported bulls have for years headed this herd. They
areall well bered.

All live stock and farm implements will be disposed of at the same sale. TERMS-Six months' on bankable paper; $6 \%$ per annum off for cash.

The farm is $21 / 2$ miles from the G. T. R. Station and 10 minutes' walk
from the end of the North Richmond car line. Conveyances will meet all rom the end of the North Richmond car line. Conveyances will meet all
fisitors from the morning trains at the Grigg House.

CAPT. T. E. ROBSON, Auctioneer, London, Ont. T. F. KINGSMILL, Prop., London, Ont.

## ABERDEEN ANGUS <br> Calves Sired by

ce Bravo imp. 4503

 | Come and make your own selection from a large herd. |
| :--- |
| $\begin{array}{c}\text { CLYDESDLE TEMMS } \\ \text { Prices Reasonable }\end{array}$ LARKIN FARMS $\begin{array}{c}\text { Correspondence solicited } \\ \text { OUEENSTON } \\ \text { ONTARIO }\end{array}$ |

Robert Miller pays the freight, and in addition he is offering a roan 2-year-old bull that hap
bull, first the only time been beaten, robed direct from imported stock and a a rand sire. A A year



Blairgowrie $\begin{gathered}\text { Special offering for } 30 \text { days at reduced prices to make room } \\ \text { for stabling. } \\ \text { Bulls of serviceable age, young cows with }\end{gathered}$


## 

Spring Valley Shorthorns
Shorthorns wictix numw mon woum ored in $p$ ire Scotch, as well as the greatest milking blo I have the most fashionable blood of the
boice Yorkhires
 John Elder \& Sons, Hensall, Ont. $\begin{gathered}\text { to. a day } \\ \text { grand quality } \\ \text { to } \\ \text { lo }\end{gathered}$

## SHORTHORNS and SHROPSHIRES




ring calibre. \& SON,
GEO GIER \& SON. HAY P. O., ONT
21 SHORTHORN BULLS and as many heifers for sale.
SHORTHORNS YORKSHIRES SHROPSHIRES We have a choice selection in young shorthorn bivis.
ram and ewe lamos
WR

G. M. FORSYTH, morth Claremont, Ont., C. P. R.
.

SHORTHORNS AND SHIRES
 Dplend
OHN GARDHOUSE \& SONS, Weston. Ont. C.P.R., G.T.R. \& Electric Railway L-D Phone.

THE FARMER'S ADVOCATE.
$\underset{\text { Miscelloneous. }}{\text { Questions and }}$ Miscelloneous.
War Tax.
th a man living on a rented farm in
the Cunty of Victoria, obliged to the Provincial vict Coria, obliged to pay
lo it the landlord's duty War Tax, or Ans.-If the lease reads that the tenant
must pay all taxes, then the teen must pay all
gnitiled to pay.

Ducks.
Would you please let me know, througl
"The Farmer's Advocate," color of Indian Runnecres. ducks In right there
any breed of ducks pure any, breed of ducks pure black with
mhite breast ? ence between pencilled mow indian the differ
ducks and the onther $k$ In miner Ans. -Indian Runner ducks, according to
Standard of Perter
 and-white head, groenish - yellow beak
dark-brown eyes, white neck, fawn-and dark-bown eyes, white nek, rawn-and
white breast, fawn shoulders, and even, tawn back, with a white body and fuuff
The shanks and toes should be The shanks and toes should de orange
red.
The tail of the drake is bronze ree. The tail of the drake is bronzo
gren, and of the duck light tawn
Would advise you to get in touch
 duck
duck.

