PUBLISHED EVERY WEEK. ${ }^{6}$ §1.50 PER YEAR.


A'Griculture, Stock, DAilky, Poultry, Horticulture, Veterinary, Home circle.*
Vol. XLVIII.
LONDON, ONTARIO, JANUARY 23, 1913.
No, 1061


CRAND TRUNK RDIWWAY
CALIFORNIA
MEXICO
FLORIDA

THE SUNNY SOUTH The Grand Truk Rallimy in the moon
 Only Double Track Route Round trip touribe tichemite.


Send your Raw EUBSto John Hallam
等 PREO:
 Dita

## The Success of This Engine Has Amazed Competitors

IN the early part of October. 1912. we we were placing on hhe makret therigh

The older manufacturers of gasoline engines merey smiled at our announce ment. Another make of engine amone te neticed. ceedidg diverisemens appeared and the interest of farmers in the Renirevev Stan
dard engine continued to
grow as much talk was created by the Renfrew Standard exhibits at the big Fall Fairs, as reports from agents in the field kept com-
ing in saying that they were losing many of their prospects who were buying the
Renfrew Standard engine, the long estabRenfrew Standard engine, the long estab-
lishod manufacturers woke up to the fact lished manufacturers wore up to the fact was successfully invading the field.
We must confess that the success of
the Renfrew Standard engine has exceeded even our most sanguine expectations. Bu
considering the remarkable perfection to which this gasoline engine has been brought-the many improvements it posgent Canadian farmers have given it such a royal welcome.
Standard gasoline engine is the Renfrew handsomely illustrated booklet. You and every other progressive farmer will want of gasoline conthe for sale in best type ENFREW MACIMNDA Without obligat
mail me
Renfrew Name.


RENFREW STANDARD

Strongly and substantially some. Simplicity. compactness and accessibility are outstanding reatures. Parts are so perfectly balanced that engine does not jump or crawl. Needs no fastNeeds little water for cooling Has no pipes. frittings or valve o leak or freeze, no cooling pumpls or fans to get out of order.
Stiarts easily under all weather
sensitive that it controls engine sensitive that it controls engine
perfectly, and the speed of the
engine can be varied at will engine can be varied at will Carburetcr is of simple construction and proper proportion
to make a perfect mixture.
Valves so arranged that gases
explode as perfetly explode as perfectly as a carThese and other features fully
described in our engine booklet sizes range from engine booklet.
in semi-portable (as illusth.-p. The governor, which is. the in semi-portable (as ithustrated)
Dall steam engine type, is so
stationary aud portable type The Renfrew Machinery Co., Itč. Wrile us about

## STUIIP EXTRAGTOR

II ycu are troubled with etumpa, give ormp Emrope for the past three yeare ith die greatest success. By ita asaitonoce, two men will do the worl of three for felling trees.

Werts us mor Ditame
The Camadian Boving Po, Ltd. 164 Bay Street, TORONTO

CEREMOL
well-balanced Molasses Fe FOR BARYY CATTLE

Made by
The CHISHOLM MILLING CO., Ltd Toronto, Ont.
$\qquad$
RAW FURS
Ship your furs to a reliable firm, where you can depend on reocoivset pricos. Write at once for J. YAFFR

72 Colborne Street
TORONTO, ONT.

## HUITERS \& TRAPPERS

We are the largest buyers of raw highest cash prices. WRITE AT ONCE FOR PRICE LIST AND
A. \& E. PIERCE \& CO.
sot St.Paul St.,cor.St.Peter.Montreal,P.O


No ruts on this or any other concrete road

## You Can't Wear

 Ruts in a Concrete RoadConcrete is the Ideal Pavement for either town streets or country highways

## CONGRETE IS "RUT-PROOF"

TO REALIZE WHAT THIS MEANS, it is only necessary to compare a piece of dirt or Macadam roadway with one that is built properly with concrete The roadway shown in the illustration is typical one of its kind. You can see one just like it in almost any Canadian Community. Take a look at the one nearest you. You'll see a big double rut down the centre, made by the vehicles driven there to escape the soft, oozy surface on either side.

There's a reason for that double rut down the centre. A Macadam road when originally laid, must be constructed with a high "Grown," so that the water may drain off properly on either side.

A Concrete road, you'll notice, is not built that way True, it has a slightly sloping surface, a certain amount of "Crown", but very little is necessary, because a concrete surface drains so much more easily than dirt.

The high crown of the Macadam road forces all vehicles to drive in the centre of the road. From the very day the roadway is ready, every wagon takes the middle of the road; and every one that forlows, ollows in the ruts thus started. rying the total traffic that passes over that road. Everybody takes to the ruts.

Now see what happens when the road is of concrete. The slope, or crown, of a concrete road is so imperceptible that there s no need to keep to the centre. Vehicles, therefore, use the entire width of the road. The traffic is distributed over the whole surface.

When you drive along a concrete pavement, you'll find no ruts whatever. Concrete doesn't give them a chance to get started.

Concrete roads are not an experiment. They have been proven the best and, in the long run, the cheapest of all roads.

Wind and rain, instead of making mud-pools and ditches, only serve to keep them clean enough to serve as a pathway for pedestrians.

Concrete roads save the farmer's money by allowing him to haul bigger loads, in faster time; they are never impassable when he wants to hurry in with a load of produce to catch high prices.


Driving in the rut. Where else can you drive?

For further information address: PUBLICITY DEPARTMENT

## CANADA GEMENT COn, Limited, MONTREAL

Concrete roads save the public money, their cost of maintenance is so low

Concrete roads are within the reach of every community-the first cost is very little more than that of a good Macadam road; the ultimate cost is infinitely less,


The cost of maintaining 33 miles of concrete road in Wayne County, Michigan, does not exceed $\$ 6.00$ per mile per year.
FI It costs Peel County, Ontario, $\$ 900.00$ per mile to maintain Macadam roads for the same period.

120


THE SAVIMG HABIT Should be acquired early in life-your
future years will then be provided for. There is no better way than through Endowment Assurance.
A small yearly payment will provide
a fund to meet future wants, and dura fund to meet future wants, and dur-
ing the payment period your family is ing the pay

THE FEDERAL LIFE
ASSURANCE COMPANY
Hamilton,
Ontario
MEITION "FARMER'S ADVOGAYE."


## The Farmers'

 Power Plant BOLINDERS SEMI - DIESEL CRUDE OIL ENGINEThis handy little tool will save This handy little tool will save
you hundreds of dollars. Not
alone in replacing labour but in alone in replacing labour but in
upkeep and running cost as comupkeep and running cost as com-
pared with Gasoline engines. A
$12 \mathrm{H} . \mathrm{P}$. Gasoline Engine costs you 30 cents to operate per hour. Our Crude Oil Engine only costs
6 cents per hour. Our engines a cents per hour. Uur engines
are designed and built to stand
hard work. They will outlive hard work. They will outlive
three or four gasoline engines.
There is absolutely no risk from fire or explosion as it uses non-
inflammable crude oil.
THE CANADIAN BOVING CO., LIMITED 164 Bay Street TORONTO, ONTARIO

Guaranteed garden tools
wou are sure of saved time, lighter wo
when you use implements marked

## Planet Jr

## 


 FREE!
 WRITE FOR NAME OF OIR NEAREST AG

## HEADOUARTERS IN UANADA FOR

 butter workers, butter printers: Babcock testers, milk cans, milk hods. Crescent washing powder. etc. We are exclusive Canadian distributors of the
famous De Laval Cream Separators. Be sure to get our Dairy Supply Catamoss
Farm Supplies.
As in our dairy supply line, so
with our farm machinery and - with our farm machinery and
supplies. we carry only lines that are known to be absolutely reliable. If in need of a gas engine. ensilage
cutter, stanchions. cow drinking bowls, or any kind of farm equipment. be sure to get our catalog and prices before making a purchase. If youm conten

## Creamery Supp ies.

## Milk Plant §upplies.

## Cheese Factory Supplies.

 Why not install a De Laval Whey Separator before spring and make wheybutter? A De Laval Whey Separator will soon pay for itsolf. A full com-
plement of vats, presses, curd mills, milk pumps. etc.., at your disposal. Be We have every facility for rendering prompt and satisfactory service to
all engaged in any phase of the dairy industry. We aim to carry only apparatus and supplies of the highest grade, and our lines are most complete. Whatever your requirements may be, we can supply them with prompt-
ness and dispatch. Just drop us a line stating what you need and catalogs. ness and dispatch. Just drop us a line stating what you ne
full information and prices will be mailed to you forthwith.
DE LAVAL DAIRY SUPPLY CO., Limited 173 William Street, MONTREAL 128 James Street, WINNIPEG





 ENTERIIG A PROFESSIOM


$\qquad$
Canadian CorrespondenceCollege,Ltd
Dept. E.


FOR YOUR FARM, YOUR HOME, YOUR FAGTORY FOR EVERY POWER PURPOSE
A Gilson "Goes-Like-Sixty" Engine


MORE POWER
MORE SRR VICE
MORE SATISFACTION




 GILSON MFG. CO., LTD., 120 York St., GUELPH, ONT.

Vol. XLVIII.

EDITORIAL



How triet $\quad \square$
In ficuring the prefit of alfalfa, do not forget
to allow a liberal entry for its soil-improving to allow a liberal entry for its soil-improving
virtue. If sseptical, break up a piece of old run-Qut alfalia, plant to corn, potatoes, or even ats, and obscrve the resulting cro

So it appears that defective scales have been responsible for no small part of the trouble over weights of cheese consigned to Montreal. Bad scales play the mischief with business, and there are too many cheap ones on the market.

Of all modern conveniences is there a greater one than water on tap in house and stables with bath, closet, and a satisfactory system of sewage disposal? Those privileges are almost priceless, and not beyond the means of the majority Canadian farmers. Look into the question.

As referring to the mixed-farming sections of Canada, it is safe to characterize as a mismanaged place that farm where the help necessary in summer cannot be kept busily employed the earned holidays some time during the winter.

If, as Prof. Wm. H. Day estimates, thirty dollars a year would buy the gasoline necessary to do all the grinding, pumping, cutting, pulping, washing, sawing, cream-separating and churning on a hundred-acre farm, the Hydro-Electric Commission will have to do some figuring to beat it.
Of course, hydro still has it on the score of convenience, greater adaptability, and probably convenience, greater adaptability, and probably
on durability of motors. Between the two, it looks as though the day of cheap and convenient farm-power had certainly arrived.

Commercial fertilizers may pay you, but not your neighhor, or may pay your neighbor without proving profitable to you. Moreover, and more especially, the kind which pays your neighbor ticularly needs. Nature of soil, systems of cropping and manuring, and various other factors, enter into the problem. That a farmer may employ fertilithers with best assurance of profit, he must noeds do same individual ex perimenting on his own fields.

A wealth of information comes to light a the important Provincial and National Conventions held numerously every year and especially at this season. The gist of it, gleaned with care by our editors, assisted when necessary by picked correspondents, appears promptly week by week in "The Farmer's Advocate." With, per
haps, the single exception of the Weekly Sun, no haps, the single exception of the Weekly Sun, no
other paper covers these events anywhere nearly other paper covers these events anywhere nearly
so thoroughly, and none ranges the field of the So thoroughly, and none ranges the field of the As a record of what develops in or anized agri culture, "The Farmer's Advocate" invites com

LONDON, ONTARIO, JANUARY 23, 1913.

Financing Agriculture. lustralia his, in recent years, been making mark It or masire to the fact that agriculture has been surc. elize desendencs upon mining as a producaltoral de elopment were constructed, and eltiral de elopment were constructed, and the hird direction in which the State undertook aill the industries of the soil has been by means of the Government Agricultural Bank, which lends money on apuroved holdings in sums rainging from $£ 25$ to $£ 2,000$ for improvements, water conservation, stock, farming implements and any other approved purposes. The success of this policy has been completely demonstrated. The amount advanced by the Bank last year was $£ 400,000$, the next heaviest year being that immediately preceding, when $£ 300,00$ was lent. As showing the careful way in which the institution is managed and the caution with which advances are made, out of a total amount of $£ 3,000,000$ loaned the arrears of repayment have been quite negligible. Last year the profit on the Bank's
transactions was $£ 8,061$, which brought the transactions was $£ 8,061$, which brought the re serve fund up to 10 , 101 accounts current on the books, representing as many customers, and the number continues to in1,334 new accounts opened, leaving a net increase of 873 accounts. The effect of the policy pursued, writes Mr. Reid in "The Empire Review," has Leen to induce other banks and financial institutions to come into the field for the purpose of lending money on Western Australian agricultural land.

## Land-Poor with Ten Acres.

An eye opener truly was the discussion on inExperimental , which took place at the Ontario in Guelph. net income of $\$ 3,500$ a year from of deriving a voted ckiefly to beekeeping, fruit culture and poultry raising, while awother told of selling $\$ 2,750$ worth of produce from $2 \frac{1}{2}$ acres devoted $t$ ten acres too much to work properly, was inclined to make a farmer with one or two hundred acres eel bankrupt. At first blush it would look as though the men with larce holdinцs must be entirely on the wrong track. As usual, however, there is another side to the question. In the frst place it must be confessed that the men who achievcd these results were of the exceptional class, who are reasonabsy sure to succeed in whatever they undertake. In the second place, let no ne assume that their work is easy because the acres are few. Daylight to dark, with an train which only a constitution like that of Mr . rouse could endure, and his, probatly, not for tons. There is, too, the element of differences in sasons, which, with the beekeeping business in particular, vary greathy. In such lines the conspicuous success of one year is ever liable to be averased down by the failure of another. The importance of convenient markets and the necessary limitation of demand are other factors which will tend to prevent a universal rush into bees, -ejetables, poultry and fruit. Beyond all this
not the whole thing. There are men who would rather work with bees, chickens, and truck farming than with fields of grain, hay and corn. There are many otkers whom nothing but an imto embark in these minor branches of husbandry Many would fail if they did.
We have no fear, therefure, of an early general mevement away from the staple lines and broader acres of cenoral farming, but we would commend a consideration of the experiences on page 88 of our last issue to those farmers who are struggling to wrest a living profit from the staple lines of husbandry. The possibility of on larging cash returns and het profts per acre by
adding one or more sidelines is topeful indeed adding one or more sidelines is kopeful indeed the land, working fewer acres, and looking after them better. In other cases it may be possible by employing a growing family to advantage, or in some instances by hiring more help. Detalls are for the individual to solve. Certainly there are many land-poor farmers in Canada. We do not begin to realize the possibilitios of an acre.

## How to Earn More Per Day.

 In these days of such extreme scarcity of experienced farm help, it becomes necessary for per farmers to accompt afford to be doing very much dollar-a-day work. A day's. labor must yield a larger return than that if he is i.o add yield a larger return than that if he is spreadmuch to his bank account. How can he speat much to his bank account. How can he spread
himself over a great variety of tasks without denying to any the numerous little attentions so important to success? An everlasting study of convenience at every turn is one requisite, and for $i$ lustration we commend the colony-system of rearing poultry, watering with a barrel and feeding once a week by filling hoppers, as decribed by J. W. Clark at the Ontario Experí mental Union. Short cuts can likewise be made to whittle down the labor of cattle and hog feeding, while in crop production a blg piargin
of saving is possible through the use of fourof saving is possible through the use of four-
horse implements in place of two-horse ones and horse implements in place of two-horse ones and of these changes entail capital expenditure for equipment sul prove sound economy in the end Cut down labor cost and earii more per day

## New Use for the Silo.

It was once a current observation in the Canadian West that every season wás an exceptional season, in respect to the weather. This involved no end of variation in adapting methods to conditions. In Western Ontario one of the unusual silos in January. This does not mean that the corn kas just been ripening under a salubrious winter sky, but it indicates the varied uses to which our obd friend, the silo, can be put in the hands of resourceful owners. Men with probably one silo of medium size had far more corn last autumn than could be converted into silage, so t remained shocked in the fields until the first filling was fed out, and the silo was refilled on exceptionally fine days. This is believed to be a safer practice than undertaking to store large box, into corn fodder, run through the cutce great deal of it is liathle to be spoiled through

CHE FARMER'S ADVOCATE
AND HOME MAGAZINE.
THE LEADING AGRICULTURAL JOURNAL IN THE DOMANTON.
 johin weld, managrr.
Agente for
Farmer's Adroate and Home Journal,
WTntipeg, Men.

- The farmerg's Advocatr and home magazine $+$
.

3. AD







4. 

 Address-THE FARMER'S ADVOCATE, or THE WILLIAM WELD COMPANY (LIMTTED),

London, Canada
ally more than ever before corn stood for a long time in the shock before it could be put in the silo. How this silage is coming out for dence from point on which we invite corlual ex perience

That potato canker has gained a foothold in Canada was the disturbing fact brought out in 2 recent lecture on this serious European potato Agricultural College. Broadcast warnings, it seems, availed not to exclude the infection from Canada. Now, let the individual grower beware and endeavor to keep it off his own particular premises. If you buy any seed poitatoos, en-
quire as to their history and watch for the proquire as to their history and watch for the protruding rusty-brown eyes, characteristic of the
slightly infested tubers. diseased ones may infect a bag or a pile.

## YOUR SUBSCRIPTION

Have you sent us your renewal sub cription to "The Farmer's Advocate and Home Magazine

Our subscribers are our best circula tion getters. They can conscientiously recommend it to others, feeling that $\$ 1.50$ cannot be invested in any other manner that will give as much pleasure and profit. The larger our circulation becomes, the better paper we can give our readers

Old subscribers sending us two NEW names and $\$ 3.00$ may have their own subscription advanced tweive months; or, for your own renewal and one NEW name, we will accept $\$ 2.50$. In either case we expect the new subscriber to pay the regular subscription price of $\$ 1.50$
New subscribers will receive a copy of the 1912 Christmas Number complimentary

## Nature's Diary.

, Diary.
The Ruffed Grouse may fairly be reckoned as the premier game bird of Eastern Canada. At the same timae, it is one of the most mis-named, being termed "partridge", or "pat'ridge" in some localities and "pheasant" in others. It has not the characteristics of either a partridge or of a pheasant, and we have no native birds in Canada In writish these names can be correctly applied arin colin la from California, and the Ring-necked Pheasant from Caliifornia, and the Ring-necked Pheasant grouse has inherited these names from its faint resemblance to the partridge and pheasant of Elurope in the same way that our American Robin was termed "Robin" because it had a red breast, though it was twice as large, of a different build and with an entirely different bill to the bird of that name in England.
The ruffed grouse is a fine hardy bird, well adjusted to survive and increase if given a reasonable amount of protection. The recent complete ciose seasons of the last few years had a benecommoner again in many localities where it was becoming dangerously scarce. That it has in Gamed is a hopeful sign, as it shows that the spected. And we hope that in the future we may be able to speak more of the "respect for" and less of the "enforcement of" Game Laws, as
these laws can only be effective when backed up by an onlightened public conscience. If the great asset to a country the wild life is, then those Rew who would ruthlessly destroy it can soon be dealt with as they deserve.
Those who live in thickly populated districts, country, have very different ideas of the ruffed grouse. In the thickly settled regions one usually hears a whirr of wings and sees but a brown point, for the rur departs for some far distant been educated and knows that man is to has feared. But away from civilization we get an opportunity to study its habits.
In summer the ruffed grouse feeds largely on it eats grasshoppers, crickets, of the forme various moths, beetles, flies, bugs and ants. It eats a great many wild fruits, among them being
the fruits of raspberry, wild black cherry, wild red cherry, elder berry, Nanny berry; maple-leaved dogwood, climhing bitter-sweet, high-bush cranberry, bunch-berry, snowberry, huckleberry, withe cornel, Virginia creeper, wild grape, staghorn
sumac, bayberry, blueberry, partridge berry son ivy, thorn-apple, mountain ash, blackberry,
rose wintergreen and sarsaparilla. eats a great variety, being particularly par-
tial to those of the partridge berry, the sheep In the autumn it eats a fern.
In the autumn it eats quantities of beech nuts,
hornheam seeds, and acorns, and in the late fall in winter, and in early spring the ruffed grouse of various trees, largely the birch, poplar buds may be injured has been suggested that the trees grouse, but investigation has shown liat the hirds cannot reach the termin'al huds wnd that
no trees are injuriously affected. no trees are injuriously affected.
It will be noticed that among the fruits eaten interesting to grouse is the poison ivy, and it is poison. sorel or "lambgrill" is common that the grouse often ieeds in winter upon the buds of the
po sonous plant. This fare has no injurious the po sonous plant. This fare has no injurious effect
upon the bird, but if their flesh is eaten, it often causes glossitis (inflammation of the tongue) and
other symptoms of poisoning. Dr. V. K. Chest nut, the specialist on poisonous plants, gave an
extract of poison laurel leaves to extract of poison laurel leaves to a chicken, which
he subsequently killed and fed to a. cat. The
cat was rendered cat was rendered seriously ill, but ultimately
recovered. Orie good feature of this item bill-of-fare of the grouse is that the laurel the are eaten only in late winter during the close
season, and people who eat grouse then deserve The ruffed the wrouse of poisoning. then deserve
passing the night in the wint peculiar habit passing the night in the winter beneath habit of
They drive down int morning force their way out at snow, and in the tumnels in thel. I have occasionally come across hole," and, as I approacher which had no "exit hirds burst out and ty off amm, have seen the
snow. sometimes the habit proves fatal to of th
grouse
old by fox tracks leading to and from the tunner and blood and feathers left at its entrance.
The "drumming" of the male grouse is
ound we love to hear. It is a love-call to the sound we love to hear. It is a love-call to the emale and a challenge to rival males. Each log. He mounts the log, struts up and down with his tail spread and his black ruffis erect. Then he spreads and raises his wings, and begin o beat then slowly at first, then faster arid aster, till the "thumps" becorne a rolling tatoo head held high on outstretched neck, and the another "drumming." It is frequently stated tha "drumming," the bird strikes its kreast on th log, but by careful stalking I have approached very close to drumming grouse and have seen by beating the air which is enclosed on the down stroke between the $\log$, the sides of the body an he concave wings.
The nest of the ruffed grouse is made on the nd lined with depression being scratched out and
When the young are hatched, they follow the mother about, and when the family is approached she makes a whining sound like a young puppy keeping just out of reach of the intruder. After bout a minute of this acting, off she goes like a bullet. But by this time the chicks have hidden, and so successfully that it takes a very one has to be extremely careful in moving awa not to tread on them

Rural debate.-Resolved-That forking warm silage out of a silo is preferable to digging frozen corn shocks out of the snow. The "Ayes"

Exactly one month was the length of time it took the Grand Trunk Railway to deliver a bar Man apples from fondon, Ont., to Winnipeg the apples were frozen solia on arrival. required to be embalmed.

## HORSES.

Watch the feet of the unshod horses to keep them in shape.

It takes little time to dampen the horse hay before feeding, and may help to ward off a case o

It costs no small penny per annum to keep team of korses shod, especially when used much on metalled roads.

Watch the harness and halters for weak parts That is the price of a tug, a hold-back strap, aeck-yoke iron, or a halter shank gagainst the

Moderate feeding with light, regular exercis cally as it work with intervening periods of idleness is har on condition.
"We are deriving a great deal of help from well do without it. Your veterinary columns are much sought arter by the boys.
Lambton Co., Ont.
P. W. FORSHEE.

Do you know what it costs you a year to keep
horse on the farm? Somewhere between anety and a hundred and fifty dollars. Is there Can't you get rid of himeand off in your s

In horses, as in cows, type is not the whol the inherent vigor and stamin. Much depends upon the hide. This quality is not always apparent even to shrewd judges. The owner of a stable weight, recently remarked that the same age and who had visited his stables, had picked the poor est horse for the best. Yet this animal, showinv evidence of much quality, could not stand
half the hard, steady work which the others could
easily perform

Ontatio Stallion Inspection As it has been reported that a number of Oninspected on account of not having information as ot the time the inspectors wre to be in their district, it has been suggested that some arrange-
ment should be made which would tive the owners ma opportunity to have their stallions inspected, and thus to have an "Inspectod Certificate", instead of being required to use for the coming season a certificate stating "not inspected."
The Stallion Enrolment Board, owing to the impossibility of procuring anything like a complete list of stallion owners, were unable to notify each person individually regarding the working of the Act. Attention, however, may
be drawn to the fact that all stallions standing bor public service require to be enrolled with the for public service require to be errolled with the
Stallion Enrolment Board, and at the option of the owner may be inspected by inspectors appointed for that purpose. spected the report of such inspection forms a part of the record of enrolment, and the enrolment certificate is issuud in accordance therewith. If the inspection is not aesired by the owner the
stallion will be enrolled according to the breedstallion will be enroled according to the breed-
ing, and the certificate issued stating "not inspected."
During the recent inspection between one
thousand and twelve hundred horses were inthousand and twelve hundred horses were inhad decided it to be in their own interest to have the highest form of certificate available. There are, no doubt, others as stated above, who, if they had had more compte had stallions inspected. Owing to these circumstances, therefore, it has been decided to see if sonne arrangement could not be made for
further inspection.
Before doing so, however, it further inspection. Before doing so, however, it will be necessary that full information regarding the Stallion Enrolment Board. Suck application should be made not later than the 7 th of Febru ary. Immediately after that date further inthose making appplication. The naime and address of the Secretary of the
Board is A. P. Westervelt, Parliament Buildings, Board is.
Toronto.

## LIVE STOCK.

## The Provincial Winter Fair.

Editor "The Farmer's Advocate": of "The Farmer'
I read in a recent issue of Advocate", an arcticle pertaining to the Guelph Wintor Fair problem. A winter fair of this and a fair that any province might well feel and a foir that any province mind of while the building is of saize, we must admit that it has outgrown its capacity, and I anu sure the management are to be con gratuatecior ition. It is undoubtedly the best pair of its kind in the Dominion, and I feel justified in' saying that if it makes the rapid progress in the future that it has made in the past, in the space of a few years it will be unsurpassed on
the continent. We are not to look at what il will be one year from now, but what it will be ten years from now; and to provide ample ac pity that so much money has been spent on the buildings. They are in crowded quarters and a'so out of date. Some are of the opinion that hev should pull up stakes and move to West of a national nature like the International Show at Chicago, but I think the sentiment of the people is that it should remain in Guelph A very important point in connection with thid problem is the inadenuate acsommodation or
visitors. We must admit that Guelph is crowded in this respect, and it is only with great difffcult. that visitors are able to find lodging. Wha will it be ten years from now? This is perhaps Fair, as there is nothing that spells success so plainly as to have the visitors feel assured that they will have the best accommodation available, and it is in this resnect that Toronto scores one would, no doubt, be large enough to give Winter Fair
Some have sugqested thrat the poultry and seed exhibits remain in Guelph and that the live
stock denartment locate in West Toronto ; should think that this would be a very good plan It would save building a poultry and seed depart
ment in Toronto, and Guelph would not feel that ment in Toronto, and Guelph would not feel that
she was robhed entirely. This question should anpeal to every stock
hreeder in the province, and $I$ think that anv sug hreoder in the province, and I think that anv sug-
yestions that can be made will ne welcome in th


A Small New Brunswick Flock. satare on the highest part of my farm. There wes an- old tens-acre field which was coming up in hardSheep raising in word bushes, how abbout three teet high; this I any great extent. To be sure many farmers of May. This pasture was entirely out of sight have flocks ranging from five to thirty in number, of my house, over a mile back-a fact which I and the industry is sadly on the decline. Every very much regretted, and it seemed to be the only year one will hear of some man who is going to piece of land 1 could spare and fanceesmost con-
 hard on the pasture, making it unfit for cattle- supply of water and salted them often. How-


Prince of Aden [13763] (16922)
Firat-prizo two-year-old Clydesdale stalli on at Winter Fair, Guelph, 1912. Sire ay in tha perhaps another will say there is no that time I could see they nover made as large shoepp heen industry very largely myseit mut in the if they raised lambs the irst year, so turred him 0 in the near future. I have heard them called five ewe lambs that fall, which was last fall the animal with the golden hoof," and that is 1912 ; I did not sell any lambe, but kopt them only fourteen ewee and a ram, end they are which was begining to show age; so this winter certairily good ones, and they are not pure-bred, I have as fine a flock of sheep as one would caro either, but well-bred. Three years ago I started to look at, five of them spring lambs that I wll
in wilh four of the best ewes I could find-they not breed, six yearlinge, and three old oheop


Pleasant Valley Again
First-prize shorthorn steer under one year, at ontario Provincial Winter Fair,
Guelph, 1912 .
Exhibited by A. F. \&
were large and well-wooled-and the following weedy hay I happen May sheared thirty-nine pounds of wool. A weedy hay I happen pure-bred Dorset ram had served them before I little oat straw in theit throw them and bought them. and they dropped six lovely lambs, pioking over, makes them phenty of bed kept on my farin for generations, you can imagine clean snow in the barnyard, never in racke the fences were in poor shape to keep sheep. clean as mow do. In give them a lew sliced roots However, there was plenty of cedar growing, and d every niorning, less than a peck to the fifteen,
I got out poles enough that winter for one pas
Just hefore lambing time I start feeding a few
oats, and continue both roots and oats, untili the grass gets a good start; then I gradually lessen tue aming to pansure. I also had a small pen par-
titioned off and a cage for the lambs to enter not of and a cage for the lambs to en not being large enough to admit the sheep which they are very fond of. With mashed oats, which they are very fond of. With this and the
extra feed given the mothers, I could almost see them grow daily. I plan to keep salt before the fock the year round. By applying Scotch snuff to the ewes twice during the first of the winter, they are kept free from ticks; but if any should be seen before lambing time, it will pay
to give a third application. Some confine their focks in small sards around their pens from early in the fall until turned to pasture. This is a very bad practice, as sheep need plenty of exer-
cise. or the lambs will be born weak. and nearly all die. I have never had my lambs come until after the middie of May, as I had no suitable place for housing them, but next spring they will be dropped a month earlier. Some men can see profits after one has a good flock fully established. With the fine grazing lands in New Brunswick, believe a great future awaits the intelligent shepherd, not only in this province throug Next spri
and have two, intend making another pasture, change. My fursting them in week about for a hard-wood bushes about three feet high all with it. Now the bushes are all dead and I intend plowing it next fall, and I think it will raise a good crop. As yet, personally, I can say nothing about sheep manure as a fertilizer, but an old as hay manure. As you will see, I am starting in the sheep-raising business, but I for one am satisfied with the start I have made.
York Co., N.B. baRRY J. whitehead.
How Foxes Are Reared in Prince Edward Island.

## The Farmer's

Replying to requests for information about the breeding, feeding, and general management of foxes raised in captivity on Prince Edward Ishand, I have been able to gather the following particulars, which I trust is about what your inquirers in Ontario want to get. The sketch accompanying this will illustrate just what a ranch is like. It is a roush draft of Patrick's Fox Ranch," which had the honor to be parents, by Princess Patricia, visited it last summer.

This ranch has in it twenty-eight of the best black foxes, and has capacity at present for more than double that number, and in its extent, dustry-hese at this time. There are quite a few with a larger number of foxes, and many with less.
In constructing a ranch there is first the outer fence, which encloses several acres. For sides providing shelter, makes conditions more natural. This bush should be close enough for good shelter, and open enough over the pens to
admit plenty of sunshine. The outer, or guard fence, is constructed of boards or plank, preferably on a concrete foundation, that is $2 \frac{1}{2}$ or 3
feet in the ground. It is eleven feet high fastened to cedar posts. The ranch proper is located inside of this on the same kind of
foundation, and is enclosed with heayy foundation, and is enclosed with heavy wove
wire. eleven feet high, and securely fastened t posts three fet in the ground, about ten feet apart. The wire web is turned in all around the top for two fest so as to make it more secure.
Some small ranches are covered all over the top with web wire. Inside this enclosure are the pens, each of which contains two foxes during matin_ time, and after the pups come, the mother and family. Thase pens are divided from each
other by web wire or small mesh on both sides oi the posts, as a double wall is necessary to keep the foxes from fighting and injuring one an-
other. A kall way runs right through the centre. and doors open into the pens from it. Each of These dens are about $4 \times 4 \frac{1}{2}$ fect with 4 -foot 6-inch posts, with a pitch roof about the square.
All dens are alont this si\%e. hut some for men prefer to have them rooferl sheel fashion, so that and stim himself. The den has a doon in the end about 2 feet by 20 inches. This den is
double toarded on the walls with tar paner he tween, and well shingled in walls and roof.
floor is also double-boarded with hena h heary paper


Entrance to St. Patrick's Ranch.
Christened by the Princess Patricia during the visit of
by $7 \frac{1}{1}$ inchos square, with an elbow on it draught. This is the way the foxes
go in an out of the go in an out of the
den. All foxes are in-
spected for tuberculosis or other diseases. Great care is taken to keep
health.

## FEEDING.

They are fed only clle a n wholesome fed, as it generally is to the young ones, it is whole milk, and only from cows that have culosis tests. They are fed $t w i c e$ a day any kind of
wholesome meat or wholesome meat or
fish. Generally fish twice a week. pound of one-half pound of meat or for a grown fox.

Inside the den is divided into two compartments. The kennel is at the rear end, and the entrance to it is a circular opening just large
enough for a fox to go throuch. This is wwhere the young are horn, and it must be very warm and close, so it is double-boarded with an air space filled with dry sawdust or ground cork.


Three Black Fox Pups.
This is believed by the owners of the ranch to b
the only photo of pups ever made, as it is diffiThe corners are bevelled off by setting a na row board on an angle from floor to wall, to Some use a fox kennel, an 18 -gallon keg, which is even more like a hollow log which the There is a shoot on one side, four feet long


A Fox on the Roof of His Den. excellent feed for foxes
MATING. ing the number of expensive males kept mi.ht result in no increas 3 .

Bread is fed to some extent, especially in summer. One feed of bread and one of meat would be the daily ration, but no bread raised with yeast is lent for growth and development. Feeding is a very skilful matter, and the food has to be varied according to the condition of the bowels. Loss is sure to result from carelessness in feeding,
especially in the case of young foxes, Some especially in the case of young foxes, Some prolific variety of rabbits for for feed. These rabbits are kept in the outer inclosure of the ranch, and fed on vegetables. It is claimed
that they can be very cheaply raised, and are

This time of the year the fox men are competing with the butchers in buying the poorer class
of cattle to supply feed for ranches.

