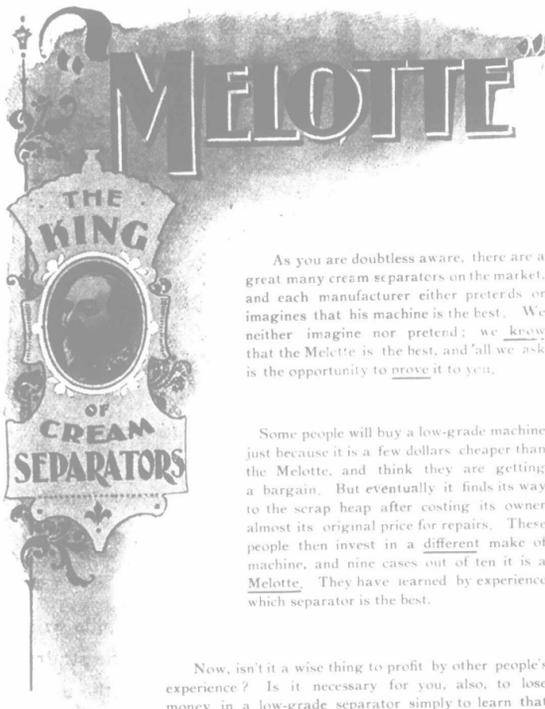


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separator on the market. The bowl and interior skimming-device are extremely simple, and there are no grooves and crevices in which the dirt can collect.

But the qualities that appeal most to the farmer are, that, under ordinary conditions, it requires no repairs, and with care will last a lifetime. We have many testimonials from Melotte owners, saying that they have used this separator daily for ten and more years without it having cost them a cent for repairs. That's proof.

The exhibit of the different sizes and models of Melotte Cream Separators is in the Dairy Building this year, as usual

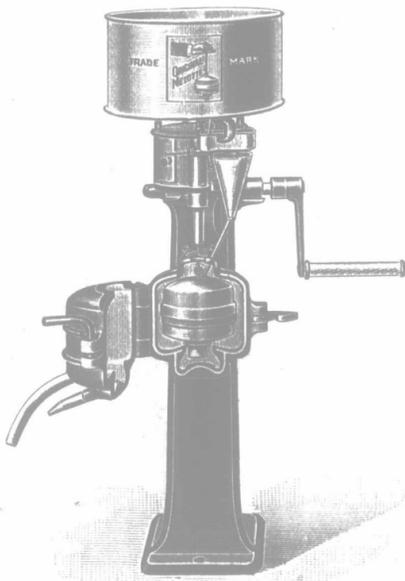
As you are doubtless aware, there are a great many cream separators on the market, and each manufacturer either pretends or imagines that his machine is the best. We neither imagine nor pretend; we know that the Melotte is the best, and all we ask is the opportunity to prove it to you.

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The Melotte possesses two qualities which make it the housewife's favorite: It is easy to turn and easy to clean. Its peculiar construction renders it almost frictionless, and even competitors will acknowledge it is the lightest-running



Do not neglect to see the Melotte Cream Separators at Toronto Exhibition, in the Dairy Building.

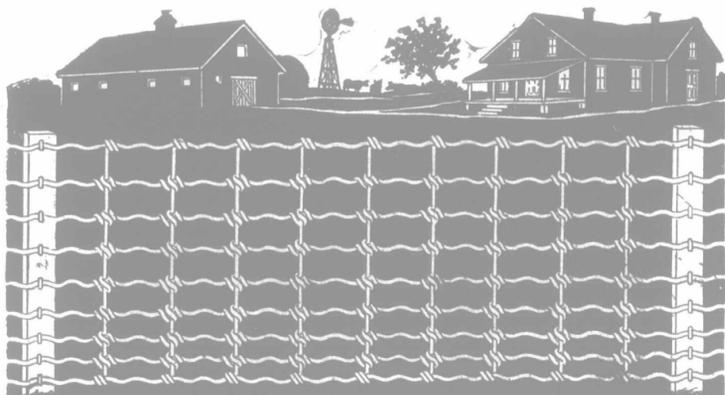
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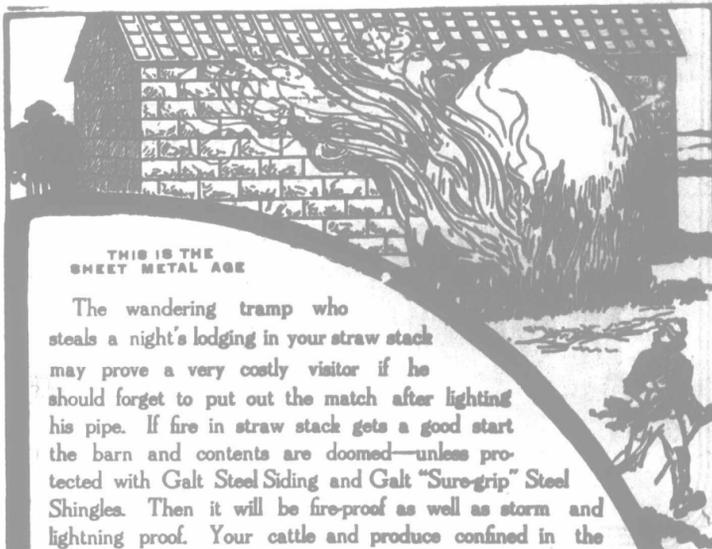
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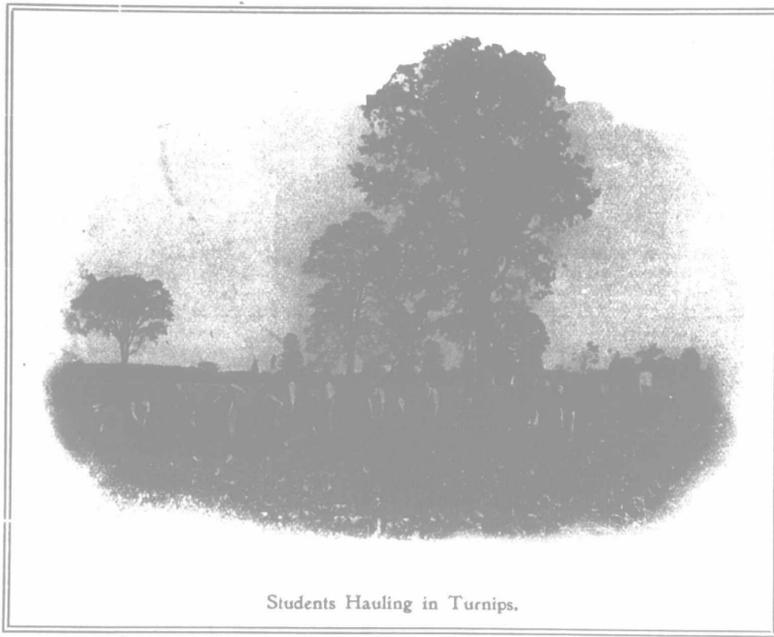


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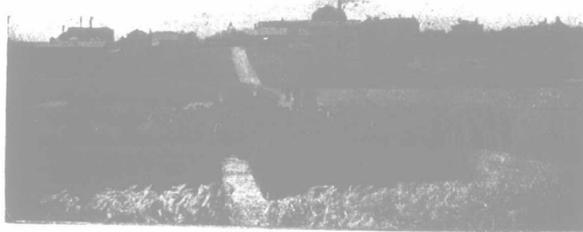
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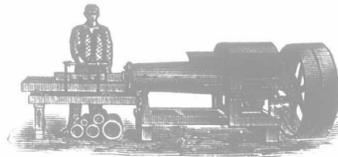
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## and Home Magazine

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LONDON, ONTARIO, SEPTEMBER 3, 1908.

No. 832.

### EDITORIAL.

#### OUR GREAT FRESH-WATER OCEAN PORT.

The Dominion of Canada has a national interest in the Port of Montreal. At its docks the steamships of the Atlantic meet the converging arteries of water-borne and rail-carried commerce of the interior continent. In fact, it might be said that North America has a continental interest in this fresh-water ocean port—for, despite the apparent contradiction of the term it fairly describes the strategic situation of the great St. Lawrence city. From Montreal to the sea, by way of the St. Lawrence River, Canadian enterprise has established a channel, with an available depth of 30 feet, now actually in use by steamships of 12,000 tons. By 1910 it will accommodate ships of 18,000 tons. This gives to Canada a virtual seaport at Montreal, the head of ocean navigation, 1,000 miles from the sea, the junction-point of three transcontinental railways, and of a navigation system with a minimum depth of 14 feet tapping all the cities of the Great Lakes, clear into the heart of the continent. Prospects are that facilities will be vastly improved by the construction of a 22-foot Georgian Bay Canal, and not unlikely, a new and deeper Welland Canal.

In view of these tremendously important facts, and especially the developments of the present season, during which American seaport cities have been alarmed by the rate at which Montreal has been capturing the export grain trade, special interest attaches to a recently-issued report on British and Continental ports, with a view to the development of the Port of Montreal and Canadian transportation. This report, published as a supplement to the fortieth annual report of Marine and Fisheries, is prepared by Geo. W. Stephens, President Harbor Commissioners, Montreal, and Frederick W. Cowie, B. A. Sc., M. Inst., C. E., Engineer River St. Lawrence Ship Canal, who visited the different seaports of Europe and Great Britain to personally inspect the various phases of port development and management, and to gather such information as might serve a useful purpose in the development of Canada's national ports. Their information has been published in clear and concise form, as will appear from the presentation of facts quoted elsewhere with regard to our own port of Montreal.

Scarcely necessary, we should hope, though not out of place by any means, is the emphasis in the foreword placed upon the supreme importance of retaining the national waterway as the property of the Canadian people, not allowing it to come under the control of any navigating corporation or railway, or combination of either, "as has been the case in the United States, where the railways have killed the efficiency of the Erie Canal by blocking legislation for its enlargement; in England, where the inland waterways have largely been bought up by the railroads, and their usefulness confiscated; or in France, where a like situation exists with regard to the Port of Marseille." Hamburg, on the other hand, with a canal system eight feet in depth, distributes annually to inland points, 8,000,000 tons of freight by the cheapest known means of transportation; and Antwerp, with a canal and river system of the same depth, carries water-borne cargoes to the boundaries of Austria at the rate of something over 6,000,000 tons per annum, and distributes annually, by means of her own waterways, 37,000,000 tons of merchandise.

#### WHEN PURE-BREDS SHALL BECOME COMMON.

We look forward to the day, still well in the future, when pure-bred stock will supplant scrubs, mongrels and, for the most part, grades. It may never entirely supplant straight cross-breds or high-grades, for a first cross often produces a most profitable animal to feed, and doubtless a certain amount of crossing and mingling of blood will always be done, but the stockmen's missionary work must continue until no one thinks of using any but a pure-bred sire, and until the great majority of breeding females in horses, cattle, sheep and swine are either pure-bred or else first-crosses or high-grades. In swine this goal has already been attained in most districts, thanks to the fecundity of the sow; in sheep, it is within measurable approach, but among horses and cattle it will be some time yet before pure-breds are so generally disseminated as they should be. When pure-breds become as common as grades now are, the tendency will be to reduce prices, though not the values, of the average run of pure-breds, thereby lessening the temptation to palm off inferior individuals on the strength of registration. Then, only those registered animals which combine superior individuality with rich breeding will command a premium by virtue of their pedigrees. The business of distributing seed stock will not be confined, as at present, to a few breeders, but every farmer will stand a chance of producing an animal of rare value for purposes of stock improvement. At present, with grades chiefly in vogue, no matter how superior an individual male animal may occur in a farm stud or herd, he is of little value for stock improvement because lacking the concentration of blood lines which tends to insure prepotency in the transmission of his good qualities. Even if he prove an exceptionally good sire, the breeder of pure-breds dare not use him, since his get would not be eligible for registration. Thus, many a jewel in farm stables is passed by, which, if a registered pure-bred, and, therefore, available for the purposes of the pure-breeder, would prove an acquisition to the cause of stock improvement, and incidentally a source of profit to the farmer who raised him. The more plentiful the pure-breds in the country, the more rapidly and thoroughly may the cause of live-stock improvement advance. At present the number of pure-breds is so small, comparatively speaking, that the business of breeding them is inconvenient and expensive; and this, together with the expense of registration and selling, and the obvious need for blooded stock in almost every community, tempts the breeder to distribute for breeding purposes registered stock which never should be allowed to perpetuate its kind. Among pure-breds, as among scrubs, close culling will always be necessary to maintain, let alone to advance, the standard of merit; and the fact that this has not always been practiced accounts for the inferior showing, from a utility standpoint, which the poorer class of pure-breds often make in competition with high-class selected grades. For practical purposes, a high-class grade is more valuable than a medium pure-bred, but a good pure-bred is better than an equally good grade, in that the descendants of the former, if bred pure, will have the prepotency to transmit their excellencies with greater certainty. This fact of prepotency, due to concentration of blood lines and tendencies, is the sole and only reason why pure-breds are so necessary for improvement of the general stock of the country.

We do not anticipate that the best stock will become uniformly distributed among the rank and

file of farmers. Doubtless, in future, as in the past, the cause of stock improvement will be served by those few men of enterprise and genius who make it a point to assemble in their stables some of the best stock of richest blood lines, and, by intelligent selection, skillful mating, and favorable environment, to produce masterpieces of the breeder's art, just as in swine we still have our noted breeders, notwithstanding the plenitude of pure-breds throughout the country. But, as in swine, so in other stock, the work of the leading breeders, while not less profitable to themselves, will be much more advantageous to the country when they can draw freely for their studs and herds upon the specially-choice specimens occurring here and there among a large number of pure-breds kept throughout the country, and when they will no longer be tempted to sell for breeding purposes everything that claims a pedigree certificate.

Of course, the student of this question must realize that one practical difficulty in the way of utilizing animals from commercial herds, even though pure-bred, will be the fact that many stockmen, keeping pure-breds for every-day purposes, would refrain from recording their stock; so that, after several generations had passed without registration, it might be difficult, under existing herd and stud book rules, to enter ever so deserving a beast. This could and doubtless will be met in time by a judicious relaxation of rules to allow the inclusion of meritorious candidates of evidently pure-breeding. Even were a dilute strain of alien blood occasionally filtered in through such channels, it would doubtless do the breed more good than harm.

The scarcer the supply of desirable pure-bred stock, and the more narrowly its ownership is limited, the greater the cost of pure-bred sires to the general farmer; whilst, on the other hand, the more abundant the supply, the more general the distribution, and the more closely the breeding of pure-bred stock is brought down to an every-day commercial basis, the higher the standard of merit will be raised, the less will be the cost of production, and consequently the selling price of serviceable breeding males. Wherefore, we see that the general dissemination of pure-bred stock over the country promises substantial betterment of live-stock interests, particularly to the dairyman and the raiser of market stock.

#### WISE AND UNWISE INVESTMENTS IN PURE-BRED STOCK.

Seeing that the premium in price ordinarily commanded by registered stock depends upon their accepted prepotency in the transmission of type and function, owing to the fixation of these characteristics in themselves by reason of concentration of blood lines of ancestors in which the said qualities have been developed, it follows that a pure-bred is valued not for its own merit alone, but also with a view to the prospective value of its progeny, not only of the first, but of subsequent generations. Hence the wisdom of investing in a pure-bred animal will depend upon what use can be made of it. For instance, a man who bought a high-priced registered female to be put in a herd where no registered sire of that breed was available, would be investing most unwisely. A good grade would answer his purpose almost if not equally as well, and would cost him much less to buy. Folly of this kind runs its length when it leads, say, a dairyman to purchase a pedigreed Shorthorn or Aberdeen-Angus, at a good round figure, and then breed it to a dairy

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THE LEADING AGRICULTURAL JOURNAL IN THE  
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JOHN WELD, MANAGER.