We have a Heaves. 12 -year-old mare, 1,600 Ibs., a Pree worker. but thas maent trubbled
with heaves for some time and has be come worse. She almo has a cough
Can you kindly tell an you kindly tell me, through your
valuable pappr, what may relieve this?
She is supposed to be in foal. due ent
 Can you also tell me how to make tar-
water tor horses to drink Ans.-This mare seems to have heaves case, the trouble is generally upon as incurable. The trouble can be mg and driving. Careful feeding, water-
Feed only the the qualty of feed; shake the duat out ot all teed with lin lime water. jelore feeding, allowing aty alway water pailful at a time, and avory an ordid driving tast
orst
pulting
heavily pulling heavily just after a meal.
Smaller quantities of hay and should be ted.

## Forging.

agy drinst the the horse strikes the hind shoe
tront then travell
kgainst he front when traveling. Is
this forging or clacking it called? ? in fis just a habit? If so, how can it be remedied?
2. Can the horse be shod to stop this? IT so, howse be shod to stop
Ins.-1 And
SUBSCRIBER. hns. -1 and 2 . We have sen several
horses with the minor defect shown this animal, which is generally called
torging. Carefulu shoecing oftect, and yourtur bhocing may have some
ofkmith will be able
to tell to tell you how to shoo the horse. The
hind shoe strikes underneath the uniet If he can sont shoe and makes the click. you will have no more to probevent thit diis-
terent cases require different treatments and the shoeing-sinitith acifecustomed treat to yonts,
horrse will anyone else in a better position thai
such you explain be called. We advise that
himerer to him and let
hee how the horse gees. A bad fault at all, and it may be that
the horse cannot be so shod as to altogother prevent it
 you ought to be fully informed as to the extent to which agasolene engine would
help you toward more profitable farming. Information
power on the farm. 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 mat . We mell FARM POWER INFORMATION bUREAU Limited.
1143 King Street West, Toronto


## Escana Farm Shorthorns

 pedigree and prices. Mail orders a specialty, satisfaction guaranteed. Burlington P.O., Ontario
MITCHELLL BROS.

## 20 IMPORTED BULLS


 Burlington Jct. G. T. R.
J. A. \& H. M. PETTIT Burlington phone or telegraph. Freeman, Ont 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
Will A. Dryden, Maple Shade Farm, Brooklin, Ont. GLENGOW SHORTHORNS
For this season's trade we have the best lot of young bulls we ever bred. Wedding
Gifts, Strathallans, Crimon FIowerg and Killean beauty, gired by Broadhooks Prime
These are athick, mellow, well bred lot. Heifers from calves un.
These are a thick, mellow, well bred lot. Heifers from calves upl COLUMBUS. ONTARIO
WM. SMITH \& SON. Rosedale Stock Farm orfers for quick, sale at low prices one 2 -year-old Shire yearling Hackney stallions, both imp. and bothth first at Toronto. One Hackney pony horose foal dame
champion at Toronto Two Clyde. horse foals, sire and dam imp. Ten Shorthorn bulls. A few
chan

PLEASANT VALLEY FARM SHORTHORNS

SHORTHORNS AND CLYDESDALES


## 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 If you have not yet installed a gasolene engine, take advantage of our Free
Inforration Bureau-we maintain it for the spread of knowledge about gasolene

You can write freely, unreservedly, telling us about present conditions on your farm. We'promise you that your conidences will be respected, and we't likely be
able to give you valuable information. an engine some ot 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
after it's bought. We have made a deep study of the farmer's requirements-and whether it's an

The Page Wire Fence Company

Plaster Hill Shorthorns
 these some choice thow animala, Prices right. F. Martindale \& Son, Caledonia, Ont Lynnore Stock Farm

Pure bred Dairy Shorthorn Cattle
Pure bred English Berkchlire plese
Pure bred imported Clydeedale hotreae.
F. Wallace Cockshutt, Brantiord

Glenlea Shorthorns

 Prices easy for quick sale.
John McLean \& Son, Rodney, Ont. Shorthorns high clase young bulls from 7 to.