It is claimed that foxes in this wild state are most breeders think it safer to mate them Some have had good success with mating two females with one male. In this ranch nine pups raised from one dog and two fermales. One breeder sai in order to produce there make bigamists of

They are mated any time from September up to Christmas. At mating the male and female are put together in the pen and left so till about
the 20 the of March, when the male is removed the 20 th of March, when the male is removed
and put in a separate pen $8 \times 8$ feet for the rest of the year. This pen is enclosed by a strong wire fence, and is proofed over, and the fox should have access to earth to burrow in. It is and females year after year, as changing them
of next spring's crop of pups, and almost all They are bar-ained for by paps are sold ahead.
ance when they are
Quite a number of black foxes are be-
ing imported from ing imported from quite a number of
hlue foxes have alhlue foxes have already heen brought
here from Alaska. here from Alaska. as if this island in the ne ar future
would develop into a bic fur farm a big fur farm.
But dame fashion is fickle, and as soon as the com-
mon peonle can buy and wear black fox fur, then wealthy havecto will something else which the tyranny fashion will adopt in its place, But this day is be lieved to be some w. SIMPSON

## THE DAIRY.

 Casien and Fat Content of Milk Ontario Cheeseries, 1911 and1912. $\underset{\text { Prof. H. H. Dean discussing casein and fat in }}{ }$ stress upon casein and the great need of knowing more about the composition of milk and dairy products in Canada. He said in part: We know comparatively nothing regardine the Rent improvement in the future. From the small amount of work done during the past two seasons, we are led to believe there is a markedyariation in the composition of mikk as delivered variation in the composition of milk as delivered
at Ontario cheese factories, so far as casein fat are concerned. Who knows how much albumen, ash, suagar and water there is in Ontario milk, and what part these play in the manu
facture of cheese and other dairy products For a lons time, scientists, as well as prac tical men who had studied the question, thought it was necessary to consider milk-fat only whe discussing the relation of milk constituents to cheese manufacture. The danger now is of con
sidering casein only. After a careful study this question during the past five years, I have come to the conclusion that it is prac-
tically impossible to consider either one of these alone, in its relation to cheese-making. It is
possible that other milk constituents may als play an important part, but it is certain that these two, casso n and fat are the principal milk consttuaents concerned ile we making of Canadian that each imerease of a fraction of a per cent. of fat in the milk, means an increase of so much in the yield of cheese (some have been bold enough to say an increase also in the food value a relation between casein content and cheese, I make bold to say that the foregoing are impossibilities, strictly speaking. These two, casein and milkrat, must-be considered together. Without casein
and milk-fat it is impossible to make good Canadian cheddar cheese. So far as the work at Guelph has gone, it indicates that there is no absolutely definite relation of casein to milk-fat required in normaty may oause a modification of this statement. Prof. Dean referred briefly to the work do the O. A. College, Guelph, on this question. milk used in cheese-making during the five vears 1908 to 1912 inclusive, averagned as follows:


The tendency is towards lower average percentages of casein and fat in the mik that has
been deli yered seasons from practically the same patrons each year. By months, we find the lowest average percentages for casein and fat usually in July and August and the hizhest in September and Duriny these five years one experiment was made earh week during the cheese season of May to October, by dividing the milk of the
patrons into two lots. ly high in casein and fat was put in one vat, and milk with lower casein and fat content was put in anothor vat. 'The results of
thase five vears' tests, consisting of 79 experiments in which over 82.000 गbs. milk were used A. LOTS-LOW CA

| Year | ${ }_{\text {Av. }}^{\text {\% \% fat }}$ fin | Av. \% masien in | $\begin{aligned} & \text { Av. rbs. chesese } \\ & \text { per } 1 \text { 1.onoliks. } \\ & \text { miks } \end{aligned}$ | Av. lis.? cheese per |  |  | Av. Tracore.Max. 100 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Lb. fat in milk. | Lb. casein |  |  |
| $\begin{aligned} & 1908 \\ & 1909 \\ & 19019 \\ & 1911 \end{aligned}$ | $\begin{aligned} & 3.51 \\ & 3.55 \\ & 3.50 \\ & 3.45 \end{aligned}$ | $\begin{gathered} 2.32 \\ 2.24 \\ 2.42, ~ \\ 2.08 \end{gathered}$ | $\begin{aligned} & 89.40 \\ & 90.32 \\ & 920101 \\ & 9000 \end{aligned}$ | $\begin{aligned} & 2.56 \\ & 2.56 \\ & 2.62 \\ & 2.64 \end{aligned}$ | $\begin{gathered} 3.85 \\ 8.89 \\ 8.89 \\ 4.9 \\ 4.93 \end{gathered}$ |  | $\begin{gathered} 91.90 \\ \substack{90.15 \\ 90.125 \\ 92.25 \\ 92.09} \end{gathered}$ |
| ${ }_{\substack{\text { Av.five } \\ \text { years }}}^{\text {a }}$ | ${ }^{3.49}$ | 2.28 | 90.50 | 2.59 | 3.98 | 34.90 | 91.24 |

B. LOTS-HIGH CASEIN AND FAT.

| $\begin{aligned} & 1908 \\ & 1909 \\ & 1901011 \\ & 1912 \end{aligned}$ | $\begin{aligned} & 3.750 \\ & \text { and } \\ & \text { s.7. } \\ & 3.84 \end{aligned}$ |  |  |  | $\begin{aligned} & 3.84 \\ & 3.88 \\ & 3.96 \\ & 3.02 \\ & 4.02 \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underset{\substack{\text { Ave five } \\ \text { years }}}{ }$ | 3.77 | 2.48 | 95.85 | ${ }^{2.53}$ | ${ }^{3.85}$ | ${ }^{34.8}$ | 91.87 | .28 and .2 , respectively, We thus see thet a very slight 'increase in the percentage of fat and casein in the milk from which cheese are made The average for the five years' experiments is 10 one more cheese per ton of milk, worth at leas milk dollar to the patron or producer of such fat and per average yields of cheese, per pound of sliyhtly higher from the lower fat and casein lote Cheesaverage percentages of moisture in the littese, one month old, were 34.9 and 34.8-very termined force. The the fat in the cheese was decheese from the lower casein and fat The casein-d 35.58, while those from the higher avera lots averaged 36.3 per cent. fat. The out of 100 respectively high casein-fat lots. The average pound frome made per pound of casein-fat in the milk hi hhen 10 er testing lots was, 1.57 ; from the hixher testing lots, 1.53.

To suonlement
were carried on at several factories experiments were carried on at several factories, a composite
test havin $\underline{1}$ 'een mado of ahout ten patrons' mille at each factory for fat and casein, and as many


Plan of a Foz Ranch
Within the guard fence is a 40 -foot belt of buah
vats of milk as possible tested, and the weight of Cheese made from these vats wherever practicable
secured. secured factories were visited in Western Ont. in each of the two years, and four in Eastern Ont. The hichest, lowest and average percentages of casein and farin the mill or these two groups,
for the two years are as follows : $\mathbf{W}_{t}$ Ont. $\begin{gathered}\text { Per Cent. Casein } \\ \text { High. Low. Ave, }\end{gathered} \begin{gathered}\text { Per Cent. Fat } \\ \text { Ligh. Low. Ave. }\end{gathered}$ $\begin{array}{lllllll}1911 \ldots . . & 2.90 & 1.6 & 2.26 & 4.5 & 2.7 & 3.42 \\ 1912 . . . & 3.10 & 1.6 & 2.21 & 5.8 & 2.1 & 3.54\end{array}$ $\begin{array}{lllllll}1911 & 2.70 & 2.70 & 1.6 & 2.35 & 4.3 & 2.6 \\ 1912 & 3.50 \\ 2.60 & 1.6 & { }_{2} .08 & 5.3 & 2.7 & 3.50\end{array}$ Av. two seasons. $\quad{ }_{2.22}$
Ontar: o verage percentage of cascin in Western Ontar:o milks, as determined at the factories
Visited, was 2.23 ; for Eastern Ontario factories 2.21 ; and for all the factories visited in the two years, 2.22 . The milk-fat averages are: 3.4 R
ASEIN AND FAT

These results show an average incroase of 54 for the factories visited in Western Ontario, and is. cheese per 1,000 Mbs. milk, where the average 3.50 for Eastern Ontario, averaging 3.49 in both
alue is lacgely do Until a practicable casein-fat test is evolved, wo. may test for milk--ata and casein soparately by the the plan of "Fat plus 2, " which is near enough the plan of "Fat plus 2," which is near enough
for all practical purposes, with normal milks.

## POULTRY

## How to Fill the Egg Basket.

Keep the hens warm, the hen-house well ventilated, and as bright and sunny as possible. Pro-
vide a dust bath, using dry road dust, wood or vide a dust bath, using dry road dust, wood or screened coal ashes.
Keep the hopper
bone and charco A constant supply of pure water is most important.
Have a rack filled with clover to supply the necensary grean food.
Feed "meat scraps" in mash, three times week, during cold weather, in proportion of 2 lbs .
to overy grain and make them scratch Feed a variety Try make them scratch
Dry mash for laying hents - Feed daily in small 1
ground oats
cornmeal.
shorts.
cruslied barley.
Table scraps, kitchash 2
Table scraps, kitchen waste, small vegetables, porridge, vegetable partermilk. Mix with ground grains, in pro
Min portion of one-half waste to one-hall ground grains. Feed warm three times a week, in quan tit, ${ }^{\text {g of }}$ of two lbs. to 15 hens.
SCRATCHING FEED.
The combination of 30 lbs . of oats, 10 lbs . of
The combination of 30 lbs. of oats, 10 lbs . of
wheat, 10 lbs. of barley, and 15 lbs . of buckwheat will give a large number of eggs of finest flavor, bringing two cents a doven over market It is based on a practical experience with poul-
try, of over twenty years. My hens have each
supplied an egg daily, with the exception of a few days, for months on the rations given.

## Poultry for Profit

Poultry-keeping is being considered, from
and it was a tow years aso, mud it is is onouraging to find that such a doeen interect is being tharen Although there has beon such a martked improvement in poultry-keoping, there is moch more to
be done ond
and or done, and I cannot help thinking that if properivy looked after poultry can be kept both
town and country and be very proftante to hhert ownors, who thomsolves are pottor, alite in hoalth and pooket, whether their fowls are kept in smali or liarge numbers.
It must be remembered that fowls must be kept
clean and healthy, and for the encouragement of those who have only a backyard let me stat that it is quite possible to produce es meny, il fot more, eges during the winter monthe in mun abouthed on thus the farm farmers can whose fowle run about, on the arm with plenty of Hiberty
Nothing stands in the way of anyone keeping fowlif they are kopt on the right prinoiple. One reasen why poultry should bo kept and studied more is that they aro able to convert all the
 there aro wastod, as a rule. For these scrapa Keop an iron pot on purpose, When I empt it in the morning, I hair fill it with water and al the serapa Irom the table, serapings trom the plates, refiuse lood, potato poelings, etc. This sall bolied up through the day and in the morring is mixed up with bran and ahorts to
crumbly condition and
oxven to the hens tor their crumbly condition and given to the hens for thair
morning meal. $1 t$ it
is astonishing to meo the large morning meai, It is astonishing to gee the larg away, which might easily be convertod into oggs and moat
Which ordinary cannot afford a brean or outtor, in bo ground up or cruabed dailly, should purchase ti:otherwise, as nothing soo much as a groer bone ration , yives rigior and oone to poultry and groanty, incranaes oggs production. If poultryogrs will alwas prove more tertile and the ditichens hationd will be hardieff as the omposition of grean bone contains nearly all the oile ments of an egg. Finely cut clover or alfalfa as it contains the eloments necessary for egg pro duction and is a natural diet. A great mitan poultry-keepers use it with great success, as has been found to be high inf nutriment and cereals and a small quantity of meat, it is on of the best substitutes for grass and insect life for we have. Out clover is admirably suited plenty of rich eggs. It is equally y . will insure at liberty, and is largely responsible for a rich color and flavor of the yoke, also for exceptional vigor in the male bird, thereby ensuring greater after being moistened very much increases bulk and becomes of a spongy texture, enabling the Rowls' stomach juices to permeate the mass Clover and clover meal, particularly allalfa clover competitions and contains a large percentage of protein and carbohydrates, which, together with the lime and salts it contains, makes it most It is necessary now that fowl be confined to a certain extent, but that plenty of exercise be not compelled to exercise, fowl will very soon become a back number
or three inches of straw, chaff or dried to and to rake all the whole grains fed into this. I consider it a most satisfactory sign of health early morning till ni fowl busy scratching from this plan havo good results. Anchiner point worthy of consideration is that
scratching sheds tend to economize the grain given to poultry, and there is no waste as when Apart from the feeding, farmers should en
deavor to introduce new blood into their flocks every year in the shape of pure-bred males from the hest layng stock obtainable. By doing tris,
they can in a very few years greatly improve they can in a very few years greatly improve
both the laying quatity and the appearance of
their tlock, no mather how mediocre it may have their flock, wo mather how mediocre appearance of

Poultry Worl in Ontario County. penses for feod wero $\$ 37.80$, leaving a profit for The pioneer county in this province, as far as co-operative poultry production and marketing is concerned, is the rood old live-stock county, Ontarlo. About four years ago Whitby the count town, saw the advent of a district representative of the Ontario Department of Agriculture. This man, J. H. Hare, a graduate of the Ontario Agricultural College, opened an office and began work Various lines of work were followed, as is done in all these offices, but seeing the possibilities of the poultry industry and realizing the indifferent attitude, on the part of a large percentace make this phase of agriculture one of the main


The House in Which the 30 Pullets Made the Good Returns, points in his work. Seven poultry circles have farmers of the county, to mean many thousbeen established with 500 members. Each circle flock is being ohanjed. The average "dunghill" has meven directors and the manager gets a small tive, well-housed, , well-fed and well-bred flock ducertage on all eggs handled, while the pro with results which cannot but increase the im price of eggs over that paid by local buyers.
In connection pith the work a demonstration breeding station has been established. The demonstration house, as shown in the illustration,
is not a large one. It is situated on the is not a large one. It is situated on the farm Wromen's Institutes, who started with thirty purebred Barred Plymouth Rock pullets in the fall of 1911. Previous to getting these birds_ which
were of very ordinary quality (not bred to lay) wers of very ordinary quality (not bred to lay),
Mrs. Brown had not bean able to get winter eggs. These pullets. were early-katched, and commenced to lay in November. In November, 1911, they produced 12 eggs ; in December, 162
ecgs ; in January, 299 eǧs ; in February, 353 eggs ; in March, 472 egge ; in April, 663 . ergs. in May, 528 oges, and from June to October 31st 1,200 eggs ; a total for the year of 3,689 egos for the oonamon hen. Egge from these pullets were sold for hatching, but the price was limited to 30 cents per dozen (not much higher than circle prices) and male birds were sold for $\$ 1.00$
per liird (very little in excess of market prices).

sides this work Mr. Hare and his assistant Mr. Hogarth, have visited 448 farms, making an weak points, and to plan their work of bettering conditions. They know whereof they speak on poultry and poultry conditions, and are sure to
make great progress in improving the poultry business.
Drainage and orchard demonstrations have been held ; short courses are put on each year and everything possible is being done to educate their profession anriculturists or the county in their cash returns which are always the measure of man's success.

## GARDEN 毅 ORCHARD.

Handling Orchard Soils lay of the land will
permit, is a combination of clean cultivation with cover crops,"
says Professor Wendell Paddock, of the Oh io College of Agriculture. the plowing of the land as early in the season permit. The plow is by the harrow, in order that the surface of the ooil may be kept
mellow throughout the growing season. UsualIy in the latter part of
July or the first of August, at the close of the growing season for
trees, a crop of some kind is planted and this is allowed to occupy the land until the First in class, and winners of breed cup, at Smithfield. Exhibited by Miss Alice next spring. The land The eggs sold brought $\$ 88.84$, exactly $\$ 7.12$ is plowed again as early as possible, and this is
more than if they had been sold through the followed by olean cultivation and a cover crop as Circles, which was very little advantare from be- hellowed by olean cultivation and a cover crop as brought $\$ 78.68$; poultry now on hand, $\$ 45.20 ;$ Have taken "The Farmer's Advocate since
poultry consumed, $\$ 10.00$; a total for poultry of 18.91 continuously, and consider the price money poultry consumed, $\$ 10.00$; a total for poultry of 1891 continuously, and consider the price money
$\$ 133.80$. Add to this $\$ 88.84$ receiven for ears. and a grand total of $\$ 222.64$. The total exgs, well invested. $\begin{gathered}\text { York Co., N.B. JOHN A. CAMPBELI }\end{gathered}$

## THE PARM.

## Battling with Bindweed.

Editor "The Frmer"s Advocat":
 mears our experience might. be useful to someone.
he had a $e$ emall fold of four acres badly infested
We with it it think we got the seed with mangel seed which wer had panted in that field for a
number of years. In $_{\text {the }}$ the spring of 1911 we numbed the field as soon as it was dry and disked
plo
 used the cultivator every feve days, or just before the meed got above the surface. I think just once it got haean of us white we were busy with
the hay. We continued this method till the first of September. Then we gave the feld a good
coat of bernyard manire and plowed it in and
 ${ }^{\text {fine }}$ coverat the ipround. In the spring after the siow had all gone, we examined the field and, to our surprise, there was lots of the weed. It
was small, but quite green.
When the weather was small, but quite green. When the weather
got warm, the wheat trew very rapidly and ber got warm, the wheat grew very rapidy and be
came a thick, heavy crop.
When we cut it, there was scarcely a stock of the weed to be seen. As soon as the crop was off, we plowed again, in-
tending to continue the cultivation, but the heavy tending to continue the cultivation, but the heavy
rains stopped us. Had the weather been favorrains stopped us. Had the weather
able, the victory would have been' ours. The
cultivation weakened the weed and the ground being rich (which is all-important) the wheat smothered it.
Bruce Co., On

## THE FARM BULLETIN.

## Progress.

ay Peter MeArthu
At last this part of Ontarlo has made a step
forward. A Fruit-Growers' Association has been orward. A Fruutt-Growers' Association has been
organized at Glencoe, and preparations are being organized to handle the orchards of the district properly. I have been told that thirteen thous and barrels oi apples were shipped from this
neighborhood last year, so we certainly have the neighborhood last year, so we certainy have no
goods to deliver if we go at the work, with a will. To me this sistrict in many a year. I it is successful, and I see no reason whysit should not be, it will probably mean the trans tormation of the whole country side in the course of the next ten or fifteen years. The land is admirably is amply proven by the fruit produced in the orchards that have been cared for properly, and visiting horticulturists have been unanimous in saving that apple-growing is our logical industry.
of course, it will take years to convince some people that they should plant out orchards; but when they see proper results from the orchards Aready in existence, they will gradually fall in line., Unquestionably it takes many years to get cives a chance to the wise owls, who exist here as elsewhere, to hoot dismally: "You will never live to get the good of your tree-planting."
Perhaps not, but I have heard that doleful rePerhaps not, but I have heard that doletul re
mark before, and the answer is simple. De veloping an orchard is like putting money in the ou will realize that you will never get the goo of the money you put in the bank unless you
spend it, and you have no intention of doing you save to someone else. just as well to leave that money invested in an
orchard especially as it will increase in value in orchard, especially as it will increase in value in
the land much more rapidly than it will in a bank. And the heirs to whom you leave a good orchard will have a permanent source of income
while the money in the bank might be lost in one dyer in a bucket shop. The argument is all in
favor of planting an orchard. avor of planting an orchard.

At the meeting which was held for the purpose of organizing the association there was a discus
sion of the problem of selling that interested me greatly. The prevailing opinion seemed to be that we should try to organize a county as-
sciation. It sociation. It was held that the more powerfur wo were, the more likely we would be to gel
cood prices from the buyers. As the problem of the high cost of living is never long absent from iny mind, I could not help seeing that the work we are doing here gives little promise of cheape to do is city people. Apparently an is is hoper do is to compel the buyers to give up fair
treatment and to exact from them a share of the profits they are making. If this has any result
at all in the cities, it will be to force prices still at all in the oities, it will be to force prices stith
higher, for what the deellers give up at one end
of their transaction they will try to get back at Balfour even quoted from one of the advertise-
the other. the other. It is hard to see how the cost of ments on the floor of Parliament. It was prob-
living can be reduced in the cities until Con- ably the most skilled piece of advertising ever
 sumers. Leagues are organized, or at least $\mathbb{R e -}$
tailers' Associations. If there were organizations in the cities that could handle the products of the bring down prices to a normal level. Wo cours bring down prices to a normal level. Of course,
the present middemen would be eliminated, but considering the character of the service they have been giving of late years, they deserve little sympatay. There are altogether too many men
making their livings between the producer and the consumer, and it is time that something was done to weed them out. The distribution of pro-
ducts by the transportation companies and midducts by the transportation companies and midas the production, and in order to pay profts to all the intermediaries, both the producers and consumers are being robbed. I suppose, from the point of view of many producers, it does not the producers get a decent profit. But this is a mistake. If consumers can get apples and vage-
tahles at a fair price, they will use more and the demand will be greatly increased to the producers. to anyone else that the cortant to the producer as treatment, and the consumer cannot get fair treatment until we have a co-operative system of distribution that will put an end to such holdups as have been experienced in the past.

The work of county advertising that is now in progress in various parts of the country is also
interesting. Having had some experience in the advertising business, I learned a few things that
impressed me greatly. To begin with, ""Hot

ir," although very popular, is about the poorest kind of advertising known. H. R. Haxton, the man who advertised the Encyolopaedia Britan nica so that who couldn't afford it bought a set ance told me that he could sell mud by advertising, but he could sell it only once. He expressed
"You must have a good thing to sell ; you must believe in it, and will believe in it." had an opportunity of studyying his methods some what closely, and the fact books in less than five million dollars wo his methods were good. H years indulged in "Hot air." Before beginning his campaign, he knew the Encyclopaedia Britan nica better than any man living, and knew every use to which it could be applied dealt only with facts. Of course, he made those facts amazingly attractive. I happerted to be in London, Eng land, when his advertising campaign was at its height. He had fult-page aderlerent them the papers every morning, and people day. Premie
what advertising should be. If Haxton were advertising one of our Ontario counties, I imagine he would go about the work somewhat as follows. the time of the first settler. He would get careful records of all industries that had succeeded in it. To this he would add a list of all the
property for sale in it, and would classify this property for sale in it, and would classify this property according to the lines along which it find out the actual demand for labor within the county, the wages that would be paid, the hours
of labor, and other conditions. From this mase of labor, and other conditions. From this mass of material he would work out the opportunities aiforded by his county to men of all classes and he described would be a real one, and he would
see to it that a full statement of that opportunity see to it that a full statement of that opportunity reached the right men. Some advertisers seem advertising campaign is to "Holler." Noise will, of course, attract attention, but it win not necos sarily lead to the transaction of business. Every county in Ontario is bristling with opportunitilies
for the right kind of men. If our advertisers will only work out what these opportunities are tell about them convincingly and get their advertisements into the hands of the right people, they cannot fail to achieve permanent results.
Haphazzard, hot-air, advertising would do little more than bring people who should be seeking homesteads into counties where men cannot start without capital. The older counties of Ontario are no longer a poor man's country, and the
population they need is not of the kind that comes through the ordinary immigration chat nels. They should be advertised to the substan-
tial farmers and busintess men of the old land, to While it is triue opportunities might apeal. the most prontable forms of investment, thore is no easier way of wasting money than by poor advertising.

## Parcel Post for Canada.

In the Canadiart Parliament list weok Hon. that he expected to introduce legislation provid ing for the establishment of a parcel-post aystem the cast of porimary mail. The minister stated his position, in re: sponse to a motion proposed by the former Post-
master General, Hon. R. Lemieux, "that in the masinion of the House the establishment of a cheap opinion of the House the establishment of a cheap parcel-post systere woude." During the discuesion, it was shown that other countries have a
parcel-post, the latest to act being the Unitod parcel-post, the latest to act being the Unitod
States, where it went into operation on States, where it went into operation on January
1st, and had already developed enormously. In fact, the Canadilian postal system was now doluged with such mail from the United States particu-
larly. As it is, Canada is carrying the parcels larly. As it is, Canada is carrying the parcelp In the States it is said that during the first woek of operation over $4,000,000$ lbs. of such matter had operation over carried, though it had been long opposed there by the express companies and
other interests. It is intimated that objection comes from local merchants, but the reail opposit tion is evidently from other quarters. In the postal Department a number of petitions wor received against parcel post, but theee were all type-written and in the same phraseolocis, so
that they were believed not to be individual pro tests. Judging by the observetions of several members of the House, public sentiment is growing strongly in favor of parcel post, and its institution is a foregone conclusion. Hon. Mr.
Pelletior intimated that the elaborate zone syla em of the United States would not be copied. It is thought that the plan may be by territorial zones, based or provncial units. Incidentally it was stated that rural mail delivery development would precede that of parcol post. nhe two-million dollars a year for carrying the mail.

## Lost Without It.

Please find enclosed P.O. order for $\$ 1.50$, being my subseription for the coming year
Kindly change my address, as I have loft the cit and bought a small farm close to the city, and must continue to . have our old friend, "The Far-
ner's Advocate, "which wo would all leel lost mer's Advocate," which wo without.
withour
Frontenac Co., Ont.
J. E. Johnston.

Our Western contemporary says that there is strong evidence proving that there is 2,
of pure-bred hogs in the Canadian West.

## Western Dairymen Again at Woodstock.

No matter how full and neaty a program may have been discussed at the Eastern Ontario Dairy
men's Convention, contsiderable that is new alway romatis to De brotight out at the Wostern held the ensuing week. While many of the papers giver at Woodstock on Wednesday and Thursday
last duplitated those read at Kingston, there were
several exceptions, notably Prof. F. C. Harrison's several exceptions, notably Prof. F. C. Harrison'
address on fishy flavor in' butter and Prof. Har court's, entitled, "What is cheese ?", Professors
Zavitz and Edwards on alfalia. and legume inocuZavitz and Edwards on alialia and legume inqcu-
lation and Prof. Dean's report on three
years' investigations at the O. A. C., in the yetion and investigations at the o. A. C., in the
ypreface to which he proposed utilizing moving picture shows and enacted drama
cultural knowledge on the farm.
A milk supply miaintained weil on to cheese from April to Novemiler were two encouraging features of the, situation comthe opening session by President D. A. Dempsey. the butter market has been active and prices
indicate a strong demand from the growing home indicate a strong demand from the growing home
inarket. narket.
Several new creameries and cheese factorie were built during the past season, and it is be
lieved that factory buildings are being improved -s-rapidly es funds will permit.
Scarcity of labor is rapidly becoming a big factor in limiting milk production. Competen assistance for factory work is also becoming mor
dificult to secure. With multiplying demands fo milk and cream, producers were never in a bette position as regards prospects for markets and prices.

CHEESE FACTORY CONDITIONS.
A greater number of patrons cooled their milk last year, and the majority of makers did good parhaps superior to other years, said Chief Instructor Frank Herns, in his report on Dairy In-
struction and Sanitary Inspection. Among other points from the very concise report we observe The estimated average per cent. of fat in the milk supplied by 12,307 patrons was 3.42. The estimated loss of fat in the whey was 21 per cent
Five cheese factories made whey butter.
Fourteen factories have ice cool-curing room $\begin{array}{ll}\text { and ive have sufficient insulation to control the } \\ \text { temperature. } & \text { Twenty-seven factories paid for }\end{array}$ mille by tes
Eighty factories pasteurized the whey and
eight fed all or a portion of the whey at the
factories.
Fifty-four patrons pleaded guilty before police magistrates to delivering deteriorated milk, and fines of from $\$ 5$ to $\$ 50$ were imposed.

AN EXAMPLE FROM THE INDIANS. G. G. Publow, Chief Instructor in Eastern plied altogether by 14 Indians phied altogether by 14 Indians, all of whom mave been coolting their milk this season with a the only factory in Eastern Ontario where a the patrons are cooling their milk.

INVESTMENT. IN CREAMERIES
Eight new creameries were built at a cost of
$\$ 46,300$, and $\$ 37,253$ was expended in general improvements.
The quality of the butter made at 115 cream eries and combined factories visited was fair considering that practically all Western Ontario
butter is made from gathered cream butter is was heard regarding the weak texture of a portion of the fall make, and fishy flavor had been noticed in a few lots coming from storage.
The average per cent. of fat in cream delivered was 26.25 per cent
was 26.25 per cent. for weighing cream samples. Only six creameries use the oil test.
For collecting cream, 27 creameries use large cans, 10 used jacketted cans, 44 have individual Out of 527 creamery patrons visited by a
special instructor, 90 per cent. had abundant special instructor, 90
water sup
pent. had abundant water supply, but orly 35 per cent. cooled the
cream in water, while only two per cent. cooled it in iced water, and 50 per cent. still cooled it
in the cellar. Only 65 per cent. of the hand in the cellar. Only 65 per cent. of the han
separators were washed each time after using.

THE DAIRY-HERD COMPETITION.
dairy-herd competition was conducted on much the same genar Prizes creameries who furnished the largest amounts of milk and butter fat respectively per cow from
May 1st to October 1st. In each clacs wer May 1st to October 1st. In each class were two one for patrons with 15 cows or over.