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bull or a scrub, thereby forfeiting that part of  
the cow's value which represented her accumulated  
prepotency in the transmission of beefing merit,  
for, while the first cross may be a fairly good in-  
dividual, it will command no premium as a  
breeder. Equally foolish is it to mate a valu-  
able pedigreed dairy cow with a Shorthorn or  
Aberdeen-Angus bull; or, for the matter of that,  
to mate an Ayrshire cow with a Holstein bull, or  
a Shorthorn cow with an Angus, unless there is  
some specific purpose in view, such as experimen-  
tation, or, perchance, the production of a prizewin-  
ning cross-bred in a beef class. The point is  
that, when a pure-bred is mated with any sire but  
a pure-bred of its own breed, its prepotency is  
broken up and nullified, so far as the progeny of  
that mating is concerned. The resulting calf or  
colt, or whatever it may be, is not available for  
the grand ultimate purpose of stock improvement.  
It is, therefore, an unwise investment to pay a  
long price for a pure-bred female unless one can  
mate it with a meritorious registered male of the  
same breed.

Less foolish, though nevertheless unwise, is it  
to buy a top-notch sire to use on grade females.  
While the motto, "Breed to the best sire obtain-  
able," is sound within reasonable limits, still it is  
of the nature of dissipation of merit to allow the  
service of a phenomenal sire, such, for instance, as  
Baron's Pride, to any except high-class pure-bred  
females; and an astute owner will place his ser-  
vice fee so high that none but owners of pure-bred  
females can afford to use him. It is generally un-  
wise even for the breeder of registered stock to  
invest in a world-beater, unless he has a large  
number of exceptionally good females on which to  
use him and the skill to do it with judgment, and  
then make the most possible out of the stock.  
While every breeder should seek a sire consid-  
erably better than his females, still there are limits  
of moderation. The best pure-bred sires for the  
best pure-bred females, and the remaining sires for

the general run of pure-bred females and for grade  
herds, is the principle that applies.

So much for unwise investments. A wise in-  
vestment is usually made when some farmer, who  
has proven himself a discriminating, observant and  
successful herdsman with grades, adds to his stock  
one or more good registered females of the breed  
which he prefers, and then, by occasional purchase  
and persistent use of a first-class bull, works  
gradually into pure-breds, keeping his operations  
down to a strict commercial basis, and sending to  
the block all individuals which do not measure up  
to a goodly standard of profit. Such a farmer  
is almost sure to make a success of pure-breds,  
and his annual sales of milk or market stock, as  
the case may be, will be substantially supplu-  
mented by the returns from a selected quota of  
young pure-bred stock, sold for a neat figure to  
some enterprising breeder, or to spread the work  
of stock improvement in a neighbor's herd, stud  
or flock.

## ONLY ONE DEGREE OF MURDER.

As if the Thaw case were not a sufficient dis-  
grace to American criminal law and jurisprudence,  
we have now promise of a similar fiasco in the  
trial of the Hains brothers, one of whom, at the  
instance of his elder brother, deliberately shot, in  
cold blood, before a crowd of people, including the  
victim's wife and family, a publisher named Annis,  
who was alleged by the instigator to have been  
improperly familiar with the junior Hains' wife.  
The elder Hains was implicated, not only as in-  
stigator, but in that he accompanied the murderer  
on his deed of death, and, at the muzzle of a re-  
volver, warned all present against interfering.

It was hoped that this crime would be dealt  
with summarily, and without legal and medical  
chicanery, but, according to later reports, it  
seems that the defence bids fair to parallel the in-  
famous Thaw case, in which lashing of money  
were expended on conflicting "expert" evidence  
as to the prisoner's sanity at the moment of com-  
mitting the act; on all kinds of technical appeals  
and subterfuges, and on long-winded, dissembling  
argument. If certain despatches may be re-  
lied upon, the counsel of the Hains brothers will  
attempt to prove that the murderer was afflicted  
with that alleged mental state notoriously known  
as "brain storm." Doubtless, they will en-  
deavor to have the prisoner judged insane, and  
then, afterwards, on some pretext or other, to  
have him discharged from the asylum as cured.  
Failing in this, they will seek to secure a verdict  
of murder in some other than the first degree, so  
as to spare him the full rigor of the law.

Concerning that cowardly and unbalanced frame  
of mind which could lead a man to take the law  
into his own hand, and undertake to mete out  
punishment on the strength of suspicion, without  
even the opportunity of trial or defence, we need  
say little. Its unfortunate prevalence on the  
other side of the boundary is attested by the re-  
peated outbreaks of mob rule, of which the recent  
frenzy in Springfield appears to be a climax.

The point of this article is directed at the deep-  
seated misconception of the purpose of punish-  
ment, so-called, as administered in the courts for  
criminal offence. Hanging, electrocution and im-  
prisonment are, or should be, regarded as in no  
sense retributive, but wholly deterrent. Society  
has no business to usurp the functions of Provi-  
dence or Destiny by PUNISHING a man for what  
he has done. The only ground on which chastise-  
ment is justifiable is for protection of society by the  
prevention or minimizing of similar crimes. It  
is intended to restrain those whose ethical stand-  
ards, whose conscience, in other words, is not suf-  
ficient to cause them to respect the rights of  
others, and to conform with established tenets  
and social instincts. Attempt to justify punish-  
ment on any other ground is pagan and diabolic.

Assuming, therefore, that the object of the law  
is to deter those with criminal propensities from  
acting upon their impulses, it follows that there  
need be only one degree of punishment for murder.  
To recognize one kind of life destruction as murder  
in the first degree, and another as due to the  
promptings of an irresponsible mind, and, there-  
fore, not to be punished except by incarceration  
in a lunatic asylum, is farcical and absurd. So

far as insanity is concerned, it is doubtful whether  
any man is perfectly sane. Streaks of insanity—  
which is to say, mental bias or abnormality—ex-  
ist in practically if not all of us in either mild or  
violent form, and no expert can accurately ad-  
judge the degree in any given person. To con-  
cede, therefore, that insanity is a reason for miti-  
gating punishment, is to invite the break-down of  
our whole system of criminal justice, and to open  
a gaping loophole for murderers rich enough to  
prove themselves insane.

Under the British system, we do not go the  
length of our American kinsmen in extenuating  
crime on the plea of insanity. With us, a man  
is supposed to be convicted, unless it can be  
shown to the satisfaction of judge and jury that  
reason was so far dethroned that he was not  
aware of the fact that he was committing a crime.  
Even this, however, renders it necessary to draw  
a line between stark and partial insanity, and re-  
solves the decision, after all, into a mere matter  
of opinion.

The fact of the matter is that people of un-  
sound mind require, especially, the prospect of  
severe and certain punishment to restrain their  
otherwise unbridled passions. The fact that a  
man may escape punishment on the plea of in-  
sanity or partial justification is a strong induc-  
ement for men of the Hains type to emulate such  
as Thaw. Moreover, the more insane and irre-  
sponsible a murderer is, the less the loss to so-  
ciety—if the death of any murderer can be called  
a loss—and the greater the reason, therefore, for  
inflicting capital punishment. Such people are  
not safe, and their lives are of little or no use  
to themselves or to others. The more we ex-  
amine this whole question, the more strongly are we  
driven to the conclusion that there is only one  
degree of murder, that everyone is virtually  
guilty of it who attempts to kill, and that the  
welfare of society demands that the full rigor of  
the law, either capital punishment or life-impris-  
onment with hard labor, preferably the former,  
be administered in every case. Such a simplified  
understanding and system would make justice far  
more certain, as well as far cheaper, and immen-  
sely contribute to the safety of human life.

## "THE FARMER'S ADVOCATE" AT THE FAIR.

"The Farmer's Advocate" will be represented  
as usual by a capable reportorial and business  
staff at all the leading exhibitions this fall and  
winter. A feature of this paper for years has  
been the reliable, incisive and illuminating re-  
views of the live-stock, dairy, horticultural and  
general agricultural features of all the important  
shows, to the end that those who have not the  
privilege of attendance may be as fully informed  
as possible concerning the salient events of the  
season's contests in hall and ring; while those who  
have attended may find in the subsequent report  
explanation of much that was puzzling, and ampler  
information about animals and produce than a  
 cursory ring-side inspection affords. It is no  
reflection, either, on the general run of exhibitors  
and judges to assert that the close, critical review  
of the judges' work is an influence tending ma-  
terially to rectitude in show-ring ethics. An ex-  
hibition without the attendance of the agricultural  
press would lose much of its educational value.

In addition to their editorial and reportorial  
services, our staff are always prepared to receive  
subscriptions, as well as advertising copy and  
contracts. Moreover, we will have a commodious  
tent in a convenient position, near the cattle-  
judging ring, at the Canadian National Exhi-  
bition, Toronto; while at the Western Fair, in Lon-  
don, visitors will readily find our location among  
the press booths. At Ottawa, Halifax, St. John,  
and the other leading fairs, our representatives  
will be encountered frequently within the judging-  
rings and about the grounds. We regret that  
the extent of our field forbids attempt to cover  
the county and local fairs, as the reporting of  
these would quite congest our columns, to the ex-  
clusion of all other matter, for weeks and months.

The reading public are especially invited to  
make themselves at home in our tent at Toronto.  
A call and chat with our representative there, an  
item of news left, or a point of experience related,  
is always appreciated. The tent is pitched for  
the accommodation of our patrons and the trans-  
action of business. Make use of it.

**MONTREAL HARBOR AND THE ST. LAWRENCE WATERWAY.**

The first attempt to make a harbor for ocean vessels at Montreal was in 1830.

The Canadian inland canal system, connecting the Great Lakes of the Central part of the North American Continent with the St. Lawrence at Montreal, had just been opened. The physical features of the locality, the trade situation, and the position as a point of interchange between ocean and inland vessels, was recognized.

Westward was the canal system, to avoid the Lachine and other rapids.

Montreal was fast becoming a commercial and manufacturing center, and the situation for warehouses and works was excellent.

Eastward was the mighty St. Lawrence, with its clean water and permanent river-bed, passing through Lake St. Peter, and on 160 miles to Quebec, and 800 miles further to the Atlantic.

Navigation to Quebec was an accomplished fact for all classes of ocean vessels, but Lake St. Peter, half way up to Montreal, had only a depth of 10 feet.

**THE SHIP CHANNEL.**

Commencing modestly, as it would be considered at the present time, but on right lines, the Montreal far-seeing business men undertook to construct a harbor and to deepen the channel in Lake St. Peter.

Their lessons were gained from the successes in taking ocean navigation up the Clyde, which had been a shallow stream, to Glasgow.

Dredging on the St. Lawrence commenced in 1850. The plant had been designed, and the machinery made in Scotland.

From 10 feet, in 1850, the channel had been deepened, in 1888, to 27½ feet at ordinary low water, over a length of river requiring dredging of about 50 miles, the work being carried on departmentally by the Harbor Commissioners of Montreal.

In 1888, the Government of Canada, recognizing the St. Lawrence as the national route of Canada, assumed the debt incurred with respect to the channel, and opened the waterway free to the shipping of the world.

The Government, in 1899, undertook, as well, the task of deepening the channel about 4 feet, to obtain a depth of 30 feet at the lowest stage of the river-level recorded, and of widening, straightening, and marking the channel with the most modern systems of Aids to Navigation.

In 1907 the channel was opened to commerce, with a depth of 30 feet, the actual lowest recorded depth that season being 31 feet 10 inches, and with a magnificent system of lights, buoys, signal service, and swept channel.

The standard curves are easy and the width ample, as compared with any other artificial navigable waterway of the world.

Montreal Harbor and the St. Lawrence has had a bad name. It is unfortunate that in Canada

misfortunes are advertised. The facts and actual records show to the contrary, and the St. Lawrence should be known as one of the most advantageous routes in the world.

The St. Lawrence, with the whole of the Great Lakes navigation, amounting to 60,000,000 tons per annum, is closed by ice from December 1st to April 20th of each year. This situation is accepted on the Great Lakes, which are the feeders to the shipping of the St. Lawrence. When the lakes are open, the ocean ships are in the Montreal Harbor, ready for the trade.

During the open season, the St. Lawrence has splendid weather conditions, and is notably adapted to navigation.

Fogs are very rare in the whole of the contracted part of the river, from Murray Bay, 235 miles below Montreal, right up to the Harbor.

In 30 years, only two ships have been totally lost between Quebec and Montreal.

Groundings, which are so well advertised, are not frequent. The report of 1906 stated that, between Montreal and Quebec, the loss due to navigation accidents did not amount to one thousand dollars, although about 3,000 ocean vessels, of a combined tonnage of about 6,000,000 tons, passed up and down during the seven months of open season.

The records of the accidents on the St. Lawrence give the causes about equally divided between faults due to the machinery of the ship and errors of the pilots.

None of the accidents whatever in recent years have been due in any measure to the channel.

**THE HARBOR.**

In the consideration of Montreal as a position for a great port, except for its winter season, it would be regarded as an ideal situation, according to the best British and Continental practice.

1. It is as far inland as it is possible for ocean navigation to go.

2. It has a splendid channel approach, and a dredging plant and organization for navigation at least equal to any in the world.

3. The navigable conditions are excellent.

4. It is on the direct line of the great summer-trade route of North America.

5. It is the most advantageous ocean port for a large section of the North American continent's most productive area.

6. It is a route which, with its up-to-the-present meager facilities, has successfully held its own with the Buffalo-New York route.

7. It is the eastern terminus of the St. Lawrence Canal System, giving 14 feet navigation from Montreal to Port Colborne. From Port Colborne, the depth is 20 feet to Buffalo, Cleveland, Detroit, Chicago, Sault Ste. Marie, Fort William and Duluth, a total distance of 1,400 miles.

8. Montreal is the railway center of Canada. Trunk lines extend in every direction, and three transcontinental lines reach ocean navigation in the harbor.

9. Physically, Montreal is favorable for the construction of a port.

10. The water is free from sediment, and constant dredging is not required.

11. The whole of the water-front and river-bed is controlled by the Port Authority.

12. The Harbor is in the heart of the business section of the city.

13. The railway connections with the docks are the best on the continent.

14. The great transportation companies of Canada, both rail and water, have their headquarters at Montreal.

15. The trade by the St. Lawrence to Montreal is now nearly 30 per cent. of the total commerce of Canada, including the trade with the United States.

16. The present situation of Montreal, as regards the port, is as follows:

Vessels per annum, inwards and outwards combined: Sea-going, 2,400; tonnage, 5,000,000. Inland, 25,000; tonnage, 6,000,000.

The capital expenditure on the port to date is approximately the amount of the bonded debt, viz., \$10,000,000.

The depth of water in the harbor and its approach is 30 feet at lowest water, or 31 feet 10 inches at the lowest stage reached in 1907.

The total shed area is 20 acres, to be doubled in 1909.

There are no tonnage dues on vessels. The revenues are chiefly derived from wharfage rates on the goods and rentals of space.

Pilotage to the port is compulsory, and controlled by the Government of Canada.

The Port Authority is a Commission composed of three members appointed by the Government of Canada, subject to the approval, in the matters of expenditure, to the Minister of Marine and Fisheries.

Reference need only be made to the description of the eleven principal ports of Great Britain and Europe, in the report, and a comparison with the physical, natural and trade advantages of Montreal, to complete the favorable decision regarding the future of the Port of Montreal, and of the necessity of taking immediate steps in a careful and comprehensive way of the development for the future.