Stewart M. Graham
Long distance Phone, Lindsay, Ont. FLETCHER'S SHORTHORNS
 $\mathbf{S}^{\text {HORTHORNS, buls, females, reds, roans, s.ize. }}$
 easy. Thomas Graham. R.R.3. Port Perry, Ont.
 dams, cows and heifers due to calf in March and
April at trices that will please the buyer.


## Cotton Seed Meal

H. Fraleigh, Forest, Ont. HOLSTEINS
cisexy

## Pedigreed Hols

ufrozows frams

## 

Questions and Answers. Miscellaneous.

[^1] would how much lumber and cement trocks house (each block being i6 $\times 8 \times 8$ ), two
floors ? Ans.-1. When wómen go out by day's
work they usually work from eiight to five or from nine to six. of course,
living in the home and working by the month the houme ane working by the
governed usually by agreement and are
at the governed usually.
time of hiring.
2. Have your contractor figure this un
or you. We side finishing. etc., so could not possibly
do it 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? $\begin{gathered}\text { I fought her } \\ \text { I bit }\end{gathered}$ Cor tourteen years old, and she does not
ceally look any older. She seoms at all round, and oher. She she seems stiff
ting, and slow when seen trotting, and slow at that, for about five o
ten minutes, she begins to sweat. ten minutes, she begins to swat. By
the time she has gore about half a mile
she is white lather. She wan't trot it she is ,white lather. She won't trot
she can help it. She is worked very little on account of that. I don't kno
what she did before 1 got her, whic six months ago. Her teeth are worr
down very thin you tell me what makes her do so, and
what 1 could do for her ?
E. B. Ans. - We should not wonder but that
your mare is have her teeth atierded to, and also have
your veterinarian liook her over for the
cause

## Feeding Oil Cake and Cabbage.

 1. I bought oil eake in sacks of 32lbs., and it was pressed.
I have or soften it I poured boiling water on
it.
Only must be s
mashing.
2. What is the feeding value of cab-
bage for milk
bage for milk? Has anyone had any
experience alone this line
 onceake, wro parts hran, and ten parts
brewery grains?
T. .J. o.


$\square$


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 We Pay express and postage. Prompt return
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 Ibs. butter in 7 days.. Write for catalogue.

HOLSTEIN CATTLE



RIVERSIDE HOLSTEINS
Herd headed by King Johanna Pontiac Korndyke, a grandson of Pontiac
Korndyke, and a brother of Pontiac Lady Korndyke, 38.02 lbs. butter
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

$\qquad$
Ourvilla Holstein Herd If yua are starting a herd, of wanting to imporove one

Evergreen Stock Farm-REGISTERED HOLSTEINS Present offering; Several bull and heifer calves, also a few yearling heifers
and ready to bred. Write for prices
and descriptions. Bell thone.
A. E. Hulet, Norwich Ont.



and lis. sire was the great Sir Admiral Ofmsby. Also a few females.
PEETR MITH. R. R. . No. 3. Stratford, Ont. $\quad$ Stratford or Sebrimeville. Stations.



R


Idest House in Canada mpt returne.
Street E., TORONTO
ispersion Sale of olsteins
, 22nd, 1915
$\qquad$
EO. KILGOUR, Prop.
ATTLE
$\qquad$
HAMILTON, ontario
LSTEINS
lyke, a grandson of Pontiac
rndyke, 38.02 lbs. butter
Caledonia, Ontario

$\qquad$

$V$ BroS., Aylmer, Ont. ERED HOLSTEINS
0 a few yearling heifers bred Iulet, Norwich Ont.
$\qquad$
just now arr som cinoice young Bulls
d dams and sired by Count Mercedes
and a 21.06 lb . 3 -year old daughters,
ales.
$\qquad$

Segis Walker
OSHAWA. ONTARIO
dechamber 16, 1915


Insist on "GOOD LUCK", Brand COTTON SEED MEAL
IT to 48 per cent. Proteln
MAKES RICH MILK
Crampsey \& Kelly $\begin{gathered}\text { Dovercourt } \\ \text { Road }\end{gathered}$ Torento