## THE WINNERS.

ease Factory Patrons.
Sec.1-First, Geo. Pearce, Tillsonburg, Miller's Corner's Cheese Factory-100 acres in farm-14 7,025 Jbs. of mill per cow. Second, W. . H . Mason, Tyrell, Tyrell Clieese Factory-130. acres ns. milk-6, 534 . Dos. of milk per cow. Third,
$\mathbf{J}$. A. Thistle, St. Pauls, St. Pauls Cheese FacJ. A. Thistle, St. Pauls, St. Pauls Cheese Fac-Cory-100 acres in farm-10 Holstein grade cows
$-63,964$ total ms. milk-6,396 1bs. of milk per
Sec. 2-First, S. G. Sangzter, Rebecca, West Nissouri Chese Factory-150 acres in farm-19
Holstein prade cows-119.117 total Holstein prade cows- 119,117 total los. milk. los. or mixa per cow

Creamery Patrons.
Sec. 1-First, R. M. Bowie, Beachville, Beach ville Creamery-50 acres in farm-9 Holstein gralkefat per cow. Second, Geo. Bourchier,
milat
Flattsville Flattsville, New Dundee Creamery-25 acres in
farm-8 Jersey prade cows- 1,370 , total farm-8 Jersey erade cows- 1,370 total 10s. milk-

Sweepstakes Med
Sweepstakes Medals.
Geo. Pearce, Tillsonburg ; R. M. Bowie, Beach-
$\underset{\text { ville. }}{\text { Ge }}$
Letters from three of the successful competitors were read at the convention by Secretary
Herns. Gea. Pearce wrote in Herns. Geo. Pearce wrote in part: "Fior the winter season from Jan. 1st; 1912 the cows are dry till about the last of March. The cows are fed silo-feed and bran while milking. and "Inen dry they are fed hay.
In the summer the cows are fed silage and during the summer months. Each animal is fed half a bushel of silage and about four pounds of


Jersey Cow Rising Three Years
Property or A. T. Springate, Island of Jersey
whatever a firm believer in feeding no straw "In spring, when the cows freshen, they are erd some oat chop besides the regular rations. Wallace H. Mason :-
"A pure-bred Holstein sire has been, the founstock is pure-bred and seven now all the young Holsteins, the other two lveing grade Holstein.
"During the what hay and silage of May the cows received went, out to pasture, and during August, Septem ber and October they were given green corn for
bulky feed along with pasture. tion varied during the season. In the early raf fed Manitoba wheat chop, shorts in part mer, and oats and barley chop after new grain was threshed. The wheat costs 70 cents per
bushel. shorts was $\$ 1.30$ per cwt hushel. shorts was $\$ 1.30$ per cwt., and consider-
ing the cost of oat and barley chop this fall averape of $\$ 1.25$ per cwt. would cover the cost of grain for the season. The total amount,
which was 3,800 tbs., at $\$ 1.25$ per $\$ 47.50$. or "The total ace of the nine cows is 37 years, or an average of four years. The first nine days in May we separated once a day, a fact which is

The cows freshened from February 20th to April 4th in the spring, and when they have their
season complete, $I \mathrm{am}$ sure the total of the nin cows will be over 108,000 ms. mitl of the nine "'We be 108,000 the. milk.
breds are all in Record of Penformance work, so we know the test of
the milk production.
"I believe if we could induce all dairymen to test their cows and keep records of milk produc years until only grood cows would be seen on Canadian farm.s
J. A. Thistle :-
for the past ten years, and raise Hosstein sire for the past ten years, and raise most of the
heifer calves. We kave our cows freshen as early in the winter as possible, as it gives a much better chance to raise the calves, especially when the milk goes to the cheese factory, and we think winter dairying is just as profitable as
summer dairying, if not more so. We have been fceding some brewer's grains for the past two years, and find it a great help in keeping up the milk flow, especially when the grass begins to for last summer, as our silo was very nearly empty when the cows went to grass in the spring, but would very much like to have a stmal silo just for summer reeding, as it is not a safe
plan to depend on grass alone. We weigh each cow's milk and keep daily records. and think it is time well spent as it gives a correct accoun of each cow for the season. and is a sure way o - practical pot

PRe's and On ALfalfa.
If one's land is perfectly clean and in good
heart,' he may sow alfalfa seed with considerotl assurance of success on fall wheat, early in sprine, scattering the seed on the snow as many
sow clover, said ppreciated addres non alfalfa. He es uoon alfalfa. He had
experimented with this method during the past four seasons at the On ege and had 10 lege and had io ound seedlings would stani a great deal of frost The 1 and , however must be very cleau Ise seeding with wheal very satisfactory. Can adian blue grass is one of the greatest. enemies
of alfalfa. He had had alout two-thirds as oo od results seeding with oats as with acra. Wharley $p e$ with spring graifl sow the seed in front of the how lightly afterwards the landneed eaning, a first-class allow is to summer July and then sow the seed alone. Do th If the stand is in pasture the first your. much top, clip with in danger of making too clippings on the ground. In the average of fifteen years' experiments at Guelph, yielding an average of three cuttings a year, the average weight of green crop was a little over 20 tons per annum
and of cured kay, four and four-fifths tons been on fields which had been growing alfallia hay or hay and seed for twenty years without manure He suggested ensiling the thind cutting mixed with
corn. In reply to an objection from the Olfalfa had been tried and proven a failure in Oxford County, Prof. Zavitz asked for a show of Oxford Co.. and we who had grown alfalfa in with a considerable degree could be grown there a score of hands appeared satisfaction. Ove one contra was recorded. However, Geo. A rose to observe that his of Farmer's Institutes ed in the county a planatity in maintaining a stand. Postances o sowing of surgested by the speaker were the land with a cold, wet, subsoil, and lack sowing on lation. The varierated alfalfa ind lack of inocuEurope into the Niagara Peninsula of Ontario from now known as the Canadian Variegated, is much
hardier than the common alialia. Another hardy variegated variety is the Grimm, introduced into
Minnesota years ago from Germany. Other fairly hardy kinds are the Wheeler or Baltic, th Sand Lucerne and the Turkestan. The poorest Western States, though of this the Montana see s better than the rest. The common often pro huces a good stand, but in plots at Guel of variegated beside it continued strony and igorous. Investigations show that in Canad the greatest percentage of variegated is found in some in Lambton and small percentages in Variegated seed is the best to sow in Canada, but this year, owing to climatic conditions, th rialfa seed crop in the Niagara Peninsula is a
ailure. In conclusion Prof. Zavitz offered the very sensible advice not to give up growing
alfalfa. because you had encountered a failure or Ifalfa because yourhad encoun hardy strain, or vide the best possible conditions and try again. Prof. Edwards, discussing inocusation, brought out the fact that a few of the nitrogen-gathering bacteria may occur on the stems and spread over
farm in manure, while a very few may attach to the seed, but not many because drying kills nearly all of them. However, a few introduced by seed or otherwise would multip'y and inocuenou,kh. Artificial inoculation by treatment of seed or broadcasting of soil from an old alfalfa
feld saves time.
FACTS FROM THE DAIRY CENSUS. During the past season the Provincial Depart-
ment of Agriculture made a dairy survey of four ment of Agriculture made a dairy survey of four
townships among the patrons of 35 cheese factories and creameries. Results are not yet com-
plete hut a few facts, from the survey of North Dorchester Township, were given by Geo. A. nd Director of Dairy Instruction. and Director of Dairy Instruction. Out of 27.2
arms visited 70 per cent. cooled mill or cream with water only in a tank or some other vessel ;
$8 \%$ cooled with running or iced water ; $8 \%$ cooled with running or iced water;
while $151 \%$ had no special provision. of the While 1 \% 272 patrons $62 \%$ sent milk to a cheese factory,
$7 \%$ supplied city trade ; $13.6 \%$ sent cream to creameries, $8 \%$ made butter at home, $7 \%$ patron-
ized the condensary; while $2.2 \%$ were vealing ized the
calves.
Taki
calves.
Taking the best fifty herds, the highest return
per cow was per cow was $\$ 111$, obtained by a man with 18
head supplying a city trade. From the 11 herds supplying a city trade, the average return
per cow was $\$ 86.20$. From the 13 supplying the condensary, the average per cow was $\$ 75.40$ one herd of 40 cows averaging $\$ 75$. From 18 factory herds cash returns per cow were $\$ 57.50$.
From eight herds sending cream to the creamery of the fifty best farms averaging 100 acres, 49 grow corn, 29 have silos and the corn acreage
is 14 acres each. On the 19 without silos the corn acreage is $6 \frac{1}{1}$ acres. The twenty-nine mon with silos have 17 cows each, and the 19 with
out have 13 cows each. If corn and the silo out have 13 cows each. If corn and the silo
enable a farmer to keep an extra four cows withshould should he good practice to go in for them.
Thirteen of these best farmers grevr alfalfa, and 34 grew an average of two acres of roots.
Cheese experiments and investigations at O.A.C. during the past three years was the title of a paper by Prop. H. H. Dean, read in his ab-
sence by A. McKay, though the author himself arrived near the conclusion of the session an added a few words impromptu. In these infor
mal remarks Prof. Dean, in his usual emphati manner, asserted three facts : clining
2. That our exports of butter have ceased.
2.- That our exports of butter have cease
3.-Our exports of cheese are declining.
The first fact he attributed partly to rhe first fact he attributed partly to the
testing and culling of our herds, which is reduc ing the cow population. He thought the time to improve the quality of our cows and increas their number. At present, he said, we had no
active organization trying to do this. A leading dairy company had lately asked him to prepare
an article for distribution on this subject. He did so, attempting to show the advantage o a pure-bred sire. This company now intends to put pure-bred sires within reach of every farmer
supplying milk to its plant. "What breed woul you advise?" was a question fired from the audience. He wouldn't say as to that, so long
as it was a dairy breed. He cited an experience told him by a short-course student hratign with thustrate how one generation of grading with
the strains of Shorthorn bulls now available would ruin the milking quality of a herd.
A second reason for decreasing production was A second reason for decreasing production was
the lesser profts of dairying as compared with
some other lines some other lines. A dolar per profitable.
peated the suaggestion offered in his paper. If
he were a millionaire, he would-make use of two agencies a for the spread of agricultural and dairy knowledge-viz., the moving picture show and drama, where real persons, animals prefert the and products, with suitable stage equipment and comfortssary accesories of music, colored lights, impressions, seats, etc., which go to make strong and dairy lessons. Why could not a suitable maike, with real cows in a clean stable, caring for milk, separating cream, churning, etc., with suitable music, be made an effective means of teaching the first principles of dairying ? This methood to mankind. teach a lesson in cheesemaking. The actors would be a farmer, his hired man, wife, son and assistants, the cheese buyer, railway agent and train Lands, steamship employees, cheese merch-
ants in Canada and England, retailers and conants in Canada and England, retailers and consupresent a farm: scene 2 hauling millk would
 cheese; 2, ripening cheese and buyers inspecting ; 3, loading cheese on cars and steamboat.
Act III, scene 1, cheese landing at English port Act III, scene 1, cheese landing at linglish port
2, receiving at warehouses ; 3, retailer's shap 4, pleased or dissatisfied consumers in English
or Scotch home, with the necessary dialogue. orc., to make a good drama.
ethe
in the lobbies, opinion as to its feasibility being divided.

RESULTS OF DAIRY INVESTIGATIONS. the experiments reported by Prof. Dean : Night's milk, cooled to about 70 degrees, will neept morning and stirring of the mill is is necessary for good ressllts, though stirring did
result in a little prompter cooling and slightly result in a little prompter cooling and slightly
lower percentage of acidity. When milk has over two per cent. of acid at
the time rennet is added, or the curd the filine rennet is added, or the curd remains
in the whey less than one hour, it means a loss of over one pound of cheese per 1,000 pounds
milk, and a deterioration of the quality of the cheese represented by a score of nearly one point cheese represented by a score of nearly one point
less. Since high acidity (souring) in milk is promoted by high temperature of milk, the practical poin't is to have milk properly cooled so as
to keep it comparatively sweet. to keop it comparatively sweet.
Closely associated with the
of milk at time of adding the rennet is the iques tion of acidity at the time of dipping or removal aged together indicated that an extra four one hundredths of a per cent. of acid at dipping 1.198 per cent. as compared with 158 per cent.) re-
duced the quantity of cheese per 1,000 lbs. milk by a trifle over half a pound and the average
score loy over half a point. No one could say just where the danger point lay, but for all millik per cent. of acid, varying in different localities and with different kinds of milk
From another series of experiments Prot
Dean deduced the tentative conclusion Dean deduced the tentative conclusion that it the time of salting were quite an important fac order to make the finest cheese. The season and character of the milk may also be contributing Following this paper in discussion, G. G.
Publow, Chief Dairy Instructor for Eastern Ontario, endorsed several of the points made. In visit to England he had heard the complaint that many of our cheese were too lean in character. tion for a certain smooth silkiness of texture which ours did not possess. Looking inta possible causes he came to the conclusion that our cheese were too dry, probably owing to two
things ; viz., having the milk too ripe when adding the rennet, and then over-salting the curd rom that kind of milk. A number of district
meetings were held ${ }^{\text {in }}$ the sections where that trouble was most pronounced. The makers were salt a little lighter, with decidedly advantageous results. They had carried on some experiments
and found with Prof. Dean that the riper the and found with Prof. Dean that the riper the When the milk is over-ripe, they have been able
to reduce the salt by one-quarter of a pound per thousand pounds of milk

## green cheese.

The practice of shipping green cheese is still
almost universal. At probably 150 factories a week their instructors will find no cheese on the shelves to report upon. "Prohably from another hundres"
the word will be "cheese too young too report on."

Tncidentally this complicates the work of finstrue tion, since the staff, in those cases, must rely
upon the reports from buyers in Montreal. When the market is brisk the buyers pass the oheese on
without comment, but when it becomes dragey complaints come thick and fast.
The Fastern Aseocietion, announced Mr. Pub
ow, intends to follow the example of its sister organization organization, and have a dairy exhibit next year
if a national dairy show is not arranged for.

THE DOMINION DAIRY STATIONS.
Geo. H. Barr, Chief of the Dairy Division, Ottawa, described the two Dominion Dairy Sta-
tions. The combined cheese factory and creamery tions. The combined cheese factory and creamer at Finch, Ont., cost $\$ 7,767.73$ for building a site, this being more probably than he could
have built it for with private capital. The
creamery in creamery in Quebec Province cost $\$ 4,000$ complete including sewage. One tender for the contrac
was at $\$ 7,000$, jllustrating the difference in calcu was at $\$$ lations. In this case the contractor earned time bonus of $\$ 223$. The buildings seemed well planned, and some interesting practical points are being worked out. For instance to insulate coal cinders, a thickness of lumber, ten inches of mill shavings and a second thickness of lumber. Below the cinders the floor was carefully drained
with 3 -inch land tile. How it will work out with 3 -inch land tile.
Omcers for 1918.- Presildont, S. E. Facey Harrietsville; 1st Vico-President, J. B. Macey, Tngersoll; ${ }^{2 n d}$ Vice-President, Robt. Myrick,
Springford; ${ }^{\text {Srd }}$ Vice-President, Springford ; ${ }^{\text {Srd }}$ Vice-President, Jas., Bristow,
St. Thomas ;
Secretary-Treasurer, Frank Herns, London; Directors, S. E. Facey, J. B. Muir,
Roht. Myrick, J. H. Scott, J. N. Paget, Thos. Roht. Myrick, J. H. Scott, J. N. Paget, Thos.
Ballantyne, W. A. Bothwell, J. Donaldson, R. Ballantyne
Stratton.

## A FINE EXHIBIT.

 In connection with the convention was a very staged. The cheese .were remarkable for finish less than a point difference between the best and poorest.WINNERS IN CHGESE.
September White-1, T. O. Flynn, Tevistook, (won on fiavor) ; 8, C. J. Donnelly, Scottsville, $96.82 ; 4$, J. Cuthbertson, Sebrin
5, R. E. Hastings, Newry, 96.38 .
September Colored,-1, Roy Hastings, Newry, 7.17 ; 2, W. A. Bell, Pine River, 96.32 , (won 4, Jno. Francis, South Middleton, 98.16, (won on flavor) ; 5, J. K. Brown, Ethel, 96.16. October White.-1, J. T. Donnelly, Sparta,
$96.65 ; 2$, H. E. Donnelly, Straffordvile, 96.49 : 96.65 ; 2, H. E. Donnelly, Strainordvilie, 96.49 ; 3, J. K. Brown, Ethel, 26.48 ; 4, J. Cuthbert-
son, Sebringville, 96.32 ; 5, C. J. Donnelly, son, Sebringvilie,
October colored.-1,
$\mathbf{9 6 . 6 5} ; 2, \mathrm{R}$. Myrick, Y Youn, Molesworth,
Sprinqford,
96.32 , (tie.) 3, R. R. Hastings, Newry, 96.32, , (tie.) ; 4, J. E, Tavistock, 96.16.
 stock, 95.82 , (won on flavor); 3, H. W. Hamilton. Onklon, 95.82 .
September Flat Cheese (Two).-1, P. Callan,
Whoodstock, $95.82 ;$, C. J. Donnelly, Scot
 Cheese Buyers' Trophy.-R. E. Hastings, WINNERS IN BUTTEER.
Winter, 56-1b. Box, Creamery.-1, F. M. Johnston, Innerkip, $9.49 ;{ }^{2}, \mathbf{H}$. W. . Patrick, St $95.66 ; 4$, B. Johnston, Bright, $95.49 ;$ 5, J. Cuthbertson, Sebringville, 94.16.
 Innerkip, 95.38 ; 2, Wm. Waddell, Kerwood, 95.16 , 3, R. Johnston, Bright, 94.65 ; 4, T. O. Flynn
Tavistock, 94.49 (won on flavor) ; E, H. W. Tavistocks, 94.49, (won on
Patrick, St. Thomas, 94.49 .
56-mb. Box Creamery Butter-1, W. G. Medd,
Winchelsea, $95.66 ; 2, \quad$ Wm. Waddell Kerwod Winchelsea, $95.66 ; 2$, Wm. Waddell, Kerwood,
$95.15 ; 3, \mathrm{~J} . \mathrm{H}$.
Scott, Exeter, $94.99 ; 4,1 .{ }^{2}$ $95.15 ; 3$, J. H. Scott, Exeter, $94.99 ; 4$, I. ${ }^{2}$.
Goodhand, Corbett, $94.81 ; 5$, H. W. Patrick, St. Thomas, 94.65 .
the The auction sale of cheese and butter realized the following prices : SReptember white, 12 fe.
September colored, 12 fc. October white, 12 c .
 creamery, 28 c . ; prints, 30 àc. OTHER ITEMS.
Among the resolutions was one recommending that cream sent to creameries ie cooled where ever possible to a temperature of at least 55 de-
grees promptly after separating; cool water or grees promptly after separating ;
ice was recommended for cooling.
A committee was appointed by the directors to
confer with committees from any other organiza
tions regarding the advisability of kolding a NaDairy the final Cold Storage commissioner, discussed Dairy and Cold Storage Commissioner, discussed of Agriculture, and N. W. Rowell, M. P. P.' gave a. strong addre
in citizenship.
The addre

The addresses of Prof. Harcourt and Dr
Harrison are reserved for publication in full.

## Best Printed.

Inclosed please find $\$ 1.50$, renewal subscrip tiontion to the best farm journal printed. With Yost wishes.
Yo., $\qquad$ James hlll

The Ministerial Order from Ottawa of 16th October last prohibiting the importation or introduction into Canada of any hay, straw, fodder, feed stuffs or litter accompanying horses
from Continental Europe, has been extended for from Continental Europe, has been extended for
a further period of three months from January a fur
16 th.

## Live Stock Ouarters, National

 Exhibition.The work of moving the live-stock stables at the Canadian National Exhibition Grounds, ing diagram shows their low, and the accompanyrison Commons, to the east side of the old site. The tables are being refitted inside, properly venti lated, furnished with wash racks, and equipped nevery way for the exhibiting of live stock. A temporary arena and grand-stand is being erected a grand judging arena, which it is hoped will be erected in 1914. All cattle and heavy horses will be judged in the arena, while small judging
rings will be arranged for sheep and swine. The rings will be arranged for sheep and swine. The
estimated cost of this year's improvements is
$\$ 125,000$. The following is the diagram : 1, old location of stables ; 2, main approach; 3, western end live-stock department (see other photo) ; 4, arena; 5, grand-stand ; arcade; 9, hog pens.

## Likes Oilskin Moccasins.

## Edtor The Farmers

In your issue of January 9th, D. S. asks for information regarding oilskin moccasins. As ind of that othing better in the ided he secures the right kind. There are two kinds of oil-tanned moccasins made in these parts-one made in Bala by the Gibson Reserve
Indians, and another made by a white man, and both kinds are much worn by the lumber-jacks in hese parts, who swear by them. These moc days, ard on warm or wet days are positively days, ard on warm or wet days are positively
impervious to water, keeping the feet perfectly dry at all times.
$\qquad$ GRAVENHURST.
"'Ten Acres Enough" is the title of a book on
intensive agriculture. Ten acres too much is the idea of a speaker at the recent Experimentel

## Successful Show of Live Stock and Poultry <br> The Eastern Ontario Live-Stock and Poultry

Show has had another record year, the show Which closed on January 17th being in almost
every particular the superior of any former winter exhibition held at Ottawa. The weether was exhibition held at Ottawa. The weather was
clear and cold on the opening day, but gradually clear and cold on the opening day, but gradually
moderated and became quite mild before the olose of the show, but, on the whole, was favorable for spectators and exhibitors, as well as for the
stock. Howick Pavilion, in which the exhibition stock. Howick Pavilion, in which the exhibition
is held, has no equal in this country as an ideal place for a winter stock show. With the new three-storey wing added this year, giving stabling
for 70 more dairy cows on the lower floor, nearly for 70 more dairy cows on the lower floor, nearly
50 addition'al horse stalls on the second floor and poultry above, besides all the space previously allotted to these different classes, no one could question the enterprise of the management and
their desire to make the Eastern Live-Stock and their desire to make the Eastern Live-Stock and
Poultry Show the banner show of its kind in Poultry Show the banner show of its kind in Conede. of man and beast. The stables are light,
comfort matal
well ventilated and sanitary, and comfortable well ventilated and sanitary, and comfortable
quarters are provided for the exhibitors, as well quarters are provided for the exhibitors, as well
as ample seating space for the spectators. One as ample seating space for the spectators. One
thing the show seems to lack; and that is special attractions to draw evening, crowds. While the attendance was good, there seems to be an opportunity missed for drawing the city people out
en masse. Judging of draft horses and of cattle gets just a little monotonous if continued to exceedingly great lengtn, and even those interested appreciate a change. A little diversion like a
number of good jumpers over the jumps, a potato number of good jumpers over the jumps, a potato
race on horseback, or a little clean sport, adds spice, and is not out of place at evening shows. However, the crowds were fairly large and the management ever willing to assist in every way
possible towards the comfort and enjoyment of possible towards the comiort and enjoyment of
all present. Lectures were well attended, and, being held at hours when no judging was in progress, did not conflict with that important part
of the exhibition. It is useless to attempt to of the exhibition. It is useless to attempt to
get crowded lecture rooms when judging is in progress, and, the management realizing this, progress, and, the management realizing this, skill in arranging the program.

HORSES.
Like the Ontario Provincial Winter Fair held in Guelph in December, the great feature of the dales formed the major part. It was one of the best horse shows of the season, and conspicuous were the large number of creditable amateur and local entries, the smaller breeders being out in
very large numbers. It shows a healthy state of affairs when the amateur is encouraged to compete, not only in the amateur classes, but also in the open classes. John A. Boag, of Queensville, Ont., placed the awards in all the heavy
breeds, and Dr. F. C. Greenside, V.S., of Guelph judged all the light breeds. The single-judge
system worked perfectly, and good satisfaction system worked perfect
was given throughout
Exhibitors.-Clydesdales-Smith \& Richardson Columbus, Ont.; Mount Victoria Stock Farm,
Hudson Heights, Que.; Wm. Meharey Russell Ont; R. Ness \& Son, Howw. Meharey, Russell,
well., Hillsdale Farm, Ottawa, Out. Both-
Ont.: Allison well, Hillsdale Farm, Ottawa, Ont.; Allison Bros., Chesterville, Ont.; A. Scharf, Cumming's
Bridge, Ont.; R. M. Holtby, Manchester, Ont.; John Minoque, London, Ont.; W. Cochrane, Ot
tawa; RI N. Harris, Gatineau Point, Que.; W A. Morron, Russell, Ont.; Lew Richardson, Ash D. J. Boyd, Kars, Ont.; John Bright. Myrtle Station, Ont.; J. \& D. J. Campbell, Whaodville,
Ont.; Wm. Darcy, Purple Hill, Ont.; J. D. Mc-

## at Ottawa.

Curdy, Hazeldean, Ont.; W. J. Ormiston, Enfield, Ont.; Wm. Ratcliffe, Beathton, Ont.; T. D. Fair-
bairn, Billing's Bride, Ont.; Geo. Mackie Shirleg. Ont.; Ralph Henry, City View, Mackie, Shirley, McLean, Ormond, Ont.; Eadie Bros., Aylmer, Que.; A. Watson \& Son, St. Thomas, Ont.; Bower Henry, Bell's Corners, Ont.; Robert Todd, Geneva,

Shires.-Jas. Callander, North Gower, Ont Percherons.-R. Ness \& Son and W. R. Wilson, Hackneys.-A. Watson \& Son, Mount Victoria Stock Farm; Allison Bros., and Mrs. G. E. Standard-breds.-D. H. Skuce, Carsonby, On tawa; C. W. Cresswell, Martintown, Ont. A. Devitt; John Helmer, Westboro, Ont.; ynes, Ottowa, and Owen McGovern,
Thoroughbreds.-R
Thoroughbreds.-R. E. Webster, Ottawa; W.
Hunters.-Homewood Farm ; C. M. Edward Clydesdales.-Ten aged stallions faced the judge. They were a good drafty lot. On clean, flinty bone, and good feet and a fair nice went first with the great old show fair mover, Spencer, winner of many hard battles and stil clean at the ground, and showing the same sen a red, second. Third in linelped him land many brought out in perfect condition, Majestic Baro Whiteking horse, with lots of draft character going horses of the of the snappiest and trues stance and quality was and with lots of subby Everlasting, fifth. and were wear-olds, four strong, were a fair clase brim full of drat by Loyth Cup, a big, black of good quality bone, good feet an abundance mover. Viscount Kinnard, a short a fair
smooth, high quality, clean-limbed Viscount Seton was second, and Lucky Coin, of Five two-year-olds madird
of the entire show, containing, the best classes champion of the Dominion Exhibition last tall
Scottish Ring Soottish Ring. The class was won by Corinthian, and showing an abundance turned throughout, Murray, a very strong boned of quality. Baron upstanding than the winner, went second, with Sottish Ring, thind.
a good type of Clydesdale, was first. Anagram a good type of Clydesdale, was first, and Bonnie
Dee second.
Ten aged mares made the best female class.
Scotts Lady, a seven-vear-old, not overly but trim and neat, strong on top and faultless at the ground, was a winner. Lady Pride, a strong
topped mare, scarcely as thick as Scotts but showing great quality, wast scotts Lady
Nan Spencer, the Nan Spencer, the big, strong-boned, winner of
last year, third. Mares two years old were headed hy' one of the sensations of the show, Lady McTageart, a big
filly with the best of Clydesdale feet, and an
abundance of high abundance of high quality bone. She gives every
indication of making indication of making a very large drafty brood
mare. Next in line was Dora Iuff, also a great
mare, massive, thick, clean-limbed,
mover. Prunella and Queen, two more of the Clydes went third and four respecively. Clydesdales (Canadian-bred-The Canadian-bred
classes were all well filled and closely tested, and interest was just as keen in them conin the open classes. Ten aged stallions made a strong class, and the many times winner, Koyama, wonderful horse with away the red. He is a wonderful horse with feet and legs to suit the good middle. Prince Cairn, a very clean-limbed horse and an extra good mover, was second, with Duke of Ormond, a big, massive black, in
third place, and Teddy middleton fourth third place, and Teddy Middleton fourth
Clydesdale from top to bottom, quality all and a strong true goer, was the best. Adjutant a somewhat smaller colt, but well ribbed up, and with the right class of quality won second: Acme, a bigger colt and a little plain at the
croup, was third. Yearlings, nine strony, were headed by Fiscal Prince with Acme Prince second, just the reverse of the placing at Guelph. These two colts are youngster with grand feet and Prince is a toppy cood quality, while Acme Prince is a littlene of with almost as many good points as his rival Third went to Cashell Lad, a smaller colt, having Six aged mares feod feet.
Lady Peggy Freeland, a nice type of went to clean limbs and showing plenty of mare with Rosvelva, last year's champion of the Can'adian that classes, not in quite as good bloom as upo Killantrae Jean, third and the big, massive Trim of Oro, a very growthy filly, strong on
op, with bone and sulbstance with quality, headed a class of five two-year-onts second, and Belle Only one yearling was forward.
All the amateur classes were well flled from entries made in the Canadian-bred classes, and Mempetition was keen in every class.
Heavy draft horses
Baroness and Blucher winning a good showing the line in single harness, and first in second of Percherons made wire was forward, and ercherons made up the exhibit of this breed.
Hackneys were not how. Christopher North, a typeed at this anded the championship on his conformastnut A few choice Thoroughbreds, and Hunters added to the interest in the light orse department
Awards - Clyd

## ged : 1 and 4 Classes-Stallions,

 Prince Sturdy and Whitekirk Hero, by Aberlady; by Smith \& Rir Spencer, by Sir Hugo; 3 and 6 Baron's Pride, and Lascar, by Craigend Prince 5, Meharey, on Title Deeds, by Everlastina Sy Silver Cup; 2 and 4 S 1 , Ness, on Loyal Cup Viscount Kinnard, by Viscount Seton, and Cowar yy Nuy Baron Ruby ; 3, Scharf, on Lucky Coin Smith \& Rickardson, on Corinthian, 1 and 2 and Baron Murray, by Baron's Pride; 3, and 5 Raron Stockwell, by Baron's Sride. Scotish Crest, and ear-oldinston, hy Sir Winston. Stallions, one By Benedict; 2, Holthy, on Bonni Anagram, by Benedict; 2, Holthy, on Bonnie Dee, byBanks O'Dee. Mare, aged : 1,6 and 7 , Allison
Bros., on Scotts Lady, by


Proposed Live Stock Building, Canadian National Exhibition, Toronto, Ont.

Wisconsin Maid, by Baronson, and Riverdale Belle,
by Perfection ; 2 and 5, Smith \& Richardsen Lady Pride, by Pride of Blacon, and Belle of Holmbyre, by Crusoe; 3, Ness, on Nan Spencer, by Sir Spencer ; 4, Rothwell, on Mimosa, by Silver
Cup. Mares, two years old : 1,6 and 7 ine on Lady McTaggart, by Sir Spencer, Lady Clark, by Sir Spencer, and Agatha, by Laura's Pride; 2, 3 and 4, Smith \& Richardson, on Dora Duff, by Ramson, Prunella, by Baron's. Pride, and
Queen, by Knight of Albion; 5, Scharf, on Kathleen Rudd, by The Comet. Champion stallion, On Guard. Champion mare, Lady McTag-
1, Clydesdales (Canadian-bred)-Stallions, aged : Richardson, on Prince Cairn, by Cariondale Le McLean, on Duke of Ormond, by Adam Bede ; 4, Smith \& Richardson, on Teddy Middleton, by Montrave Matchless ; 5, Morron, on Baro
Morris, hv Baron's Acme's Phillip, by Acme. Stallions, two years old: 1, John Bright, on Baron Shapley, by Blatk Ivory; 2, Camplell, on Adjutant, l,y Mythboe ; 3, and 4, Devitt, on Acme 2nd, by Acme, and Roya
Rod, by Black Rod ; 5, Darcy, on Royal Direct by Royal Freeland ; 6, Bvars, on Cornerstone Jr by Cornerstone. Stallion, on one-year-old : Jr Ormicton, on Fiscal Prince, by Fiscal Member on Cashell Lad, by Gay Spring ; 4, Ratcliffe, on

Royal Baron, by Baron Charming ; 5, Smith \& 6, Harris on Hedley's Choice, by Royal Hedley, Mares, aged : 1, Geo. Mackie, on Lady Pegey Freeland, by Royal Freeland: 2, Fairbairn, on Rosvelva, by Roosevelt: 3, Cochrane, on Killan-
trae Jean, by Gallant Baron: trae Jean, by Gallant Biaron; ; ${ }^{4}$, Henry, on
Hilda Priam, by Royal Winifred; ${ }^{5}$ and 6 , McLean, on L.ouie Archer, by The Royal Arch, and Belle of Glouster, by Prince Fuchius. Mare, two years Gartley, and Belle of Argyle, by Baron Gartley 2, Smith \& Richardson, on Ivory's Queen, by Black Ivory ; 4, Eadie Bros., on Pretty Lass, by Sir David: 's, Henry, on Lady Baron, by Baron
Eirig. Mare, yearling : 1. Robt. Todd, Eirig. Mare, yearling: 1, Robt. Todd, on stallion, Baron Shapely. Cherdeen. Champion of Oro. Grand champion Clydesdale stallion, On Guard. Grand champion Clydesdale mare, Lady McTaggart.
Clvdesdales, (Canadian-lred, Amateur Classes) -Stallions, aged: 1, Wilson, on Prince Patrick, by Prince Fuchius ; 2, Lew Richardson, on Prince Cairn ; 3, Morron, on Baron Morris ${ }_{\text {i }}$
4, Devitt, on Acme's Phillip; 5 , Mackie, on Baron 4, Devitt, on Acme's Phillip; 5, Mackie, on Baron
Thomas. Stall on two years old : 1, Camphell on Adjutant ; 2 and 3, Devitt, on Acme 2nd, and Royal Rod; 4, Darcy, on Roval Direct; 5 Bvars, on Cornerstone Jr. Stallions one-year-
old : 1, Holtby, on Cashel Lad ; 2, Ratcliffe, on

Royal Baron ; 8, Franklin, on Baron Soutar ; 4
Holtby, on A. B. Acme ; 5, Scharf, on Borden Holtby, on A. B. Acme ; 5, Scharf, on Borde Freeland M, Ow, aged : 1, Mackie, on Lady Pegy Mares, yearling: 1, Todd, on Aberdeen's Grace; 2, A. Millar \& Son, on Lady Aberdeen. Shires-Stallion any aye: 1, Jas. Callander Fercheron-Stallion any lage: 1, Wilson, o
Hableur, by Galopin : 2, Ness, on Insecto, b Cirquet. Dravy Draft-Gelding or Mare in Harness : 1 Heavy Draft-Gelding or Mare in Harness : 1 Blucher ; 3, Geo. Cochrane, on Baroness Lillerest Lady Gartley: ${ }^{4,}$, A. Schart, on Lady Gold. Teams in harness : 1, Smith \& Richardson, on Baroness and Blucher; 2, Cochrane, on Mary Kirkwood, and Hillcrest Lady Gartley ; 8, Bower Henry, on McLaws and Lay; Gold. Stallions in harness: and 2, Smith \& Richardson, on Viscount Kinnard. and Majestic Baron; 8, and 4, McLarey, on (amateur): 1, Henry ; 2, Clarence T. Watt: 8, Reid \& Co. ; 4, A. Minar \& Sons.
Hac'neys-Stallion, 15.2 and over, any age
1, Watson, on Guelph Performer: 2, Mount Victoria Stock Farm, on Silyer Kinq. Stallion
under 15.2, any age: 1, Mount Victoria Stock Farm, on Christopher North; 2, Watson, on
Wenona Jubilee ; 3, Mrs. Steacy, on Duke of


General Plan Live Stock Department, Canadian National Exhibition. See article, page 130.

Compuest. Aged Mares : 1, Mount Victoria Stock Dainty. Mares foaled after Jan. Ist; 1910: 1, Catson, on Daisy Porformer. Champion stallion,
Chisistopher North. Ashtand J.; 2, Skuce, on Prince Ambrose. StalIlions foaled after Jan, 1st, 1910: 1, Devitt, on
Antevolo Rysdylk ; 2, Cresswell, on King Royal ; Ahtevolo Rysdyk ; 2, Cresswell, on King Royal ;
3 , Helmer, on Laragraph. Mare, any age: 1, McGoverne on Custerena; 2 and 3, Dynes, on Larry Wass, and Nettie Larabie. Champion stallion, ntevolo Rysdyk.
Thoroughbreds-Stallions : 1, Webster, on KirkHomewood Farm, on Pocade, and Stacecraft. Hiunterg-Four years and under : 1, 2 and 8 , Homowood Farms. Gelding or mares carrying
up to 175,108 . or over: 1,2 and 3, Sifton.
 and $8_{\text {, }}$ Siftotic 2, I

## behge cattle

Fichibitors and spectators alike have become Wirhibitors and spectators alike have become
accustomed to sooing a botter show of the dairy
breeds than of boef cattle at Ottawa, but the breeds than of bee cattle at Ottawa, but the
1912 beof cattle exhibit was undoubtedly a revelation to many, for it was not only numerically stronger than upon any former occasion,
but the quality and finish of the entries was far
ebove that of former years. May of the cattle but the quality and finish of the entries was far
ebove that of former years. Many of the cattle
were freeh from winnings at Guelph, and the mejor phorthon of the show was made up of pureargely from Western Ontario
The feature of it all was the class for three export steers. Seldom is it that one is privi-
loged to set eyes upon 24 better heavy-weight loged to set eyes upion 24 better heavy-weight
exporters than the two dozen which were forward. Judge John Gardhouse, of Highifild, who always cives the best of satisfaction in the judging ring, placed the awards in all the boef classes, and
while he had his work cut, out for him in many, this was undoubtedly his most difficult class at Guelph took premier honors here. They are a thick-loshed, massive trio, almost as much alike
$\qquad$
The princtipal winners were
Pritchard and Slattery, Fergus, Ont.; A Toronto, Ont.: Peter White, Pembroke., Ont.; Wra, Ratclifio \& Son, Beathton, Ont.; W. A. Wallace, Kars, Ont.; J. D. Brien © Ridgetown, Ont. : Sam Bray, Enfield, Ont. : L. O. Cliffiford Cohawa, Ont.i Thos. B. Broadfoot, Fergus, Ont.
A. Dynes, Ottawa, and J. MacKenzie, Beathton,
Ont. Awards.-Shorthorns-Steer, 2 years and under : Pritchard and Slattery: 2 and 3, Arm
trong. Steer, 1 year and under $2: 1$ and $8_{5}$ Pritchard \& Slattery; 2 and 4. Armstrong. Steer, under 1 year : 1, 2 and 3, Russell ; 4, Armstrong. Heifer, 2 years and under 3: 1, 3 and
4, Armstrong ; 2, Pritchard \& Slattery. Heifer. 1. year and under 2: 1, Peter White ; 2, Wm.
Ratclife \& Son ; 3, Peter White; 4, Russell Ratcliffe \& Son; 3, Peter White ; 4, Russe
5 and 6, Wallace. Heifer, under one year 5. and 6, Wallace. Heifer, under one year
J. D. Brien ; 2, Sam Bray ; 3, Wallace.