**THE OPTIONAL REFERENDUM.**

Editor "The Farmer's Advocate":

Your recent editorial, dealing with the failure of responsible government in Hamilton, reminds one of the very simple political device known as the Optional Referendum, long in vogue in Switzerland, and rapidly gaining popularity in cities and States of the American Union. I have been advocating this reform for a number of years, but people move very slowly, and probably a number of cases like that in Hamilton will have to occur



A Pastoral Scene in New South Wales.

before the majority will awake to their necessities and look about for a remedy.

The Optional Referendum is simply this: Constitutional provision is made that all laws, save urgency measures, shall remain inoperative for a certain specified period, during which a certain percentage of the electorate, by petition, has the right to compel a referendum thereon. We have the obligatory referendum now in respect to municipal money by-laws, and the option of its use lies with all legislatures and councils at any time. But the people should be given the option of using it, because it is just when the council or legislature will not use it that it is highly necessary; that is, when doubtful or suspicious legislation is under consideration. As a means of checking unwise, hasty or unpatriotic legislation, the Optional Referendum is unequalled. Why it is not more widely known, discussed and advocated, I have never been able to understand, for it is both extremely simple and also highly efficient, according to the testimony of those who use it.

The case alluded to has not been the only one in which "responsible civic administration has failed through the duplicity of elected representatives," and your demand for "some means that will render such eventuality impossible in future" finds immediate and satisfactory answer in the Optional Referendum. W. C. GOOD.

## HORSES.

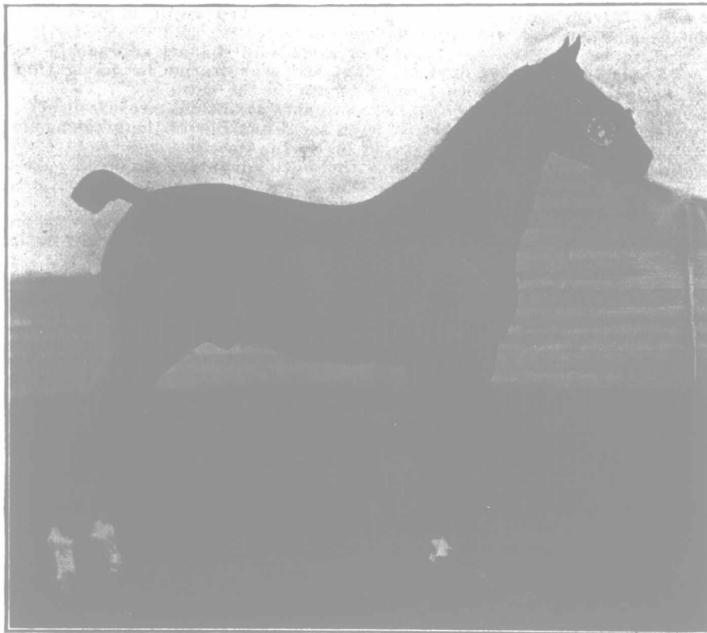
### SOME HACKNEY REMINISCENCES.

It seems to me I have loved a good horse ever since I knew enough to know what a horse was, and, of all breeds of horses, the Hackney has always been my favorite.

The first stallion that made a deep and lasting impression on me was Beal's Sir Charles (768), a remarkable horse in his day, and one that has left his mark on most of the celebrated Hackney sires of the present time through his son Denmark (177), and grandsons, Connaught (1453) and Danegelt (174); and great-grandsons, Rosador (4964) and Garton Duke of Connaught (3009). I well remember a cousin of my father's for years riding consecutively a daughter and a son of old Sir Charles, both strawberry roans, of exceptionally high quality and phenomenal action. Many is the time I have watched the old gentleman from behind the hedge of our feeding pasture, which adjoined his farm, "nagging" one or other of these beautiful horses, and it seems to me I have never since seen better goers or a better rider of a high-stepper. He never would allow anyone else to ride either one, nor would he ever allow his riding horse to be put in harness. He sold both for very high prices, and one (the gelding) was afterwards resold to the Duke of Cambridge, and used by him when Commander-in-Chief of the British Army. How I became so fond of old Sir Charles was through visiting a cousin of my mother's, who lived near to Richard Beal, and was at that time much interested in his sister, and nothing delighted me, as a boy, so much as to go over to "Galley Gap" with him and get a look at the old horse, and sometimes have the privilege of seeing him go. I was then so firmly convinced that Sir Charles was an extraordinary horse that I would beg my father to allow me to take his riding mare (a Hackney, by Tom Thumb (830)), and the fastest trotting mare within twenty miles of our home) to be bred to old Sir Charles. I can distinctly call to mind his quizzical expression when he asked me what I knew of such things.

My own opinion is, and always has been, that to old Sir Charles is due as much credit for his impressiveness as a sire as has been accorded to his son Denmark. Of course, there is no denying the fact that Denmark was a wonderful horse, nor that his son Danegelt was a great sire, but to my mind Sir Charles never got the credit he deserved. Most of the best Hackneys of to-day carry the Sir Charles blood, notably, on this side, Mr. Stevens' Fandango, whose mother was by Sir Charles. That such impressive blood "breeds on," there is not a shadow of a doubt, and his sons and grandsons have added lustre to his name. When Sir Walter Gilbey paid the highest price ever paid for a Hackney, when he bought his grandson, Danegelt, then in the sere and yellow leaf, he showed his excellent judgment in securing this Denmark or Sir Charles blood, as he has proven time and again by his progeny in the best show-rings in England and on the Continent; and through that purchase alone he stands to-day as one of the foremost Hackney breeders—if not the foremost one—in England. Another gentleman, who has ever been an ardent advocate of the Denmark blood, is Mr. Burdett-Coutts, who has always been a champion of the breed, and who lately had the satisfaction of seeing a goodly proportion of the winners at Olympia, which originally came from the Brookfield Stud. To these two public-spirited men all lovers of the Hackney owe a tribute of respect and thanks. Many of the early importations (especially of mares) to this country came from Brookfield. It was late in the 70's, when

Mr. Prescott Lawrence, of Newport, R. I., brought over Fashion, No. 7, a great prizewinner on both sides of the Atlantic, and still perpetuated in his son, Tiger Lillie 566, now owned by Mr. Reginald Vanderbilt. Soon after, Mr. A. J. Cassatt, of Philadelphia, brought out Little Wonder, and later on, Cadet. In the 80's, Senator Fairfax imported Matchless of Londesboro' 18, and Mr. Perkins' Bonfire 43, afterwards owned by the late, lamented John A. Logan. Later came F. C. Stevens, of Attica, N. Y., with Langton Performer and Clifton II. Then we had E. D. Jordan, of Boston. Each of these brought over some extra good animals of both sexes. To the West, the first to import Hackneys in any numbers were the Trumans, Burgess and Sterickers, of Illinois, and Galbraiths, of Wisconsin. The Grahams, of Claremont, Ont., and Hon. Robt. Beith, of Bowmanville, Ont., stand out on your side as early champions of the breed, both having owned remarkable animals. The former brings back to mind Royal Standard and Roseberry, whilst the latter is closely associated with Robin Adair II. and Gribthorpe Playmate, both New York champions. Some of the best have gone back to the country which best appreciates a good horse, notably Bonfire, Royal Standard, and Matchless of Londesboro'. We possibly expect more than is reasonable, and don't always get it; still, let us consider the best show-ring records on both sides of the line, and review results for the last 15 years, and we must admit that the half-blood and pure-bred Hackneys stand out in bold relief as the principal winners against superior numbers of other breeds. Where can you point to any animal that equals the doughty Blucher, and on this side what have we had that equals the mighty



Flash Cadet (10203).

Two-year-old Hackney stallion. Bay. First and champion, Royal Show, 1908. Sire His Majesty. Owner, Sir Walter Gilbey.

Forest King or the superb Hildred? Others there are that have made enviable records, and will continue to do so, for, notwithstanding the efforts that have continually been made to belittle the Hackney, he stands out alone as the peer of any other breed on earth.

Essex Co., N. J. R. P. STERICKER.

### THE PULSE OF THE HORSE.

The pulse of the horse may be counted and its character may be determined at any point where a large artery occupies a situation close to the skin and above a hard tissue, such as a bone, cartilage or tendon. The most convenient place for taking the pulse of a horse is at the jaw. The external maxillary artery runs from between the jaws, around the lower border of the jawbone, and up on the outside of the jawbone to the face. It is located immediately in front of the heavy muscles of the cheek. Its throb can be felt most distinctly just before it turns around the lower border of the jawbone. The balls of the first and second or the second and third fingers should be pressed lightly on the skin over this artery when its pulsations are to be studied. The normal pulse of the healthy horse varies in frequency as follows: Stallion, 28 to 32 beats per minute; gelding, 33 to 38 beats per minute; mare, 34 to 40 beats per minute; filly, two to three years old, 40 to 50 beats per minute; foal, six to twelve months old, 45 to 60 beats per minute; foal, two to four weeks old, 70 to 90 beats per minute.—[Exchange.

### HANDLING A BALKY HORSE.

What is the best way to handle a balky horse? M. P.

The best manner of handling a balky horse always has been, and doubtless will be, a matter of opinion. In most cases whipping does not give good results, but has a tendency to make the animal more sulky. Balky horses are generally the result of ignorant, cruel or rash treatment during the education (generally called breaking) of the colt. Surly, rash, ill-tempered men, who expect a colt to know more than themselves, are usually responsible for the balking habit in horses. And once the habit has been contracted, it is very hard to check. Of course, colts vary greatly in disposition and predisposition, hence some are much more easily spoiled than others. At the same time, it is seldom that a colt that has been kindly and intelligently handled during his first lessons, and that has been gradually taught to draw loads, makes a balker to the average horseman. A man who is compelled to do a certain amount of work with a horse in a given time must not have a balker. The man who undertakes to cure a balker must not be pressed for time. The balker must be carefully handled. In the first place, the harness should fit well, and the load should not be heavy. The driver must be able to control his temper, and not have recourse to the whip. When the horse balks, he should be allowed to stand for a few minutes; if the load be quite heavy, it should be lightened. The attention of the horse should be drawn to something other than his load. This may be done by giving him an apple, a little salt or oats, or by tapping the shoe with a hammer, etc., and, after a few minutes, if he is asked quietly to go on, it is very probable he will do so. By kind and intelligent treatment for considerable time, most balkers can be cured, and it is possible one may occasionally be met upon whom punishment may have the desired effect, but in most cases time and kind treatment are necessary. An ill-tempered or passionate man should never undertake to cure a balker; while, on the other hand, if the horse has been required to draw a heavy load, without sufficient education, he is very liable to become sulky, especially if he has sufficient ambition, energy and spirit to make a good horse.

Many people have many methods of treating balky horses, such as pouring sand in his ears, filling the mouth with sand, lifting his foot and tapping the shoe with a hammer, etc. There is no particular virtue in any of these methods, and the habit of pouring sand, water, etc., into the ears is not only cruel, but dangerous. The favorable action of any of these methods is obtained by diverting the attention of the horse from the load, and in many cases he will forget that he does not want to draw, and will go on. If a person is unfortunate enough to buy a balky horse, or to make one out of a colt, he will have to exercise a great deal of patience to effect a cure.

"WHIP."

### SHYING FROM FEAR OR DEFECTIVE VISION.

It has been proved that shying in horses is the result of defective eyesight as much as it is that of fear. A brave horse will never shy, whether his eyesight be perfect or not; if the shying be from defective eyes, a great deal of compassion should be exercised towards the horse; if from fear, still greater compassion is due him. Take the horse up to the object he is afraid of and allow him to smell it; it will often pay the rider to waste half an hour in convincing a horse that he has really nothing to be afraid of, rather than to pass on, leaving the horse under the impression that he has escaped from something terrible. It is best to soothe him, and keep him with it until he is convinced there is no danger in it. If the fright is from defective vision, the matter is more serious, and the horse will probably never be thoroughly cured. No horse is ever cured of shying by punishment; the dread of punishment will only increase his timidity.

Habits grow upon horses as they do upon

children. A horse will sometimes shy at a small piece of paper lying in the road. The occurrence may be out of his mind entirely until he comes to the place again where he shied. He seems to think it is his business to shy again, and unless he is cured of the habit he will be likely to shy every time he passes that particular spot. Horses may get a habit of pulling on one rein because of some soreness of the mouth. The habit thus formed may be continued after the original cause has been removed.—[Live-stock Journal.]

**THE HORSE UNRIVALLED IN WINTER.**

Editor "The Farmer's Advocate":

In your issue of August 20th, I notice an article entitled, "We Still Need the Horse." I must say that I think the only way that a machine can put him off the road is to hit him hard or frighten him so badly that he will run off. When we of this country of snow think of the long winter months, when the auto is out of business, the bicycle is stored away for the season, and even the railroads tied up with snow, the thought comes to us, "Hurrah! let's have a sleigh-ride!" Out to the stable goes the young man in the evening, and in a few minutes the team is harnessed to the large sleigh, a forkful of hay is placed in the bottom, and out we go, gather up the neighbors, and perhaps go to the village and load on one or two more. Then is the time for sport.

The autoists either have to stay at home or keep horses as well, which quite a number of them are not able to afford.

Many people grumble at the speed of the auto, saying it is a menace to the farmers, especially the wives and daughters. Now, the first time my horse ever saw a railroad engine, she gave me all I could do to hold her; and it was the same with the auto. But the whip was not used in either case; if it had been, the horse would never have been forced up to the machines, for she objects to the whip.

I noticed a newspaper joke some time ago, the point of which ran thus: "If you will lead the old woman by the auto, the horse and I will get by all right." Now, that is what I think is the matter, only, instead of saying woman, it should have been man.

We have plenty of autos in our district, driven at a speed of from ten to thirty miles an hour, and I have not heard of one accident yet—that is, to vehicles drawn by horses. No! the auto is here to stay, so we must make the best of it; treat the autoists as friends, not as enemies, and they will do the same with us.

R. M. Peterboro Co., Ont.

**FEEDING MILK TO COLTS.**

A Manitoba reader asks "The Farmer's Advocate and Home Journal": "Would you kindly advise me whether or not it is good policy to feed a colt cow's milk after it is weaned? It is two months and a half old now, and eats well."

The reply is that any policy that will keep flesh on foals after they are weaned is a good one. Nothing so detracts from the value of a colt as to let him get down in flesh between weaning time and winter, and at no time is good feeding so well repaid. Cow's milk is not of the same composition as that of mare's, hence one needs to use care in feeding it. Put the foal on it gradually, using new milk at first, diluted with about one-quarter its bulk of water. Cow's milk averages about four per cent. fat, and mare's about three, and as it is generally the fat that causes indigestion, its amount should not be large. A little lime-water in the cow's milk will also help digestion. After the foal has been accustomed to new milk, he can gradually be put on sweet skim milk. Every precaution should be taken to feed him out of a clean dish, and to never give sour milk. Two or three quarts three times a day will be all that a healthy colt had better have.

Both before and after weaning, a foal should have a liberal supply of crushed oats and bran. If the colt is intended for road work, this will give him muscle and stamina; and if of draft breeding, will add size to these two essential features. Always make an effort to keep the milk flesh on a colt. Colts that keep it may be naturally easy feeders, anyhow, but it always follows that they are the best keepers. Brown pastures, lack of shade, and flies to fight, are a combination that will take the flesh off and the spirit out of almost any colt. On some farms these are difficult to overcome, but a shed, a well, and some grain, will generally answer the purpose.

**PREMIUM PICTURE OF BARON'S PRIDE.**

A splendid photo-engraving of the celebrated Clydesdale stallion, Baron's Pride, may be obtained by any present subscriber of "The Farmer's Advocate" who will send us the name of one new yearly subscriber, accompanied by \$1.50. The engraving is 7½ x 11 inches in size, and is printed with a soft tone, combined with much clearness of detail, on a card of finest coated stock. It is a beautiful picture to frame and hang in the

library or sitting-room of any horseman's home. Copies may be purchased from "The Farmer's Advocate" at 50 cents each.