Lakeside Ayrshires

| GEO. H. MONTGOMERY, Proprietor |
| :--- |
| Dominion Express BIdg. Montreal, Que. |
| D. MCArthur, Mgr., Philipsburg, Que. | $\frac{\text { STOCKWOOD AYRSHIRES }}{\text { Sir., Philipsburg, Que. }}$ | Whitehal! king of Hearts, Imp.. for sale are, in |
| :--- |
| calf heifen, ind yonng bulls, out of Imp. and big |
| D. M. W.it. Sroducing cows. S. O., Quebec | Alde:ley Edge $\frac{\text { J.R. KVVNEDY, Knowlon, Oue }}{\text { High Class }}$



THE FARMER'S ADVOCATE


Second Annual Consignment Sale
AYRSHIRE GATTLE
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
caws that have either qualified or are now running in the R. O. P. test. A caws that have either qualified or are now running in the R. O. P. test. A 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.
TERMS Cash or credit up to 6 months on bankable paper, with W. W. BALLANTYNE, Stratford, Ont. JOHN McKEE, Norwich, Ont.
$\qquad$ MOORE \& DEAN, Auctioneers.

CITY VIEW AYRSHIRES
 JAMES BEGG \& SON R. R. 1, St. Thomas, Ont. AYRSHIRES Excellent chance to secure good two
Two young cows freshen in fanuary.
Several young bulls, heifers and calves. Melrose Park Farm S. SEDMAN, Manager, PoRT Hope, ontario


SUMMER HILL OXFORDS

## Three Score and Four

64 years is a long time A product that can hold the popularity of the entire Dominion for 64 years must be meritori-ous-dependable.

## Eddy's Matches

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.

Rolle
The
Ground Better

## ACORN IRON

而
The Metal Shingle \& Siding Co., Ltd. preston, ontario
Pedigreed Tamworth Sows HEROLD'S FARMS Beamsville, Ont. For Sale:- Ohio Improved Chester White
Swina. The oldest established reegistered herd in
Canada. Pairs
Pairs furnished not akin 6 to 8 weeks old.

|  |
| :---: |
| nworths. both sexes, all ages, 150 head to choose <br> m. Choice Shorthorns, 3 extra fine red roan bull es, 8 mos. old, dandies, also cows and heifers of <br> deep milking strain. Charles Currie, Morriston |
|  |
|  |
| all ages for sale. Before buying, write for prices. JOHN W. TODD |
|  |
|  |

THE FARMER'S ADVOCATE.
seeking. Salt, pepper, mustard, etc.,
act as appetizers, and may be given with
the mash.
6. Would advise that the hens be
given their grain in litter, so they will
have to scratch for it for their break-
fast. Feed their mash or soft feed at
noon, and grain again in the evening,
placing the latter feed where they can
secure it easiliy. It it 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 hun-
gry 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 re pods on one of my rose bushes whioh re-
semble raspberries, and they are full of
seeds. Ans.-1. Walnut trees are planted when one or two years of age, pleferably when 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 The
young trees are very tender, and should be supported by a stake to prevent
waying. A strip of cloth is used to nake the tree fast to the stake. Any
other tying material might injure th 2. The growing of roses from seed
not so easy as one would suppose, not so easy as one would suppose, fo
one can never foretell how long it wil
 the autumn, the seed freed from it covering, and planted at once. The
may germinate the following spring, or
not till the succeeding spring By ing the hips in warm water for a tim they will ferment and the seed can be
rubbed clean. The seed should be plat ed at once, either in a well-manured bed
ent out of doors, or in flats in a cool green-
house. 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
lant in the spring.
Mare's Leg Stocks-Ferrets. she appears to be in perfect health, but
when she sears old and when she stands in the stable all, night
she stocks in one hind leg. When put she stocks in one hind leg. When put
to work it nearly all disappears.
2. Also, atter taking a drink she coughs two or three times.
3. What are ferrets? What size are they, what are they good for, and wha
are they worth? Some tell me they for hunting, and that you can send are them
into a hole and thay hing in it. Is that so ? J. H. only for 12 to 18 hours, then on bran ginger. Feed bran only, and give water
from which the chill has been taken, until
purgation ceases. Give purgation ceases. Give one dram iodide
of potash night and morning for of potash night and morning for twelve
days. Feed lightly and give regular ex-
ercise crcise some horses are so predisposed
$t_{0}$ this condition of the legs that it can-
not be prevented, except stant and regular exercise, while in