Herefords.-There were four classes of this breed, L. O. Clifford, of Oshawa, having the only Abtries, ten-head in all.
Aberdeen Angus.-Steer or heifer, 2 years and under 3: 1, Thos. B. Broadifoot. Steer or
heifer, 1 year and under 2: 1, Broadfoot. Steer heifer, 1 year and under $2: 1$, Broadfoot. Stee
or heifer under 1 year: 1 and 3, Broadfoot; 2 , Armstrong. Cow or heifer, 3 years or over : Grades or crosses.-Steer, 2 years and under Armstrong.
Steer, 1 year and under 2: 1, 2, 4 and 5 Armstrong; 3 , Pritchard and Slattery. Steer
under 1 year: 1, Pritchard and Slattery. Russell; 3 and 4, Armstrong ; 5, Dynes. Heife 2 vears and under 3:1 and 2, Pritchard and $\begin{array}{ll}\text { Slattery; } & 3 \\ \text { and } & \text { and } \\ \text { and }\end{array}$ ard and Slattery. Heifer, under 1 year: 1 and 2, Armstrong.
Three export steers: 1 and 2, Pritchard \& Slattery; 3,4 and 5 , Armstrong. tion judged as part: 1 and 3, Armstrong ; 22
Pritchard \& Slattery. Pritchard \& Slattery
1, Amateur classes.-Heifer, 1 year and under 2 1, y. Russel, 1, J. D. Brien'; 2, S. Bray.
Best grade steer sired by a pure-bred Shorthorn bull: 1 and 3. Pritchard \& Slattery ; Armstrong.
Champion beef animal of the show.--Pritchard
\& Slattery on the first-prize yearling Shorthorn steer.
A GRFAT DAIRY TEST.
The entry of dairy cows was about equal to
hat of last year in numbers, and the quality that of last year in numbers, and the quality
was well up to the highest ever seen at the East
orn Ontario Live-Stock Show. Situated in the
heart of a noted dairying district and drawing, tario, the dairy test is always a keen competition. When the final reckoning for championship Holstem " millk machine," showed the highest number of points. This cow has had a wonderful record, being champion two-year-old of this
show in 1905 , champion cow in 1910 , champion show in 1905 , champion cow in 1910, champion
milk producer in 1912, and champion again this year. Although not in as good bloom as she once was, she still is a great cow, and won the De Laval special for hest dairy cow of the show.
The special for best grade was won by an Ayr. shire grade, the property of D. T. Ness.
The principul winners were: D. T. Ness, Howick, Que.; A. S. Turner \& Sons, Ryckman's Corner's, Cnt.; Hector Gordon, Howick, Que.; N. harey, Russell, Ont.; Legatt \& McMillan, Trout Riler, Que.; N. Sangster, Ormstown, Que.; W. J. Bailey, Nober, Ont.; A. E. Hulet, Norwich, Ont.; A. C. Hardy, Brockvi'le, Ont.; W. H. Cherry, Gar-
net, Ont.; R. Dowler, Billing's Bridge; Sam. net, Ont.; R. Dowler, Billing's Bridge; Sam.
Brav, Beathton, Ont.; R. Reid \& Co., Ottawa, Senator Owivens, Mountbello, Que.; T. A. Spratt, Billing's Bridge, Ont., and John Kelly,
Shakespeare, Ont.
hibited by E. Brien \& Sort, Ridgetown, Ont.;
J. L.loyd Jones, Burford, Ont,, and A. Arm strong, Fergus, Ont. - Awards. - Wether lamb unde 1 year: Brien, 1 and 2; Jones, 3 ; Armstrong 4 and 5. Pen of 3 wether lambs under 1 year.Brien, 1 ; Jones, 2 ; Armstrong, 3 . Ewe lamb lamer 1 year.-Mrion, 1, 2 and 8. Pen of 3 ewo
lambs under 1 year.-Brien, 1, 2 and 3 . Lincolns.-Only two exhibitors were out with Lincolns-E. Brien \& Son and J. Linden, Ilder ton, Ont. Awards,-Wether lamb, under 1 year lambs: 1 and 4; Brien, 2 and 3. Three wethe lambs: Brien, 1;
1 year: $: ~ L i n d e n, ~$
2. $\frac{\text { Ewe lamb }}{}$ unde 1 year: Linden, 1, 3 and 4; Brien, 2. Thre
ewe lambs : Linden, 1 ; Brien, 2 . Leicesters.-A particularly strong lot of Lei cesters were exhibited by A. \& W. Whitelaw Ont. : and J. Lloyd Jones, Burford, Awards. - Wether lamb, under 1 year whither lambs : ${ }^{2}$ Whitela 3: Kelly, ${ }^{4}$. Three Ewe lamb under 1 year: Jones, 1 ; Kelly ${ }^{2}$, ${ }^{2}$ Whitelamelaw, 3 and 4. Three ewe lambs : Oxfords. - This breed was exhibited by J, Kelly, E. Brien \& Son, and A. Armstrong. Awards.-
Wether lamb under 1 year: Armstrong, 1, 2 and

Aryshires-Cow 48 Months and Over.
1, A. S. Turner \& Son; Briery of Springbank
3, Hector Gordon: Victoria
N. Dyment: Snowdrop of Hickory Hil
N. Dyment; Beeury of Hickory Hill Cow 36 Months and Under 48
, N. Dyment; Violet of Hillview
, Turner; Blossom of Springbank 4, N. Dyment; Gypsy Maid of Hickory Hil Eleifer Under 36 Months.



Holsteins-Cow 48 Months or Over.
1, N. Sangster; Rhoda's Queen
3, W. J. Bailey; Hidda of Nober ...............
4, A. E. Hulct; Pauline Colantha
Cow 36
Cow 36 Months and Under 48

He:fer 24 Months and Under 48.

1. Sangster; Rhoda's Queen Princess
, Hulet; Rose Abbe'
Duskie Cor Bo
-ikor Under 24 Months.
1, Dowler; Cacey Te Kol
, San rster; L.yla of Pleasant Valley
5, Sanester; Ioretta of Pleasant Valley
Shorthorns-Cow 48 Months and Over.
2. Tohn Kelly; Gracy Gywnne

3, R. Reid \& Co.; Bonnie Find
Grades and Crosses-Cow 48 Months and Over.

1. Reid \& Co.; Cherry ........
, D. T. Ne-si Rose ....
4, T. A. Spratt; Bessie
Cow 36 Months and Under 48

Heifer Under 36 Months
1, Reid \& Co.; Tiopo
2, D. T. Ness; Rose
$133.05 \quad 3.9$
$\begin{array}{ll}131.00 & 3.4 \\ 107.00 & 3.8\end{array}$
143.05
130.86

The universal SHEEP. ${ }^{3}$. Three wether lambs: Armstrong, 1; Brien The universal opinion was that the sheep ex-. 2 and 3. Ewe lamb under 1 y year: Kelly, 1 ,
hibit excelled that of any former year. The Brien, 2, 3 and 4 . Three ewe lambs: Brien high-class character of the various breed entries and the perfection of fitting, so conspicuous all Shropshires.-This breed made a splendid show
through the various classes, made the work of ing. Fresh from through the various classes, made the work of ing. Fresh from a successful tour of the Chicago
the judge, Col. R. McEwen, of Byron, Ont., a and Guelph Shows, their quality and fitting was pleasant one, although many of the classes up to a high standard. Exhibitors. fitting was

 he, was that all the exhibitors were from Western
Ontario. $\begin{aligned} & \text { wether lambs: Campbell, } 1 ; \text { Joml, under } 1 \text { year : Campbell, } 1,2 \\ & \text { Fwe and } \\ & \text { Jones. } \\ & 2 .\end{aligned}$

Sorthdowns:-Verry seldenar has: a nicer lot of show ring than those exhitioted by'G. Baker \& ros. Fergus. Awards.-Wether lamb under ear:- Baker, 1 and 2: Jones, 3 and 4. Thre wether lambs: Baker, 1 ; Jones, 2 and 3. Ewe amb under 1 year: Jones, 1; Hampton Bros., 2 and 3 ; Baker, 4.4 Three ewe lambs: Hamp-
ton Bros., $1 ;$ Jones, 2 ; Baker, 3 . Dorsets were exhibited by R. H. Harding, but the flock had things all their own way. Hampshires were exhibited by John Kelly, and with a single entry by G. Baker in the wether
lamb class, which was placed second, Kelly won all the other awards.
Grades or Crosses, "Long Wooled." -This class was particularly strong in numbers, fitting and quality. Awards.- Wether lamb under 1 1
year: J. Linden, 1 and 2; A. Armstrong. 3 ;
E. Brien \& Son, 4. Three wether lambs: den, 1; Brien, 2. Whitelaw, 3; Armstrong, 4 Ewe lamb under 1 year: Linden, 1 and 4 ; Brien 2 ; Armstrong, 3. ،Short-wooled" wether Grades or Crosses, "Short-wooled"' wether J. Lloyd Jortes, 2; J. \& D. J. Campbell, $3 ;$
Armstrong, 4. Three wether lambs : Baker, $1 ; ~$ Jones, 2 ; Camphell, 3: Armstrong, 4. Ewe lamb under 1 year: Campbell, 1 and 2 : Arm-
strong, 3 and 4 . Three ewe lambs: Campbell, strong, 3 and 4.

SWINE.
The swine exhibit as a whole was a very creditshown a higher standard of breed quality. York shires were probably a little behind what some other years brought out, although some excellent Brethour \& Nephews, Burford, Ont.; A. Dynes, Ottawa; R. Reid \& Co., Ottawa; Pritchard \&
Slattery, Fergus.
Berkshires, in the matter of Slattery, Fergus. Berkshires, in the matter of
breed type and quality, were perhaps the strong est of any of the pure-bred classes. They were Ridgetown, Ont., and A. Thompson, Shakespeare,
Ont. In the Tamworths some particularly nice things were shown, the exhibitors being A. Dynes crosses were the stron crosses were the strongest and the quality gener
ally good. They were exhibited by R. Reid
Co., J. McKen ie, Beathton, Ont.; Gramandyn Co., J. McKen ie, Beathton, Ont.; Gramandyne
Stock Farm, Ottawa; J. Ferguson, Dalmeny, Nephews, and Pritchard \& Slattery. All the swine classes, including the export bacon hogs,
were judged by Wm. Jones, of Zenda, Ont. Following is the order of the awards:
1 and 3, Brethour ; 2, Dynes ; 4 and under 9 Barrow, under 6 months: Reid \& Co., 1 ; Bre Sow, 6 months and under 9 : Brethour, 1, ${ }^{2},{ }^{2}, 3$
and 4 ; Reid \& Co., 5 . Sow, under 6 months Brethour, 1, 2, 3,
 Brien, 1 and 2 ; Reid ${ }^{\&}$ Co., ${ }^{3}$; Barrow, under
6 months: Brien, 1, ${ }_{2}$ and $3 ;$ Reid \& Co., 4. Tamworths.-Barrow, 6 and under 9 months
Dynes, 1, 2, 3 and 4. Barrow, under 6 months Dynes, $1,2,3$ and 4. Barrow, under 6 months
Dynes, $1,4,6 ;$ Reid \& Co., $2,3,5$ Sow, Dynes, $1,4,6$; Reid \& Co., 2, 3, 5. Sow,
and under 9 months: Dynes, 1, 2, 3. Sow,
under 6 months: Dynes, 1, 2, 3. Grades or Crosses.-Barrow, 6 and under ${ }^{9}$
months: Reid \& Co., 1 and 4 ; McKenzie; 2 Gramandyne Farm, 3, 5 and 6., Barrow, under 6 months: Mckenzie, $1 ;$ Ferguson, 2; Dynes,
$3 ;$ Brien, $4 ;$ Reid \& Co., $5 ;$ Pritchard and
3
 Sow, under 6 months: Dynes, 1, 2, 5 ; Pritchard
and Slattery, 3 ; Brethour, 4; Ferguson, 6. Grade Barrow or Sow, exhibited hy an amateur:
McKenzie, 1 and 3 ; Brien, 2 ; Pritchard and Export Bacon Hogs.-Three export bacon hogs pure-breds. Outside some of the leading win-
ners, other years have seen more uniformity and better fitting than some of the entries presented dye awards were: Brethour, 1, 3, 4; Graman
dyne 2 and 7 ; Reid \& Co., 5 ; Pritchar Grades or Crosses.-Brethour, 1 ; Ferguson, 2 Reid \& Co., 3 , Dyynes, 4 ; Pritchard \& Slattery,
5 . Sweepstakes for best trio of bacon hogs, pure-breds or grades. went to Breth
pure-breds and reserve on his grades.
 THE SEED EXHIBIT.
Which was larger than usual, and the quality, the whole, very satisfactory.
Awards.-Fall Wheat: 1, R. A. Oliver; 2, S.
J. Woods, Metcalfe

Spring Wheat: 1, D.: B; Stewant, Renfremi, 2;
Peter Wilson, Cobden ; 3, S. J. Woods ; 4, S. G, Banner Oats: 1, Peter Wilson; 2, S. G Barley" (six-rowed) : 1, R. A. Oliver ; 2, Peter
Wilson : 3, Alex Morrison : 4, II. B. Webster, Rannock. Buckwheat: 1, S. J. Woods ; 2, D. Cumming,
Russell. Russell.
Field
Field Beans: 1, S. J. Woods ; 2, E. Brien. \&
Sons. Ridgetown ; 3, L. D. Brien, Ridyetown. A. Watson. Potatoes (long white): 1 Jas. Snetsinger,
Camer's Corners ; 2, S. J. Whods. Potatoes (round, white) : 1, A. Sckmidt, Mild-
wav : 2, Wm. Naismith, Falkenberg ; 3, S. J wav ; 2, Wm. Naismith,
Woods ; 4, D. B. Stewart.
Potatoes (rose type) : 1, Andrew Schmidt ; 2
Wm . Naismith ; 3, Jas. 'Snetsinger : 4, S, J Woods

Corn (8-rowed finnt) : 1, F. A. Smith, Aylmer ! Corn (12-rowed
S. Manard ; 1 and 4, J. D. Brien.
(Corn (early white dent): 1, E. J. Mullins Milton F. Mickle ; 3, L. D. Hankinson ; 4, F
Corn (early yellow dent): 1, J. A. Fletcher A. Smith.

Timothy : 1, E. Brien \& Sons ; 2, D. Cumminest S. G. Gourley : 4, J. A. Fletcher.

Red Clover: 2, W. J. Fletcker ; 3, J. A
Alsike: 2, J. A, Fletcher
POULITRY NUMEROUS AND QUALITY HIGH. With an entry list, almost up to the recordto the exhibitors and to the exhibition. Although there were a few less entries than a year ago, there were, owing to the fact that more pens
of five birds each were on exhibition, actually more birds out this year than upon that occasion. The utility classes were very strong, especially barred Plymouth Rocks and White Leghorns, quality. The quality of the exhibit throughout was pronounced luy experts to be the best ever
seen in Eastern. Ontario. All the Asiatic breeds were of exceptionally high standard, and the larly strong; Silver Grey Dorkings, Colored and White Dorkings all above the standard set at former shows, and Houdans excelled anything and hen being about the kest ever seen in America. All classes of Wyandottes were on a high plane as were the Orpingtons, particularly
the white variety. Rhode Island Reds scored
 and water owl were stronger than in

A Bank Review of 1912.
From the profits of black fox ranching in the Province of Prince Edward Island to the accumuBritain of the National Insurance Fund in Great its annual revierial factor in the preparation of vailing during 1912 in North America and Great Britain neom to have escaped the ken of the management of the Canadian Bank of Commerce. The results of this survey, prepared in connection with the recent annual meeting, appear in the form of a firty page pamphiet conveniently arranged in eight sections according to the territories where the bank is actively respresented by managers or superintendents, vic., The Maritime Provinces and Newroundana, Quebec, Onlario, Manitova, Saskatchewan and Alberta, British Mexico Great Britain. The bank is doing , lar.e businoss in expanding fields of enterprise with which the management aim to keep closely in touch. Particularly is this so in regard to agricultural matters, and it shows how supremely important, in the mind of the banker, must be the condition and progress of farming. On nearly every page is this in evidence. New railways into undeveloped districts, with other improved
transportation facilities, are infusing a fresh transportation facilities, are infusing a fresh
spirit of enterprise into the Maritime Provinces spirit of enterprise into the Maritime Provinces
and Newfoundland. Some people, living further and Newroundand. Some people, living further
west, may be interested to learn that little west, may be interested to learn that little
Prince Edward Island has about $\$ 10,000,000$ in
saving's deposits, and is, per capita, probably
the richest rural community in Canada. As
Farmer's Advocate readers are aware black fox rearing is the most notable recont business develophinent there. The prosent breeding stock of captivity in the world 000 ; laet year's young foxes boing worth $\$ 1,800$,Maritime orcharding is co-operative societies in Maritime orcharding is noted, but live-stock is dopears to be a lack of tonnage to make the export lumber trade as proftable as it might be. The investigation of the Conservation Commission and the appoinminion of a Shell Fish Commisgreat satisfaction. Quebec, like the more east erly Provinces, has enjoyed its full share of Canare still sont f.ed the Quebee people, while Eastern Townitio actories claim to make more money shippins ream to the States than making buttor locally. not adopted everywhere in Canada to protect the pure products of the "sugat buoh", by pro-
hibiting the labelling and sale of adultoratod hibiting the labelling and sale, of aduitorated yrup and sugars as "maple". Indicative of for 1912 showed an increase of 478,$000 ; 000$ oer 1911, reaching the greatest total on record, $2,845,470,000$. With an eye continually on deal of money will be made by Ontario farment individually, and saved to the country genierally by the more general adoption of the stio. Wetwhys, "crude and harnful" and the decline of cattle raising is noted with apprehension, but th view of the high price for meat and the lossea to grain growing, through frost and wet, the time The report admits the existence of extensive epeculation in real estate, but appears to minity ite eriousness in the case of farming lands. There Columbia prosperity, the record price per foot frontage having been reached in Vancouver:- of the 600 . Gold production in the Yukon exceeded the output of 1911 ly about $\$ 800,000$, the total election, unusual activity and strength appeer to characterise American business conditions. The Wheat crop in the great. States of Washington,
Tiaho, Oregon and California is falling off, and Theno, Oregon and California is falling ofil, and
the Oriental demand for their four is feeling the competition of Australia. Judyred by the space devoted to that section, the Bank bees a lapge
future in Mexico where, apart from other ind uture in Mexico where, apart from other indue
tries, there is a petroleum oll zone of some 12. 000 square miles, the development of which io destined to affect the world's commerce through engine in naval and other navigation. Another factor is the Panama Canal opening.
It must be profoundly gratifying to Canediane to know that, notwithstanding strickes, political unrest and war scares, there has been no cessation trade of Great Britain which, for the ton montha ending. October last, showed larger figures than were ever before reached in the history of the
country; and better still the outlook continuee favoraple, With such an expansion in the volume and value of business done money has naturally been in demand, and at this point the report strikes a cautionary note, expressive of the bank,
er's view, that "the price of capital is rising," and that the coming year does not hold out much prospect of improvement from the borrower's point of view. Canada has enjoyed first place in
the favor of the British investor, tut Canadian nrovincial and municipal loan issues have. been heavy with large offerings of such securities still
in prospect. Borrowers of this class will therefore be well advised in exercising fore be well advised in exercising great caution in
embarking in costly projects for which capital must be songht abroad, because securities will probably have to should help to maintain the price of gil which securities, is the fact that the immense sums to be collected, on account of the new British NaIt is Insurance Fund, will have to be invested. amount to about $£ 20,000,000$, and it is hoped the securities of the Canadian provinces wilh be included in the approved list.
One other point from this report may be memevery part of Canada. Other industries are handicapped for want of skilled and ordinary labor, but none so seriously as farming. Tofarm problems, the report does not undertake to shed light. Readers of "The Farmer's Advocate" will find in this review, no doukt, obtainable
from the head offices of the Bank of Commerce Toronto, a lucid, readable and informing account of the business affairs of the year past, that will tend to a clearer understanding of the conditions
of the year upon which we have just entered.

## MARKETS. <br> Toronto.

REVIEW OF LAST WEEK'S MARKETS
At West Toronto, on Monday, Januar At West Toronto, on Monday, January cars, comprising 1,852 cattle, 1,048 hogs, 612 sheep and lambs, and .90 calves; 'io business transacted, Packers quote hogs at $\$ 8.25$ fed
o. b. cars.
Receipts of live stock at the City and
Union Stock $=$ yards lesit week follow


The total receipts of live stock at the 1912 were the co

rough, 8710 to $\mathbf{8 7 . 2 5}$; pigs, $\$ 6$ \$7.45. sheep and Lambs.-Sheep, native, \$4.65- to $\$ 6.25$; Western, $\$ 4.75$ to $\$ 6.25$ yearlings, $\$ 6.40$ to $\$ 8.15 ;$ lambs, nat.
$\$ 6.70$ to $\$ 9 ;$ Western, $\$ 6.70$ to $\$ 9$.

## Buffalo.

Cattle.-Prime
butchers', $\$ 6$ to $\$ 8.70 ;$ bulls, $\$ 4.50$ to $\$ 9$ to
 shipping, $\$ 7.50$ to $\$ 8$; heifers, $\$ 4.75$ to
to $\$ 8 ;$ cows, $\$ 3.25$ to $\$ 7$; stockers and toder cows, $\$ 3.25$ to $\$ 7$; stockers an
feeders, $\$ 4.50$ to $\$ 6.75$; fresh cows and springers. $\$ 35$ to $\$ 78$.
Veals. $\$ 4$ to
.
Hogs.-Heavy, $\$ 7.75$ to $\$ 7.85$; mifed $\$ 7.85$ to $\$ 8$; Yorkers and pigs, $\$ 7.90$ t
$\$ 8 ;$ roughs, $\$ 6.90$ to $\$ 7.10$; stags, $\$ 5.50$ to $\$ 6.50$; dairies. $\$ 7.60$ to $\$ 7.90$. $\$ 5.5$ $\$ 9.25$ y yearlings, $\$ 5$ to $\$ \mathrm{~K} .25$; a few
$\$ 8.35$; wethers, $\$ 6$ to $\$ 6.40$ ewes, $\$ 3.50$ $\$ 8.35 ;$ wethers, $\$ 6$ to $\$ 6.40 ;$ ewes, $\$ 3.50$
to $\$ 5.75 ;$ sheep, mixed, $\$ 4.50$ to $\$ 6$.

## GOSSIP

sale dates clatmed.

$$
\begin{aligned}
& \text { SALEE DATES CLAIMED. } \\
& \text { 31st.-John Semple, Milverton, }
\end{aligned}
$$

Feb. 5th.-Annual Consignment Sale Teb. 5th.-T. H. Hassard, Markham Ont. sale
Clydesdales.
Feb. 7th.-Graham - Renfrew Co., Bedford Park, Ont., at Burns \& Shephard's Re pository, Toront, Clydes and HackFeb. 12
Feb. 25th and 26th.-Union Stock-yard Percherons.
March Sth.-Annual Contribution Sale of pure-bred cattle, at Guelph, Ont.
March 6th.-Iames Cowan, Seaforth, Ont.; Shorthorns.
a holstern peace celebration J. E. K. Herrick, Abbotaford, Que.
President of the Holstein-Friesian Asso ciation of Canada. sends "The Farmer's
Advocate" a memorandum stating that the Holstein-Friesian breeders of Canade and the United States have become in fected with the peace centennial jubile
spirit of the mother country completing arrangements for and ar jubilee that promises unity of action and harmony of purpose in the way of
co-operation in perfecting rules co-operation in perfecting rules of entry
registration fees, and custom-house regut lations. The recent plan suggested by leading Holstein-Friesian breeders of the Dominion to refer all matters of diffier
ence between the Canadian Herdhook As sociations to a joint committee composed of three members of each organization direction. Mr. Herrick encloses a resolution sug ing of the Canadian Holstein-Friesian Association. This resolution proposes
to invite the American Comission to appoint a conference committee of three o confer with a like committee from Che Canadian Association. A final clause
proposes to establish that such rules pating to registration and fees on animals passing the border line between Canada and the United States as may be fixed by the suid conference commit-
tee shall remain in force until annulled by a two-thirds vote of either association at a regular annual meeting. The
matter will doubtless come up at the TRADE TOPICS
$\qquad$ Bank of Commerce, which merits a care tul perusal by our readsrs, not only be-
cause of the remarkaible progress of this great monetary institution, but on account of the keen public interest i
banking subjects at the present time.

Attention is called to the new adver-
tisement of ".Ontario Seed Co cessors." of Waterloo, Ont., in which it
is stated that the mangel "Tider is stated that the mangel. "Which it
which has shown the highest "compre

the Nat Fecland coosit. to tive
An artile in the Indpondent, atitile Ahe artice is is the I Incopendent, entitled Angles, Calitiorile, the credit tor har nety perteot than that of any other To Wegini with, the lomeot classes, the ktedergarten, have been turned rigot out
of doort, the ouly structure appronobing of doork, the only, structure appronoting
 oit of the climato pormite of the us year. One department of the school is year. One departmont or the schoil id dovito ho study of the ehild himbolit,
 Wrotil activity he most enjoys. This Sopirtiment has been of preventitituged misiofst in life. Purpose oriefic deventing derment has also been thitalled. Hyilen is a part of the
ourriculum. The child is taught to be
 clenes, tour of them men and three
Women, and there are beven shool nursees. The physiciar in charge has alaborately - equipped medical oflces, and
his work covers all phases of meticine
 physicol disturbances, being cared tor
Here is solution of the sex problem, Here is not yet sate to put this in the hands of untrained teachers, but a school dopiertinent of hygiene covers the case Thie board has even erected a. hooppital where those ohildren can remain and
provided for whose cases cannot bo carred for in a a single day.

## Hope's Quiet Hour.

Faithful unto Death. Ho that is falthtul) in that which is that if unjuat in the least

- In Life's small things be resolute and

To koep thy muscle
Thy measure takes, or when ene I and thee worthy; do this thing me ? -Lowell.
A young man once applied to an old triend of his father's for a position in
his store. He was offered work which


 plty beeause he had eplon wo once into the more imporiant brain-work for which
 tion had preparid hing. Weak artur week
he attendid faithuily to his various unhe attendd faithfuly to his various his
lmportant duties, und apparently employer had forgotien his existence.
Sit monthe slipprd by, and - like a new Six monthe slipp, dy dy, and -like a new
broom-he still "swept cean." Then he was unexpectedly offered a splendid position in the business. His employer had been quietly "takking his measure," and $\left.\begin{array}{l}\text { was convinced that a } \\ \text { man who was so steadily faithul in lit- }\end{array}\right]$ ${ }_{c}^{\text {man }}$ tho was so sings, could be depended on in larger maters. A straw shows, far bet-
ter than athedral, which way the ter than a cathedral, which way the
tind blows. if you want to judge wind blows. If you want to puage
character, study men in their way or character. litle things. Our Lord knew
doing
hite human nature thoroughly, and He has
told us that one who is faithful in toid us that one who
trifies will be faithful in important mat trifles will be taith is unfaithut in trivial
ters; and one who is und matters is not to be depended upon. in anything.
What a splendid recommendation it is of any one when people say of him "He is absolutely reliable, and to be de pended on." They never say that about pointment-carelessly stealing the prec pointment - carelesesly steating che prect
lous time of others-or who contantly
 forgets a promise as soon as it is made
Such a person may be very taithtul in in the pertormance of some important work
which he knows will be noticed. To d which enspicuous thing spleadidily does no


The Study at "Quillcote," where "Rebecca": was Written. kindness. A woman once decided to be if it had not been done there would have
especially kind to the people who go been no splendid tree. No beby can beespecially kind to the people who go been no splendid tree. No beby can be from door to door trying to sell small come a man by one great effort. It
St articles. She was poor, and could not takes years of taithfungork done by the buy much from them; but she spoke in hidden servants - lungs, heart, etc.-to
frlendly fashion-instead of saying curt-, build a man. No one can become a ly: "I dont want anything to-day." scholar, a musician, a painter-or any-
Sometimes when they looked very weary thing else of importance-unless he goes Sometimes when they looked very weary thing else of importance-unless he goes
and sad, she would ask them to rest, through a lot of patient drudgery. The and sad, she would ask them to rest, through a
and would otier a drink of water or a city of Jericho was taken by Joshua's cup of tea. Such a beautiful service army; but not untill the army had hidden from the world-must be very marched round and round the walls, day
dear to the King. Who accepts as a gift after day, patiently and faithfully. An doar to the King. Who accepts as a gift after day, patiently and faithfully, An
to Himself any real kindness shown to ignorant child may become a learned one of the least of His brethren. In man, but the great result can only come the story of the Last Great Day (s. from years of faithful work. "Precept
copt; line upgn line, line upon line; here a little, and there a litile.0.
We are beginning another yoar, and we
desire earnestly to make it a precious and beautiful gitt, to God, and of real value to our fellows. Don't liet us fee discouraged it the work prossing upon us The one thing of real importance is tha we should do it faithfully. Christ could easily feed the five thousand hungry peo ule, but the five little loaves and two
small Ashes muet be given freely if grea things were to be done by thetr means. God could multiply the losves-that wa easy-but it was a fine thing for the lad to give away lood hight easily have
own hunger. He med mide
said: My loaves will be enough for Me, but they are not worth giving away." Even St. Andrew, who had been
so long used to his Master's power thought that the lad's gift of loaves and fishes was not worth considering: "What are they among so many $?^{\prime \prime}$ he
asked, fait hfully. But JESUS answered his despairing question promptly and hopefully: "Make the men sit down." He had asked: "Whence shall we buy
bread, that these may oat $?$ " and the bread, that these may eat?" and the supply of food was all the answer Ho needed. The feast was ready-let the men sit down.
We are so disappointed if we have to "waste" our lives in doing unimportant work. Ho "large" thingg-through our gifts or without our help-but He can never force our faithful service. If He did, the service would be - no longer
faithful. We have the power to give Him something of priceless value-our Him something of priceless value-our
faithful service unto death. The kind of service that can be depended on. When I was in charge of a social set-
tlement, the volunteer workers were tlement, the volunteer workers were e constant problem. Some of them were
very enthusiastic at first, clever and interested and eager. But when the novelty wore off, and the work became monotonous and uninteresting, some of
them became careless and unfaithful. The weather, a headache, or anotheriengagement, would he considered suffleient excuse for negleeting the work they had undertaken. One stormy day I had to a few volunteers were absolutely rellable. I was confident that they would be on hand, rain or shine, unless absolutely un-
able to attend.

"Quillcote," Maine, the Summer Home of Kate Douglas Wiggin.
are ot minu qaiue ne eompared with
overyday faithfulneas.
It it satd that when the Emperor of Japain was goling on a railway journey,
not long ago, he insisted that all the men who were on his train must be
Christians. It was not that he was a Christians. It was not that he was a Christian himself, but he knew that
Christiañs-in Japan-could be depended on. There was no temptation for
man to be a Christian only in name.
What a grand thing it would be it the name of Christian were a guarantee of faithfulnes-in small things as well as in large-all the world ove
What will our year be uke ? Probably
it will be much the same as last yearit will be much the same as last year-
outwardly.
"A New Year? Well, we will call it so,
But each new shower is the same old But each new shower is the same old And the New Year, some of us happen Is only the old one over again.
That is the outside. What will the Inside be like ? Shall we put new gladthe old tasks, being especially faithful when no oite but Gud will notice?
Then He will be able to do great things Then He will be able to do great things woy to Christ was used to feed a multitude then, and has inspired millions

Yesterday I heard a very ting boy on
the street $s_{a} y$ to a still smaller comthe street say to a still smaller comThey guards the world while people ere asleep, so no thieves can get into the houses and steal things." The English was raulty, but the words were an in-
spiration.
On duty while otherg ald spiration. On duty while others slept,
faithful with none to see, safeguarding the properts of others ! There is romance in the life of a policicman on
night duty, and God ahowed it to me night duty, and God showed it to me through a little child. We lie down in
peace and yield ourselves to the helplosis unconsciousness of sleep, while the silent policeman - unnoticed and unthanked guards our interests. He is doing the
work of God, Whiuse glory is his taithwork of God, Whuse glory is his raith-
fulness. How do we know that these cold winter days will be followed by spring and sumuer ? How do we know
that the darknees of night will die bethat the darkness of night will die be-
fore the glury of day ? How do we
know that life is waiting for us on the know that life is waiting for us on the
other side of death? ) We know, because other side of death ? We know, because
God has proved Himself faithful He has never failed us yet. He is Paithful to
reward righteousness with gladness, and to check wrongdoing by making the way His langressors very hard and painful. His law of gravitation holds the great
worlds in their places, and is never unworlds in their places, and is never un-
faithful to the nunst insignificant scrap of dust. He faithfully bestows beauty on the wayside fower, although the
evening star has to be lighted. The vening star has to be lighted. The flower is not neglected, even though no
human eye may see its delicate coloring human eye may see its delicate coloring
and give praise to its Maker and its
That last word is the key to real
faithfulness. if we are to win the faithfulness." If we are to min the
"Well donel" of our Lord, we must love "Well done1" of our Lord, we must love
His service. The cup of cold water must be gladly. given. . His love for us
ts so great that anything which interis so great that anything which inter ests us is important in His eyes. Even
the hairs of our head are numbered. The grass is green and the sky is blue for our sake. Even each separate snow-
flake is perfect in its star-like beauty flake is perfect in its star-like beauty and Jack Frost paints pictures on ou
window-panes. God-our Father-has always been and
will always be faithful to us. Let us resolve this year to be more faithful than ever before, and especially faithful will notice.
"I went to the Throne with quivering
The old year was done;
-Dear Father, hast Thou a New Year I've spoiled this one?
He took the old year, stained and Ind gave me a new one all unspotted, And into my sad heart s. ${ }^{\text {miled }}$
'Do better now, My child." $"$

$$
\begin{aligned}
& \text { 'Do better now, My child." } \\
& \text { DORA FARNCOMB. }
\end{aligned}
$$ ora farncomb.