**LIVE STOCK.**

**CONDENSED INFORMATION ABOUT BREEDS.**

The receipt of occasional requests for the publication of sketches of the origin, history and characteristics of one or more of the principal pure

and were, no doubt, the result of the amalgamation of two sorts of polled cattle inhabiting the districts of that country, where even now the breed abounds most numerous. Improvement has been by selection and mating of the fittest, until the breed, as at present known, ranks high among the best beef-producing cattle in the world, and are noted for the uniform smoothness and excellent quality of their flesh. The first volume of the Polled Herdbook of Great Britain was published in 1862, and the breed was first introduced into the United States in 1873, and into Canada in 1876. They have become very widespread and popular in the Western States, and rank high in the prize-winning at fat-stock shows.

Galloways (also black and hornless) are so named from the Province of Galloway, in Scotland. The Galloways are certainly one of the purest, as well as one of the oldest, of the improved breeds. The treatment to which they have been subjected in their native land, and the cold, damp climate in which they were originally reared, have contributed much to their proverbial ruggedness, their hair growing long and curly. Their flesh is also very smoothly laid, and of superior quality. They were first imported into Canada in 1853. The Galloway Society in Britain was established in 1877, and the first volume of herdbook, as distinguished from that of the Aberdeen-



District Maid.

Hackney mare. First and champion, Royal Show, 1908. Owner, R. P. Evans.

breeds of live stock in America, leads to the effort to condense into one article of moderate space an answer to these and others which may arise, though they have at various times been treated at greater length in the columns of "The Farmer's Advocate." This synopsis will apply only to the chief breeds of cattle, sheep and swine kept on this continent. Reliable information regarding the different races prior to the seventeenth century is very meager, and the precise origin of the British

Angus, was published in 1878, the two breeds being previously recorded in one book, known as the Polled Herdbook, first published in 1862.

Herefords (red, with white face, throat, chest, legs and switch) originated in the County of Hereford, in England, and are probably descended from one or more of the aboriginal breeds of Great Britain, in that respect showing a common ancestry with the Devon and Sussex breeds, and were originally red. It is believed that at an early

period the white cattle of Wales were crossed upon the native stock, and that the white marks thus originated were further instamped by a cross of white-faced Flemish cattle, imported to England in 1671. The Herefords are essentially a beef breed, are noted for their good grazing properties, for early maturity, and thickness of flesh on loin and ribs, giving a large percentage of the highest-selling cuts of meat.

Shorthorns, formerly known as Durhams (color, red or white, or a mixture of these called roan), originated in the County of Durham, England, where, on the rich pastures, a comparatively large type of cattle existed several centuries ago, the ancestors of the modern Shorthorn, the name being chosen to distinguish them from the breed known



Halstead Duchess 3rd.

Champion Shire mare, Royal Show, 1908.

breeds will probably never be fully known. The principal agencies in the evolution of race and type have been inter-breeding or crossing, climate, food, habit, and treatment. Of the varieties of cattle, we commence with the Scottish breeds:

**CATTLE.**

Aberdeen-Angus cattle (black, and hornless) are indigenous to the north-eastern counties of Scotland, with Forfar and Aberdeen as their chief centers,

as Longhorns, then prevailing, and still perpetuated as a pure breed, to a limited extent, in England. For a long time there were two independent strains of ancestry, namely, the Teeswater and the Holderness, which were later blended through crossing. Those progenitors possessed high and broad carcasses, good milking qualities, and an aptitude to fatten, but their flesh was coarse, and accompanied by a large proportion of

offal. The Colling Bros., about the end of the eighteenth century, effected great improvement in the refining of the breed by judicious and skillful breeding, and the purchases made at the dispersion sale of their herd, when the famous bull, Comet, sold for 1,000 guineas, the highest price ever paid for a bull up to that time, greatly improved the cattle of the country. Thos. Bates, a faithful disciple of the Collings, who died in 1849, and whose herd was dispersed in 1850, displayed great skill in improving and developing the breed in its dual-purpose features—the production of beef and milk. Thomas Booth, and his son Richard, contemporaries of Bates, also wrought great improvement in the breed, especially in regard to its beefing propensities and the building up of strong constitutions. Along in the sixties of the nineteenth century, Amos Cruickshank (born in 1808, and reared in Aberdeenshire), with a well-defined purpose, building upon a mixed Bates and Booth foundation, evolved a new type, that of the modern Shorthorn—low-set, thick-fleshed, smooth, and early-maturing—which has been used in many countries as a leaven for the improvement of the breed, producing the bulk of the prizewinners in the last two or three decades. The first importation of Shorthorns to America was made to Virginia between 1783 and 1795, and the first to Canada in 1825, by the New Brunswick Board of Agriculture. The first volume of the English Shorthorn Herdbook was published in 1822 by George Coates, and is entitled "Coates's Herdbook" to the present day, fifty-four volumes having been published.

Holsteins, in color, are black and white. Holland, the original home of this great breed of dairy cattle, has several types of cattle, of which the Friesian are the most numerous, and are the progenitors of nearly all the Holstein-Friesian cattle in America. This is probably the oldest of the known breeds of cattle; they are larger than any of the other dairy breeds, and yield considerably more milk, as a rule, than any other breed, their milk testing, on the average, a somewhat lower percentage of fat than the Channel Island breeds. The first importation of cattle from Holland to the United States of which we have any definite knowledge, was made in 1861. The first volume of the American Holstein Herdbook was published in 1872. The Holstein-Friesian Association of America was the pioneer association in establishing a system of advanced registry, based on actual performance, under official test. It was established in 1885. The first volume of the Canadian Herdbook for the breed was published in 1892.

Ayrshires are so named from the County of Ayr, in Scotland, where the breed originated, and which is still its principal center, though the breed has spread into many other countries, and is now quite numerous in Canada and the United States. In color, they may be red of any shade, brown, or white, or a mixture of these, each color being distinctly defined. At one time dark colors prevailed in the breed, but in late years, in the majority of cases, white predominates, accompanied by red or brown markings, and the horns are comparatively long and upturned. In approved dairy form, shape and suspension of udder, and placing of teats, the Ayrshire cow, as a rule, comes as near the ideal as any, and is also a good feeder, has a strong constitution, and yields a large quantity of milk testing a fairly good percentage of fat. Ayrshires were brought into Canada by Scotch settlers early in the 19th century, and in recent years have been imported in larger numbers than of any other breed. The American Ayrshire Breeders' Association was established on its present basis in 1875. The Canadian Ayrshire Breeders' Association, on its present basis, was organized in 1898, although pedigree records of the breed, under Association supervision, have been kept since 1870.

Jerseys.—This excellent breed of dairy cattle originated in the Island of Jersey, which is a dependency of Great Britain. It is generally believed they are descended from the cattle of Brittany and Normandy, on the adjacent coast. There is no standard for color in the scale of points of the breed, which may include gray, fawn, yellow-fawn, silver-gray, or dark brown, either solid, or with white markings. It has been claimed that they have been bred with little or no admixture of alien blood for 500 years. Since 1789 the importation of other cattle into the Island has been strictly prohibited, except for slaughter. Improvement has been sought and attained along the lines of prolonged milk-giving and in milk rich in butter-fat, in which respects the breed excels, while, with these qualities, beauty and sound constitution have been combined. Importations to the United States date as far back as 1800, and to Canada in 1868. The American Jersey Cattle Club was organized in 1858, and its first volume of its herdbook have been published. Registration of Jerseys in Canada is conducted under the National Record System, on the same lines as that of the American Jersey Cattle Club. Jerseys are now very numerous in the United States, and are widely distributed in Canada.

Guernseys, so named from the Island of Guernsey, one of the Channel Island group, off the north-west coast of France, are, like the Jerseys, supposed to be descended from the cattle of Brittany and Normandy, and for many centuries have been bred without admixture of alien blood. They are, as a rule, somewhat larger than the Jerseys; in color of hair are generally light lemon, orange or yellow-fawn, with white, while the skin is generally of a rich orange color. They are less handsome, as a rule, than the Jerseys, and generally

have been found specially adapted to the conditions of soil, pasturage, and other conditions. Only about one-half the number of the British breeds have been introduced into America. Of these, three are recognized as long-wooled breeds, namely, the Leicester, Cotswold and Lincoln, and six medium-wooled, namely, the Southdown, Shropshire, Hampshire, Oxford, Suffolk and Dorset. The last named is the only horned breed in this list, and the medium-wooled are so called to distinguish them from the several varieties of Merinos, which are classed as fine-wooled. The limits of space require brief reference to principal characteristics of the breeds above named.

Leicesters.—The Leicester breed, so named from the county in England in which it originated, was formerly frequently spoken of as the Dishley breed, from the home of Robert Bakewell, the originator, who lived at Dishley Hall, in Leicestershire. Bakewell commenced the work of improvement of the breed about 1755. They were formerly large, coarse-boned, flat-sided, and slow feeders. Bakewell chose animals for breeding possessing in the highest degree available the qualities he sought to perpetuate, and rendered these permanent by continued selection and in-and-in-breeding. The leading qualities he sought were symmetry of form, early maturity, and reduction in the proportion of bone and offal; and he succeeded so well that, while at first he could only rent his rams for seventeen shillings and sixpence for the season, he later readily realized one hundred guineas (over five hundred dollars) each for the hire of some of his best rams. Crosses of Leicester blood were later used in the improvement of many of the other breeds in England and Scotland. There are now two types of Leicesters in Britain, namely, the Bakewell and the Border, the latter originated in and are mainly confined to Scotland, and separate prize lists are provided for the two classes at the Royal Show. The Border Leicesters are the more popular of the two in America, and are among the most numerous of the breeds kept in Canada. They are larger, more upstanding and more stylish than the English or Bakewell type, which are rather shorter-bodied and lower-set. Leicesters were first imported from England into Canada in 1800, by Rev. Mr. Toofy, of Quebec, and from Scotland about 1840. For a long time they were more numerous in this country than all other breeds combined, and they are still favorites with a large proportion of Canadian farmers, though other breeds have made great headway in the last twenty years in gaining favor in this country.

Cotswolds are a breed which originated in Gloucestershire, England, and were so named from the Cotswold Hills in that county, on which they were pastured. They are regarded by some writers as of great antiquity, and, before improvement, were large, tall, and rangy, producing heavy fleeces of coarse wool. Improvement is said to have been effected by the Leicester cross, and later by selection and good management. They are among the largest of the breeds of sheep, are very stylish in carriage and appearance, and shear heavy fleeces, which have been greatly improved in fineness of fibre in late years. Cotswolds were first imported into Canada in 1854, by George and William Miller, of Markham and Pickering, and are now widely distributed throughout America.

Lincolns originated in the lowlands of Lincolnshire, in England, and are now found over several of the neighboring counties. A century ago they were large, coarse, flat-sided, and ungainly, with heavy fleeces of oily wool. Improvement in symmetry and feeding qualities was effected by crosses of Leicester blood and improved methods of breeding and feeding. They are now, perhaps, the largest and heaviest of the breeds, shear very heavy fleeces of lustrous wool of fine and even fibre, and have grown in favor rapidly in recent years, being imported into many countries in considerable numbers, and largely into Australia and New Zealand, where they are very popular. They were first imported into the United States in 1836, and into Canada, probably, about 1850.

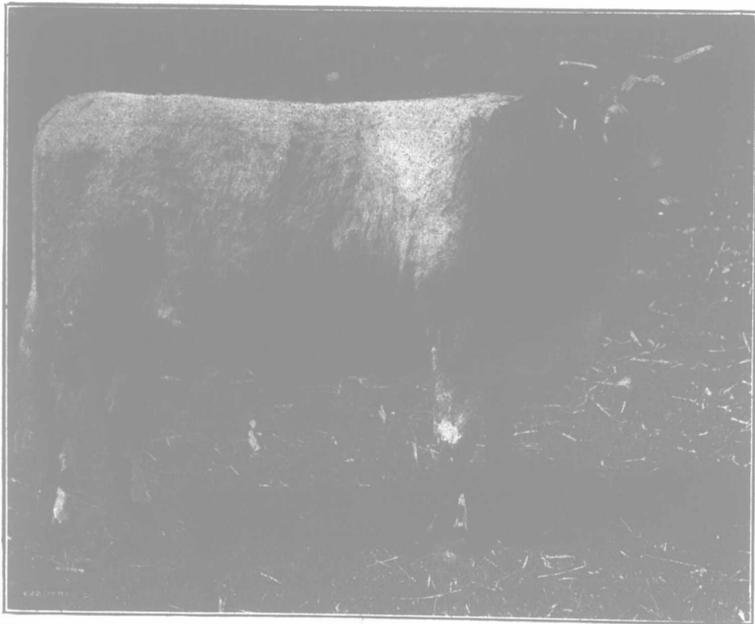


**Bourne Beauty.**

Yearling Yorkshire sow. First and champion, Royal Show, 1908.

carry less-evenly-balanced udders, but their milk is, on the average, fully as rich in butter-fat, and many of the cows show model-shaped udders and yield large quantities of milk. Guernseys are numerous in the Eastern States, but have not spread rapidly in Canada, though there are some good herds of the breed in Quebec, the Maritime Provinces and British Columbia.

Canadians.—The French-Canadian cattle are doubtless also descended from the cattle of Brittany and Normandy, as they strongly resemble the Jerseys in many respects, but are uniformly of dark color, from brown to black. The early settlers of Quebec came largely from the above-named provinces in France, and doubtless brought with them the stocks of cattle kept there. They were found in the new French colony as early as 1620. These early importations were the only source from which the Canadian cattle derived their characteristics, as no other cattle were introduced into Quebec Province prior to 1776. Subsequent



**Village Belle.**

Yearling Shorthorn heifer. First at Royal Show, 1908. Exhibited by W. T. Garne & Sons.

to that date, cattle of English origin were introduced to a limited extent, but their blood had not been extensively mingled with that of the French-Canadian cattle, many of which have been bred pure in the Province for 250 years. They are an excellent class of hardy dairy cattle, carrying large and evenly-balanced udders, as a rule, and giving large yields of rich milk. Registration was commenced in 1895 under the French-Canadian Cattle Breeders' Association, and is continued under the National Record System, with headquarters at Ottawa.

#### SHEEP.

A remarkable fact that in so comparatively small a country as Great Britain there are so many distinct breeds of sheep. Most of these are adapted to local districts, where they

Southdowns are so named from a long range of chalky hills extending through the Counties of Kent, Sussex, Hampshire and Dorsetshire, upon which this class of sheep originally pastured. They were formerly long, thin and narrow. Improvement was commenced by John Ellman, of Sussex, about 1780, and continued by Jonas Webb, Babraham, Cambridgeshire, who guarded well the constitutional qualities of the breed while improving its feeding qualities, and left it the ideal model of a mutton breed, the blood of which was later freely used in the evolution of most of the other Down breeds. And the breed yet holds its own in competition at leading fat-stock shows in Britain, America, and elsewhere. The modern Southdown has a lighter-colored face and legs than was the case many years ago, the prevailing color now being a uniform tint of brown or gray, or mouse color. In feeding and early-maturing propensities, and in quality of meat, the breed stands in the front rank. Southdowns were imported into America from England as early as 1803, and good flocks are found in many parts of Canada and the United States.

Shropshires.—The Shropshire Down sheep, originally composite in character, are descended from a breed formerly known as "Morfe Common," from an extensive tract in Shropshire, England, on which they were reared. Improvement was effected during the 19th century, largely through crossing and selection, and also through better care and food, the blood of the Southdown, Cotswold and Leicester being freely used in their evolution, many breeders working simultaneously, and not always on the same lines, the outcome finally being the nearest approach to the ideal Southdown of all the breeds in mutton qualities, while securing more size and a heavier fleece, of nearly equally fine wool. Shropshires were first recognized in the prize-list of the Royal Show in 1859. They have gained rapidly in popularity in the last 25 years, and are among the most widely-distributed and numerous of the breeds in America at present. The color of their face and legs is darker than the Southdown and less dark than the Hampshire and Suffolk breeds.