$\square$



Farnham Farm Oxford and Hampshire Downs
Flock Established in 1881 from the best flocks in Ensland.
 lambs; few superior Hampshire yearlings and ram lambs. All registered.
Prices reasonable. HENRY ARKELL \& SON, Route 2 GUELPH, ONT. Shropshires and Cotswolds for Sale- Yearling rams and yearling ewes, i fem Claremont, C. P. R., 3 miles Pickering, G. T. R., 7 miles $\begin{gathered}\text { JOHN MLLER, Claremont, } \\ \text { Greenburn, C.N.R., } 4 \text { miles }\end{gathered}$
 SHROPSHIRES ${ }^{\text {that have produced winners at Toronto for the last } 3 \text { yearo. }}$ highest quality. J. E. Brethour \& Nephew, Burford. Ontario

## Yorkshire Pigs

AGES FROM FOUR WEEKS TO SEVEN MONTHS. Strong growthy individuals from well bred sire and dams. Inspection invited. Address-

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Cloverdale Large English Berkshires!
 Yorkshire Salle Do It Now. Make your choice. SPECIAL PRICES from Nov. 18th. to
All ages and sexes. Dec. 18 th. Will pay one way fare on purchase of $\$ 60.00$ and over. Wm. Manning \& Sons,

Woodville, Ont
Spruce Lodge Stock Farm-Shorthorns and Leicester Sheep
 ewcastle Tamworths and Shorthorns Boars ready for service. Sows, due reed and a lot of both sexes ready to wean. Descendants of imp panrow, ocmpinionshnip stock. Several
ctra choice young bulls and heifer calves, recently dropped: grand milking strain, 2 bulls 5 and 8 ELMHURST LARGE ENGLISH BERKSHIRES


DUROC JERSEY SWINE, JERSEY CATTLE


BERKSHIRES
ADAM THOMPSON,


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makers of saws to discover the need of such a saw-and the first to Can get the drices 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 weve
been able to include so many splendid features in this low-priced saw. Here are a few
of the outstanding ones; uavy angle steel bars, well braced and strongly bolted; $A$ shaft box that All this for $\$ 19.00$, with blades exlra a faclitate handling long poles;
ind

| for $\$ 19.900$. with blades exira as follows: |
| :--- |
| 20-inch |
| 2 2-inch |
| 3.25 |

 26-inch
28-inch
30-inch

The Page Wire Fence Company 1143 King Street, West, Toronto


## MBER 16, 1915

## CREAM <br> Where are you shipping now? And what are you getting for your cream? We w <br> We want more individual ship- <br>  <br> Sliverwoods Limited <br> ondon, ontario <br> CREAM

We offer highest prices for churn
ing cream. Write us for quotations.
SANITARY DAIRY
H. W. Newhall, Mgr. ST, CATHARINES

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Pvor exprese, furrivehes cans and Pay Highest Price.
White for particulare.
Sarnia Creamery Co., Ltd.