## 

Z is for Zest. Help the grood worl
A Boy's Life on the Farm. Eveor sincee 1 was big enoggh to got Peoding hene ent cerrring wood, I have had d buey wit.
Sinice I was about six years of age 1
have had my regular chores, getting the have had my regular chores, gotting the cows and carrying wood, of course, I
thought it was too much for a small


The Barn at Quillcote.
As Mrs. Riggs has had it made over for an amusement hall for the boys and is for Cough, which we should not boy, but it never hurt anything but my neglect,
for the Dentist, who ends tooth defect, is Ior Evils of foul air and dirt. is for Fresh Air - too much cannot hurt, play.. Hardiness gained in that way. is Infeetion from foul drinking-cupp, is for Knowledge of rules of good is health, Lungs, whose soundness is

Three Jolly Little Lads are We. Photo by B. Serles, Burford, Ont.) $\underset{\mathbf{N}}{\mathrm{M}}$ is for Milk; it must be quite pure, is for Nurses, your health to insure
0 is for Oxygen, not found in a crowd, is for Pencils-in mouths not allowed. $R$ is for Rest-as part of our creed, $\mathbf{S}$ is for Sunshine to drive germs away,
$\mathbf{T}$ is for Tooth-brush, used three times T is
a day,
is for Useful
school, school,
is the Value of learning these rules,
is Worry, which always does harm,

## boy, but

Then the time came when I wanted to
learn to milk. learn to millks, I was refuese a fow times, but at last I got started, millking
one cow. This was not as easy as I had thought. 10 I wanted to quilt, but my father and moother sald no, I must ctick with the job. II dild, and, of course, learned to milk, and was glad
 up. My work through the winter wa
very nlack, ae I was not asked to do
muich, but the next summer wae at hueg one. We had some spring calves ruy-
g in an orchard next to the house, was good practice for me, as the calves was goo practice for me, as the calvese
were wild. $M y$ older brother made me a singletree, and after I had got one calf pretty well broken in, I got a harnerohard after it was :trimmed. The older I got the more I wanted to
do, so when I was about do, so when I was about ten years old
my father allowed me to break in the my father allowed me to break in the
spring colt. I tarted when he whe apring colt. I started when he was
about a weelk old. I was not allowed

to plow a whip, but had a halter, and a plowline which was made into a theoohing shape. I ean well remember
the colt I broke. Iy father toek the plowline, andoko. doubling father tiont the plowline, and, doubling it thit the loep would be around the colt'e hip thid were put oach side of this neck anid through the shank ring, then, when he stopped, I would pull on the
and he would come right along and he would come right along
I still use the same method, and bina
jerifing and whipping quite unniecoseary. Jerking and whipping quite unneceasiry. tell had the pleasure of seeing three talke prizee at the Sutton Falr, and three at foun, telking first as agricultural teamb and the year-old taking second, as gen-
eral-purpose. This was the Sutton reoord. At Queensville, the team took second out of class
yean-old Percherons.
The farm that we work contains 1250
necres. In the back field we have gravel - pht of about 1 for it ace a and from 15 to 20 leet deep. It ta far
graval, and a lot is used for comentmaking. There is a spring on the farm.
and the horses and cattle can have : drink whenever they want it. We have no rough pasturvilield or bush, so paye
to koep geoding down diflereat nelds.
Wo have only two hills on the farme.
 and only two obatacles to .to
Thene are two shice trees.
The barn has a windmill on it, anit With this we grind our food, pulp our
rootes, ruin the cutting-box and the grindstone:
wo have a rack-litser to tale the rack of the wagon. In the tall wheh wo we drawing in roots, we take the two rackeuirtior ropee and frasten they togetliwer
under the front of the wagon-boz tihe root celler is under the barn toor), thon
we take up the door, and ofter putting wo take up the door, and after putting yemove the end-boand and let the horee
draw in frout of box, then town dram up tho front of bos, then town collar.
our atables are andergronind, and zire certainky hendy. The root coller it ln the conter. The cown are ack di etand fooling






 and baok to the horve stable. Thits ? stom-heat boing high, $n$ - ban earlly to apeot over any small lump. We have 2 part, al
I am well satiefled with my farm ile and intend to stay at it. WILLIE Kive. Belhaven, Ont. We think this letter worth

Senior Beavers' Letter Boz Dear Puck, -Thank you very, very
much, for that lovely prize I received for the doll's dress competition. I
thought two or three times, when I wed makking the dreses, I would give up, blith I am glad I didnn't. It pays to try. try again, "ulf at arst you don't
coed." I think it is just beoutiful. MABLE sollitt (age 11, Clase IV.). Uxbridge, Ont.

## Dear Puek and Beavers,- I have teen your letters in

 your letters in "The Farmer's Advoca.te, ${ }^{\text {" }}$ and enjoy reading them. I liveon a farm. 'We have about seventyon a farm. We had a saile a year ayko. and I worked out last summer at zio place where the man had two nice litale colts. I worked there about two
monthes, and have then proter well




Riddles.
What time is it when the clock strikgen
thirteen ? Ans.-Time it was fixed Why is spring the most dangerous bear-
son 7 Ans..The fowers
 the bulrush is out (bull rushes out).-
Sent by Jimie Kerr (abe 10), Milver.
ton, Ont. As I was going through the gate 1
saw a little green house. In the grean house was a white house, in the green
houne was a red house, and in the red
house wes res.
 Nassagaweya, Ont.
Why
Why does a eow look over a wall ?
Ans. - Because she can't see througt Ans.- - Because she can't see through it.
What is the frot thing a boy does
When he dets int He gets wet in ther Ans.
What does a watch do when it is left
upstalrs? Ans. -1 t runs down. Sent by


OUR JUNIOR BEAVERS. (For all pupilis from the First Book to
Junior Third, inclusive.]

Junior Beavers' Letter Box Dear Puck and Beavers,- - have always
enjoyed the letters of the Beaver Circle, and thought I would write one, too. 1 I
have a pet dog; I call him Tossy, and
 day. I am in the Junior Second Class.
My teacher's name is Miss Hogg.
 years. I will closs now
GRAAAMC WRAY (age 8, Book II.).

JANUARY 23, 1913
Doar Puck and Beavers,-I have for a
pota black cat, and its namie is Doona pot a black cat, and its namio is Doona.
am a boy eight years old, and $I$ go to school not tar from where I live. I ave a governess to teach me, and her name is Mise Rose, and I like her very
well. ${ }_{\text {My }}^{\text {s. chool is connected with }}$ tandon school, where my brother Johr soes, My father has two horses; their to seo my letter in print. so sood hope edward J. Savage (St. II.). Puckeriage, Herts, England.
Dear Puck and Beave ocond lettor to the Beaver Circle. My eate"' lor quite a number of years, and $I$ enjog reading the Beaver Circle very the Senior Second Class. We drivivin in the Senior Second Class, Wo drive to chool. My youngest brother has a pair

 STEWART RIVERS.
Folden's, ont. $\qquad$

 o road the Beaver Circle. I in have a ittle kitten; I calr her Timmy. When oot are mer. Our hilred man the manger and er to hit place to catco mice. I hope you will enjoy. my leter.
FRANK
HAM (age 9, Jr. III.).
"The Farmer's Advocate" Fashions.


Desten by May Mantono
7653 Girl's Cap, 6 or 8. ro or 12 yeara



Those who KNOW buy the DE LAVAL
Creamerymen-Because they are experts in the handling of cream and know by long experience that the De Laval skims cleanest and wears longest. That is why $98 \%$ of the World's creameries use the De Laval exclusively.
Experienced Dairymen - The De Laval is the universal favorite among big dairymen. They know that no other separator will give them such satisfactory service.
Old De Laval Users-Whenever a man who has used an old model De Laval decides to purchase a later style machine he invariably buys another De Laval
Men Who Investigate-If anyone takes the time to investigate the merits of the various cream separators, either by finding out from other users what kind of service their machines have given or by testing Other machines out against the De be the De Laval. More De Laval machines are in use than any other make. There is a reason. The De Laval agent in your locality will be glad to tell you why.
DE LAVAL DAIRY SUPPLY OO, LIMITED 178 William St., MONTREAL

128 Jamee St., WINNIPEG


Wonderful Structural Strength
Is the secret of the remarkable durability of the does not impair." DOMINION PIANOS possess many exclusive mechanical betterments that give it a tone strong. sweet, rich and sonorous,
and at the same time as enduring as the wood and iron of the instrument itself. Musicians have
only to hear it to fall in love with it.
 THE DOMINION ORGAN \& PIANO CO., LTD Makers, of Pianos, Organs and Players bOWMANVILLE, CANADA

BEST RESULTS ARE OBTAINED FROM ADS. IM "ADVOGATE."

Fruit Farms
IN THE GARDEN OF CANADA
 Alsombern
No. $100{ }^{22}$, malles froe clay and gravelly sand sollt thane hime for fritit or gieneral froming Hase.fine



 30 acres
tyictive.
tiente. The above farms must be sold at once. The
pricese are marked down to the lowest possible fig
ine for quick sale.

Forfull
all particulars regarding pr ces and terms,
MELVIN GAYMAN \& CO. Oueen

Farm Help Supplied With a view to securing to its many pat-
rons the very best obtainable in the way of immigrated

## Farm Laborers

SALVATION ARMY
is this year putting forth special efforts
in the rural and outlying districts of THE BRITISH ISLES
From such districts will come the very class of men, boys, and housekeepers
required by Canadian farmers.

Apply by letter at once to
IMMIGRATION SECRETARY 20 ALBERT STREET, TORONTO, ONT.
MAJOR McGILLIVARY 39 ClaRENCE STREET - LONDON, ONT If ACIAL BLEMINHEN
 The successful home
treatment of Skin , treatment of Sk in,
Scalp, Hair and Complexional troubles has us for over 20 years We treat Pimples,
Blothes, Blackheads, Eczema, Freckles, Morhpatches, Discolor: ations, Ivy Poisoning
Ringworm, Rashes Red Nose, Wrinkles, Dandruff, Gray
Fallingor itifless Hair Alopecia, Goitre, Moles
Warts Red Veins Siperfur on-contageous skin trouble. For Hairs on Face and Red Veins there is no reliable home remedy.
Our methor is isasurd satisf
 ee if this paper is named.
Hiscott Dermatological Institut
ollege St.. Tornnto.

## "E0 Morth Young Man" WHY? <br> Because there are millions of acres In agricultural land in Nothern Ontario, cente per acre, excelling in richness any other part of Canada, blessing and waiting to bless the strong, willing settler, especially the man of some capital. For information as to terms, homeetcen, write to EE. A. Mraceciloz TORONTO, ONTARIO. HONo JAS. S. DUFFi,

## The Inste Nook.





## D

Doar Toglo Nook Priends, - Do pou wer
 Soavtitul phasē, somotimes the very

 verval themsalves as uhey rally aro

 the exerieo of alahaness or otherwiso or

 and poople standing tin the aileses. Maro
and
more
came, unti thero wero

 aor, a moman with six. litilio ohildren-
yeas,
bix, in these dayy
 to reange or the sumaller oneses she manazged in the aisle, the
 year otho, youngeat, ab baby perhaps a
y
 took out his watch. Thhey heay wo mail
have to wait here
threa
 the ond of the carat where stood the moman with the dite ehildren. . In doublo
geate at sairs, at her lefr vat four men, four Mho were, apparently, having a nilariour
time otheer Dirocily at her right aat two
 "suraly," thought, nome the them will sour give up a seat to that woman and But don't you ever think that they did Untit tho three- -uarters of an a ".what-wewave wo hold at atturue, e" end there the woman stod, looking more
and more tagked as the minutes
woro
mor
 to orime, sarcastically, -ovidenty an $A$ merican, from the tact that he carried
Washingron time and Whamington tume and could one blame
him tor his sarcoasm $\chi$ Could
Con aim for hin sarcase be bould one do
other, than wonder where those five
omen "mon" had been brougt up, nond. what sort of training they had had?
To bring my story to To bring my story to an end, when
the half-hour had been passed, the hus
band of the band of the woman came in. Taking in
the situation at the situation at a glance, he whispered
somenhing to the two sonething to the two younger men. The
light of intelligence at last broke
over their over their faces. Apparently such before, but theyer now entered their heads
enough to up, willingly enough to all appearance, and so the
mother and part of her little brood were
at last compre mother and part of her little brood were
at last comfortably settled.
Query : Query: Is such callousness, or cad
ishness, or chumpishaus considerable proportion of the masses
Canada ?--1 have word "chump." in the dictionary, and
find that. whether slang at firat it has now been accorded a or nace
not
reputable English. Isn't it aplate A little farther down the line, after
having secured a seat, I wanted a, drink of water, oh, so much. There was still
a group of boys standing near the door,
and and I wondered how I could reach the
tank. Deciding at last to request the my drinking-cup mitht be passed along.
I took it out, rather resolutely mediately a young man sitting across
the aisle, raised his, hat and asked in might be permitted to bring mea a drink
Returning, he gave me the con raised his hat again, and sat down. ". gentleman," was my mental note, "with
a lady-mother's
coudraining."
I wish Could say that this young man was
Canadian, but he was not. He was, undoubtedly, English, both in appearanc
and speech.
Of course, I know


A few cows should do much toward making your wrong.

Three things are necessary to make the dairy yield a satisfactory profit:-

$$
\begin{aligned}
& \text { FIRST-Good Cows. } \\
& \text { SECOND-Prer }
\end{aligned}
$$

THIRD-Proper Disposition of the Mill.
No matter whether you have half a dozen cows or half a hundred, it will pay you to take steps to see that you secure the proper returns from this source-be sure that your cows are more than self-supporting.


Some helpful hints will be found in
PROFITABLE DAIRYING which may be had from any Agent of MASSEY-HARRIS CO., Limited

| Toronto | Montreal <br> Calgary | Monctoa <br> Saskatoon | Wingipes <br> Regina |
| :--- | :--- | :--- | :--- |

## BASIC SLAG

Renovates Old Worn-out Pastures Without Re-seeding There are thousands of farmers in Ontario whose pastures have been worn ertility, and now grow only poor, worthless vegetation. Clover has entirely disappeared. This need not continue. A dressing of BASIC SLAG applied good heart and double or treble their capacity for stock-carrying. The effect of such an application should be apparent for four or five years. inces and Quebec, and the consumption in Europe a in the Maritime Prov tons per annum. It is therefore no untried fertilizer. Every farmer fro, th the Dountry knows about BASIC SLAG, but for your own satisfaction as farming journal as to its merits BASt your district, or the editor of any to stiff clay lands, to wet marshy fields and to all soils which hizer to apply sour. If you have any such pasture, buy one ton of BASIC SLAG and broad the better Until aur selling arratit at earliest opportunity-the sooner be supplied direct from the factory at $\$ 20$ per ton, carriage completed you can nearest station-cash with order. Make this experiment, and you will feel interesting us or bringing the merits of BASIC SLAG under your notice. An interesting pamphlet giving particulars of the results obtained by leading agri-
culturists from the use of BASIC SLAG will be forwarded by post on THE CROSS FERTILIZER CO'Y, LIMITED Sydney, Nova Scotia
Or to their Sales Agent for Ontario-
MR. A. WARK, Wanstead, O
MR. $A_{k}$ E. WARK, Wanstead, Ont.




 W. W. GREENER, 63-65 Beaver Hall Hill, montreal

THIS WASHER MUST PAY FOR ITSELF.





 I was
wasnat anaid
Imight have mymone
whrthe
horse.
it bady.
thindin thinking. Now, this set me me You see 1 mate Was
ing Meohines
Gravity" Washer "
"


 lion that way. So thought i, it is only fair
enough to leet peope try my Wasking Machnnes
for amonth beoro they pay for them, just as I


 ever invented can do that, without wear maching the
clothes Our
willo
Gravity
 way all other machines do



 chine after you've used it a month that is fair
beck and pay the freight too. Surely that
enough, pasn the Doesh't it prove that the "11000 Gravity"
Washer must beall that I sey it is
And you can pay me out of yhat it saves or or



 washes clothes in six minutel
Address me personaly: 1900 Washer
A. S. MORRIS, Manager
Co.. 357 Yonge St., Toronto, Can.
just as he did, but the question is, ho many of them, taken as they come, out
of the thousand? of a gentleman should be universal.
There should be no mane empted from be no class of society ex-
mane privilege of gentle

One more observation
up, trok her little girl down to the tank, and gave her airl down trink trom the
general drinking-cup general drinking - cup. The sight of it
was enough to make one squirm. Didn't Was enough to make one squirm. Didn't
she know anything about germs she never suspect that someone afflicted with tuberculosis, or with some of the loathsome diseases, might have drunk
already from that very cup? it thet it is so hard to knock How is heads of the general public the few sim-
plest rules plest rules for health-preservation ?
collapsible drinking-cup occupies but colapsible drinking-cup occupies but lit-
the space in $a$ hand-bag; one can be bought for fifteen cents at Knox's; then why should anyone go, on even a short
journey, unprovided with one journey, unprovidod with one?
On some of the trains the general drinking-cup has already been abolished. It is also being driven out, slowly, but surely, from the schools, and children
are being required to use their are being required to use their own cups,
and no others. In this, however, one difflyulty has been encountered: It has been discovered that the children will in-
sist on "lending") their cups. sist on "lending" their cups. To pre-
vent this, some of the United States vent this, some of the United States
schools have been supplied with paper choos have been supplied with paper
cups, which are of no use after one using; in others, piles of paper arer kept rear the water-tap, and the children are
required to make their own cups, by Colding, as necessary. In many of the canadian schools, as well as others,
drinking - fountains which "squirt" the water into the nouths of "the children so that no cup at all is required, are
being installed. One of these is now being placed, in the schoolhouse in my
own little home village, much own little home village, much to the satisfaction of the ratepayers. What is
the syatem in your section? JUNIA.

## Dear J A "BRomide.

Dear Junia, -I think it was in "The
Farmer's Advocate" that I saiw the rhyme, "I want to be a Bromide." In another paper, I see a man described as
"a prig and a bromide." What does this word "bromide" mean when used in
this way? Lambton Co., Ont.
Looking in the dictionary, you find the definition of "bromide" to be-"A comof "sulphite"-"A combination of sulphur with another element of base."
Well, then, what possible connection can all this have with the lines of the parudy, "1 want to be a Bromide," etce.? Looking a little deeper, you find that bromides are given by physicians to
quiet the nerves, while sulphur enters quiet the nerves, while sulphur enters
into the composition of such explosive substances as gunpowder and friction
matches. In the doggerel quoted, matches. In the doggerel quoted, then,
a Bromide would indicate a convena Bromide
tional, platitudinous person, one who is never excited nor orifinal, -the direct opposite from the $\begin{aligned} & \text { Sulphide, or exeitable, } \\ & \text { impulsive person. }\end{aligned} \begin{aligned} & \text { The words, you see, }\end{aligned}$
ind impulsive person. The words, you see.
are used figuratively. are used diaratively an extreme litera'.
I hope you are not ant ist, M. Y. I have taught school, and
found out by experience how very difffound out by experience how very diff-
cult it is to explain figures of sperch to cult it is to explain figures of spepch to
members of that class. Possibly your failure to understand came from your not knowing the use to which bromides
are put in medicine.

HANDKERCHIEF BAG.
Dear Junia,-I have been a silent listener to the chats. in your valuable
column. We could not do without "The Farmer's Advocate", in our home very
well. Will you please tell me, through well. Will you please tell mee, through
your column, how to make a work-bag your column, howly I have seen some
out of handkerchels?
very pretty ones, and would like to make very pretty ones, and would like to make
one for myself.
Thanking you in ad-
vance vance.
oxford Co., Ont.
Can
cakes and bread
Will you kindly let me have a few
recipes for cake-making, also one for recipes for cake-making, also one for
bread? Thanking you in advance.
Chambly Co., Ont. MRS. G.

You can build cheaper-Your buildings will look better and will last a life-time if you build with

## METALLIC

## Proof against Fire, Weather

 -Lightning and VerminThe best steel shingle made and the cheapest to lay. Has been on roofs for ver 25 years and is good as new now. Looks exactly tike stone or brick yet can be laid easily and quickly by any man. The best building material pos ible for homes, stores, etc
and Brick,

Makes the most sanitary interior finish possible. Proof against rats, mice and vermin-they last for ever. There is no plaster to fall, therefore no dustor paper to put on or take off, there fore no trouble.

## Corrugated Iron Siding and

 For barns, sheds, granaries, outbuild ings, etc., can be covered at a low cost No wood sheeting necessaryEaves-troughs, Conductor Pipes, Cornices, Ventilators Finial and all Building Accessories.

It will pap you to send a postal card to us and let us know your requirements. ${ }^{\text {wut }}$ METALLIC manupacturers CO. Limited

TORONTO and WINNIPEG

## 0000000000000

## $\$ 5,000,000.00$

## FOR PEERLESS WAY POULTRYMEN

Into the pookete of the users of The Peenles Way last year went five million dollars made trom the poultry these people raised. Yet chickens are scarce in Canada is positively the fact.
To-day there are not enough Canadian CHICKENS or EGGS to go around. Thousands of chickens and hundreds of thousands of dozens of eggs are being shipped
into Canada from the United States and other countries to help meet the demand.


Yet there is
Now is the time to take adrantage of this ithetion make maney oritise You can raise and sell 600 chickens thin neaxt year, and you will find a quick and sure market for every one of them. You c
dozens of eggs that your poultry lay.
Let us tell you how I
Poultry raising is the bent business for any farmer, any farmeris wife or farmer's child. The poultry crop is the one crop that never fails. It pays better for the time and
money invested; the profit is surest ; it ison't overcrowded and never will be Our book "When Poultry Pays,", will show you. Let us send it to you, It is interesting; it is instructive, and it contains the proot.
You need this book. It will be mailed free. A pokk card will bring it
LE MANIFAGTURING CO., LIMITED 200 13 Pead omoens st. PEM:BDIX马रु)

## Dothey Cello Gli yevt Rntous Use

Uselt On the Farm Too
Pedlar Culvert
makes farm madiges at dittch
es, gates, etc
Time savin Time saving,
frost-proof. it
never wroshes out
Lastsforyears. Sites
8 inches to 7 ft. in
 Put the small sizes in your open drains farm.


Or use it under your gateway bridge

for Our Free Sample of Pedlar Culvert and Book to-day to the nearest branch below.

Thitato of dolog statuto A Sample of Pedlar Culvert $A$ Forting tritge, and a Special Book about it thal our pediar to every Farmer or Reeve fof hoursh or Municipal Officer


To
Metal
Pedlar Cul
verts are verts are not
madeiǐ ordinary
metal, and do no

peculiar anti-rusting
metal. It is used only Pedlar Culverts. It makes
the culvert good for year to come.
There are imitations. Be sure Which will not corrode. Writitus
details SEND

$\underset{\substack{\text { LETHBRIDGE } \\ 1282 \\ \text { let Ave. So } \\ \hline}}{ }$


WRITE NEAREST BRANC

making the batter elightly thicker at
the sides than in the center. A fruit cake bakes much better if the pan is set inside a second pan partly
filled with boiling water There are many ways for maknng
bread, some requiring "perpetual"' yeast, bread, some requring "perpetual" yeast which Royal yeast cake (I suppose in other would do) are called fo
(1) Soak the yeast cake + hour in pint lukewarm water, then stir in enough in a to make a batter, cover, and set this rather early in the afternoon. Whe light, add 1 quart warm water, or scalded milk and water, It you want to have the bread more nutritious, and all briskly for 15 minutes, and set again in a warm place over night. In the morning, add salt, and mix in flour $t_{0}$ form a dough. Knead well on a board,
and let rise again, then mould into loaves. Let rise, and bake in a modr erate oven from it to 1 hour. In a modr
weather, have all your weather, have all your flour warm, and
add the salt in the morning. In add the salt in the morning. In hot
weather, add the salt to the sponge at night, as it retards fermentation somewhat, and will help to prevent the bread from souring. A gentle, even bread. Chilling will make vit heavy and soggy; too much heat will make it sour, because of over-fermentation.
Another: (Highly recommended).tablespoonful of lard, the same of fine sugar, and a scanty spoonful of salt. Blend half a cake of yeast with a little warm water, and add more warm water,
enough to make the flour into atifl batter. Cover, and let rise orer stif In the morning, work in flour enough to mould up, using as little as possible, hands, then knead until free from the very smooth. Bread dough requires very thorough kneading. Allow it to rise in a warm place until light, then
divide into two loaves, handing divide into two loaves, handling, as lit
tle and as lightly as possible, and put in baking pans. Let rise agaln until quite light, in a warm place, then, with a knife, score the topy of the loaves to prevent cracking, and bake one hour in
a moderate oven.
If more bread is re quired, double the quantities.

## CROCHETED HUG-ME-TIGHT

Dear Junia,-Iike so many others, I
come for help. I would like to get the come for help. I would like to get the
pattern for a crocheted "hug-me-tight," laced with ribbon under the arms. Thanking you in advance.
P. Q. The very thing you want appeared in have not that number, 1911. If you probably some of your neighbors have it If not, kindly let me know. As a rule,
we do nut care to repeat so soonn.

Midwinter Cookery. Meat and suet dishes may be indulged in during cold weather more than at any
other time of the year. Fat, you must understand, is a heat-producer.
Brisket is one of the cheaper cuts of beef, yet it may be made into a very saucepan put 4 as slices of bacon, and on
top lay 3 lis. with the meat 2 carrots, 1 onion, herbs to season, then cover with cold water.
Cover the stewran closely, and let come siowly to the boil, and then simmer
(nut boil) for 4 hours. (nut boil) for 4 hours. Before serving,
take out a little of the liguid and thicken for gravy, adding caramel
(hurnt sugar) to brown. Add this to the rest. Garnish the meat with the once. For a small facmily, reduce the
quantities for this dish. Keep in mind that "a stew boiled is a stew spoiled." The secret of delicious stews is slow and
steady cooking. Done in this way the steady cooking. Done in this way, the
chealpest pieces of meat are quite as ap-
petizing and nutritious as the dearer Ones.
Bacon, a fine heat-producer, should be $\begin{aligned} & \text { used even more than it is during cold } \\ & \text { weather. Owing to its peculiar granu- }\end{aligned}$ lar formation, it is quite digestible, and can be eaten by those who cannot touch
pork in any other form. It may be
broiled nicely as follows: Fut the slices
on a wire griatron or toaster, and set and brown lightly and quickly. Serve, it you choose, with eggs, or veal cutlets. Larded Fillet of Boef.-Have a fillet of
beef larded et the butcher-shono. beef larded et the butcher-shop. Place
it on a rack in a pan; sprinkle with it on a meper, dredge with flour, and put small slices of pork on the bottom of the pan. Bake in a hot oven 20 to
30 minutes, basting frequently. 30 mintos, basting trun
 suet very
flour, 2 teaspoons baking powder, spoon salt. Add $\&$ pint sugar, then stir in the chopped suet. Make a hole
in the center. Put in yolks of 3 eggs, well beaten, gradually add $\frac{1}{3}$ pint mill, and stir all into a smooth batter, then add the whites of the eggs beaten to a
stiff froth. Stir through the batter stiff froth. Stir through the batter
over a cupful of drained apricots, stewed over a cupful of drained apricots, stewed
dried peaches, or raisins, to suit. the taste, then turn all into a buttered
mould. Cover tightly, and steam $2 \sharp$ mould. Cover tightly, and steam $2 \downarrow$
hours.
Serve with cream and sugar, hours. Sith a little nutmeg grated in, or with pudding sauce.

Wiila Sauce.-Half-cup butter, 1 cup sugar, 2 cups water, 1 large tablespoon
four mixed with the sugar or a little flour mixed with fater. Cook, then flavor with vanilla. Cream Sauce.-Half-cup butter, 1 cup powdered sugar, st cup cream, 1 teaspoon
tanilla. Stir over hot water until powdered sugar,
vanilla.
creamed. Uncle Tom Pudding:-To 1 cup flour poonful brown sugar, 2 cups dark molasses, 1 teaspoon ground ginger, 1 of
cinnamon, 1 of allspice, 1 of sode. Beet cinnamon, 1 of allspice, 1 of sode. Beat
up 2 eggs, mix with-1 cup milk, and $\operatorname{up}_{\text {add. }} 2$ eggs, mix with 1 cup milk, and ${ }_{\text {Beat }}^{\text {mell, pour into a buttered }}$ mould, and steam $2 \ddagger$ or 3 hours. Serve with sweet butter sauce, made by beating
butter and sugar together. An Easy Fruit Pudding.-Make oatmeal molasses, spice and fruit to taste. Boil again, thicken a little with flour if you choose, and serve with sauce. Oatmeal, also a heat-producer, should be served
frequently during cold weather.

## CELERY RELISH

Having seen in a recent issue of "The armer's Advocate" a query re celery
elish, will send a recipe, which we have found very good.
One peck green tometoes, 6 heads celery, fie, then add the following: Fhop all brown sugar, t cup mustard, 3 table$\begin{array}{cccc}\text { spoons cassia, } & 4 & \text { tablespoons } & \text { salt, } \\ \text { tablespoon curry } & \text { powder, } & 1 & \text { teaspoo }\end{array}$ pepper, 3 pints good vinegar.
Boil all Hoping this will be of help, I remain, Bruce Co., Ont. SEAMSTRESS.

## News of the Week.

At the Carnegie Hero Fund meeting, held recently in the United States, the two $^{\text {tw }}$ Carnegie silver medals awarded for conspicuous heroism during a certain
time, were passed over to Canada. One, with $\$ 2,000$ for educational purposes,
was awarded to Doris Lewis, a pirl of was awarded to Doris Lewis, a girl of
fourteen, who, under particularly difficult circumstances, at Cowansville, Que., on November 25th, 1911, saved Benjamin
Draper, a Draper, a boy of seven, from drowning.
The other was given to the father of The other was given to the father of
Frank Beamont, age 36, farmer and boatman, who lost his life on July 27 , 1912, when trying to save a nephew
from drowning in Muskoka Lake. A remarkable awand of $\$ 20,000$ was
last week awarded, in Calgary, to Miss last week awarded, in Calgary, to Miss
Louise Collard, a school-teacher of Nanton. who sued Martin James Armstrong, of the Nanton Valley Ranch, for breach Both Houses of Parliament reassemhed in Ottawa on January 14th, after
he four weeks
Christmas adjournment. There is a scheme afoot for securing
large tract of land in the Maritime


Buy our famous, superior home-grown and imported seeds. Ask for catalogue
rm garden collection, 26 selected varieties, $\$ 1$ postpaid. Trial collection, 18 selected varieties, 50 c. postpaid. Children's collection, 15 selected varieties, 25 c. postpaid. OUR HOME-GROWN

## Yellow Mangel

 "Our Ideal"leads them all. It is the new mangel with the greatest future. An easy harvester and a keeper of highest feeding value. The 1912 report of the Ontario Agricultural \& Experimental Union in the competing co-operative experiments, shows the "Ideal" as the leading variety, with 100 value and 32.40 tons per acre.

50 cents per pound
Give them a trial.
Ontario Seed Co., Successors WATERLOO, ONTARIO Our Hurst Sprayers are the best. Ask for Catalogue


## Looking for Trouble

Every farmer who allows an outside privy to remain on his farm is Looking for Trouble-disease and illness-for himself and his entire family.

## It Has Been Proved

That nine out of every ten cases of illness on the farms are directly traceable to the outside privy-that horrible sink of disease and filth.

Just think! You allow this horror to remain within a few steps of your home-and force your family-your wife and daughter to use it-in all weathers-winter and summer.

Why, man, it's outrageous! Especially when you consider how little it would cost you to instal a Good Health Sanitary $\overline{\text { Closet-right in your own home. Imagine how your family }}$ will appreciate its privacy and convenience. Make up your mind now to get rid of that outside privy. We will show you how.

Coupon

## Mail This Coupon to Us

NOW!
THE GOOD HEALTH COMPANY

Brockville, Ontario
mention the farmer's advocate when writing advertisers.

##  <br> Forget the City Stick to the Farm <br> $T$ HERES no ned to come to tunity and sumeceke gity for oppor for you in every farm iocaity right in your own neighbortood right now. Gef a <br> BUCKEYE TRACTION DITCHER   in bie yar <br>     nomed <br> Wean ave gou owncoid hard <br>  <br> Write for Catalogue $T$ to-day <br> THE BUCKEYE <br> TRACTION DITCHER CO. <br> Pliadiay, oulo.

HACENEY AUTO - PLOW

this loa





is of greatest value. Besides its many household uses, it is just the thing for cleane ing and scouring mill pails, the cream separator, the
churn and everything conchurn and everything connected with the dairy Makes everything clean, sweet, sanitary.

Many uses and full directions on large Sifter-Can, 10c.


GUNNE

( PRTLLILER)
CUHIMS SHUR-GAIM FEEDS
FOR STOGK and POULTRY GUNN'S
40 years' experience behind them. Write for Price List and booklet.
Gunn's Pork and Beef Packers WEST TORONTO

Provinces, to
training ground.
BRITISH AND FOREIGN The sick Benefits clause of the British Insurance Act came into force on Janu-
ary 18 th.

The fie built by Great Britain will now being alone. Should this example be followed
by coal-buriing ingniactorits by coal-burining manufactoriés, the pro-
diction may come true that a new avonue for production, that of raising oil-bearing plants, will be afforded to farmera.

The claims egainst the White Star Line for Titanic losies amount to more than \$10,000,080, The highest wae put in by Mra. Irene Harris, who asks
$\$ 1,000,000$ for the loss of her husband, a theater manager.

By the details of the new educational scheme for Great Britain, it is explained
that it will henceforth be made possible for any man to climb to the top, through his mental eapacity, rather than through cash. The curriculum is to be broadened to include manual training
and technical instruction. Schools for mothers are also to be established.
M. Poincare has been chosen President of the French Republic, to succeed M. Fallieres.
-. " After a hot debate, the Home Rule Commons, on January 16th, by a maJority of 110.
House of Lorde.