Oxfords.—The Oxford Downs originated in the County of Oxford, England, and are the result of crossing Cotswold rams upon Hampshire Down ewes, and, to some extent, upon Southdown ewes, and mating selected specimens of these cross-breeds, their dark face and legs being largely due to the Down parentage. These crosses cannot be traced beyond the year 1833, and it is thought no outside blood has been introduced since 1854. Foremost among the early improvers of the breed was Samuel Druce, of Eynsham, Oxon, who commenced the work of crossing in 1833. They were first recognized as a distinct breed at the Royal Show in 1862. They are the largest of the Down breeds, and shear heavier fleeces than any other of the medium-wool breeds, though not of as fine fibre as the wool of the other Down breeds. Oxford Downs were imported into the United States in 1853, and into Canada soon after that date, and since 1880 have been imported in comparatively large numbers, and have been widely distributed throughout the continent of America.

Hampshires.—The Hampshire Down breed originated in Hampshire, England, and is the outcome of a cross of the improved Southdown upon the old Wiltshire horned sheep and the Berkshire Knot. The old Wiltshires were the largest of the fine-wooled breeds of England. Improvement was effected by crossing, in some instances, Southdown rams on native ewes, but sometimes native rams on Southdown ewes. A careful selection followed, and after a time cross-bred rams of the progeny were used, and in this way a breed was formed retaining the size and hard-hood of the old native breed and the good feeding qualities of the Southdown; and in time a breed with dark face and legs, combining size and quality, was produced, which became very popular with English farmers, owing to their adaptation to being hurdled in large numbers upon turnips or other green crops, and also owing to the ewes being good milkers and producing lambs that grew large and sold readily at high prices when a few months old, while their flesh was full of lean meat, rather than of tallow, and their wool dense and of fine quality. Hampshire rams are in active demand, at high prices, for crossing upon grade ewes, for producing large, early-maturing lambs. Hampshires were imported into the United States and Canada about 1855. They have not been widely distributed on this continent, but have been sought after more largely in the last few years, and a considerable number have been imported, finding ready purchasers.

Suffolks.—The Suffolk Down sheep, whose central home is in the Counties of Suffolk, Norfolk, Cambridge and Essex, in England, are essentially the outcome of the crossing of Southdown rams upon ewes of the old Norfolk breed, whose bodies were long and robust, their fleece fine and silky, and the color of their face and legs a jet black. The improved Suffolks retain the black face and legs. They were first named Suffolks in 1859, when a class was provided for them at the Show held by the Suffolk Agricultural Society. They

strongly resemble the Hampshires in several respects, especially in color of head and legs, in quality of fleece, which is dense and fine, and in the quality of their flesh, which is firm, and largely of juicy, lean meat. They have been very successful in carrying off first and champion prizes at the Smithfield and other leading fat-stock shows in England in the carcass competitions. The first importation of Suffolks to Canada was made in 1888, by R. W. Sewell, Fredericton, N. B., and the first importation to the United States by M. B. Streeter, Brooklyn, N. Y., in the same year. There are now several flocks of the breed in Ontario, and they are gaining ground in the Western Provinces.

numbers in recent years, and are now widely distributed in America.

SWINE.

The chief of the British breeds of swine at present are the Berkshire, the Yorkshire, and the Tamworth. The principal of the breeds originated in America are the Chester White, the Poland-China, the Duroc-Jersey, and the Hampshire or Thin Rind breed.

Berkshires are one of the oldest of the improved breeds of swine, and are so named from the County of Berkshire, in England, in which they have been numerous bred, though the principal improvement of the breed was made in

Leicestershire and Staffordshire, and they are now widely distributed in Great Britain and many other countries. The original Berkshire was a large, coarse animal, of similar ancestry, probably, with the Tamworth, the color being tawny, white, or reddish brown, spotted with black. Improvement was commenced about 1820, Chinese or Neapolitan crosses, it is generally conceded, being used. They were first given a class at the Royal Show in 1862. Uniformity of color (black, with white points) and type was effected by careful selection and mating, and refining has been secured by judicious management. Berkshires were first imported

into America in 1832, and have become popular and widely distributed on this continent and in many countries for their good feeding and early-maturing qualities, quiet disposition and excellent quality of flesh, the lean and fat being well intermixed. They also hold their own well in the Old Country in fat-stock-show competitions. Yorkshires.—The improved Large Yorkshire of the present day is descended from the larger and coarser Yorkshire of former years, found mainly in the English county of that name. The improvement and refinement of the breed, commenced nearly a century ago, has been made by judicious

crossing with the white Leicester, the small Yorkshire, and other small white breeds, such as the Suffolk, and the improved or present-day Large White breed, as they are classed in England, have been brought to a type showing much refinement, and combining size and quality of flesh in a high degree; and they are largely in demand for the production of the most desirable quality of bacon. Large Yorkshires were imported into Canada as early as 1840, and in the last twenty years have been imported in large numbers, and widely distributed in this country.

Tamworths derive their name from Tamworth, in Staffordshire, where they have been numerous-ly bred for many years. They are thought to be one of the oldest and purest breeds in Great Britain, and, as long ago as the beginning of last century, were noted for the large proportion of lean meat they produced. Before improvement, they were long-legged, flat-ribbed and long-snouted, but were active, hardy, and good rustlers, though slow feeders and late in maturing. It does not appear that the blood of other breeds has been used to any appreciable extent in their improvement, which has been effected by judicious selection and mating of the fittest, and by good feeding and management. They are second in size



Lemster Plum.

Hereford heifer, two years old. First in class and female champion, Royal Show, 1908. Owner, A. E. Hughes.

Dorsets.—The Dorsets are an ancient breed, which, in large numbers, inherited the Midland Counties of England centuries ago, and their central home is in Dorsetshire and Somersetshire. Originally, there were two classes of this variety, one rather small and light of carcass, the other, the Somerset Dorsets, larger and more lank in form, with longer wool, and producing larger lambs. Improvement was effected by careful selection and blending of the two classes named, by judicious mating and better feeding, without drawing upon alien blood. Dorsets have white faces and legs, and both sexes are horned, the rams

having strong, spiral horns. They are of medium size, being considerably larger than Southdowns, have fine, dense fleeces, and an excellent quality of flesh. The ewes are very prolific, taking the ram at almost any season of the year, and often producing lambs twice a year. They are valuable for the production of early lambs, and, the ewes being good milkers and mothers, the lambs are ready for the market when the highest prices are available. Dorsets were first imported into Canada in 1885, by E. Stanford, an Englishman, then of Markham, Ont., and into the United States in 1887. They have been imported in considerable



Eurota.

Aberdeen-Angus heifer, three years old. First in class and champion, Royal Show, Newcastle, 1908.

ly bred for many years. They are thought to be one of the oldest and purest breeds in Great Britain, and, as long ago as the beginning of last century, were noted for the large proportion of lean meat they produced. Before improvement, they were long-legged, flat-ribbed and long-snouted, but were active, hardy, and good rustlers, though slow feeders and late in maturing. It does not appear that the blood of other breeds has been used to any appreciable extent in their improvement, which has been effected by judicious selection and mating of the fittest, and by good feeding and management. They are second in size

to the Yorkshires, are red or dark chestnut in color, have a longer and straighter snout, light jowls, a strong, slightly-arched back, strong legs and feet, without coarseness of bone, are prolific and hardy, and cross well with other breeds, their flesh being of excellent quality, and admirably filling the bill for export bacon. Tamworths have been imported into Canada in large numbers since 1888, and are now widely distributed in all the Provinces.

**Chester Whites.**—This breed originated in Chester County, Pennsylvania, from which they derive their name. They are a white breed, and probably the oldest of the breeds of purely American origin. The foundation stocks appear to have been large hogs, white in color, found in that part of Pennsylvania, probably descended from white pigs imported from Bedford, England. Formerly, Chester Whites were coarse in the head, bone and hair, and lacked smoothness of hair, but in the best specimens these coarse features have been eliminated, and they have been transformed into a smooth and symmetrical form, conforming fairly well to what is known as the bacon type. They have been well distributed in the Eastern, Middle and Western States, and a good many herds are found in Canada.

**Poland-Chinas.**—This breed of swine originated chiefly in Warren and Butler Counties, in Ohio. For many years various names were applied to it, but its present name was fixed in 1872. The foundation animals were the common stocks of the country, of mixed breeding, which were more or less crossed with the Byfield and the Big Chinas which existed in Warren County previous to 1820. The Berkshire cross, introduced in 1835, gave the black color, which has been intensified, until the majority of the breed are marked much like the Berkshires—black, with white points—whereas, formerly, the breed showed quite as much white as black, and they were less refined than at present; but they now possess early-maturing qualities in a high degree, and are well adapted to the conditions of the corn belt of the United States and for the production of the class of pork called for by the markets of that country. By selection of the fittest, and by pasturing on grass while young, the breed is susceptible of being transformed more nearly into the bacon type, and some Canadian breeders have effected considerable improvement in the breed in this respect. The Poland-China is probably the most widely-distributed and numerous of all the breeds in the United States.

**Duroc - Jerseys.**—The American Duroc-Jersey breed are the outcome of the union of two classes of swine, known respectively as the Durocs and the Jersey Reds, the former having been bred for many years in Saratoga County, N. Y., and the latter in New Jersey for the past 50 years. They are red in color, are about equal in size to the Poland-Chinas, and bear considerable resemblance to that breed in form; they mature early, are hardy, and have proved well adapted to sections where good rustling qualities are required. They are widely distributed in the United States, and are found in limited numbers in most of the Provinces of the Dominion.

**Hampshires.**—The Hampshire breed of swine, formerly known as the Thin Rind hog, is a composite breed, evolved from a union by crossing of the blood of several of the British and American breeds, principally in the Southern States. They are black, with a wide white belt encircling the body at the shoulders, and including the fore flank and fore legs. They are a medium-sized, smoothly-formed and refined class of hogs, with fine skin and hair, good feeders, with smoothly-fitting shoulders, and of medium length of body, and a good disposition, are prolific, and the sows good nurses. They are quite numerous in the United States, and rank well in carcass competitions at fat-stock shows. They are found in only limited numbers in Canada, but have gained ground and favor in the last few years.

**POINTERS FOR HOG FEEDERS.**

A three-hundred-pound hog at eight months of age, is the ambition of Prof. Dietrich, who is conducting an extensive series of experiments in economical hog-feeding at the Illinois Experiment Station. He has accomplished it in nine months, but is anxious to do it in eight. Of course, he is producing the fat hog, not the Wiltshire singer, but, all the same, the results are interesting. He finds that an all-corn ration is not good for growing pigs. Up to the age of six months, which is to say during the growing period, a ration containing considerable protein is advantageous; after that, corn may be used to produce fat. One of their most important findings, and one to which hog raisers the world over can not give too careful heed, is the danger of over-feeding. A hog can eat more than he can digest, and digest more than he can use.

**THE FARM.**

**FALL-WHEAT EXPERIMENTS AT THE O. A. C.**

Within the past year, experiments have been conducted at the Ontario Agricultural College with winter wheat, winter rye, winter barley, winter emmer, and hairy vetches, the seed of which was sown in the autumn of 1907.

About two hundred and sixty varieties of winter wheat have been grown at the College within the past nineteen years. All varieties are carefully tested for a period of five years, after which the inferior kinds are dropped, and the most promising sorts are continued in future tests. In 1908 sixty-five varieties were under experiment. Of this number, ten varieties have been grown for less than five years, and fifty-five varieties for five

The average results of the fifteen varieties are as follows: Weight per measured bushel, 62.8 lbs. for 1908, and 61 lbs. for the thirteen-year period; and yield of grain per acre, 31.9 bushels for 1908, and 47.7 bushels for the thirteen-year period. It will, therefore, be seen that, in the experiments at the College in 1908, the winter wheat gave a comparatively light yield of grain, but that the grain was of superior quality.

The Dawson's Golden Chaff stands the highest in average yield of grain per acre of the fifteen varieties tested in each of thirteen years. It produces a very stiff straw of medium length, beardless heads with red chaff, and white grain, somewhat soft, but about the standard in weight per measured bushel. The Imperial Amber produces a large amount of straw which is rather weak, a bearded head with red chaff, and a red grain of average quality. The Early Genesee Giant furnishes a straw of medium length and of fair strength; a short, compact, bearded head, and a grain which is sometimes classed as white and sometimes as amber. The straw of the Tasmania Red, Geneva, Tuscan Island, Turkey Red and Kentucky Giant is comparatively weak, but the grain is hard, and weighs well per measured bushel.

Fifty-five varieties of winter wheat, grown in 1908, have been under experiment for at least five years. In the five-years' test, the highest average yields of grain per acre have been produced by the Dawson's Golden Chaff (48.5 bush.) and seven other varieties, which resemble it very closely, and which yielded as follows: American Banner, 51 bushels; New American Banner, 50.9 bushels; Abundance, 50.6 bushels; Beardless Rural New Yorker No. 6, 50.4 bushels; Prize Taker, 47.7 bushels; Superlative, 47.1 bushels; and Fortyfold, 46.6 bushels. The highest average yields produced by varieties of other types in the five-years' experiment are as follows: Genesee Reliable, 45.7 bushels; Paramount, 44.7 bushels; Egyptian Amber, 44.5 bushels; and Imperial Amber, 44.3 bushels.

The heaviest weights of grain per measured bushel in the five-years' test have been produced by the Northwester, 62.3 pounds; Geneva, 62.1 pounds; Kentucky Giant, 62 pounds; Auburn, 61.9 pounds; and Genesee Reliable, 61.9 pounds.

Of the sixty-five varieties of winter wheat grown in 1908, the greatest yields of grain per acre were produced by the American Banner, 47.5 bushels; Beardless Rural New Yorker No. 6, 45.5 bushels; Dawson's Golden Chaff, 43.9 bushels; American Wonder, 42.8 bushels; Prize Taker, 39.5 bushels; and Genesee Reliable, 37.9 bushels. And the heaviest weights per measured bushel, by the Geneva, 64.4 pounds; Egyptian Amber, 64 pounds; Russian Amber, 64 pounds; Genesee Reliable, 63.9 pounds; Turkey Red, 63.9 pounds; and Banatka, 63.9 pounds.

In 1906 and 1907, fifty-seven varieties of winter wheat, grown in the Experimental Department, were tested for bread production in the Bakery Branch of the Chemical Department of the College. Those varieties of wheat which produced the largest loaves of bread from equal quantities of flour, in the average of two-years' experiments, are as follows: Crimean Red, Yaroslaf, Winter Red Fife, Banatka, Northwester, Turkey Red, McGarvin, Geneva, Rudy, and Tasmania Red. These varieties all possess red grain, and, with two exceptions, bearded heads.

From the various varieties of wheats tested at the College, it seems to be generally true that white wheats yield more grain per acre, possess stronger straw, weigh a little less per measured bushel, are slightly softer in the grain, produce a more popular pastry flour, and furnish a somewhat weaker flour for bread production than the red varieties.

A considerable amount of work has been done during the past few years with the object of improving some of the best varieties of winter wheat, by means of systematic selection and by cross-fertilization. It is interesting to note that



Lincoln Shearling Ram.

First and champion, Royal Show, 1908. Shown by S. E. Dean & Sons.

years or over. As each of the fifteen of the varieties has been grown for at least thirteen years, the average results of these are particularly interesting and valuable. The following table gives, for each of these fifteen varieties, the average weight per measured bushel for twelve years, the yield of grain per acre for 1908, and the average yield of both straw and grain per acre for the thirteen-year period.