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| You buy a cow on the strength of past per- |
| creamery you patronizo, the same test |
| shipping to us, get our prices for the |
| netrummer and convince yourself that it will |
| now. Cans furnishec. Ex- |
| PALLEY CREAMERY, Ltd., ottawa, Ont. |

Brant Creamery
Brantford, Ontario
Guarantees to you a high-priced marke
cream every day of the ye
Write for our book.
Reference: Bank of Nova Scotia CREA M ! Mr. Shipper, Reasons why you ahould send your cream to us
I We aim to pay he hishost prices.
2. We give you a square deal.
 The mararet prompticates in making remittances.
Write us for farthe ad rad advance. Act now Write us for further particulars
TOORONTO GREAMERY LIMITED
Church

## CREAM

We pay express charges and furnish cans.
$\begin{gathered}\text { Remit promptly } \\ \text { make. Wrake all } \\ \text { mate }\end{gathered}$ you can THE BERLIN CREAME, Canada

## RAW FURS

Hishest cash price paid for raw furs. Oid-
esthetrade. Write for price list and tagg

- FREE. C. H. ROGERS, WALKERTQN, ONT.

Woodville, Ont

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 of farms and city properties for sale or exchange.Send to us tor our catalogues-F Free. Ahamber of Western farms to exchange for
Ontario prop rty. Tell us your wants. The western real estate exchange,


THE FARMER'S ADVOCATE
2037

## Trade Topic

 SUITS free !Remarkable Cloth that Won't Wear out pair of pants absolutely like a suit or astounding offer is being made by a well known English firm! They have dia covered a remarkable Holeproof Cloth You can't tear it! Yet it looks just the same as $\$ 20$ suitings. Yoi can't wear it out no matter how hard you hard grinding work six months of solit 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, only $\$ 2.25$ for a pair of pants, sent to you all charges and postage paid, and guaranteed for six menths' solid grind-
ing wear. Now, ing wear. Now, don't think because you markable cloths, for you simply send 2- cent postal card to. The Holeproo
Clothing Co, 56, Theobalds Road, Lon Clothing Co., 56, Theobalds Road, Lon
don, W.C., Eng, for large don, W.C., Eng.; tor large range of pat
terns, easy self - measure chart and tash tons. These are absolutely free, and at once I Mention." "The Advocate."-Adve

Balkan Nursery Rhymes (By Sir Owen Seaman, in Punch.) (After Tennyson's lulahy' in "See Dreams.')
"What does little birdie say
her nest at break of day"?
What does Hittle Ferdte say In his tent behind the fray? "I shall lose my head some day Ferdie, wait a little longer And And your nose a little longer-
You shall lose your head some day.

What does little Tino say In his chamber, Athens way? "I me "a, says rin the Tino, what of Salonika? Though his fides may ke Groec For the sake of Salonika

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'm a loser either way."."

The Spice of Life. Miss Coy-Oh, what beautiful flowers!
There's still a little dew on them. but I'll pay it to-morrow.

The teacher of natural geography di rected all her pupils to write a definitio
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., when sending $\$ 4.50$ for thrce ye scription, encloses the foilowing |
| :---: |
| ur paper takes me away, w the good old times I had, |
| hen the men would |
| nes I'd ride the ! upon the plow |
| e good old days, tho' |

## LISTER $\begin{gathered}\text { casouns } \\ \text { ADO } \\ \text { Cis } \\ \text { Engines }\end{gathered}$


R. A. LISTER \& CO., LIMITED, TORONTO



## Farmers and Lumbermen!

 about them. Nearly every one knows the Hastings Sleigh to be the best made, easiest running and THE HASTINGS WAGGON COMPANY, Watford, Ontario




[^0]:    ## Mention The Advoca:

[^1]:    Free Martins Breeding.
    We have had several inquiries at this
    once 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 Innuiries Ans.-A heifer twinned with a bull generally proves barren, but in rare cases
    they have been known to breed. Such they have been known to breed. Such
    a heifer which fails to show ostrum is called a free martin. The bull is gen
    erally a sure breeder. Women's Hours-House Material . What are the hours for a woman
    in Canada to work per day?
    2. How much