The interior of Mexico has been cut off from the Capital by the rebels.
The telephone system of Great Britain is to be operated henceforth by the British Government. The sum of $\$ 62,-$
576,320 was paid to the National Telephone Company for the transference.

## TRADE TOPICS.

"The wonderful era of prosperity that is now being enjoyed in Canada is ex-
emplified by the report of the 'Salada' Tea Co., which states that, during the
year just ended, there were $1,223,437$ pounds more 'Salada' tea sold than in
pond. This increase would supply every
1911. 1911. This increase would supply every
household in the Dominion with one
pound of then pound of tee.

## CANADIAN

## PACIFIC

SPECIAL CRUISE
AROUND THE WORLD Empresses of "Russia" and "Asia"
(New C. P. R. Pacific Steamships) The Empreso of Rusia will leave Liverpool
April 1 st, calling at Gibraltar, Villefranche and
 pore, Hong Kong, Shanghai, Nagasaki, Kobe
and Y Yokohama, arriving Vancouver June the,
1913. Vesel remains 16 days at Hong Kong
Empress of Asia
June 18th oril sail from Liverpool
particulars of trip will be anJounced later.
Most direct
connection for April Most direct connection for April 1st sailing
is via. Empreso of city
N. B., Marce 21st. Britain" from St. Sohn, Rate for Entire Cruise, $\$ 639.10$
 Russia, and stop over at hong Kong. Par-
ticulars from tonatian Pacific agents., write
M. G. MURPHY. D.P.A. C.P.R. Toronto.

Columbia Double Disc Records double value for your money

BULKLEE TRAINING SCHOOL



 mar grade instruction and one year' high school
tete equivalent.
Aply
Eat 10th Street, New York Cuperintendent at 30

## It's easy to innure a bumper crop

Costs little to do so, because-You can make that and large profits equally certain with a

## Hand PowerSpramotor

A machine that will return the money invested in it every year and then some.

A HAND POWER SPRAMOTOR sprays ${ }^{\dagger}$ an acre of potatoes effectively in 30 minutes-annihilates bugs, germs and pests and makes the blight impossible-Making your work vastly more profitable than ever before.

The Hand Spramotor has two lines of 10 foot hose-cuplings attached, patent valves, two bamboo extension rods with internal brass tube, brass cupped ends, patent drip guard and two nozzle clusters.
A durable machine for all purposes -destroying weeds, spraying orchards and can /be used effectively for white washing or painting thè buildings about the farm.
NOTE :-There's a Spramotor built for your exac

requirements.Prices range from $\$ 6.00$ to $\$ 350.00$. You owe it to yourself to find out all there is to know about it. We forward you the facts with our treatise on "Crop Diseases" without placing you under any obligation to buy.

## SPRAMOTOR, Ltd.

1560 King St.
LONDON, CAN.


FEED THEM

## "Maple Leaf" Oil Cake Meal

-then the cows will give more and richer milk-the beef cattle will fatten faster and make juicier beef of finer flavor.
"'Maple Leaf" Oil Cake Meal will put quality into both beef and dairy products. And for quality the old world clamors more and more.
For indoor feeding "'Maple Leaf"' Oil Cake Meal fits every condition. It can be mixed with any other kind of feed on hand, and is very economical.
And its fertilizing or manurial value must also be remem bered. It enriches everything with which it comes in contact

But when you go to buy it, be sure to ask for "Maple Leaf" Oil Cake Meal, the kind produced by The Canada Linseed Oil Mills, Ltd., at their big modern mills in Montreal and

Our book, "Facts to Feeders," will be mailed free on request Get "Maple Leaf"' Oil Cake Meal from your dealer, or direct from our nearest mill
THE CANADA LINSEED OIL MILLS, LTD.
montreal, que.
Sorauren Avenue
TORONTO, ONT
MEMTION THE FARMER'S ADVOCATE WHEN WRITIMG ADVERTISERS.

## POUFDRY CEGGSOD

Coucin arpurate vill boun uder
 =aimen mivin














 $\mathrm{F}^{\circ \mathrm{O}}$ site





 W

## 


























Young Men
FOR ONTARIO FARMS Arriving February, March, April Apply:
Boys'
FARMER LEAGUE,


## Potash for Potatoes

The Potato is the most important vegetable that the farmer grows, and
the demand for it is always increasing. It is also one of the crops that responds most generously to the application of commercial fertilizers. In the extent of, approximately; $\$ 30$ per acre. This expenditure covers a very heavy application, but the growers are satisfed, as they obtain very large yielde. It has been proved by analysis that a crop of 800 bushels removes from the
soil, approximately, 60 lbs. nitrogen, 80 lbs . phosphoric acid, and 105 lbs . POT soil, approximately, 60 lbs . nitrogen, 80 lbs. phosphoric acid, soll in some form
ASH. These essential plant foods must be returned to the soil in if fertility is to be maintained. This can be done by the application of art ficial fertilizers, either as supplements to or substitutes for barnyard manure.
From the figures given above, it can be soen that POTASH must be the From the figures given artili, for potatoes, and no mixture should be buught to fertilize this crop unless it contains 8 per cent to 10 per cent. poTASH. Should the farmer mix his materials on the farm, the following
quantities would suflice : 150 lbs . nitrate of soda (a crop of clover plowed quantities would suffce: 150 lbs. nitrate of soda (a crop of elover plowed
under will supply the necessary nitrogen), 800 lbs. acid phosjhate, and 210 lbs , under will supply the necessary nitrogen), 800 lbs . actid phosiphate, and 210 lise.
suiphate of potash. POTASH in the form of sulphate of potash should be used as it gives better results than in other forms.
Advice on the economio purchase and use of artifcial fertilizers will be given o those desiring such, and copies of bulletins on the important subject of applice
izing, including "The Potato Crop in Canada," will be mailed free on apper lizing, in
tion to

GERMAN POTASH SYNDICATE
1,106 Temple Building
Toronto, Ontario

## WHARM WATER FOR YOUR COWS PAYS BIE

Leading Cattle Men warm the water for their stock in winter.
It will pay you to get your cows to drink warm water
and not have them shiver after drinking.
Heat the water right in your trough or tank with our
TANK HTATER
Made of high grade iron and as
here shown. Remains on bottom of here shown. Remains on bottom tank without being fastened down.
Takes on a uniform temperature; will not crack. Weighs 155 lbs; is 12 inches high (exclusive of pipe), rate and basket. Ash pan and grate and basket fire pot are all
heavy cast iron.
The heater will burn any kind of fuel,
 co-night and get the full benefit this winter.
Catalogue of Tanks, Pumps. Windmills
THE HCLLER-ALLER CO.
Windeor, Ont. WHEN WRITING ADVERTISERS PLEASE MENTION The Farmer's Advocate


There's Still Time Ita not too line to ble wibl profie Bdibe cume dow turas prea
Rumely Automatic Baler
 He
 for 1913 we to ouit any warket-also a biler with eneine mounted on frame.
Send for our Baler Dala-boot No. 245 $\rightarrow$ RUMELY PRODUCTS CO.

Power- Fanmind Mechinery
Toronto, Ont, 472

## NEW TERM

now open, Students may enter
any time. If yourare interested any time. If you are interested
in "Education That Pays" you in "Education That Pays you
should write today for a copy
of our latest catalogue.
BRITISH AMIRICAN business college Y.M.C.A. Bullding, Toronte T. M. Watson, Princtpal

## Good Schools!

The bent bucinets colleases in Ontario are Contral Business College, matrosd。 Elliott Business College,

All our thatructon are experiened. The



## BUSINIESS AND

SHORTHAND
 Lovion siog
Studenta caisted to poition Coltero in meaion from Sopp 3rd Catalegio


,
mixizizize

[^0]There is nothing like a "Tea Pot" test at your own table to prove its sterling worth!
"SALADA"
TEA "Always and Easily the Best"
BLACK, GREEN, or MIXED. Sealed Airtight Packages Only

## The Anthony Fence <br> THE PERFECT TIE

Are you looking for a Strong, Durable Fence? The Anthony is made from all No. 9 spring steel wire, which is thoroughly galvanized.
The stay wires are locked to the line wires with the
neatest, strongest and best lock on any fence made. If you are interested, write for full descriptive catalogue.

Live agents wanted in all unoccupied territory.
The Anthony Wire Fence Co. of Canada, Limited Walkerville, Ontario.



## MAPLE SYRUP MAKERS!

ENTER THIS CONTEST

## $\$ 500$ <br> MAPLE SYRUP <br> PRIZE CONTEST

THE demand for genuine and high-grade goods so enhances the market price of Maple Sugar and Syrup that we have decided
to open a competition to pduate the onsumer who is hore familiar
with the second- or third-grade article. To attain this result, we offer $\$ 500$ in gold for the best-made syrup and sugar.

## Syrup and Sugar on Exhibition in Montreal

The object of making a display of this kind is to show the public
he products of the very best Maple Syrup and Sugar Makers in Canada, and must undoubtedly result in unlimited benefit to you should you be
one of the exhibitors. All syrup must be made
 stand a chance of winning a prize - will be paid for if you enter the contest, or returned a fter contest is over if you so desire.
The entries will be thibited in the magnificent sho the "Montreal Star." Why not properly equip yourself to be the
winner in this contest ? State number of trees youl ter  give you pricip on a suitably
sized outfite
For all condition Ficulars, address:
PRIZE CONTEST GRIMM MFG. CO. Limite $58 \begin{gathered}\text { Wellington Street } \\ \text { MONTREAL }\end{gathered}$


## Rebeccayof Sunnybrook

 Farm.By Kate:Doustars Wigezin.
Serial rights secured from Houghtor
Miffin Publishing Company, New
CHAPTER XIV.
Mr. Aladdin.
A single hour's experience of the vicissitudes incident to a business career clouded the children's spirits just the least bit. They did not accompany each other to the doors of their chosen victims, feeling sure that together they could not approach the subject seriously; but they parted at the gate of each house, the one holding the horse while the other took the soap samples and interviewed any one who seemed of a coming-on disposition. Emma Jane had disposed of three single cakes, Rebecca of three small boxes; for a difference in their ability to persuade the public was clearly defined at the start, though neither of them ascribed either success or defeat to anything but the imperious force of circumstances. Housewives looked at Emma Jane and desired no soap; listened to her descriptor ors in governed Rebecca's doings. The people whom she interviewed either remembered whoir present need of soap, or reminded their present need of soap, or reminded
themselves that they would need it in the future; the notable point in the case being future; the notable point in the case being
that lucky Rebecca accomplished, with that lucky Rebecca accomplished, with
almost no effort, results that poor little almost no effort, results that poor little
Emma Jane failed to attain by hard and conscientious labor.
"It's your turn, Rebecca, and I'm glad, too," said Emma Jane, drawing up to a gateway and indicating a house that was set a considerable distance from the road. "I haven't got over trembling from the last place yet." (A lady had put her head out of the upstairs window and called, "Go away, little girl; whatever you have in your box we don't want any.") "I don't know who lives here, and the blinds are all shut in front. If there's nobody at home you mustn't count it, but take the
next house as yours." Rebeca alks.
Rebecca walked up the lane and went and seated in a rocking chair, husking corn, was a good-looking young man, or
was he middle-aged? Rebecc could was he middle-aged? Rebecca could not
make up her mind. At all events he hod make up her mind. At all events he had
an air of the city about him,-well-shaven face, well-trimmed mustache, well-fitting clothes. Rebecca was a trifle shy at this
unexpected encounter, but there was unexpected encounter, but there was
nothing to be done but explain her pre-
sence, so she asked, "Is the lady of the sence, so she asked, "Is the lady of the
house at home?" house at home?"
"I am the lady of the house at present,"
said the stranger, with a whimsical smile. said the stranger, with a whimsical smile.
"What can I do for you?",
"Have you ever heard of the-would "Have you ever heard of the-would
you like, or I mean- do you need any
soan?" soap?" queried Rebecca.
"Do I l look as if I did?" he responded unexpectedly.
Rebecca dimple
Rebecca dimpled. "I didn't mean that;
I have some soap to sell. I Thave some soap to sell; I mean I would
like to introduce to you a very remarkable like to introduce to you a very remarkable
soap, the best now on the market. It is
called the"called the "Oh! I must know that soap," said
the gentleman genially, "Made out of
pure vegetable fats, isn't it?" "The very purest," corroborated Rebecca. "No acid in it?
"Not a trace."
"And yet a child could do the Monday
washing with it and use no force." "A babe," corrected Rebecca. younger every year, instead of older-
wise child!" wise child!" $\begin{aligned} & \text { This was great good fortune, to find a }\end{aligned}$ customer who knew all the virtues of the
article in advance. Rebecca dimpled and more, and at her new friend's invita-
tion sat down on a stool the edge of the porch The beautides of the
ornamental box which hell were disclosed, and the prices of both that
and the smow-11 hite were unfolded serty she forgn ill alout her silent. Pre-
ner at the gate ind was talking as if
had known this grand personage all her
"I'm keeping house to-day, but I don" live here," explained the delightful gentle man. "I'm just on a visit to my aunt who has gone to Portland. I used to be
here as a boy, and I am very fond of the
spot." "I don't think anything takes the place of the farm where one lived when one was a child," observed Rebecca, nearly burst
ing with pride at having at last success fully used the indefinite pronoun in general conversation.
The man darted a look at her and put your childhood a thing of the past, do you, young lady?"
"I can still remember it," answered
Rebecca gravely, "though it seems a long Rebecca gravely, "though it seems a long time ago.'
a particularly unpleasant one it was, said "the stranger. was mine," sighed Rebecca "What was your worst trouble?" Oh!" exclaimed Rebecca sympatheti-cally,- "mine was no shoes and to many babies and not enough books. But you?'' she asked doubtfully, for though he looked handsome,well-fed, and prosperous any child could see that his eyes were ired and his mouth was sad when he "I'm doing pretty well, thank you," said the man, with a delightful smile "Now tell me, how much soap ought "How much has your aunt on hand now?", suggested the very modest and in experienced agent; "and how much would "Oh, I don't know about that; soap keeps, doesn't it?"' "o scientiously, "but I'Ll look in the circular scientiously, but sure to tell," document from her pocket. "What are you going to with the "What are you going to do with the magnificent profits you get from this busi "We are not selling for our own benefit," who is holding the hentially. Mate is the daughter of a very rich blacksmith, and I live with my aunts in a brick house, and of course they wouldn't like me to be peddler. We are trying to get a premium
for some friends of ours." Rebecca had never thought of ever alluding to the circumstances with her previous customers, but unexpectedly she Mrs. Simpson, and the Simp. Simpson, their poverty, their joyless life, and their abject need of a banquet lamp to brighten their existence,
the man, as he stodue that point, "laughed the man as he stood up to get a glimpse
of the "rich blacksmith's daughter" at the gate. "I can see that they ought to you want them to have it. I've known what it was myself to do without a banquet lamp. Now give me the circular, and let's do some figuring. How much "If they sell two hundred more cakes this month and next, they can have the "amp by Christmas," Rebecca answered. and they can get a shade by summer much after to-day, because my aunt Miranda may not like to have me." three hundred, that's all right. I'll take three hundred cakes, and that will give Rebecca had been seated on a stool very near to the edge of the porch, and at this
remark she made a sudden movement tipped over, and disappeared into a clump of lilac bushes. It was a very short distance, fortunately, and the amused capitalist picked her up, set her on her feet,
and brushed her off. "You should never seem surprised when you have taken a large order," said he ; "you ought to have replied 'Can't, you make it three
hundred and fifty?' instead of capsizing hundred and fifty?' instead of capsizing "Oh, I could never say anything like that!"' exclaimed Rebecca, who was blush-
ing crimson at her awkward fall. "But it ing crimson at her awkward fall. "But it
doesnt seem right for you to buy so much. Are you sure you can afford it?" else," "returned the jocose philanthropist.
"IVhat if your aunt shouldn't like the kind of soap?", queried Rebecca nervously,
"My aunt always likes what I like,"

JANUARY 23, 1918
"Mine doesn't!" exclaimed Rebecca. "Then there's something wrong with your aunt!
"Or with me," laughed Rebecca
"What is you name, young lady
"Rebecca Rowena Randall, sir."
"What?" with an amused smile."Both? Your mother was generous. the names she says."
"Do you want to hear my name?
"I think I know already," ans Rebecca, with a bright glance. "I'm sure you must be Mr. Aladdin in the Arabian Nights. mh , please, can I run
down and tell Emma Jane? She must be so tired waiting, and she will be so glad!' At the man's nod of assent Rebecca sped
down the lane, crying irrepressibly as she down the lane, crying irrepressibly as she
neared the wagon, "Oh, Emma Jane! neared the wagon,
we are sold out!!
Mr. Aladdin followed smilingly to cor-
robate this astonishing, unbelievable staterobate this astonishing, unbelievable state-
ment; lifted all their boxes from the back of the wagon, and taking the circular pany that night concerning the premium. "If you could contrive to keep a secret, -you two little girls, - it would be $r$ ther a nice surprise to have the lamp arrive at
the Simpsons' on Thanksgiving the Simpsons' on Thanksgiving Day
wouldn't it?" he asked, as he tucked the old lap robe cosily over their feet. They gladly assented, and broke into a tears of joy stood in Rebecca's eyes. "Oh, 'don't mention it!" laughed Mr. Aladdin, lifting his hat. "I was a sort - commercial traveler myself once,
years ago, - and I like to see the thing well years ago,-and like to see the thing well
done. Good-by, Miss Rebecca Rowena! Just let me know whenever you have anything to sell, for I'm certain before
hand I shall want it, " Good-by, Mr. Aladdin! I surely will! cried Rebecca, tossing back her dark braids delightedly, and waving her hand.
"Oh; Rebecca!" said Emma Jane in an "Owe-struck whisper. "He raised his hat awe-struck whisper. "Hee raised his hat
to us, and we not thirteen! It'll be five years, before we're ladies."
Never mind," answered Rebecca; ",we
are the beginnings of ladies, even now."
"HHe are the beginnings of ladies, even now."
"He tucked the lap robe round us, too," continued Emma Jane, in an ecstasy o reminiscence. "Oh! isn't he perfectly
elegant? And wasn't ict lovely of him to elegant? And wasn't it lovely of him th
buy us out? And just think of having both the lamp and the shade for one day's work Aingham now, even if mother did make you put on flannel underneath?
You do look so pretty in pink and red Rebecca, and so homely in drab and
brown!"
"I know it," sighed Rebecca. "I wish I was like you-pretty in all colors!"
And Rebecca looked longingly at Emma Jane's fat, rosy cheeks; at her blue eyes, which said nothing; at her neat nose, which had no character; at her red lips,
from between which no word worth listening to had ever issued.
"Never mind!" said Emma Jane com-
fortingly. "Everybody says you're fortingly. "Everybody says you're awful
bright and smart, and mother thinks you'll be better looking all the time as you grow older. You wouldn't believe it, but
I was a dreadful homely baby, and Was a dreadful homely baby, and homely
right along till just a year ago, when my red hair began to grow dark. What was the nice man's name?
"I never thought to ask!" ejaculated that was just like me, and it is. But 1 called him Mr. Aladdin because he gave
us a lamp. You know the story of Aladdin us a lamp. You know the story of Aladdin and the wonderful lamp?
a nickname the very first time you ever
saw him?" saw him?" "Aladdin isn't a nickname exactly; By dint of superhuman effort, and putting such a seal upon their lips as never mortals put before, the two girls succeeded
in keeping their wonderful news to them selves; although it was obvious to all beholders that they were in an extraordinary and abnormal state of mind.
On Thanksgiving the lamp arrived in large packing box, and was taken out and
set up by See-Saw Simpson, who suddenly began to admire and respect the business ability of his sisters. Rebecca had heard nearly dark before asking permission to go to the Simpsons', so that she might see a blaze of crimson glory through its red crepe paper shade. ere paper shade.

## The Best Built Roller

is the "Bissell," with Drums of heavy stee plate, hard in temper, riveted up close, having pressed steel heads.
With AXLES of 2 inch solid steel revolving on cold Rolled Roller Bearings. With the MALLEABLE CAGE in one piece, holding the Roller Bearings in line on the axle.
With DRAW BRACKET under the Pole, making the Draught down low.
With the FRAME all of steel and the improved steel plate bottom.
that mather Re tollere are like the Bissellbut there is only
one original Biesell Roller and to Rave our customers disappointment
Wo put our name on every Roller we build Look for the name "Bissell" and write our Dept W for catalogue.
Several styles and a variety of widths to choose from, 6 fis pu to 12 f . Grass Seeder Attachment
T. E. BISSIHLL CO., LID., ELORA, ONI.


## |Wonderfiul NEW Eantion FREE

Write today for our new Edison catalog that tells: Mir. Edison- Says Edison's new Model R Reproducer and the new parlor grand equipment,
"I want to see a phonograph

## 'Ine Ofec We will send you the new model Edison Phonograph and

 your choice of over a thousand records on an absolutely free loan. We want you to have all the waltses, two-steps, vandevilles, minstrels, grand operas, also the sacred music, etc., etc., by the world's greatest artists.Entertain your family and your friends. Give plays and concerts right in Entertain your family, and your friends. Give plays and concerts right in orchestras, the choirs of Europe's great cathedrals, the piano and violin concergans, the brass bands, the symphony hear free as reproduced on the new Edison. Then, when you are through with the outfit you may send tit back you to Lhe Reason Why should we make such an ultra-liberal offer? you can have all these free concerts? Welly should we go to all this expense and trouble just so you can have all these free concerts? Well, we'll tell you: we are tremendously' proud of this magnificent rew
instrument. When you get it in your town we know everybody will say that nothing like it her instrument. When you get it in your town we know everybody will say that nothing like it has ever been
heard-so wonderful, so grand, so beautiful, such a king of entertainer heard-so wonderful, so grand, so beautiful, such a king of entertainers-so we are pretty sure that at least some
one, if not you, then somebody else, will want to buy one of these new style Edisons (especially as the ing offered now at the most astounding rock-bottom price and on easy terms as low as $\$ 2$ an they are beBut even it nobody buys there is no obligation and we'll be just as glad anyway that we low as $\$ 2.00$ a month). on our free trial; for that is our way of advertising quickly everywhere the wonderful superiont you the New Edison

## FREE: Our New Edison Catalog

Write today for our new Edison catalog
and learn all about the wonderful New Edison. Learn how thousands of people are entertaining their friends
by giving Edison concerts-learn how the boys and
girls are kept at home and all the family made happy by the wonderful Edison. No obligations whatsoever in asking for this magnificently illustrated catalog, so write now

BABSON BROS., 355 Portage Are, Deph 7531 WINTPEC, Cill


## FRED COUPON

BABSON BROS., Edison Phonngraph Distrs. Dept. 7531, 355 Portage Ave. Winnipeg, Catw Dear Sir:-Please send me your New Edison Catalog and full particulars of your free trial offer on the first
model Edison Phonographs.

Name.
Address

You can't argue with Mr. Pig



"Ideal Fence keeps hogs where they are put





The Strongest, Staunchest Fence Made

QUESTIOMS AMD AHSWERS.




 Thin-mernary of low menitron ori.00 mo

Miscellaneous.
DRTVEM WELL PROBLEM
Water is found at a depth of four feet. a mendy-loam aoll, and riess to within ne foot of the surface. Well was dug June, 1912, and water has not failed ince-good, clear, sweet water, not very hard. Composition of soil is loam dark brown), for ifteen inches, then yollow sand for twelve inches, small, hard gravel for nine inches, and remainaer, to preesent depth, white sand, at nost ilike quicksand, which silts uy about throe fnches in three months. 1. Woula it be proftable to drive a well to a greater depth, say. 15 or 20 teot, in order to get below the frost line; and do you think there would be another water-bearing strata of sand probabily at $20-1$ loet depth, or wond prove to be the only one in such soil? Would the witte aand at 81-foot depth be ilkely to continue much lower than pres ent dopth, with water still present, of woyld it drop off, and the second strata of watersand be more prolific in water 2. What is the best method of driving a well-pipe with a drive-point; and is there any better method of ascertaining depth of the water-bearing sand, by or dinary, inexpensive means? The rock shows up about 80 rods to the south of well, and the land has a very gentle slope northwarta, abouk feet. FARMER'S BOY. Ans.-1. It is impossible to tell from the data given, to what depth the white eand stratum woud oxtena, or whether another porous layer would be found lower down. One thing is certain, nemaly, 4 -bering swn is for as it goes and the way to toll this depth would ho to drive a well-point. If this porous sane there would be no objection whit ever to having your well-point the depth of the layer. Indeed, there greater supply of water, and yo greater supply of water, and you would
be below the frost line. The correct depth in each case can be settled only
by a pumping test
to
determine by a pumping test quantity of water the well gives before
it is pumped dry, and the time it take

## Reap The Benefits of Available Plant Food



In a favorable season crops will make enormous gains if they are given the available plant food necessary to support them. No soil contains enough available plan't food for a bumper crop, or enough to prevent àn unprofitable crop in a bad season. A good fertilizer increases the yield and the profit, but the plant food should be in forms available to the growing needs of the crop.

The A. A. C. Co.'s Fertilizers are manufactured from the best materials, and special factory treatment makes them highly available

Wherever you live, we can reach you with the right fertilizer, the right service and the right price. Write today for a copy of "Plant Food," tising in it, sent without cost lasts.

Agents wanted in unoccupied territory Liberal terms and goods that sell. It pays to sell our fertilizers as well as use them. Ask for agency proposition
The American Agricultural Chemical Co. Makers of brands with fifty yeras of oulity and realts beciand theo. P.O. Drawer 814, E. Detroit, Mich. 71 Lyman Street, Buffalo, N. Y.

[^1]to all again. If the quantity of water
is not suffcient. the pipe man be driven
down a foot or so and another tost down a fot or so and another toest
made. Where the porous stratum is shallow, the point is sometimes driven through it into a non-porous stratum,
which of course, shuts of the supply of water. If this should happen, the pipe may be drawn up again, as follows: A collar is made of two stout timbere. notched to fit the pipe, and bolted to-
gether around the pipe below the drive cap; the litting is done by means of two jack-screws, one under each end of the
coller collur. If the pipe sticks, it twist or
two with a pipe- wrench will generally loosen, it. If, when the bottom of the white-sand stratum is reached, you are not satisfied with the depth, you might drive further in the hope of string an-
other porous layer, failing which you other porous layer, raling which you
might draw the point up to the white and stratum. 2. To drive a well, the perforated length of pipe and a drivecap to the length or pipe and and anipe and drivepoint are
other. onen. driven into the ground with sledge hammers, or with a drop weight similar to that of a pili-driver. The drivecap
is then removed, another length of pipe is then removed, another ength of pip
screwed to the first pipe, the driveral screwed to the new length, the pipe driven down, and so on, until water id
found. A plummet is liet down inside the pipe from time to time; if it come up wet, water has benen struck. The point must then be driven down some water from the porous stratum. Th The drivecap is heavier than the ordinary pip-cap, and the, thread is cut the top of the cap, so that when it
screwed home, the edge of the screwed home, the eige of the
touches the top of the cap, and thus the strain of the driving falls on the edge of the pipe, and not on the thread. W . H. D .
CEment tank for maple
Will you kindly give me any informa tion you can about a cement cistern to store mople sap.
maplen

1. Would it spoil the flavor of syrup. 2. Would it be necessary to fill it with water for two or three weeks be
fore using, and also to keep water in tore using, and also to keep water in
it during su nmer?
c. $\cdot \mathrm{H} . \mathrm{H}$. Ans.-1. We do not think it would do
either. 2. It properly made, and frequenti sprinkled with water for, say, a weok
it should not ne necessary water, though that might insure harder and more impervious walls. It wour water over summer. The supports of such a tank should be down below frost line, and its construc.
tion tion in frosty weather should not be andertaken. Directions that have been
given in ".The Farmer's Advocate" tre quently for the construction of cement
water tanks, will be applicable in this water tanks, will be appicable in this
case. The experience of readers who have used cement rap tanks, or who
have built cement arches for boiling sap,
have built cement arches for boiling sap,
would be useful at this time

THE CAMADAN BAHK OF COMMERCE
ANNUAL MEETING
At the annual meting of The Canaa building proyrammo could be curtailed. on 14th intatant, the stotatement prosenteded
 Bank, which hate grown rapidily during the past tow yoera, During the yoar
 has been added to Reot, bringing that






 ouvhly familiar with conditions in thooe
scotions of the country about which they
 to the Bank.
Ater the reading or the report, the
 ecorrd of uninturrupteted prosesprity, and
 provious statement in the Bank shistory
In reviowing the businese of the earri part oot the yoar wo have to note a
dieady
development:
Great
induatrial cotivity, accompanied by larzo orders to

 our tustomere. Thero was apparently




 exercisos of great caution.
Woterad expecteded the gradual roturn of
 scouritee, would enlarge the supply avaianole capital, ,utut untowardo vener dentiol sampanign in in the viritod states made this imposasilio. Therere latter hall


 Townships Bank, our capitall was increased to 115.000,000. The averago

 alt was attained atter making the usual provision tor all had and doubtul debis,
and 8 thoroush revelation ot the entire Sasto of the Bank
We are ploased to report that an axTomantipg Bank loaeren us no reason to
oubt the value of our purchase, and we record our appreciation of the zeal and
vearty cooperation of our ansociates in in the diffoutt tasko incident to the adjust




 making amplo provision
tingony
likelis to
to
rise
ingency likely to fise. hope that our

 number of branches raviring the tuild
ling and remodelling of office on on ox ex



 acauired from the Eatern Tromstion Bank, and wo have written orf 8 s.o, ooo
kepeping the account at approximately
50 per cent. of the value of our propertied
The
hincrease of of the staff now number

 in proft and Lose. The Bank's crical


 Vantago of the emergency provisions of molotober, and wo cloed. our stat tement atit of the amount of our paid - up It tho Bank Alet introuducal at thised
 Gold Reaerve", eotah bishoded tharo will bo
 the deposit of gold or Dominion notese in the custady orveruato iswirg thair own notes to the full amount thus depopithod Thii will undoubtally be a very impor tant step towards ensuring that the embarrassed through lack of currency It is evident, however, that there will be no profit to the banks in availing them-
selves of the suggested privilege, and as selves of the suggested privilege, and as of currency is beyond the present limit
of the bank's power to supply, it is de sirable that in addition to the adventitious aids so wisely provided in the
new Bank Act. the banks should anticipate an increasing demand for bank-note carrency by the issue of additional
capital. During the year, our deposits insiderable accession of special amount which will be withdrawn in due course and we received $\$ 10,111,119$ as a result
of the Eastern Townships Bank amalgamation. The ordinary deposits show a
vety handsome increase. Current loans and discounts increased $\$ 52,753,947$, an call and short loans $82,757,730$, com
pared with last report.
Investments in paredernment-bonds. municipal, and other
Governmen securities, were increased by $\$ 2,821,024$
and cash resources by $\$ 1,625,271$ and cash resources by $\$ 1,625,271$.
You will notice from the report of the You will notice from the report of the
Board of Directors the large increase in Board of Directors the iarge increase
the number of our branches. We fully realize our responsibility in undertaking to control so many units in a grea
bank, and the importance of arranging for a complete organization of compa
tent tent and loyal associates, with geo graphical divisions which thoroughy
cover the field of our operations. Wo endeavor as far as possible to clothe our Superintendents and Manacers with au-
thority for'a prompt discharge of the duties of management. and believe we have succeeded in perfecting a system ment. The distribution of branches

| 49 |  |
| :---: | :---: |
| British Columbia | 4 |
| Manitobe ......... ........... .............. ${ }^{23}$ |  |
| New Brunswick |  |
| Nova Scotia |  |
| Ontario $\qquad$ |  |
|  |  |
|  |  |
| hewan |  |



Total number of Branches...... 366
The number of the Bank's shareholders to 5,656, the increase being principally Townships Bank. The stock of th Bank is now quite widely distributed,
not only in Canada, but abroad, as will be seen from the following figures com


We have referred to the provisions the new Bank Act for increased not
circulation, and would like to advert to circulation, and would like to advert to
the proposel that is now botng consid ered, of creating a system of independent
audit to supplement what has alway been regarded as complete and satisfoc can be no question a a to the importance of a strict supervision of all mettere
pertaining to our banks, and we should welcome any plan whioh makes for more efficient management, and a proper
recognition of the great responsibilitie we are called upon to assume. We are disposed to believe that with the cooperation of the-Ganadian Bankers' AsBank Clearing Houses. effective service could be rendered in the correction ot
abuses and the perfecting of methods for abuses and the perfecting of methods for
the encouragement of sound baikling. We thave possibly not taken advanta The Bank Act, will probably sanction nder proper liens and assignments, the loaning of money to farmers and ranch-
ers on the security of grain and cattle and other live stock in their possession.
This will undoubtedly be a greeat advantage in many instances, and will at least gon and probably tend to prevent hasty mon, and probaly as andee. matter of
manterting of produce
fact, large advances are made to farmers fact, large advances are made to farmers
on the security of notes, but actually on the security of notes, but actualy
upon what they possess in the way of products of agriculture, and their reputation for honesty and ability, olway an essential consideration when lending
money. We have no hesitation in stat ing that our farmer customers are, almost without exception, satisfactory
borrowers. Our aggregate advances to larmers run into large figures, estimated inces.
Despite the money stringency during the closing months of 1912, and the fea time to come, there are oflsetting influof trade work. The wonderfol reviva harvests throughout the land, and the on the railways, afford excellent ground or the assumption that the unusua prosperity we are enjoying is on a soun
basis. There is therefore some warrant for th
and ments there will be a continuance prosperous conditions for the coming
year. We must, of course, reckon year. We must, of course, reckon wit
the adverse
circumstances
prevailing abroad, for in condtcting a world-wide
business we are sensitive to these influ ences. We are hopeful that with the
settlement of present Europe, and the return of trade to mal channels, any apprehension for the immediate future will be dispelled. We
are likely to experience on the part of are likely to experience on the part or
investors a very decided reluctance to pay fancy prices when we come to dis-
pose of the securities now awaiting favorable market, and we should the pr pared for a revaluation which will prob-
ably mean a higher yield for the ably
chaser
The
 as follows :