VARIETY.	Color of Grain	Lbs. per Measured Bushel, 12 Years.	Yield Per Acre.		
			Bushels Grain, 1908.	Bushels Grain.	Tons Straw.
Dawson's Golden Chaff.	White	60.0	43.9	3.3	55.4
Imperial Amber	Red	60.9	32.1	3.6	51.2
Early Genesee Giant	White	60.1	31.1	3.3	50.4
Russian Amber	Red	61.2	30.6	3.5	49.8
Egyptian Amber	Red	61.5	30.9	3.5	49.4
Early Red Clawson	Red	59.2	29.8	3.1	49.3
Rudy	Red	61.1	37.6	2.9	47.1
Tasmania Red	Red	61.8	28.5	3.2	46.3
Geneva	Red	62.5	35.4	3.2	46.0
Tuscan Island	Red	61.0	32.1	3.1	45.7
Turkey Red	Red	61.5	35.4	2.9	45.5
Kentucky Giant	Red	61.4	35.3	3.0	45.1
Bulgarian	White	60.8	24.3	3.0	45.0
Treadwell	White	60.7	25.9	3.0	44.8
McPherson	Red	62.0	21.9	2.9	43.8



Shropshire Shearling Ewes.

First-prize pen, Royal Show, Newcastle, 1908. Shown by Sir Richard Cooper, Berkhamstead, England.

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one strain of Dawson's Golden Chaff gave an average of 4.7 bushels and another of 3.1 bushels per acre more than the highest average yield per acre of fifty-seven varieties grown in each of the past three years. It is also interesting to note that the wheats which gave the highest weights per measured bushel in 1908 were three selected strains of the Imperial Amber and one selected strain of the Bulgarian. In 1908, about twenty thousand hybrid plants of winter wheat were grown separately in the experimental grounds. Besides these, forty-two distinct plots of hybrids were under test. As these have not all been threshed, it is impossible to give the results at this early date. The object in this work is to originate new kinds which will combine the good qualities and eliminate the undesirable features of the parent varieties. Some of the hybrids obtained are very interesting, and give promise of good results.

In each of nine years experiments have been conducted in treating winter wheat in different ways to prevent the development of stinking smut, and the results have been very satisfactory. In the average of the past five years, untreated seed produced 4.2 per cent. of smutted heads, while seed which was immersed for twenty minutes in a solution made by adding one pint of formalin to forty-two gallons of water, produced a crop which was practically free from smut. In 1908, the crop produced on a plot one rod square, from untreated seed, contained over fourteen thousand smut balls, while that produced from similar seed which had been treated with formalin had no trace of smut.

In the Experimental Department, winter wheat which has been grown on clover sod has yielded much better than that which has been grown on timothy sod.

In the average of eight separate tests, land on which field peas were used as a green manure yielded 6.5 bushels of wheat per acre more than land on which buckwheat was used as a green manure.

The results of twelve separate tests made at the College show an average increase in yield of grain per acre of 6.8 bush. from large, as compared with small seed; of 7.8 bushels from plump, as compared with shrunken seed; and of 35.6 bush. from sound, as compared with broken seed. Seed which was allowed to become thoroughly ripened before it was cut, produced a greater yield of both grain and straw and a heavier weight of grain per measured bushel than that produced from wheat which was cut at any one of four earlier stages of maturity.

**FLAX : A CROP, AND AN INDUSTRY.**

Seeing how many years flax has been grown in Canada, and how important are the uses of flax products everywhere, it is really surprising how little is known either of the flax crop itself or of its manufacture into dress goods and wrapping twines, towels and shoemakers' threads, cambrics and sail-cloths, fine lace and fish nets—all so universally used. And, Ontario, being especially adapted to the flax crop, should be particularly interested in it.

**A FEW FACTS.**

Flax was the earliest-used material for making fabrics. Fine linens were made 4,000 years B. C. Flax has been continuously grown and manufactured in Canada since 1681.

In 1842 our grandparents grew, retted, scutched, heckled, spun and wove at home nearly 260,000 yards of linens, all by hand. But in 1891 only 5,400 yards were made in this way. The rest of the enormously-increased demand for linens was supplied to us by Ireland and other countries.

At the same time, the flax fibre from about 10,000 acres grown on Ontario farms was exported to the United States, there to be made into coarse twines, etc. This year, about 5,000 acres of flax will follow the same road.

Twenty or thirty years ago, if you were living almost anywhere in Western Ontario, you will have seen flax growing, and probably will have seen a flax mill.

You may see the same crop, and the same old machinery in the same, only older-looking, buildings, to-day; but only in a few counties in Western Ontario—from Mitchell to Stratford, west, and in a string from Hensall around the shoreline, south into Essex County. These, with three or four in Waterloo County, make a total of some two dozen mills in Ontario, now running.

Ontario flax straw is as good—or could be made as good—as any in the world. Yet, the fibre which is taken from it at these mills is only just better than the poorest and cheapest in the world—that grown in Russia. It is not wanted at any price, except at the twine mills of the United States, and, as these mills are combined in a trust, they naturally make their own price for our fibre.

Why don't the mills of Ontario make better fibre and get better prices? They don't know how; and there are a few other reasons: improvements would be expensive, and, perhaps, might, after all, be useless. The flax mill makes a fairly

good profit as things are, and the farmer gets about double the rental income from flax that he could get from other sources. So, we let well enough alone.

**THE FLAX CROP.**

The flax plant is unlike the grass or leguminous plants common on our farms. It consists of a straight, round, hollow, woody stem, covered by a ribbon of fibres running from the ground to the seed-boll at the top. The leaves have no stems, but grow loosely on the stem itself. The seed is contained in a spherical case at the top of the stem.

The fibres of the "bark," which are very fine and long, are united to each other and to the stem by insoluble gums, which have to be dissolved before the fibres can be spun. This dissolving is done by fermentation, and is the work of certain special bacteria which work only in water, and after the plant is dead.

These handfuls of fibre are then twisted and baled together, and sent to the spinning mills.

At the spinning mills, these handfuls are combed out—in the United States, by hand; in Irish mills, by machinery—being further cleaned, broken into finer fibres, and graded into lengths. The fibres are then drawn into a continuous, even, loose strand, called "sliver," which is "rove" into a loose yarn; and this is then tightly spun into the yarn which is to be used for making twine or linen, or other cloth. This is the brief story of the flax fibre.

**THE SEED.**

Most farmers know something of flaxseed, as to its appearance and use as a part of the feeding ration for farm animals. As, however, it is by far the most concentrated food, both as to protein and as to carbohydrate percentage; and as it is also, strangely enough, cooling and healthful in its effects, it is worth a further word or two.

Flaxseed gives a relatively low yield, averaging around 10 bushels, or 550 lbs., per acre. The acreage of flax—world's growth—is relatively small; and, as its value, especially in Great Britain, is highly appreciated by all feeders, the price of flaxseed is comparatively high. Nevertheless, it will be found always a profitable thing to buy and feed, if used intelligently.

**LINSEED OIL AND OIL-CAKE MEAL.**

Flaxseed contains a high percentage of oil—linseed oil, as we know it. This is used for a large number of purposes, as for paints, varnishes, etc., and also for medical purposes. The oil is pressed out of the ground seed, at large oil mills, of which Ontario has several, operating under a sort of trust. The residue, after the oil is extracted, is called oil cake, which is used as a feed for animals, especially sheep, either pure, or as an adulteration, in the natural ground linseed meal.

**LINSEED MEAL.**

The ground flaxseed, or linseed meal, is the richest and best grain ration known, though it should be used with other grains to get the best results. When obtained pure—which is difficult, as a rule—the feeder can follow definite rules of mixture with other grains for feeding each class of stock, with highly satisfactory results. But when, as is not uncommon, the linseed meal is adulterated with uncertain proportions of less-useful feed and impurities, as shorts, cottonseed meal, oil cake, millet seed, or common weed seed and dirt, then the farmer, besides losing the value of the foodstuff itself, is likely to give up the use of linseed meal altogether. Pure linseed meal can be fed in Ontario, at a good profit, when bought at \$3.75 per 100 pounds. Adulterated meal is dear at \$2.50, even if not extremely bad.

Linseed meal, fed a handful each night to horses, will recommend itself. For dairy cows, especially in stable, with or without ensilage or roots, linseed meal may be fed to advantage up to four pounds per day, though a less quantity, say, 1½ to 2 pounds, is usually recommended, being safer for unpracticed feeders. For wintering beef cattle or breeding animals, it is invaluable, and it can be mixed with the grain chops, using up to one or two pounds per day. For finishing



**A Field of Ontario Flax in Stock.**

Flax for fiber is pulled and bound by hand. When grown for seed alone, it may be harvested with the binder.

**RETTING.**

Hence the need of "retting" the straw to get out the fibre. This is done in various ways.

In Ontario, retting, or "retting," as it is called, is done by spreading the flax straw, after threshing, on a meadow, where dew and rain provide the necessary soft water. The defects of this system are: First, the uncertainty of a proper amount of water, and the "burning" of the flax fibre by the sun, which causes weakness, harshness, loss of weight, and bad color, in proportion to the time of exposure to the sun's rays. In Ireland, Holland, and parts of Russia, the flax straw is immersed in standing pools or "bogs," covered over with straw, etc. In Belgium, the flax is put in crates which are sunk in the River Lys, the water slowly percolating through the mass of straw. The Irish system makes dark, greenish-gray or "blue" fibre; the Belgian fibre is a light creamy color—a difference due to discoloration of the Irish fibre by the decomposed gums, which are not washed off and away during retting, as in Belgium.

**SCUTCHING.**

After the flax is retted, it is stored for scutching. This operation is carried on in a factory in winter, and consists of crushing the now brittle, woody stems, loosening the fibres in the ribbons of bark, and then "combing" or scraping off the fragments of wood (called "shivs") from the still long and tough fibres. The work is done by, first, running the straw through fluted rollers; second, holding handfuls of the crushed straw to revolving blades on a wheel, so that the blades scrape and beat the "shivs" out of the fibre.



**Typical Ontario Flax Mill.**

Purchased by the Standard Flax Co., from Hector Gunn, one of the pioneer flax men, Parkhill, Middlesex Co., Ont. Has been running since 1876.

beef in stable, even as much as seven pounds, may be used per day. For calves, its value is well known. For mares or cows, before and after giving birth, it is highly valuable, though care must be exercised. The meal has a double effect: First, as a cooling food; second, in giving health to the membranes, facilitating birth, and lessening danger of after-troubles. Caution is necessary in avoiding overfeeding of the meal, which might cause abortion. Above all, be it remembered, it is both a condition-powder in itself, and a food of the highest profit.

FLAX AS A CROP.

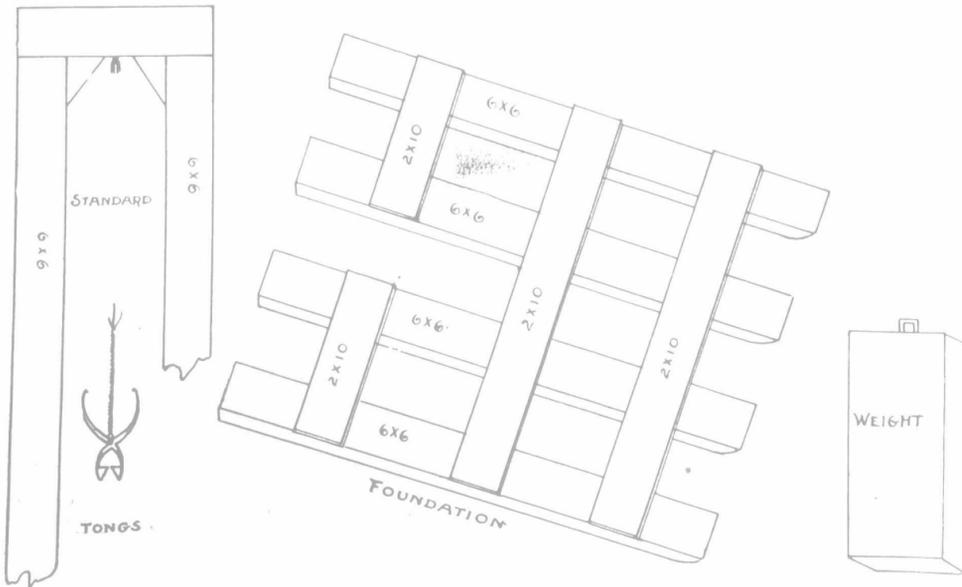
Now, as to the question of the value of flax as a crop on the land. It has often been said that flax is hard on the land. But flax takes less plant food out of the soil than any other crop except legumes. The trouble is that flax straw does not return to the soil as manure. But, with the higher rental obtained for flax, fertilizer can be bought—though, in fact, they are never found needed—and the difficulty overcome. Farmers in flax districts value flax as a crop in rotation, to be sown following sod, for two reasons: One, that it gives them a safe return, where oats would be likely to go too much to straw; the other, that flax is death to the wireworm, which is yearly becoming a more serious foe to all crops. Further, it may be said that a flax crop gives the farmer no anxiety after seeding, as the harvesting is done by the flaxmill, leaving the farmer to attend to his other crops, which, in the present scarcity of labor, is a considerable relief. After flax, wheat will give a better yield than after any other grain crop—a fact proven wherever the practice has been tried.

In conclusion, it may be said that flax has its place—and an important one—in the rotation of crops, and especially is bound to be used in all pasturing districts in increasing degree, provided the mills are installed to give the opportunity. The flax industry further provides winter employment for many men otherwise lost to the district, and brings in and spends, on rentals and labor, much money that would not otherwise find its way to the community. A. L. MCCREDIE.

A POST DRIVER.

Editor "The Farmer's Advocate":

Seeing an inquiry about a post driver, I submit the accompanying rough plan of a driver that was in use in our neighborhood some years ago. The bottom is made of four pieces, 6 x 6, and 12 feet long, with cross-pieces of plank 8 or 10 inches wide and 12 feet long, bolted on. It can be a little narrower, if necessary, to pass through gates. The uprights are 6 x 6, and 20 feet long; they are fastened to bottom behind the middle cross-piece, to the two center skids, and braced on all sides a little better than half way up. In the machine I saw, a heavy wooden block was used. It was probably 4 feet long, 16 inches square, with four iron pins driven on the sides to keep it between the uprights, and a square-topped staple driven in the top for the tongs to grip. Two level pieces nailed in the top of standard will set the weight free by closing the handles of the tongs. Any blacksmith can make the tongs. Attach rope to tongs by eye in the center, and run over pulley in top standard, and down to pulley at heel of standard. If desired, an iron weight, with grooves in sides, could be had at the foundry, any weight required. If iron weight is used, spike a piece 2 inches wide on insides of standard to fit the groove in hammer. There is a



A Post Driver Illustrated by Diagrams.

gap in the rear plank between the middle skids, so as to leave room for post when moving ahead. Make frame of some good hard wood.

Perth Co., Ont. WILL M. TURNBULL.

ALFALFA INOCULATION IN ALBERTA.

The accompanying illustration represents the difference in growth of inoculated and uninoculated alfalfa, grown at the Experimental Farm at Lacombe, Alta. The seed was sown on rather low-lying land in June, 1906. Soil from Leth-



Alberta Alfalfa.

Live-stock judge McRae, holding sample plants of alfalfa grown on inoculated and uninoculated soil at Lacombe, Alta.

bridge, where alfalfa had been successfully grown, was used at the rate of about 100 pounds per acre to inoculate the soil on three-quarters of the acre; one-quarter was left without treatment. The plants in the illustration were dug within four feet, and represent the average difference as a result of inoculation. The first cutting was made some weeks ago, and gave, on the inoculated area,

at the rate of 4,160 pounds of hay, cured sufficiently to haul, while the uninoculated yielded at the rate of 1,960 pounds per acre. Small lots of soil will be distributed for inoculation purposes next year to Alberta farmers wishing to use this means of inoculating their soil for alfalfa.

WINTER WHEAT FOR SOUTHERN ALBERTA.

The success of the winter-wheat crop in Southern Alberta this year is such as to indicate that it will become a staple in that part of the Province. The area over which the crop has been tested is quite large, and the yields coming from the thresher are reported as uniformly satisfactory. The climate of Southern Alberta seems to be such that wheat which has a good stand in the early spring, when cold, dry winds are liable to prevail, is in a better condition than spring-sown grain to go on and give a favorable account of itself at harvest. Early seeding is advised, August being considered the best month.

THE DAIRY.

CASH FOR APPLIED BRAIN-POWER.

GROWTH OF THE COW-TESTING ASSOCIATIONS.

By Chas. F. Whitley.

In 1904 some preliminary work was undertaken in a small area in three counties in Quebec, to gauge the attitude of dairy farmers towards cow-census work, and to gather data for driving home some forceful comparisons. Over 70 farmers were induced to commence weighing and sampling the milk of each cow in their herds systematically; in July of that year over 1,100 samples of milk were tested at Cowansville.

The next year saw a change in methods, and seven localities—4 in Ontario, 2 in Quebec, and 1 in Prince Edward Island—were selected for one thirty-day test. This was done with a view of arousing a more widespread interest in the movement. Over 1,350 cows were recorded.

In January, 1906, the first cow-testing association was duly organized on a co-operative basis at Cowansville, Que. Sixteen associations altogether were in operation that year, with over 4,000 cows entered to be tested. Some remarkable contrasts were noted during the year. For instance, all the patrons of one small cheese factory were not able to make a better showing than an average return of \$28.60 per cow for the full twelve months; but not far away was a herd of 28 cows that averaged 6,900 lbs. milk, testing 8.9, worth at least \$70.00 per cow, for the year. However, it is not average results that are looked for: the prime object of association work is to induce a study of each individual cow in the herd? Why? Because there are such startling variations between the capacity or production of cows in the same herd, even of the same breed, under exactly parallel conditions, that only cold, hard figuring will enable one to detect those that give a handsome margin of profit. Economical milk production is the target for every dairy farmer's aim. Many cows—too many—have not and never can possess that most desirable quality and power. They have no definite breeding or present intelligent handling to support them in the undertaking, hence they must be discarded. Only the scales and the test supply the necessary information to commence selection.

The year 1907 saw a marked growth, for 58 associations were running, with 876 members, and over 41,000 tests made by officials from Ottawa of the branch of the Dairy and Cold-storage Commissioner. Many surprises were found in scores of herds; cows that had been booked for the butcher proved themselves by the test to be the heaviest producers, while in many cases those thought to be the best had to take sixth or seventh place. Cows valued at low current prices are now held at \$100, and some far higher, because the records prove their value. In many herds it has been shown that one cow has earned \$20, and even \$25, more than another in only seven months. Other herds show that in some cases one cow is almost three times as valuable as the one in the adjoining stall. Keeping better cows is thus real labor-saving. Interest in the herd increases as month by month the records grow, and show to the shrewd owner, the enquiring children, the hitherto indifferent hired man, or the watchful women of the household, just what each cow can do when rightly cared for.

The present year of grace, 1908, stands full promise. Joining with the older members in Prince Edward Island, Ontario and Quebec, the farmers in British Columbia and New Brunswick have taken up the matter heartily, so that there are now over 80 associations organized. Its importance once thoroughly grasped by the dairymen of the Dominion, the movement is bound to spread rapidly. The cost is trifling; the possible results enormous. Thirty million dollars seems a large sum, but this could easily be an additional revenue to Canadian dairy farmers from the present number of cows if the information gained from these testing associations were put into immediate use. Join the procession!

The farmer who is not able to join a cow-testing association, or to have samples of his milk tested for fat, need not be deterred from keeping a record of weight of milk only, for the information such a record will give him will be found very useful in determining the relative value of the cows.

**OFFICIAL TESTING OF PURE-BRED COWS.**

In 1906 the Dominion Minister of Agriculture, Hon. Sydney Fisher, caused to be instituted, under the supervision of the Live-stock Branch of his Department, a system of yearly testing for milk and butter-fat production of registered cows in pure-bred herds, with a view to the improvement of the average productive capacity of the dairy cows of the country, through the use of sires bred from dams qualifying for Records of Performance provided for under this system, and by the weeding out of inferior cows. The dairy breed societies were invited, and several have agreed to publish these records for their respective breeds in an appendix to their herdbooks, accepting the rules and conditions prescribed, and fixing a standard for each of their respective breeds, the Department assuming the expense of the supervising inspectors appointed by the Minister to make unannounced quarterly visits of two days' duration to the herds, verifying the private records kept by weighing and taking samples for testing by the Babcock method of the milk of the cows entered for the test, taking also a record of two previous days' milk for comparison.

The classification of cows is in four sections, namely, for cows two to three, three to four, four to five, and five years old or over. Applications for official supervision of the test must be made to the secretary of the Canadian society for the breed to which animals belong. The owner of a cow entered in the test is required to weigh each milking and keep a correct record of the same on forms furnished for the purpose. At the end of each month the owner is required to report, on forms furnished for the purpose, a record of the weights of each milking, with the total yield of milk from each cow for the month, and at the end of the year a compiled report of the year's milk record, taken from the monthly reports sworn to before a notary public or justice of the peace. Each breed society fixes its own minimum standard of milk and butter-fat production required to render animals of the various age classifications eligible to have their names and records published in the Record of Performance. Some societies have adopted higher standards than others, although this in itself does not signify anything beyond the ambition of the society. In our opinion, a medium standard is desirable, so as to admit all cows of genuine merit. Those which make exceptionally good records in the official test have these standing to their credit.

In case of Ayrshires, the minimum year's production to qualify for the record is, for two-year-old heifers, 5,500 pounds of milk, and of butter-fat 198 pounds. And for each day the animal is over two years old at the beginning of her year's test, the amount of milk she will be required to produce in one year is determined by adding 2.75 pounds per day to the 5,500 pounds required for an even two-year-old; while the amount of butter-fat increases at the rate of one-tenth pound for each day over two years. This ratio is applicable until the animal is five years old, when the required amount of milk will be 8,500 pounds, and of butter-fat 306 pounds, which are the minimum amounts of milk and butter-fat required of all Ayrshire cows five years old or over. For Jerseys the milk standard is the same as for Ayrshires, but the requirements as to butter-fat production are 10 per cent. higher. The standard adopted by the Holstein-Friesian breeders calls for a minimum of 2,000 pounds more milk than demanded by the Ayrshire and Jersey breeders, and a little more fat than the Jersey minimum requires.

The Guernsey standard specifies in each class 500 pounds less milk than the Ayrshire standard, but from 2 to 14 pounds more butter-fat. The French-Canadian breeders will record the performance of a two-year-old heifer if she yields 4,400 pounds of milk and 198 pounds of butter-fat, while from a mature cow they demand 6,800 pounds of milk and 306 pounds of fat, from which it will be noticed that their fat standard is the same as for Ayrshires, although their milk minimum is considerably lower.

After a cow has finished her milking period and calved again, the owner of the cow makes an affidavit that the records of milk sent by him to the office are correct. The butter-fat is computed from the inspector's reports and tests. The fat reading of each report covers a period extending half-way back to the previous report and half-way on to the next report. Report of the cow's production and date she dropped her calf, number of days in milk, average percentage of fat, etc., signed by the Live-stock Commissioner, is sent in duplicate to the secretary of the association; one of these reports is to go to the owner of the cow, and belongs to the cow, the same as a certificate of registration; the other is for the secretary's use. That completes the work of the Department with that cow for that year. But she may be tested each consecutive year if the owner wishes; in fact, consecutive testing is advised, because a cow that can qualify and make a fair record for more than one year should be considered a better cow than one which does only one year's work. The inspectors are now making more frequent

visits than the quarterly ones originally provided for, and expect, in the near future, to make one a month. In case "stuffing" of milk records is suspected, more frequent visits will be made, and if the inspectors are satisfied the weights given by the owner are not correct, no more testing will be done for that party; and what that would mean to a breeder is readily understood.

In order to insure that the records published shall be made by regular-breeding cows in an ordinary lactation period, there is a rule, as follows:

"In the four-year-old class and the mature class no cow will be accepted for entry if the beginning of her previous lactation period was more than fifteen months before the commencement of the test. Every cow under test must drop a calf within fifteen months after the beginning of her testing period in order to qualify for registration of performance. No milk from a second freshening within 365 days will be considered in a test."



Mr. G. W. Clemons.

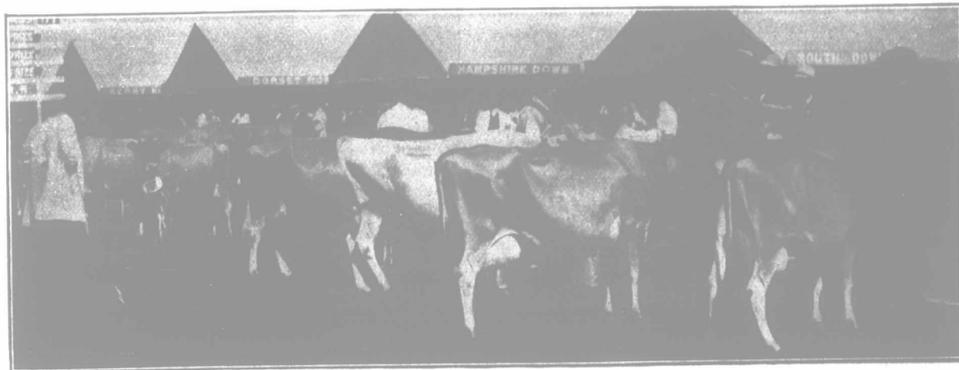
About 25 cows that would have qualified had they dropped their calves in time, are now out of it for two years. Some breeders, desirous of making big records, went too near the danger point, and missed all.

Mr. Dan Drummond, an experienced dairyman, of Quebec, was the first inspector of this work appointed, but as applications increased, and the desirability of making more frequent inspection of cows was recognized, assistance was found necessary, and Mr. G. W. Clemons, of St. George, Ont., was appointed; while the probability is that an additional inspector will be required in the near future to keep up with the work.

Below are the number of applications to July 1st, 1908. It will be noticed that the list embraces representatives of but three breeds—Ayrshires, Holsteins, and one French-Canadian. It is to be hoped that owners of the other breeds will take hold of the work in future with equal interest. We might add that the Holstein breeders have, in addition, a well-established Record of Merit, based on official weekly tests, in which a goodly number of their cows are entered. This Record of Merit is entirely independent of the Dominion Department of Agriculture.

Applications .....	345
Qualified .....	41
Failed in breeding (qualified otherwise) .....	25
Still running .....	142
Withdrawn or failed .....	137

Following is the report of all cows qualified to date:



Judging Jerseys at the Royal Show, Newcastle

**MATURE CLASS.**  
Ayrshire—Five years and over.

Name.	Reg. No.	Owner.	Milk.	Lbs. Aver.	Lbs. Fat.	Days.
Lady Stewart 11055—						
A. Hume, Menie, Ont.....	9,015½		3.83	344.65	322	
Almeda of Danville 15282—						
G. Langelier, Cap Rouge, Que. ....	11,857		3.6	409.95	365	
Mitile 11539—						
G. Langelier, Cap Rouge, Que. ....	10,203		3.67	375.36	365	
Lady Isabel 7467—						
J. N. Greenshields, Danville, Que. ....	8,884		3.76	332.60	344	
Miss Sandilands 8934—						
J. N. Greenshields, Danville, Que. ....	8,579½		3.76	312.57	345	
Bargenock Heather Bell 21366—						
R. R. Ness, Howick, Que. ....	8,549		3.68	314.92	332	
Nellie Burns of Burnside 13317—						
R. R. Ness, Howick, Que. ....	8,722½		3.66	320.5	275	

Matchless Beauty of Netherlea 19601—						
G. Langelier, Cap Rouge, Que. ....	8,845		3.65	322.4	365	
Daisy of Carleton 11540—						
J. N. Greenshields, Danville, Que. ....	12,297		3.15	336.4	365	
Lady Pearl of Burnside 13467—						
R. R. Ness, Howick, Que. ....	9,226½		3.56	328.8	287	
Chapelton Swaney 3rd 65380—						
H. Gordon, Howick, Que. ....	8,599½		4.26	366.9	355	
Daisy Queen 9705—						
E. Cohoon, Harrietsville, Que. ....	13,153.3		3.83	485.4	365	
Trixy 9707—						
E. Cohoon, Harrietsville, Que. ....	11,222.4		3.97	446.2	365	
Winona of Brookhill 7479—						
J. N. Greenshields, Danville, Que. ....	9,843		3.77	371.1	365	
*14 cows—Average lbs. milk, 9,894.25; per cent. of fat, 3.73.						

**THREE-YEAR-OLD CLASS.**  
Ayrshire.

Name.	Reg. No.	Owner.	Milk.	Lbs. Aver.	Lbs. Fat.	Days.
Norena 19391—						
W. D. Parker, Hatley, Que. ....	7,144½		3.9½	282	350	
Jubilee of Hickory Hill 23480—						
N. Dymont, Clappison, Ont. ....	7,343		4.38	320	268	
Rosalie of Hickory Hill 23482—						
N. Dymont, Clappison, Ont. ....	7,935.7		4.41	350	365	
Primrose of Hickory Hill 15333—						
N. Dymont, Clappison, Ont. ....	8,556.4		4.41	378	355	
*Four three-year-olds—Average lbs. milk, 7,747.4; average per cent. of fat, 4.28.						

TWO-YEAR-OLD CLASS.  
Ayrshire.

Name.	Reg. No.	Owner.	Lbs. Milk.	Aver. age.	Lbs. Fat.	Days.
Lady Clara 4th of Burnside, 22298—						
R. R. Ness, Howick, Que.	7,959½		3.87	309.3	294	
Barcheskie Lucky Girl 21863—						
R. R. Ness, Howick, Que.	8,710½		4.00	350.	318	
Monkland Dorothy 21370—						
R. R. Ness, Howick, Que.	6,046		4.07	245.3	292	
Finlayson Rose 21369—						
R. R. Ness, Howick, Que.	7,136		3.98	285.75	335	
Susie of Hickory Hill 22336—						
N. Dymont, Clappison, Ont.	6,410		4.71	302	365	
Isaleigh Nancy 1st 20525—						
J. N. Greenshields, Danville, Que.	7,439		3.71	276.1	350	
Sunnymead Princess 19360—						
W. D. Parker, Hatley, Q.	6,748		4.37	295	365	
Minnie of Elm Shade 18883—						
H. Gordon, Howick, Que.	7,533½		3.76	283	280	
Barcheskie Sybil 25236—						
H. Gordon, Howick, Que.	6,080		4.45	270.9	296	
Stadacona Lilly 19257—						
G. Langelier, Cap Rouge, Que.	6,228		3.79	236.2	300	
Adalia 2nd 22949—						
E. Cohoon, Harrietsville, Que.	9,924		3.7	265.8	365	
Annie of Warkworth 21493—						
A. Hume, Menie, Ont.	6,689.25		4.25	284.5	365	
Daisy Queen 2nd 22950—						
E. Cohoon, Harrietsville, Que.	6,644.65		3.76	250.18	345	
Isaleigh Clariballa 2nd 23712—						
J. N. Greenshields, Danville, Que.	8,454.75		3.8	322.5	365	
Lady Brant of Neidpath 21463—						
W. W. Ballantyne, Stratford, Ont.	6,631		4.60	304.	319	
Stadacona Silver Queen 20043—						
G. A. Langelier, Cap Rouge, Que.	6,373		4.76	303.3	340	
*Average for 16 two-year-olds—7,188.5 lbs. milk; 4.1 per cent. fat.						