## PRESIDENT'S ADDRESS.

The area of Carada in whioh tne Bank large that we have decided to present the information collected regarding its shall hereafter include new form. We made to our shareholders, reports from those senior omicers of the Bank who have charge under the General Managor
of the various geographical divisions of of the various geographical divisions of
the Bank, and who are better qualilied than we are to. set forth the factis re arding such districts.
The year has been one marked, even in
comparison with recent years of large expansion, by a continued increase in all kinds, especially in connection with railroads, in foreign and domestio trade in bank deposits, indeed, in almosi what is so well known is thet statin consider the causes of our rapld goromith,
and whether in the methods of our expansion there is anything which poode to
pe checked. Our financial requirement are mainly determined by the volume of wo must build so is because of thls that is the main cauce of the and thin als imports over our exports. The immibration for the calendar yoar, December 18 per cent. The immigrants came to us from forty-one countries, and were
divided as follows: British, 144,880; American, 140,456 ; from other countrios, to their inland destination, 800 pasuengor trains of ten cara each, averaging 50 persons to each car, would be ro-
quired. In the last two yoars, we have quired. In the last two years, we have
added riearly 10 new people to och 100 people alrendy in Caneida, talken as a
wrole, but as over hall of these immi-
grante grants have gone to the Western Prov-
inces, the proportion of newcomera to inces, the proportion of newcomera to been about 20 to achoh 100 . The popu-
lation of Saskatchewan has increasod lation of Saskatchowan has incroaed proportion ever handled by any compang, transportation for these people, wo mugo borrow very largely, and as long as are likely to be borrowers on a large scale, at loest for many doceddes to
come. In the oxcens of imports ovar exports, and in the volume of our securt-
ties sold abroad in order sto lottlo that difference, one can clearly see the otrain put upon Canda by thlo. Onormous ace cossion of now people. The total of
our foreign trade for the ancal yoar ond
ing March, 1912, whes $8874,588,000$, ing March, 1912, \$10s $8884,588,000$ axports $\$ 315,317,000$, the belance agoing
ns being $~$
$543,903,000$, and the fisure for being hall-year ending September, 1019 . how imports on an oven larger acelle. forms, from raw naterial to highily-com plicated manufactures, les are already being all thoto artibut not in sumincent quantities, or not requirements. It is to the leot degre desirable that such articlen should made at home, and to the oxtent of say $\$ 50,000,000$ or $\$ 60,000,000$ they
clearly should be. With the of motor cars and parts to the extenk
of $\$ 7,387,000$, and a fow other itemp, the whole of this amount may bo safely tures or the opening of new strui tures or the opening up of now farin tween our exports and imports whicl causen us to send so many securities to
the London market; and if it were truo that we are offering to il it were it would mean that we are importing too many goods or exporting too lltlo,
or both. Doubtless, some Canedla securities are offered some Canadla have been created, and doubtless our mports are unwisely increased to some usually prosperous people but the uncause each year is the same. Wo need mouse each year is than verer new mileage. of railwayi,
vast quantities of new rolling stoek,

Werehoves, and port facilitios, municipal
expenditures in hundreds of new towns, and an enlarged scale of improvements in ofl the older municipelities, the build ing of ordinary roads, bridges, etc., in tion of plants for new industries, and
the general increase of existing plants the general increase of existing plants private dwellings in greater numbers;
and of more permanent construction than in the past, and many other forms
of betterment which need not be door betterment which need not be de
tailed. But while our needs are mainly
menaured by our immigration, we are apt to forget that it is the investor in termine finally the pace of our expansion. For every dollar we wish to fix should have saved a dollar, and at this extravagant moment the borrower throughout the world exceed those whose
savings talke the form of loanable capisavings. take the form of lis it it us, therefore, to consider
tal. It
not so much our needs as the opinion of the investor regarding our securities, and the condition the world's money market. It restriet our building operation is much as possible for the moment and we must exspect to pay a higher rate of interest for our requirements
Men with business experience before en
tering upon building operations, large o tering upon building operations, large o moriey is available. It is only our
municipalities and reckless promoters who incur large oblilections before they securities they propose to offer. Many fused to consult the banks, find themsetves embarrassed as a result, and im provements which may be wise and much meeded, must be postponed for the mo
ment. The existing securities will doubt ment. The existing securities war wilure, but at lower prices than heretofore, in order
to meet the investors' expectations of to meet the investors' expectations of a
higher return. our municipalities, howhighér return. Our municipalities, how-
over, should seriously consider whether, during periods of such rapid expansion,
dhe tax, rate should not be largely inthe tax rate should not be largely in-
creased. In the days of western expancrion in, the United States, 25 and 30 nills on a fairly high valuation of prop
erty, were not uncommon rates. Again should we not pay for local improve ments in a far shorter time than we do
The Western cities of the United State The Western cities of the United State
make their local improvements by the issue of short-term securities, the average life of which is usuually not more
than five years. Such securities often carry six per cent. interest, and do no appeal to the same class of investors do long - term municipal debentures We can easily see the bad effect on the
credit of our municipalities of adding redit of our municipalities of addin,
the heavy cost of local improvements, spread over long terms, to the ordinary general debt. Such a system as that
lollowed in the United States would ollowed in the United States would
probably not find favor with the subprobably not find favor with the sub-
division promoter, because it would be a powerful check on all speculative real estate schemes. At least a year ago it many Canadian securities in existenc which had not been absorbed by the in vestor, and that real-estate opeculatio was proceeding at too rapid a pace.
Undoubtedly the knowledge of these facta Undoubtedly the knowledge of these fact
has exercised some restraint upon ou people. Transactions in inside city
properties have probably been larger than ever, but the sub-division promoter ha British capital in agricultural lands to be re-sold have been made in bo
In common with the rest of the worl we are living in a time of high prices those who have fixed incomes or earn greatest economic difficulty we have $t$ lace. I shall not attempt to deal fully
with a subject which is being studied by with a subject which is being studied by
Government Commissioners in many eading countries, and which will, let u ommission. There
which affect the general trend of prices
others which may cause any particular commodity to go above or below the line of the general trend, and again
others which are local, and produce such apparent anomalies as higher prices fo cheap production as compared with mor
therefore, discuasting the ertect of an onenormous increasene of credit partly made possible thereby, and the effect of many other forces causing a general upward
rend of prices, we may proftably eon-
sider some local causes which put the people of Canada at an unnecessary disand inatage. One of the moat powerful and inexcusable local causes for the
high price of food is the condition of
our country roads. It must be cloar hat if a farmer has to travel ten pronty miles to a city to gell his or pound less he is wablen, to carry bushel
cavery lost in the length of the life of his ay lost in the length of the life of his
arses and wagog, cause just so much
crease in the cost of the article he has to sell. To the extent that this
To the partlys and cruel loss might, if avoided, the state of our roads is little short of crime. If the bad roads around a
city cause the price of food to be much city cause the price of food to be much ligher than it need be, one of the re perhaps thousands, of milee away, to enter into competition with the farmer in his own county. bocause the cort in
transit over one mille of bad wagon road ill cover the cost over many miles of good railroad. This competition may ising still higher, but it will not bring the price below the point fixed by the
xtra cost from the bad local roads. It
will not do any good for those of us will not do any good for those of us
who live in well-paved cities to blame whe live in well-paved cities to blame not be expected to build good roads en-
tirely at their own expense, and good foads will not come so long as we wait for anything as unfair as this. It in struct good roads. We know fairly well what we should do, but we hesitate to way Improvements in Ontario on Highthere is a sufficient abstract of the syo tems adopted by the various countries of the world, and by thirty-three States ase in the State of New Yorls seems to be the most complete. Under this sys tem roads are classified as follows:
(1) State roads built at the entire (2) County roads to which the State contributes one-hali, the county 35 per Font., and the township 15 per cent For maintenance, the State collects from the townships $\$ 50$ per mile per annum,
the remainder being contributed by the State. Township roads, to which the State contributes one-third of the cost Can the people of Cainada be made to realize that every man, woman and child suffers from the evil of bad roads whe
ther they use the roads directly or not? Her they use the roads directly or not? citizens of these thirty-three neighboring Another cause of high prices is the general inefficiency of most kinds of tained, and the worker is so apt to be so lacking in training for the particular Calling it falls to his lot to occupy, that often needed to do the work of two. The necessity of buying food for three
families instead of two, clearly raises the amilies instead of two, clearly raises the
price of lood, and every non-producer of price of Iood, and every non-producer of
food in Camada therefore suffers from this ineffciency of labor. Still another evil, tending to high prices and growing
rapidly in these extravagant times, is rapidly in these extravagant times, ie
the waste in the use of food. As seen in a modern hotel or dining-car, this Shocks most of us, but in countless families the waste is nearly as bad propor-
tionately. If threp animals are bought where only two are really needed, the must apologize for repeating facts price of meat is raised for everybody.
which are so palpable, but in our desire to blame someone else for the suffiering see local causes which largely contribute rate if we chose. We have often spoken of the tendencies
of modern life which increase the food onsumers out of proportion to the food
producers, and it is pleasing some slight evidence of a return to the
land which may help to correct this disproportion, but while to torect quantilty of
truit, vegetables and cereals grown may
immediately be increased so as to affect immediately be increased so as to affect
prices, the state of the cattle industry
of North Amarice of North America is so serious that
some years must pass before we may some years must pass before we may
hope for a return of normal conditions. It looks as if the United Stetes would
soon cease to export beef, and unless we soon cease to export beef, and unless wo
at once change our course we may be in at once change our course we may be in
a similar condition. We must increase a similar condition. We must increase
the number of beef cattle, shep, and
swine, on the land very largely if our annual consumption is to be supplied without depleting the herds. We shall
hope the Comission regarding our cattlepe ranges will produce good results, and
that the assurance of high prices for that the assurance of high prices for
meat for some time to come may induce mixed farming to a degree not yet ac-
complished. Since 1908, while there has been a small increase in the number of
horses in Canada, there has been a serious decline in the numqer of milch cows
beef cattle, sheep, and swine. There should have been a very large increase, and unfesse every possible eflort to arrest the decrease is made, this class of food
will grow steadily dearer in price. The will grow steadily dearer in price. The
falling off is most noticeable in ontario, ralling off is most noticeable in ontario,
while the only important gains are in Saskatchewan and Alberta.
The Clearing House statements again
give ample evidence of our rapid give ample evidence of our rapid growth,
The returns of twenty Clearing Houses
for 1911 made a total of $\$ 7,391,368,000$, for 1911 made a total of $\$ 7,391,888,000$,
while for 1912 the figures were $\$ 9,146$,236,000 , a gain of 23,74 per cent. Once
more we have to record a gain in every more we have to record a gain in every
Clearing House in Canada.
The building permits of the four chie? The building permits of the four chief
cities were as follows :

| Montreal | .. | ...... | $\$ 14,530,000$ |
| :---: | :---: | :---: | :---: |
| $\$ 19,642,000$ |  |  |  | | Toronto ............. $24,374,000$ | $27,401,000$ |  |
| :--- | :--- | :--- |
| Winnipeg ...... ... | $17,550,000$ | $20,475,000$ | $\begin{array}{ccc}\text { Winnipeg ...... .... 17.550,000 } & 20,475,000 \\ \text { Vancouver ....... 17,652,000 } & 19,388,000\end{array}$

Representative Dudley M. Hughes, of
Georgia, is called a farmer statesman. Georgia, is called a farmer statesman. agricultural interests of his district.
He has requests for many new kinds of He has requests for many rew kinds of
seeds, and a time ago received this
letter: "Dear Dud,-Sàm Yopp's been tellin'
me of a new seedlesp tomatter the
 you in hopes you will send me some of
the seeds." Offcial records of 261 Holstein-Friesian cows were accepted for entry in the Am-
erican Advanced Registry, from December 8 th to December 23 rd, 1912 . This herd
of 261 animals, of which much over half were heiters with first or second
calves, produed in calves, produced in seven consecutive
days, $99,078.5$ lbs. of milk, containing days, $99,078.5$ lbs. of milk, containing
$\mathbf{3 , 4 8 6 . 0 1 1}$ lbs. of butter-fat; thus showing an average of 3.52 per cent. fat.
The average production for each animal The average production for each eanimal
was 879.6 lbs. milk, containing 18.356 was 379.6 lbs. milk, containing 13.356
lbs. of butter-fat, equivalent to 54.23
lbs. or 25.8 quarts of milk per day, and lbs. or 25.8 quarts of milk per day, and
15.6 lbs . of the best commercial butter A.T. Spingate, Gorey, Jersey, Europe,
breeder and exporter of Jersey catle, in his advertisement, of Jersey cattle,
in har sal, cows, heifers, and bulls, pedigree and
registered stock.
Representative of his registered stock. Representative of his
herd is the two-year-old heifer whose picture appears on another page in this paper, and which, for her age (less than
three years when photographed), gives promise of an extra-good producer when
matured, juphed mromise of an extra-good producer when
matured, judging from her approved
dairy and breed type, and well-balanced dairy and breed type, and well-balanced
udder.
At the auction sale on January 15th,
grade Holsteins, grade
Campbell, Kisteins, the property of D .
Komoka, Ont., excellent prices were obtained, the sale being one of the
best for grades ever held in Western best for grades ever held in Western
Ontario. The highest price reached was
$\$ 150$. Seven others brogen $\$ 150$. Seven others brought from $\$ 90$
to $\$ 125$ each.
that
thateen cows and heifers in March and April principally, sold for
an average of over $\$ 93$ each. Fleven grade yearling heifers, due to treshen in
the spring, averaged $\$ 70$ each, and thirty-three hear, including each, and
madde an average of $\$ 71.30$. The suc,
cess attending cess attending Mr. Campbell's efforts
with high-class grades is an assuranco
grat now devoting exclusive attention, he will
build up a herd and profit.

## COMBINATION SALE



## Clydesdales <br> AND <br> Percherons

ON
Tuesday and Wednesday
$F_{\text {eb. }} 25$ \& 26
[AT
Union Stock Yards,
TORONTO
125
REGISTERED
Heavy Draught lilorses, Stallions, Mares, Mares in foal, and Fillies

75 Clydesdales-TUESDAY
50 Percherons-WEDNESDAY
Imported and Canadian Bred
This will undoubtedly be the largest sale of the year, and anyne interested should make it a point to attend.
If you have anything to sell, write for terms and particulars.

Remember the Date

UNION STOCK YARDS OF TORONTO, LIMITED

Horse Department


Put T-A Wheels Your Wagons Theis Wiab -Thin stool Hat buy doi nomuly
 I. A Wide-Tire Steel Wheels Our Handy Farmi Wagons are built low-mak-
ine them
Nasy
load and unload-and are
 thind of work on the farm.
Lot us eend you our catalogue. It will give you Lot us rend you our
complete informatio


Tudhope-Anderson Co., Ltd.

## TELEPHONES

For INFORMATION and ESTIMATES for loca telephone systems:

For guaranteed construc tion material and telephone equipment

Write
Camadian Independent Telephone Co., Limited 20 Duncan Street ASK FOR NO. \& BULLETIN
 tario. We furnish cans, pay prompty-haven't
paid liss than 33 cents ofr weeks. Write;
TORONTR CREME

QUESTIONS AND ANSWERS Miscellaneous. FURNACE PIPES SWEATING hace in my house for one mot-air furhave been very greatly froubled with the pipes sweating. Would like to know
the cause, and also what pne could do the cause, and also what one could do
to prevent the sweating of the pipes.
The brick chimney is in ifst-class conTh Ans.-The trouble is that P. A. A. B.
comes become too cold, and, consequently, the
water vapor and and water vapor and gases in the smoke parently, the draft for some reason or other, is too slow. Thls may be bo cause the chimney flue is too small or ipes run too far or because your combination of two or horizontally, or a causes. A long, narrow fue in of the chim-
ney. is aquare, and dome larger than the pipe A nine-inch flue is not too large for a good furnace chimney, I am inclined to
think that the trouble is with your chimney. If, however, it is because the horizontal section of the pipe is) too
long, I suppose this cannot be altered long, I suppose this cannot be altered,
as your furnace is set. A false pipe all y yor furnace is set. A false pipe
outside the smoke pipe would probably overcome the dificulty. Sometmes sweating is overcome by admitting air
into the smoke pipe near the stove or into the smoke pipe near the stove or
furnace. Sometimes again a galvanizedfron trough is suspended just below the poipe to catch the drip. which is not a
remedy, but merely a device for overi remedy, but merely a device for over
coming the disagreeable mess caused by the black drippings. If the fault is in the chimney, it is not likely you will ever have real satisfaction until it is
altered altered. Sometimes surrounding build-
ings or trees make the draft slow. With ings or trees make the draft slow. With
so many possible causes, it is diffeult to single out the one that is really re
sponsible without more minute descrip sponsible without more minute descrip
tion. If none of these suggestion tion. If none of these suggestion
seem to strike the root of the matter, it might be well to write the manufac turers of the furnace.- W. H. D.
LIVE-Stock association meetFoll TVGS. Following meeting of live - stock association members in Toronto. Members from
east of Port Arthur should purchaie east oort Arthur should purchase
singlefare tickets to Toronto, and secar standard certificate receipt from thei
ticket agent. On these being vised in ticket agent. On these being vised in
Toronto, the holders will be returned free:
Dominion Cattle-breeders' Association at the Walker House, Monday, February 8rd, 3 p. m. Berkshire-breeders' Society, at the
Walker House, Tuesday, February 4th, Walker House, Tuesday. February 4th 9 a. m. ${ }^{9}$ Ontario Large Yorkshire Swine-breedOrs' Soclety, Walker House, Tuesday, Fobruary 4th, 11 a.m. m . Dominion Shor 4th.
day, February 4th. day, February 4th.
Dominion Swlne - breeders' Association,
in Temple Building (corner Bay and Richmond streets), room 2, 4th floor
 Walker House, Thursday, February 6th, 10 a. m.
Ontario
Oneep-breeders' Association, Ontario Sheep-breeders Aebruary bth Walker m.
8 p . min .
Domeep - breeders' Association, Temple Building (corner Bay and Rich mond streets),
February 7 th, 9 a. 9 .
m.
Shire Canadian Shire Horse Associabion
King Edward Hotel, Friday, February Canadian Pony Society, Prince George
Hotel Thurday, February 6th, 8 p. m.

## Imported Clydesdales and Percherons <br> At Auction On FEBRUARY 5TH, 1913

MAHER'S HORSE EXGHANGE, TORONTO 16-28 Hayden Street
T. H. Hassard, Markham, Ont., will sell at Auction, 25 Imported Clydesdale and Percheron Fillies, and 6 Clydesdale and Percheron Stallions. These mares are sired by such well-known horses as Baron of Buchlyvie, the $\$ 47,500$ champion sire, Baron Gibson, Baron Rothschild, Baron Albion, Baron Nelson Moncrieffe Marquis Pacific, The Bruce, Royal Fashion, Montrave Ronald, Musilino, Homer's Kyle and many others, and have been highly successful at the leading show
Some of these Percheron Mares were prizewinners at the Canadian National, Toronto, 1912, and first and champion at London, 1912. A three-year-old won theopen mare class at Guelph, 1912. The stallions are all young, up to good size, with lots of substance and quality and bred in the purple.
Owing to our barns being overstocked these all will be sold to the highest bidder.
Catalogues will be ready on Jan, 20, 1913. and may be obtained from either JAS. TORRANGE, Markham, Ont, THE MAHER'S HO
T. H. HASSARD - MARKHAM, ONTAEIO

## Clydesdales \& Shorthorns

## FOR QUICK SALE

6 Imported Stallions-4 two-year-olds and 2 yearlings. Also a number of in-foal mares and fillies, sired by Royal Edward, Hillheed sires as. Baron of Buchlyvie, Pride of Blacon, Baron Beaulieu, Cimaroo and Brigadier General

IN SHORTHORNS: One young buli fit for service, sired by (Imp.) Rob Roy; also a few heifers. Prices reasonable. Address
Telephone
In houe.
W. W. HOGG,Thamesford, Ont.

COLUMBUS GLYDESDALES AT HOME
To our past customers and intending purchasers, we wish to say that we can
show you something really worth while in Conatin-bred and show you something really worth while in Canadian bred and imported SMITH \& RIGHARDSON,

Columbus, Ontario

[^2]

Conveniences
 준둔둔 $\pm 4$

Safeguard
Family Health
by installing a
＂TWEED＂CLOSET Anithyinas工．
 ，far


NO MORE WET OR COLD FEETI！
With Health Brand Clogs on，the man
or woman who works in the wettest，cold－ or woman who works in the wettest，cold－
est places always has warme dry and com－
fortable feet．Try a pair yourself this fortab
winter


Felt－lined Clocs Fine Asilitustratea）havd－
wood sole and heos，hasily
 and women
delivered all
ONLY
81.75
Higher 3 buckles
$\cdots .8$.
Chiliregsed Wellingt
 write to us for catalogue booklet．telli
how Heath Brand Clogs are made，et
ote．Dealers，writo Lor proposition．
CANADIA FELT－LIMED CLOG CO． Dope．8； 363 Spadine Ave．，Toronto．Canede

You Pay for This Lamp many then in rive simble it and ahat





GET RID of




C Capsules 81．25． 12 for $\$ 2.00$. Postage pald．
Farmer＇s Horse Remedy Company，Dept．C2
592 7th Street，Milwaukee，Wis．
THICK，SWOLLEN GLANDS


ABSORBINE


 DR．BELL＇S $\begin{gathered}\text { Yeerinary Medical Won－} \\ \text { der．} \\ 10.000 \\ \text { si．00 }\end{gathered}$ FRER to horemen who will ive The Wonder
 Clydesdales，Standard－breds，and Shopr－

 SUNCAN BROWN os


R．Honey \＆Sons，Minster Farm Brickley，Ont．，breeders of Holsteins an Yorkshires，in ordering a change in their advertisement，write：The young
light－colored bull we are offering is from the R．O．P．Cow，Queen＇s Pride of De
Kol，whose junior two－year－old record is 9,7181 lbs．milk，and 295.837 lbs．fat．
Her sire is Katie＇s Her sire is Katie＇s losco De Kol．He
has two R．O．Pe daughters to date，and
a four－year－old with a record of 12,300 a mour－year－old with a record of 12,300
los．milk in nine months．Her dam is
Queen Queen of Minster．She gave 84 lbs．
milk per day．The call＇s sire is Lake milk per day
view Burke $\begin{array}{ll}\text { dam average } 23.14 & \text { lbs．butter in in seven }\end{array}$ days，and his sire has ten sisters that
average 30.63 lbs．butter in seven that average 30.63 lbs．butter in seven days，
and eleven sisters that gave 100 lbs． and eleven sis．The eight nearest tested
milk per day．
dams of this calf averaged 24.16 milk per day．calf averaged 24.16 lbs．
dams of this
butter in seven days．We are also butter in seven days．We are also
fering other calves of similar breeding

MORN ON THE FARM．
＂Where reason fails，the poet reaches
the truth by inspiration．＂How beau the truth by inspiration．＂How beau－
tifully the city poet is inspired to write of rural scenes．
The rising sun peeps o＇er the western
The
hill，
ripen＇d wheat appears a sea of
green ；
The stream that babbles upward past
With tacit murmurs，charms the urban
The cock has risen from his nest，and
Bids welcome to the silver orb of day；
The ducks aroused，down flutter from
the bough，
The farmer goes to bind his sheaves
The farmer goes to bind his sheaves
of hay．
High in the branches of the peanut tree
Sir Bob White nestles on his egks Sir $\begin{aligned} & \text { Bob White nestles on his egbs of } \\ & \text { blue ；exyes now toss their horns }\end{aligned}$
The sportive ener The farmer＇s wife has nothing now

The rye is ageing in the well－6illed barn， The martingales are twittering from ful yarn， into bread． Refore realing this aloud to the com－
Rany，ask，＂What poem seenis to After readines，ask，＂Did vou notice any

Manager（five－and－ten－cent store）－What
did that lady who just went out want Shopgirl－She inquired if we had


To Prospective Stallion and Mare Buyers




 Correspondence invited from all interested parties．
R．HAMILTON \＆SON，SIMCOE，ONTARIO

## Percheron Stallions and Mares

We have a large stock of imported stallions and mares to choose from．Our getter are all Government inspected and approved，and are guaranteed foal getters．We have mares all ages，some nice matched pairs in a lot and a
good many in foal．At the Toronto Exhibition and Guelph Fat Stock Shows our Percherons won more ribbons than any other firms in
HODGKINSON \＆TISDALE－BEAVERTON，ONT． G．T．R．and G．N．O．Railways Long Dist．Bell＇Phone No． 18
Clydesdales in Quantity and Quality ORMSBY GRANGE STOGK FARM，Ormstown，P．Que．
 still on hand－the selections being made more on account of price than superiority． before buying elsewhere．Inspection invited．
Imported Clydesdale Fillies $\begin{gathered}\text { of＂Baron＇s Pride，＂＂Hiawatha＂and＂Roval } \\ \text { Favorite＂strains also children＇s }\end{gathered}$ Long－distance＇phone 704 ring 41.
Visitors met at any of the stations． ALEX．F．McNIVEN，


CLYDESDALES OF CANADA＇S STANDARD They have arrived－my third importation for 1912，stallions and Gillies．I have now
the bigest section in Candada，and a few toppers in stallions．High－class breeding
and high－class quality and low prices． brodie Newmarket P．O

Clydesdales and Percherons sumbuan aod dian duad



IMPORTED CLYDESDALES
A tew choice young stallions always on hand and for sale．．Frequent importations maio－
tain a high standard．
Prices and terms to suit．
BARBER BROS．．Gatineau Pt．，Que．，near Ottawa．
Percheron，Belgian and Shire Stallions to four years old，maturing ${ }^{-1,800}$ to 2，400 lbs．No finer lot in America．Prices and terms reasonable．Barns in city．
LEW W．COGHRAN，Office， 205 Ben Hur Bldg．，Crawfordsville，Ind．

[^3]JANUARY 23, 1918
THE FARMER'S ADVOCATE.

HORSE OWNERS! USE CAUSTIC BALSAM
 Hoot Rention oill banobe forou



DR. PAEE'S ENGLISH SPAVII CURE For the cure of Spavine, Ringbone, Curbs,
Splints, Wind
Bruill, Cape
Thict Bruises, Thick Neck from Disth mper, Ring-
Here, and tato to


## Stallion Inspection and Enrolment

Under the

## OITTARIO STALLIOM ACT

For information communicate at once with
A. P. WESTERVELT,

Sec'y Stallion Enrolment Board Parliament Buildings,

TORONTO

Messrs. HICKMAN \& SCRUBY | Loage, gerron, K |
| :--- |
| Exportras or | Live Stock of all Descriptions


 Notice to Importers C. CHABOUDEZ \& SON 205 rue La Fayette, PARIS, FRANCE. If you want to buy Percheron Horsen and Marees.
Iwill save you vime and mony
with
and





QUESTIONS AMD ANSWERS. Veterinary.

## TENDER GUMS.

Yember, six months old, weaned in No-
ven drinking cold water, will
take her head out and make and then stretch
thon noise though sucking. She will repeat this
after a few more mouthtuls.
A yellowish a few more mothtuls. A yellow-
ishe is doing foricipitatates in her
urine. Ans. - The aily is getting the third
molar tooth in each row the gums tender, and the cold water eauses pain. more. For her urine, give 1 ontram
nitrate nitrate of potassium
until it becomes clear.
bURSAL ENLARGEMENT. Colt has a soft lump on fore ankle,
I listered it, and it reduced the lump,
but it reap E. G. K.
but it reappeared.
Ans.-This is. a bursal enlargement Ans.-This is a bursal enlargement.
These are very liable to reappear after being treated. Blister it every four
weeks
all
winter.
This may cause a contraction of the sac soo that it will
not reappear, but we find a tendency to reappearance in mostly all cases. An-
other method of treatment is the use of Other metho o treatment is the use of
absorbents, as a liniment made of four
domen drams each of iodine and iodide ol
potassium and four ounces each of alcopotassium and four ounces each of alco-
hol and glycerine. Rub a little in once hol and glycerine. Rub a little in once
daily, and continue treatment for at least two months.
dislocation of patella. Thaee-year-old Clyde colt dislocated his
stifie last May.
The
Thuxation was re dured, and a liniment applied. In Sep-
tember tember it again became dislocated. It
was replaced, and a bister applied, but it does not seem to be fully in place. He drags them leg. Had I better do
stroy him stroy him
Ans, It
Ans.- It is probable the patelle be-
comes partially dislocated. comes partially diilocated. It would
not bo wise to destroy hims as he should at least make $\begin{aligned} & \mathrm{a} \\ & \text { atoy } \\ & \text { useful } \\ & \text { animal, even }\end{aligned}$ though a complete recovery may not
take place.
Keep take place. Keei him quiet in a box
stall, and blister the front and inside of stall, and bister the front and inside of
the joint every four weeks all winter.

## TUBERCULIN TEST.

I tested my own cow as per instruc-
tions given by you, except that I took the temperatures every two hours in-
stead of three. The highest stead of three. The highest tempera
ture before inijection was 105 digroes, and the highest after 106.2.
hecame she cow became sick, refused to eat, and the
supply of milk fell off very much.
she supply of milk fell of very much. Sh
has had a cough for more than a year
hat She will calve in a couple of a monthe,
Will the call be all right? Ans,-When the temperature before in jection 1 is so much above 103 degrees
and especially when as high as 105 de
gite grees, disease of some nature that has a marked eliect upon the temperature
undo oubtedly
present,
and the tuberculin
 not show marked increase of normal
 effect whatever on a healthy animal
The fact that your cow showed. marke Constitutional symptoms, strongly do do
notes tuberculosis, and the
fact that she has coughed for over a year confrm
the suspicion. There is practically no
doubt thot
 Unsare to keep her with heal thy cat
It is is highl imporabbe that the call wil
be diseased when born, and it
not at lowed to nurse the dam at all, bu
raised on ure tood, and in non-con-
taminated stables will taminated stables, will grow up healthy
but it it nurse its dam, it is highy. probable it will contract the disease. $y$.
$\underset{\text { Ftention farms for sale. }}{\text { Firected }}$ Attention is directed to the advertise-
ment of fruit farms for sale in the Gar anent of Canada, by Melvin Gayman \&o
den of Can
Co ranging trom eight to st. sixty aceres, are
situated in the best section of situated in the best section of Canada
for the growth of fruit and vegetanles Tor the grown of fruit and vegetables,
while the facilities for shipping to the
best best markets are complete, and the
church, school, and osocial privileges.
chare
all that can be desired.
If in interested all that can be desired. If interested,
look up the advertisement and write for Iook up the advertisement and write for
information, mentioning "'The Farmer's

## GIVING UP BUSINESS Imp. Clydesdales and Hackneys

BY AUCTION
Having sold their farm and stables, THE GRAHAMRENFREW CO., LTD., of Bedford Park, Ont., will, on

Friday, February 7th, 1913
At the Repository of BURNS \& SHEPPARD, Toronto, commencing at 11 a.m. sharp,

Hold an absolute dispersion sale of their entire stock of high-class horses, among which are five imp. and one Canadian-bred Clydesdale stallions, two imp. Hackney stalions, seventeen imp. and Clur Canadian-bred Coydes-
dale mares and fillies, two Clyde filly foals, two imp. Hackney mares, imp. Hackney and Welsh ponies, several high-class harness horses. Many of these were prizewinners and champions at such exhibitions as Toronto and Ottawa. All are young and in prime condition. Stars for the show-ring or breeding purposes.

Terms: For mares, fillies, ponies and harness horses, cash. For stallions, half cash, balance arranged.

Catalogues on application to
Graham-Renfrew Company, Ltd. Bedford Park, Ontario

## Oat Feed, Feed Meal

## Barley Meal

We can ship you the above in mixed carloads or feEd wheat, corn, barley and oats

In straight carloads
If your dealer does not handle the ARCHIBALD BRAND, write us direct for samples and prices. It will pay you.

## ARCHBALD CEREAL COMPANY limited. <br> WOODSTOCK <br> ONTARIO

[^4]

NOTICR TO HORSE IMPORTERS CERALD POWELL,
Commiesion Agent and Interpreter, NOGENT LE ROTROU, FRANGE Whu meet tmorier, at any por th France or

Aberdeen-Anqus Cattle Maturo Abeveraly young bull for sale. MANAGER Clarksburg Gint
3 Choice Aberdeen-Angus Bulls For Sale, from 8 to 14 months of age.

Glengore Stock Farm, | R. R. No. 2, $\quad$ Erin, Ontario |
| :--- |
| SHORTHORNS and Swink- Have | SHORTHORNS and SwiNE-HAve




gossip.
Mesars. Hodgkinson \& Tisdale, Beaver ton, Ont. write: Wo have just dolivv County, Ont, that of Gril-kioenock, prucuce prizewin-
ning Percheron ning Percheron stalilion, Joviel (imp.).
(30031 (34143).
He is a massive, dark l3003] (34143). Ho is a massive, dark
gray colt, weighing 1,960 pounds, with gray colt, weighing 1,980 pounds, with
lots of quality, and very high action. In breeding he excells, eveing a son of the
greatest living Percheron sire, Etudiant greatest living Percheron osire, Etudiant
(59291), now at the head of Senator (59291), now at the head of Senatot
White's Percheron stud at Leesburg, Vai Jovial was the firet-prize: throes-year-old in a very strong class at Toronto last September, and was second in the same Class at Guelph in December. Mr. Good
is to be complimented on his selection. The scheme outlined by Hon. Mr. Runciman, $\begin{aligned} & \text { President } \\ & \text { Board of Agriculture, at the British } \\ & \text { at }\end{aligned}$ the Club dinner reeently, for the granting of premiums to heavy horse stallions of the Shire, Suffolk, and Clydesdale types,
has, neediess to has, neediess to say, met with a hearty
reception among tarmer breeders. was at the back of Mr. Runciman's mind was clear to the close reader of his
thoughts. H , has obviouly realis thoughts. He has obviously realized
that what has been done lor the heavy horse in the past has been accomplished by private enterprise of the large landowning. horse-breeding enthusiast. TTimes
are changing so tar as the ownership of are changing so far as the ownership on
the land is concerned, and Mr. Runctman is anticipating what may bo the effect of those changes, and is wishitul to counteract them. This new scheme of
the Board will beneitit not only the tenant farmer, but the mall landowning tarmer and the smale holder. These sires are to be under the control of Aspeciations, (some of which already ex
isted, and more undoubtedly will be formed. The sum the Commissioners are propared to reeommend is pomethng
like
R80 per sire. and this will like 280 per sire. and this will allow
for a certain number of heavy horbee to
nut for a certain number of heavy horges to
be in use in districts where hitherto they be in use in districts, where hitherto they
were almost unlknown. - Livo-Stock Journal.
The Toronto eale of Scotoh Short horne, on February Eth, further particulars of which are given in our advertig
ing columns, should be kopt in mind by those interested in good cattle. $\quad \begin{aligned} & \text { Breed }\end{aligned}$ ers of the irst rank assure us that they
are offering the beast that bave gone from are offering the best that have gone from
their herds.
There are a fair propor their herds. There are a f fair propor-
tion of young bullus and tried bulls, as
well well as cows and hoilera of the best breeding and form. There has been no
tlime in the history tilne in the history of cattle in Canada,
when it looked so sure that cattle muat pay immense profits for breading and reeding, as does the present time. C tle are high now, and they are getting
shorter in supply every dayehorter in supply every day-we are using
more than we are producing. What worth doing at all, is worth doing well. to see this sale, for it is in a class by itsolf. There are always great bargaing Chere, too. Last year some of the cat-
the were resold at more theirere resold at more than three times
Read the Advertisement Robert Miller.
About four miles north of Woodstock, in the County of oxcord, on lamous as
the great Holstein center of Ontario, is another of those noted Holstain herris
that has had no small share in the making of the Holstein history of that his toric county. This one is the property
of w. E. Thompson, R. R. No. 7, Woodstock. A look over his splendid carm,
builidings, and atable architecture huildings, and stable architecture, is an
indallible horoscope of the energetic and intarinie horoscope of the energetic and
buinesa character of the man, never
satisfed satisted with any halp-way measure
either as regards the sanitary
and nomic plans of his sanitary and
hutidings, or
himbelase chancter and-whites. The herd, now some thirty-
odd strong, contains many that are up
to hty

 view Colantha Butter Baron, and are treview segis Statesman, whose 22 near-
est

the graat canadian annual sace of

## Scotch Shorthorns

Will be held at the UNION STOCK YARDS, TORONTO, ONT.. on

## Wednesday, Fehruary 5th, 1913

Beginning promptly at 11 ooclock a.m.
W. R. Elliott \& Sons, Guelph, Ont., will sell one bull, Climax, by Uppermill Omega, from Imported Cinderela oth, one of the best breeding cows we know, to be found any place. They also sell three feimales, two of them are Mis Ramsdens, full sisters, that have won second place in Toronto as produce of and
both by the same sire as the areat champion heifer that will be sold in this sale reat pair, worth a lot; the fourth is a Brawith Bud, by same sire and from Marquis of Zenda mother, a grand heifer, too.

John Miller, Jr., Ashburn, Ont., will contribute seven head, two bulls and five heifers: Duchess of Glosters, one Beauty, one Matchless, one Cruickshank
Villaze and one bull from Imported Fancy A splendid lot of good guink cattle Village and one bull from Imported Fancy. A splendid lot of good going cattle,
bred right, full of profit for the buyer, the best young things in his herd.

Robert Miller, Stouffivile, Ont., will furnish 22 head, the best lot that have ever left Burnbrae Farm. There are seven bulls, a Broadhooks by Superb Sultan same sire, a great red bull from a Bruce Mary Lind cow, a Butterfly bull, one the best we have seen, from imported dam and a Duthie-bred sire, he has full sister one of the best cows living; a brother at the head of one of the greatest herds in Canada. He is worth any price; one Jessamine of great merit. Making all told
the greatest lot of bulls ever offered in any sale in Canada.

Mention this paper when you write
ROBERT MILLER, Stoufiville, Ont., caralogue





THE MAPLES HEREFORDS Never before have had ed



## SHORTHORNS !

Have now a choice lot of young bulls to offer ; also with
something nice in heifers. Catalogue of herd and list of


I Have SHORTHORM Bulls and Heifers, SHROPSHIRE and COTSWOLD Rams and Ewes, CLYDESDALE Fillies and Colts
 fird to buy without ROBERT MILLER, STOUFFVILLE, ONTARIO 1861 Irvine-SIde Shorthorns 1912
 10 SHORTHORN BULLSIO
 Freeman,Ontario.

Also a few right good herd headers, Including my great atomale bull, Lord calves upend
A.J.HOWDEN, COLUMMBUS P.O., ONT. Brooklin Sta,
 Lo O. CLIIFORD. Oehava, Ontario


JANUARY 23, 1913

## GOSSIP.

A. word to the wise is suffcient. D. Elliott, af Bolton, Ont., in his many yoars' experience as an importer of Clydesdale and Percheron stallions and allies, was never in so favorable a position to supply the discriminating Canadian buyer with the above breeds in either stallions or fllies as at present. His selection is a large one, and the type, quality and breeding unsurpassed, he has a number of Toronto and Guelph winners, his prices can be got for anywhere and his terms are to suit the purchaser Get in touch with him.
J. b. Hogate's second percheron C. importation.

There are not many men on this side ume of sales of Percheron- stallione volmares equal to that of J. B. Hogate, of Weston, Ont. His big importation of the fall of 1912, although only landing in September, went ous so fast that he France to meet the demand. This second lot arrived in December, and the demand is increasing. Mr. Hogate has been many years, and thoroughly understands the requirements of the Canadian trade. His stable is now full of the pick of the big French studs, selected of underpinning. Anyone wanting a Toronto, Ottawa, Ogdensburg or Guelph winner, should visit the stables and make their own selection while the itecstandard it is at present.

ROSEDALE STOCK FARM For over forty years, one of the leading Canadian bhire horses, Shetland and Welsh ponies, Shorthorn cattle, and Leicester sheep, the property of J. M. distance from Weston, Ont., and connected with Toronto by the G. T. R., tation of Mr. Gardhouse as an importer and breeder of the above lines of stock, and as a keen, discriminating judge, is continental. He is one of the most extensive breeders and dealers in pure-bred
stock in Ontario, his large herd of Scotch Shorthorns is one of the best in the country, strictly high-class in their massiveness of flesh, carrying the most tainly a pleasure to their owner, and an envy to visitors. No further words of the descriptive quality of the Shires is necessary than to say that at the
late Horse Show at Guelph, both the stallion and mare championships went to the entries of this farm. At the head of the Clydesdale stud is the big, flashy a son of the Royal first-prize horse, Ryecroft, dam by Knockavoury. At cultph, in a big, sensational class, this good was placed fourth, with many a of all the above lines of stock, Mr. Gardhouse can always show a big selechim your wants.

Jimson was a little, sharp-eyed shoe maker with stooped shoulders and a chin
whisker. He lived in a Missouri Rive whisker. He lived in a Missouri River
town, and whenever the drank too much he used to wind up by going home and thrashing his wife. She never failed to go over to a neighbor's after a session
with the old man and complain bitterly of his treatment. After a while the neighbors grew weary "Well, you seem to like it. You always take it you seem to lilingly. Why don't you pick up something and hit him with it the next time he whips you ?'
The wife considered the matter, and the grasped a chair and smashed it over his head. The old man fell back, in stark

- amazement, dropped his hands, and amazement, dropped his hands, and
stared at her. stared at her.
"Why, Mary! Why, Mary !" he whimpered. "What on earth is the matter
with you? You never done this way
wefore".


## Livingston's Oll MEAL CaKE

Isthe most wholly nutritious stock food you can buy. Made of the purest Linseed-by the celebrated Old Patent Process (which makes it practical and scieitificic, to be $95 \%$ digestible. Even if LIVINGSTON'S OIL CAKE MEAL costs twice as much as the other foods which do not keep and cannot be half digested, it would
pay every farmer and dairyman to get LIVINGSTON'S OIL May erery farmer and dairyman to get LIVINGSTON'S OIL CAKE LIVINGSTON'S OIL CAKE MEAL is realy cheapest in the end-
quickII increasing and improving the milk and healthily FATTENING Ask your dealer. If he cannot supply you, write us.

THE BOMIHIOIN LIISEED OIL CO. LTD.
BADEN, ONTARIO.
Manufacturers. MONTREAL, QUEBEC.


## SCOTCH SHORTHORIS

 FOR SALE Two high-class imported yearling bulls.Eighteen bull calves, 8 to 14 months old, by the imported sires Bandsman and Village Duke. Forty heifers and young cows of best Scotch families, bred to imported sires. both sexes; also some imp, yearling heifers. MITCHELL BROS.
Burlington, Ontario

Farm 3 -mile from Burington Junction Station.
 GBO, GIER a SON, Grand Valley, Ont. P.O. and Sta.


INTERIOR BENTS OF STEEL

Patent applied for
IN our plans we embody simplicity, strength, durability, roominess.

We show you how to cut your timber to save waste.
We give you bills of material so you will know just what to order from foundation to roof.

Fill out the coupon to-day and get our free booklet and sample plans.
The Metal Shingle \& Siding Co.
A. B. ORMSBY, Limited, TORONTO, ONT. Factorfes at MONTREAL, Que. TORONTO, Ont. PRESTON, Ont WINNIIPEG, Man. SASEATOON, Salk. CALGARY, AIt Head Office: PRESTON, ONT

USE THIS COUPON
The Metal Shingle \& Siding Co., Limited, Preston, Ont. Please send "Better Buildings" Free.
Name
Address
Who is Your Builder?
aper London Farmer's Advocate.

## This Homermade Cough Syrup Will Surprise You

Stope Even Whooping Cough Quickly. A Family Supply at Small Cost.



 anemo fines frity cents wornt in atcound


You pobhaly thao the modial value of pine


 The rompt waik thom tis inexpsisive remed





AYRSHIRES FOR SALE !


 Lomemt fixic:


 The building of the Tower of Babel was
 solve the trust question?
Thence arose such a confusion understand anyone else ever since.

## Chapped IIand Won't Both You if instead soap you use SNAP, the original hand cleaner cleaner. <br>  tains no ye or <br> acids, but glycerine and neutral oils which keep the and in splendid condition. S N A P

QUESTIOMS AND AMSWERS Miscellaneous

TAX PENALTY. ercentay municipal council oharge a percentage
year's end
ontario.
Ontario
Ans.-Yes; but not exceeding five per has been made by by-law.

FARM DRAINAGE
A owns a hundred acres on the north ide of a concession, or highway. B
owns a hundred acres on the south side same concession or highway. There is
natural water fall from A's farm down a natural water fall from A s farm down
across B 's farm, and then it empties into a creek. About 1892, A put in a
tile drain on his furm nd ran the concession, then dug a ditch from
to the cone
his tile to the liy tile that crossud the highway. From here he dug a difch
through B's farm, which was woots
(here the dilch went $3 \times 3$ fund kept it open as long as the woods re
mained. Then the council came along dug up A's tile for a rod back from th sence, put them in deeper, and ran them
up to the big tile, and then filled up
the pen the big tile so as to make a winter
sleigh-road along A's fence. B clear
up the woods and makes and changes the ditch across his farm,
and he malies it about $2 \frac{1}{1}$ feet wide by about 18 inches deep, where it wa
$3 \times 3$ feet. He has been working ove the ditch for the past five years, and now it is no better than a good plow water standing in the big, tile across the road; and water is standing each side of B s ditch for one or two rods. $\mathrm{A}^{\prime}$
tile are covered with $2 \frac{2}{3}$ feet of wate that is standing in the big tile that crosses the highway. so as to drain the water out of the big
tile across the highway. ing he only had to take surface water. 2. If a tile drain were put across B farm, would A have to help put it in after digging that open ditch, or will
have to open up an open ditch? have to open up an open ditch?
AN ADVOCATE READER.
Ans.-1 and 2. There is no hard-and fast rule for it. If the parties canna
agree, and the matter is considered sufficient importance to warrant the proceedings, steps should be taken to obmunicipality - under The - Ditches and Water-courses Act (Chap. 74, of the O tario Statutes of 1912).

## Veterinary

ECZEMA
he rubs and licks herself, and I notice o small., bare spots, near root of tail. Ans.-This is eczema. Make a five-perheat to about 120 degrees Fahr., and five a good washing with a scrubbing-
brush. Clothe, and keep warm until Rive days as long as necessary four MISCELLANEOUS. took sick, refused food, and i
week turned purple and died. (h) a week a week turned purple and died.
2. Calf suffered much pain, jerked great deal, and died. What was the
trouble, and how should it have been 3. Calves have chronic diarrhea. I
feed them skimmed milk and ground feed them skimmed milk and ground
MRS. G. C.
ilassed.
An.-1. This pig was constipated. pughition of 2 to 6 ounc sh Epsoms silts,
according to size, would protably have 2. The symptoms qiven are not sulfi-
cicmily definite to enable a man to diaghose. This also probably was consti-
ration, and a murgation of Fpsom salt: Tr raw linsed oil might have saved
3. If possible, feed whole milk for add tass, but whatever milk you give
water. 10 .enned chifh of its bulk of lime


GLENHURST AYRSHIRES ESTABLISHED OVER 50 YEARS
 JAMES BENNING, WILLIAMSTOWN P P. O. Summerstown Sta.,Glengarry
STOFXIOOD AYRSMRES This herd is now headed by White Hill pionship bull at Sherbrooke; also headed the 1 ree Trader (imp.). No. 33273, cham80 Imported and Canadian-bred Ayrshires am now offering by private sale my entire herd of 80 Ayrshires, im.
ported, imp. in dam and Canadian-bred; big producers, show stock,
LI high-class in quality, with best breeding. L.-D. 'PHoNe. DAVID HUNTER,

Stonehouse Axrshires Of choicest imported stock and with imp. sires and damg. I am offering young cows. 3,4
and 5 years of age;
of yourd y yand buach of imp. yearling heifers, and a pifticularly good pair
L.-D. Phone.
HECTOR GORDON, Howick, Que. Ayrshires and Yorkshires ${ }_{\text {July, }}^{- \text {We }}$, 1912. All bred bred from (imp.) sife acd fropped tith dams with yood records, or their daughters either
imported or hoae. bred. Some chice Pebruary
pigs : also young pigs.

Alex. Hume \& Po., Menie. Ont.
City View Ayrshires - Three young bulls st for service, females from 3 months to
ancestors. Always something for sale.
Bears
Bell
and ono JAMES BEGG \& SON, R. R. 1, St. Thomas, Ont
 Jenseys B. H. BULL \& SON, Brampton, Ont


JANUARY 23, 1918


FERTLIZERS Make Worn-out Soils
Yield Bumper Crops

 G.J. CLurr, Mangark. Toronto ont. Haple Crove, Grescent Ridie and





puns. -2ex nossrmio
Holstein Cattle The moit paratibe


 Holsteins of Quality

 MONRO \& LAWLESS, "EImdale Farm" The Maples Holsteins
 Emid enilubem
Walburn rivers, Foldens, ont



Holsteins and Tamworths
 R. O. Morrow of Son ilillon P.O., Ont. $\frac{\text { Briphon Station. Phoone. }}{\text { For Sale }}$





 ROBT. Dobbie, Hartington, Que.

THE FARMER'S ADVOCATE.

QUESTIONS AND ANSWERS
Miscellaneous
BARLEY FOR MARE Is rolled barley, mixed with oats and bran, injurious to mares in foal?
L. H. Ans. - If the mares are accustomed to he barley, and are not fed too much of bran and onts, it should not be inurious. Rolled oats would be better
DOG TAXES

1. Is it possible and lawful to enforc the tuxing of dogs in an unorganize district?
2. If not
3. If not, what means should be ta'en
i. the stulers to enforce such a law?
ns.-1. We do not think so.
It dioes not appear to us that there
at present any means ofen to them

## PASTURE FOR PIGS AND

What would make a good pasture t Ans--Oats and peas make a good pi pasture, and a little rape might perhap
be added with advantage. For gees an old grass meadow makes the best
pasture. If necessary to sow anything
we see we see no reason why the above mix
ture should not be all right, but have ture should not be all right, but
had no experience on the point.

COLLECTING MONEY
A
$(\$ 40)$
got from B, in dollars.
fort
He did not any note. B has never sought to col lect till now. Can he do so?
Ontario. OLD SUBSCRIBER. Ans.-It was presumably a loan; and if B can prove, by admission from A , or
other evidence, the fact of his having loaned A the money, he can certainly
recover recover the amount, with interest,
suit in the Division Court, provided $A$ has means which can be reached for satisfaction of the judgment when outained. RURAL-DELIVERY REGISTERED What is the regulation on rural-mail delivery route regarding the delivery of
registered letters ? registered letters ?
route starts, a notice is sent to the box-holder of the arrival of registered mail. He may go for it himself, or
give order on printed form supplied to give order on printed form supplied to
the courier, who will bring the letter or parcel on next trip. A standing order
natay be given the courier to bring all may be gi
such mail.
CONSTRUCTING STAVE SILO. I want to build a square silo in my
Tarn. Have a box stall I can use about barn. Have a box stall I can use about
twelve feet square, stone on two sides. twelve feet square, stone on two sides.
Please inform me how best to construct it. Have plenty of plank. A. P.
Ans.-Square silos have gone pretty Ans.-Square sill out of date, partly for the reason that it is difficult to avoid deteriora-
tion, or actual spoiling of the silage in the corners of the sito. We would suggest a round stave silo instead, and for
fuller directions than it is expedient to publish here, you might write J. H.
Grisdale, Director Experimental Farms, Ottawa, for his bulletin on silo construction. STATUTE LABOR.
Our township statute labor has been
commuted to a stated amount for a comber of sears. Last municipal elec-
num
tion (for 1912) a
Lote was submitted to
 have not been notified to perform any
statute labor. through the absence of a road overseer. Now the council hav
instructed the tax collector to collect a
and the rate of $\$ 1$ per day. I have tendere
the land tax, but the collector refuse

## HIGHEST PRICE FOR CREAM

CT. EATON $\mathrm{C}^{\circ}$. Butter Fat. We buy cream, sweet or sour, of good flavor. We furnish the cans and pay the express charges within a radius of 250 miles of Toronto.

We test and weigh each can on arrival, and send you a statement for same.

We pay all patrons once a week, and the price is increased as the price of butter advances

Drop us a card, and we shall be pleased to furnish you with any further information you may require.

## EKT. EATON CO <br> TORONTO <br> CANADA

閏ALASOFAT A BALANGED FOOD Wholesome, nutritious, palatable, "Mestible. Feed your milch cowo "Malasofat" and increase your proximum results at a minimum copt
mask your dealer, or send direct for

## DAIRY MEAL Ask your deal information.

PARK FEED MILLING COMPANY, LIMITED
17 River Street
Toronto, Ontario, Canada
AVONDALE STOCK FARM






## Silver Creek Holsteins

You can have your choice, at moderate prices, of 52 head- 45 females and 7 young bulls; all the female are young; majority of lot ever offered for sale in Canada. A. H. TEEPLE, Curties P.O. and Station.

## King Segis Walker <br>  <br> 

 A. A. FAREWELL, OSHAWA, ONTARIO LAKEVIEW HOLSTEINS

E. F. OSLER, BRONTE, ONTARIO
 daughters that have made 7 -day records abo and the only bull that ever sired next bull to be a brother to such cows as Pontiac Lady Korndyke (38.02), Pontiac
Pet (37..77), Pontiac Clothilde De Kol
2nd ( and eight others above 30 pounds? If yo do, write me for price on a son o



 HOLSTEINS AND YORKSHIRES $\begin{aligned} & \text { We herve at present a number of two- } \\ & \text { yearold defier, some in in cal } \\ & \text { and some }\end{aligned}$ just bred also our stock bull King Peter Teak sited by Peter Teak 0 . A. C. dam Oueen,
Mabe. Also some sows safe in pig. A. WATSON $\&$ SONS, R. R. NO.

T

## HOLSTMEINE

I can supply a limited number of high-producing and highly-bred femaless also yo
bulls, bred on both sides from high officilal backing. Let me know your wants. W. E. THOMPSON, R. R. No. 7, Woodstock, Ont $\overline{A M E R I C A N ~ S H R O P S H I R E ~ R E G I S T R Y ~ A S S O C I A T I O N ~}$ Only Shropshire Association recognized by U.S. Government Largest member-
ship of any live-stock association in the world. Life membership $\$ 5.00$. No yearly dues. Write for information. J. M. WADE, Secretary, Lafayettr, IndianA
Gattle and Sheeplahels Acent sient now may be the means of evine you
 F. G. JAMES, Bowmanville, Ont. Farnham $\begin{gathered}\text { The oldest established } \\ \text { Anck in America. Pres }\end{gathered}$ Oxfords and ent offering; fe few twoHampshires, shear and older ewes of Also a few nice ewe lambs by imported Bires. Prices reasonable Henry Arkellil $\&$
Sons, Arterli, Ont. L.-D. phone in house,
DorsetEwes
Litmb. Evelambor Cheste White Boar about - batan barain to mate noim. E. H. BARDNING, THORNDALE, ONTARIO alloway lodge
Southdown Sheop Aberdeen - Angus Cattlo

A firi youms bill and heile thit that

SPRINGBANK FIFTEEN EW E LAMM's OXFORDS! bizimported great prit WILLIAM BARNET \& SONS, For Sale-A number of young, regiatered to init cim choice aurty and bureaingi and bred Maple Grove Yorkshires \& Holotelne







 Large White Yorkshimea

ith herith Writeorecil oo
H. J. Davis, Woodstock, Ont



 L..D. Phone A A. colwill neweastle omt.
 Morriston Tamworths and Shorthorn
 Chas. Currie, Morriston, Ontario. TAMWORTHS A frew oims bred ty
 Ciloverdāle Berkshires ${ }^{\text {inge }}$ - Sosw of bered and others ready to breed; ; lao yong sows bre
both bexea.
Prices reasonable. C. J. LANG, Hampton, Ont. Durham Co.
HAMPNHINEXINE Both sases and all alese, from imported

## COMDIN ! श/ D

 CAATADROR DR.MARSHALKS CATARRH STUNG

QUESTIOMS AMD AMSWERS. Miscellaneous.

## MAIL ROUTE.

 will mail route is starting in this parish, Will the courier be obliged to go off ona concession - line road, about threed quarters or a mile, there being, three
residences on thie residences on. this roua, of the road.
mail. This is the end of quebec reaper. Ane Post-our enguiry should be sent to
the
Oppector of the District or Division in which your parish is
situated, and under whose direction we stuated, and under whose dresume the route is being laid out.
preser
benerit under will A makes a will. Willing landed prop-
erty ${ }_{\text {to }} B, C, D$ and $E$, each to have onequarter-achch part specified in will -
with the proviso with the proviso that in case of $\mathrm{D}^{\prime} \mathrm{s}$
death, $\mathrm{D}^{\prime} \mathrm{s}$ share would go to E. D. D is a party incapable of looking aiter his own, and would have to be looked after by others. On the land is valuable tim-
ber. ber. Could same be sold for D's benefit? 2. In case D outived E , would E 's heirs get his share?
ontario.
Ans.-1. It could probably be so arranged but certain legal procoedings
would have to be taken, and folicitor's services would be requisite.
2. Apparentiy they would.

THOROUGHPIN
Mare six years old, about thirteen hundred weight, has thoroughpin on left
 Lameness appoars to be in stifle, but can neither see nor feel anything on it.
Ans.-Ie it is thoroughpin, the usual treatment is to apply once daily the
rollowing mixture: Three drams each of biniodide of mercury and potassium Iodide, and six ounces of water. Clip
off the gair, and apply as above. After our or five applications, cease for a
 bent blister, and will not make the part bent bore.
very
ditching.
A, B, C, D, E and F, have a spring creek overaowing a large area of land.
A has dug part of his ditch.
B has dug part. of hifo, and cannot dig more on
account of water being backed account of water boing backed up by $C$
and $D, E$ and $F$ having their ditch dug.
 open the ditch, as the place is rented, Can B Borce $\mathbf{C}$ to open ditch, $\mathbf{B}$ offering
to dig the ditch if $\mathbf{C}$ would pay for to dig the ditch if O would pay for it
B also ofiering to dig hall of said, ditch it C would dig the other half? C still
 good pasture land on B alone. Ans.-It is probable that B is in position to do so. If the matter really tween all the parties interested (including C), the' municipal Engineer should be called in pursuant to the provisions
of The Ditches and Water-courses Act Ot The Ditches and Water-courses
(Ontario Statutes, 1912, Chap. 74 ). Transplanting cedarsCEMENT FOR WALL.

1. I have three or four small cedar
trees about six feet high. Can I trans plant them safely, and what time ? 2. How much gravel and cement will
it take for the foundation it take for the foundation of a bari
$30 \times 50$ feet, about two feet high, and how much for the floor? nuch the same kind of soil as that upo hhich they now stana, and are carefully
looked atter, they should do all right. Transplant them in early spring. Soo after seeding is a good time
2. If this is just a footing, it would
not need to not need to be made of such a high
percentuge of cement, but we take
pe
 12-inch wall, it would requiriee approxi
mately, ten barrels of cement, and



 postcard with the word "Roofing" and your name and address -- then we will send, you valuable information about your

ROOFING NEEDS

The<br>Galt Art MetalCo. 252 Stone Road, Galt. Ontario.



SHROPSHIRE and COTSWOLD EWES
50 young Shrophire ewes of zood bise and aualty, bred to the great brediag ram


Belmont Shropshires and Sou hdowns
I have a grand lot of rams and ewes for sale, both breeds. Anyone wanting a good ram, or a few good breeding ewes, should write me at once and get the first choice.
C. Hodorson, Brantiord, Dnt.

 J. miller, Jr., "blatrgowrie farm," ashburn p. o.. ontario ELMHURST LARGE ENGLISH BERKSHIRES

©

"The man who buys a Feed withorit knowing its ingredients wotild suy a 'pig in a poke' any day."

## Publicity

## versus Secrecy

We are firm believers in the doctrine, that if your goods are right the fact cannot receive too much publicity.

The value of a Feed is equal to the sumtotal value of its ingredients.

If the ingredients are valuable and rich in feeding qualities, secrecy is unnecessary and undesirable. Publicity is the thing, and the more of it the better.

The proportion of each ingredient entering into the manufacture of Caldwell's Molasses Meal is plainly printed on every tag.

This is for your protection, and we believe it's the main cause of our success.

We are the originators of the Pure Cane Molasses idea in a Molasses Meal, and are the only manufacturers using this ingredient exclusively.

The result is that

is higher in sugar, and lower in fibre than any of the imported competing varieties.

This statement can be easily proven by submitting samples to the Government analyst. In Caldwell's Molasses Meal we offer you a Feed scientifically prepared, highly palatable, very nutritious, possessing a certain therapeutic value and of guaranteed composition.
N. B.-If you haven't tried our Meal and your Feedman does not handle it, just drop a card to the mill to-day, and we will be glad to forward you literature and prices.

The CALDWELL FEED COMPAMY, Ldd.
dUNDAS, ONTARIO

Silage Would Increase Your Dairy Profits

This winter weather. when dry feeding is reducing your dairy oui-put, don't you often wish that you had erected a sio last summer?

If you had done so you would right now be feeding your cows succulent and milk-producing silage. just as good a milk-producing food as green summer pasturage, and getting a good deal more milk and making more profit out of your dairy
All successful dairymen now-a-days consider a good silo a very necessary part of their dairy equipment and there is no que milk flow.
If you havn't a silo perhaps you have made up your mind that this is the last year you are going to get along without one.

If so, don't put off ordering it until late next summer and perhaps find yourself in the same fix next year.

Write to-day for 48 page Ideal Green Feed Silo Book.
This book contains much interesting and valuable information about silos, silage and silage feeding, and even if you are not yet ready to buy, you will find the book interesting and instructive.

More than twice as many Ideal Green Feed Silos were sold last year than in any previous year. If you keep cows you need a Silo. Full specifications are given in the Silo book. Be sure to write for it.

We are exclusive ! distributors in Canada of the World's Standard De Lava1 Cream Separators, and also carry a ce mplete line of creamery and
DE LAVAL DAIRY SUPPLY COMPANY, LIMITED LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA
173 William Street, MONTREAL 128 James Street, WINNIPEG


Williks rour Cows in Five Minutes
Think of that Mr. Dairyman, almost a cow a minute and everyone milked thoroughly, gently and without any most sensitive animal. Stop and figure most sensitive animat. Stop and figure now and what it is costing you.

## Thien compare the low cost of instaling and operating a <br> Sharples Mechanical Milker

the independence it gives you from shittless uncliable workmen, the freedom from worry and drudgery, the assurance of perfectly clean milk - free from stable air and bacteria, and last but not least, the opportunity to double the size or your herrn Consider Supt. of the famous Branford
will understand why Mr. Henry Fielden,

 have ever made on this rand
machine using the patented
"Teat Cup with the Upward Squeeze"




Please Mention The Advocate

## Let Us Show You How Easily You and Your Neighbors Can Have A Telephone System Of Your Own

YOU-you and your neighbors-would have a telephone system for your own community, if you only realized how easily you yourselves could construct it and get it going. If you knew, in detail, how you and the people around you could form, own and control a local, self-maintaining company, for your own use and convenience, you would have such a system. There would be a telephone system in your community to-day if you knew how easily you and your neighbors could build every foot of the line and install every instrument yourselves-and especially if you realized that you do not need very much capital to do it either. Now, there is no reason why you should
not know all these facts; for we stand ready to give you, for the mere asking, every bit of this information, provided only that you are sufficiently interested in the subject to write and ask us for it.


${ }^{[1}$
OW to Build Rural Telephone Lines," is an illustrated, cloth bound book of one hundred pages, full of a carefully book tells everything ; with it before you, you can organize your own company and construct your own line. It tells you absolutely everything you need to know, step by step, as you go along. There is no other book in existence that deals so thoroughly with every vital, essential fact. Remember, this book has cost a lot of
money and careful study to money and careful study to prepare. We really ought to charge quest. To get it you have to send us the coupon and thus signify quest. To get it you have to send us the coupon and thus signify
that you are really interested. The book is too valuable to distribute haphazard.


We Will Explain All About Rural Company Organization $\mathbf{Y}^{\text {OU }}$ id on ot pet ped experience to organ-
 odo and how to do it Aly you need to

 orranize a mutual or a sta
tee book will tell you how.
You And Just Your Own Friends Can Build Every Foot Of Line
$\qquad$ B construction cour oun line keeps down construction costs. With the help
we give you, you do not need to emp ploy expert linemen. The book explains contains, in this one chapter alone, thirty seven diagrams and illustrations, showing how to make every kind of connection necessary, how to route the line, how to
put the fittings on the poles, how to put the ifttings on the poles, how to guy
the poles, how to place the insulators and
string the string the wires-in fact, how to handle
every detail as well as an expert lineman every detail as well as an expert lineman
can. On request, we will also tell you can.
of $y$ your provincial regulations, what government requires and what it will
do to help you.

The Cost To Operate Your Own Line is Low OU can readily understand that when
you and your friends have the entir mounagement in your own hands you can regulate the cost of running the
line. In the book we explain just what is necessary and you can take your pencil and figure out how little it will cost you to have a telephone on the wall :in
your own house.


Let Us Explain To You How To Interest Your Neighbors
$T T_{\text {HE }} \mathrm{HE}$ firsts step in geting started, is to $1 \begin{aligned} & \text { enthuse your neigbbors sand get them } \\ & \text { ail in with yout When you have }\end{aligned}$ read "How tor yuil. Mural youl have Lines,", "ou will have a mass of iffromaz
tion at your finger ends that win onate too at your fnger end that will enab
yout to place eositive, definite facts before your friends, to enthuse them with the idea of a self-maintaiaing, community
Owned system and to make owread system and to make everybod
around younxious to help. All it inedst get at tep ephone system started, is for some one progresive man to start the ball roll
ing.
With the information that ing. With the information that we will
peace
everty your command, you can get everything organized in shortt order.
There Will Be A Telephone System In Your Locality - Get Posted
S OONER or later someone is going to $\mathbf{N}$ start a telephone system in yout started every day in farming centres throughout the Dominion. When this subject comes up, you will want the full yar to post yourself. Now is the time fo everything and, if you are interested We will be glad to send it to you free
Do you care to sign the coupon and send Do you care to
it to us now?

## "Nowthem-Electryo

and MANUFACTÜRING CÓ. Lmite
Manufacturer and supplier of all apparatus and oquipment ueed in The construction, operation and maintenance of Telophone, Fire Teronto Winnipeg Regina Calgary Vancouver


[^0]:    CHEARN Mapun AULOS
    简
    
    

[^1]:    NEW COAL EyMN Beats Electric OIL LIGHT or Gasoline
    ONE FREE To Use On Your Old Lamp? Iocality to ono froo. Powerful white Our special introductoro offer enitles one person in each
     Better iight than gas or electric. Send postal for FREE OFFER and agents' wholesale, prices MANTLE LAMP CO., 255 Aladdin Bldg, Montreal and WInnlpeg, Can

[^2]:    1
    CLYDESDALES OF SHOW CALIBRE
     and terms the best.

    ROBT. NESS \& SON, Howick, Que. BEST RESULTS ARE OBTAINED FROM ADS. IN "ADVOCATE."

[^3]:    nStallions－CLYDESDALES－Fillies I have a big importation of Clyde stallions and fillieg just landed；a lot that cannot bo
    duplicated to－day in Scotlard and never was in Canada．Let me know your want． ROBT．BEITH，Bowmanville，Ont
    PERCHERONS，STANDARD－BRED and FRENCH COACHERS I atu offering prizewinners and charmions in Percheron stallions，Standard－bred stallions，
    French Coach tallions and Percheron mares，filly and horse colts．．Prices very low．
    P．R．，Ottawa to Montreal line

[^4]:    Just Arrived-Clydesdale Stallions and Fillies
    
     CLYDESDALES $-=$ A NEW IMPORTATION
    
    

    1
    
    
     Rosedale Stock Farm ${ }^{-1}$ Sreederer and importer of Clydedadle and Shite hornees Shees. Estabishec over
    Goun wh.
    G.T. and C.P.R., Electric cars.
    J. M. GARDHOUSE, Weston, Ont.