FIVE YEARS AND OVER.  
Holstein Cows.

Name.	Reg. No.	Owner.	Lbs. Milk.	Aver. age.	Lbs. Fat.	Days.
Madam Dot 3rd's Princess						
Pauline De Kol 3708—						
N. Sangster, Ormstown, Que.	11,518.7		3.80	438.5	303	
Maggie Dorliska 7259—						
G. H. Caughell, Middlemarch, Ont.	11,644.5		3.42	398.2	350	
Dorliska Willis 4617—						
G. H. Caughell, Middlemarch, Ont.	11,014.25		3.60	396.8	325	
HOLSTEIN, FOUR YEARS OLD.						
Rhoda's Queen 4832—						
N. Sangster, Ormstown, Que.	12,597.9		3.35	422.8	270	
HOLSTEIN, TWO YEARS OLD.						
Verona 6419—						
N. Sangster, Ormstown, Que.	8,788.2		3.34	295	319	
Dorothy Dorliska 5285—						
G. H. Caughell, Middlemarch, Ont.	9,407.5		3.57	336	327	
FRENCH-CANADIAN, FIVE YEARS AND OVER.						
Fancy 6252—						
F. B. Macaulay, Hudson Heights, Que.	7,425.75		4.30	319	334	

REJECT THE FIRST FEW STREAMS OF MILK.

Some recent English investigations, carried out on behalf of some of the County and Borough Councils in Yorkshire, demonstrated that the first milk drawn from each cow contained an enormously greater number of germs than either the mid-milk or the strippings. The first or fore milk represented the first 25 cubic centimeters drawn from the teat, the mid-milk being taken when the milking was half accomplished.

The numbers were quite variable, but the results largely confirmed those of other investigators, one of whom found 97,000 bacteria in the first milk, as compared with about 9,000 in the mid-milk, and 500 in the strippings. It seems that the bacteria clustered in colonies about the end of the teat are largely washed away by the first few streams of milk drawn from the quarter. The practical lesson is, of course, to reject the first two or three streams of milk from each teat, not even allowing it to come in contact with the inside of the pail. As the fore-milk is very thin and watery, practically no butter-fat is lost, while the bacterial content of the mess of milk will be very much reduced, and its wholesomeness and keeping qualities accordingly improved.

Two farmers, living near Aylmer, Ont., Joseph James and Beni James, were fined \$25 and costs by Magistrate Bradley, of Aylmer, for sending deteriorated milk to Springfield cheese factory.

TO KEEP COWS CLEAN.

A dairyman from Leeds Co., Ont., describes to "The Farmer's Advocate" a simple device for keeping cows clean, which he has used in his own stable successfully for many years. It consists of a horizontal straightedge across the center of the cows' backs, just high enough to be nicely clear of the top-line as they stand in the row. The straightedge is attached with pins to the lower end of upright scantling suspended from the joists above, and, by shifting the pins higher or lower,

always be practicable, as some stables are arranged with the platform longer at one end than at the other, the cows being graded according to size, and the biggest cows are not always the boss ones. Before milking, some fresh straw thrown across the gutter makes it nice and pleasant for both women and men to milk.

A NOTED BRAND OF CREAMERY BUTTER.

Those who follow our market page will have occasionally noticed special mention of the Locust Hill brand of creamery butter, which is said to be the best brand coming on the market for eight or ten years past, enjoying that reputation all through the City of Toronto, and insuring the maker from one to two cents per pound more than other creamery, and a demand always in excess of the supply.

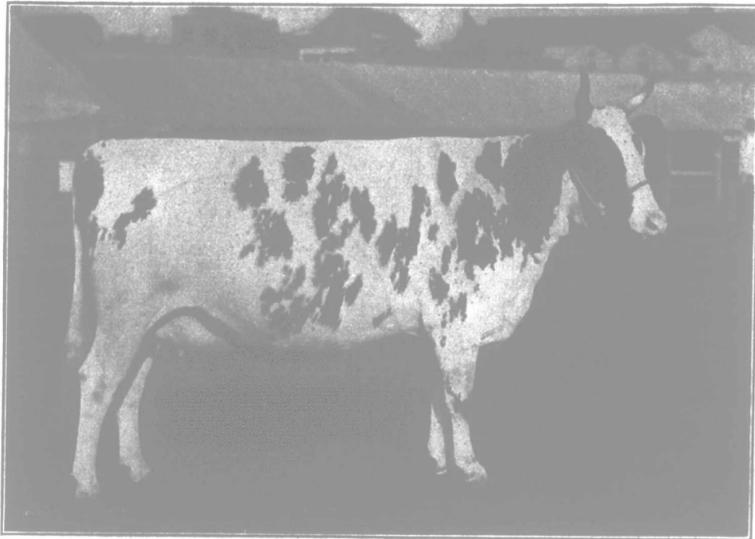
The creamery where this butter is manufactured is situated at Locust Hill, York Co., Ontario, and is operated by a private company, who run it on the same lines as a co-operative association. The president is F. E. Reesor, and the manager A. C. Reesor. The building stands on a side-hill, being so situated that the patrons can deliver either milk or cream into the weigh cans from their wagons. Its size is about 25 x 70 feet.

Equipment consists of one milk vat, two cream vats, 300 gallons each; a turbine separator of 3,500 pounds capacity; a pasteurizer and a cooler, each 3,500 pounds capacity; combined churn and worker, 20-horse-power boiler, and 8-horse-power engine. The annual output is about 145,000 pounds butter. The raw material is principally sweet cream, delivered by the patrons themselves, though milk is also received from about twenty patrons and separated at the creamery. The cream is delivered as often as necessary, so that when it reaches the creamery it is sweet and of good flavor. Some patrons deliver twice a week, some three times, and some daily or every other day.

The water supply is drawn from an artesian well, 192 ft. deep, which supplies all the water required for cooling the cream and washing the butter; it is always at a temperature of 48 degrees. The water for the boiler is obtained from the Rouge River, which runs within 100 ft. of the building.

The method of manufacture is, briefly, as follows: The cream, received sweet, and of good flavor, is immediately pasteurized, and cooled to a temperature of about 63 degrees, when it is ripened by adding a commercial culture, and cooled to churning temperature, which is about 56 degrees F. The butter is washed twice at 52 degrees F., and salted one ounce to the pound. They use no preservative. The butter is shipped daily to Toronto, to a commission firm, who look after the selling.

Farmers who read, study and reason on their work are easily recognized. There is a quality and wisdom of utterance and a bearing towards other men that is instinctively seen and recognized. Howard's Dairyman



Auchentorlie Bloomer.

Three-year-old Ayrshire cow. First in class and breed champion, Highland Society's Show, Aberdeen, 1908. Lt.-Col. Ferguson, owner.

the bar may be accommodated to cows of any height. This horizontal piece compels the cow to back up when she raises her body to pass dung or urine. The cows are fastened with stanchions, and, as the platform is made rather long, it permits them to step back to the edge of the drop, without allowing them to get their feet into the gutter. This is further guarded against by having a pretty high drop of ten or twelve inches. The cows soon acquire the habit of backing up, so that, even when the straightedge is removed, they will still do so. Consequence is that the platform is always clean, and, moreover, the cows' tails are kept out of the wet and dirt, thus pre-



Keystone.

Champion Galloway bull at the Highland Show, Aberdeen.

venting that abominable nuisance of filthy tails switching manure juice and urine into the milk pails and milkers' faces.

Our informant adds that he has no stall partitions in his stable, and his manure gutter is not only deep, but wide, holding easily a day's accumulations. The bottom of the trench slopes slightly toward the manure drop. The liquid drains out into the manure pile. At the end of the stable, towards the door, is a platform, over which the cows walk in and out. The boss cows stand at the far end, and these are always put in first and let out last. This, of course, would not

## GARDEN ORCHARD

### CO-OPERATIVE APPLE SELLING.

By A. McNeill, Chief, Fruit Division, Ottawa.

Co-operative selling in Canada is making progress, but not as fast as the benefits of the movement and the intelligence of the people would warrant. The obstacles are numerous, but none stands more in the way of the movement than the lack of leaders among groups of farmers.

The Chatham, St. Catharines, Simcoe and Forest associations show clearly that success is not dependent simply upon the membership. The organizer, manager or leader is a most essential feature of the case. The farmers composing the Simcoe Association, for instance, are neither more nor less intelligent than the farmers of dozens of other localities that might be mentioned having no co-operative associations. The apple-growers of these localities will get from 75c. to \$1.00 per barrel for their apples, while the Simcoe Association members will get \$2.00 per barrel and over. The difference is in having a leader. The conditions surrounding the apple-growers of any one of the co-operative associations named above are not different from the conditions that may be found in scores of places in other parts of Ontario and Canada generally.

The man in the neighborhood who stands out pre-eminent for honesty, intelligence and unselfishness makes the difference. He adds hundreds of dollars to the value of the orchard of every member if he takes charge of a co-operative association. He is a veritable asset to a community, as tangible as wheat, as convertible almost as coin. Such men, unfortunately, cannot be duplicated in all parts of the country. There may be men—and, undoubtedly, there are men—just as honest and just as public-spirited, but they have not been trained to act as leaders among their fellows. There are many men who have quite as much business ability, and are just as shrewd in making a bargain, but, unfortunately, many such men are not public-spirited, and cannot resist the temptation of turning to their own use the advantages which should accrue to the members of their association. And thus it happens, that in the matter of co-operation, the people are not as fit as they should be, but are ready. The opportunities are there, but the leaders are lacking.

I make the statement that the people are ready. I do not mean to say that they have all the qualifications which would make the movement successful by the force of the will of the members alone. They are simply ready in the sense that a skilled leader could hold these half-trained growers together by giving them the material advantages that co-operation brings. In every apple-growing locality there is an abundance of this raw material for a co-operative society. They form not precisely an inert membership, but a membership without great enthusiasm. Success in the movement is possible only when they are coerced by the stronger will of the leader, who, unfortunately, is in most cases wanting.

For this reason we should encourage all organizations among farmers, the purpose of which is to develop farm leaders, as well as to train the membership, so as to supplement any deficiency which a leader may have. The Grange should be a very useful organization for this purpose. I can readily understand how the Grange would hesitate to take up the matter of co-operative selling as part of the work of the Grange, but the whole tendency of the training which the Grange membership gets is towards the training of the membership of the farmers' organizations, and the development of leaders among farmers.

They could also very consistently support and encourage the establishment of a separate organization, composed of Grange members, to take over all such work as the co-operative selling of apples, and, indeed, it need not be confined specially to apples. Co-operation is sadly needed in the poultry business, in the products of bacon, and in the dairy industry. Indeed, in no line of agricultural production has co-operation yet reached the limits of its possibilities.

I would put in a strong plea that the public-spirited men of other professions, having the welfare of society at heart, should study this movement, and, upon all appropriate occasions, advocate this form of farmers' organization. When the preachers and the teachers, the country doctor and the lawyer, with the country clients and the aspirant for political favors, will all combine in preaching and teaching co-operation, we may expect the movement to progress much more rapidly than it is doing at the present time.

And in so doing, such men would have their reward in the bettering of their own condition and the condition of their own class, if they are inclined to take this more limited view. The uplifting of the farmers by these co-operative methods is a benefit to all classes of society and all conditions of men, except the narrow-minded and selfish individual who wishes to prey as a parasite upon the body politic.

I would, therefore, ask all such professional men and merchants, and all such farmers who aspire to do anything more than merely vegetate on their own farms, to investigate the benefits that have come to the members of the co-operative associations in Canada. I have mentioned a few of these as being pre-eminently successful. Many more successful organizations might be mentioned. In all these the net result has been that the growers of apples are receiving from 30 to 50 per cent. more for their fruit than they would have received without an organization. Incidentally, too, the useless middlemen have been eliminated, and

the real fruit merchant has had his hand strengthened so that the consumer, and all other members of society between the grower and the consumer have had their share of the benefits. It is important to point out that co-operative apple selling is not selfish in confining its benefits to the apple-grower himself. It means better prices for the grower, better apples for less money to the consumer, and a fair remuneration for services rendered to the fruit merchant and transportation companies.

If the history of our own co-operative societies does not convince the doubting Thomas, let him investigate the history of Denmark and Ireland. Agricultural Denmark was reduced during the early part of the nineteenth century to a state of destitution scarcely to be conceived by the well-fed Canadian. Co-operation in the production of butter, cheese, bacon and eggs has brought her to the point where she is the envy of other nations having far greater natural advantages. Ireland is another case to be cited. Within the last few years co-operation has made such advances there that the woes of Ireland may be forgotten in the prosperity coming to the people as the result of co-operation in agricultural products.

### A SON OF THE OLD GUARD.

To few journals is it given to establish themselves so thoroughly in the confidence and esteem of its clientele as "The Farmer's Advocate" has done during the forty-odd years of continuous publication. The paper is now well over a generation old, and no small proportion of its present readers are the sons of early subscribers. To one who has watched its steady growth, from an unpretentious monthly form, to the present weekly standard, there is a peculiar glow of pride with which he peruses such letters as that printed below, from a worthy son of the old guard. Our correspondent asks us not to mention his name, but we feel sure his remarks would lose no force in his own neighborhood were it appended—and that is saying a good deal:

"While writing you for information, I wish to add a word of appreciation. 'The Farmer's Advocate' was in the home nearly every year in my boyhood days, and I then read, enjoyed and understood most of it.

"Father was a great reader, and we took from five to eight papers, so we did not have to read 'The Farmer's Advocate' or nothing, but read it from choice. I have been farming for myself for eighteen years now, and have always taken it, and expect to while it is all well edited, as it now is and has been since I knew it. Have never sent you a new subscriber direct, but you have several permanent ones that I think came through my influence, and a few that are 'on-and-off.' I wish you continued success. Keep practical, and with the brains that are at the head, you will continue to lead."

### FRUIT-GROWING IN BRITISH COLUMBIA.

Fruit, one of nature's own products, plays an important role among the foods eaten by man. It is no longer a luxury to be enjoyed at times, for people are recognizing it to be as essential to the table as many of our commoner foods. Have you ever thought, while enjoying a nice juicy pear, or while relishing a cool dish of berries and cream on a hot summer's day, "From where did they come, or under what conditions were they grown?"

The Easterner naturally thinks first of California, Colorado, or the Niagara District. These old fruit-producing countries have established in the East a market for themselves, and, to compete against them would be an extremely difficult matter. British Columbia is a comparatively new fruit district, and as yet the industry is not recognized as it should be. We have thousands of acres of fruit-bearing land, which has and will produce finer and better quality fruit than even that produced by the famous Hood River and Wenatchee districts in Oregon and Washington. This land is gradually being settled by old experienced fruit-growers. A responsibility rests with them to lay a foundation which will at some future date make British Columbia recognized as one of the best fruit districts in North America.

To start with, we have three great advantages, namely, (1) climate, (2) soil, (3) market.

The climate is very mild, and free from frost

during the fruit season. The air is dry, clear and sunny, producing a large, beautifully-colored fruit, with excellent quality. The rainfall, although not heavy, is sufficient in most districts; irrigation can be easily obtained, owing to the fact that the fruit lands are situated in the valleys between the mountains.

The wash of generations from the mountains above deposits in the plains below fertility second to none for fruit-growing. This soil is composed chiefly of loam mixed with fine, decomposed granite, with a good clay subsoil.

For a market, we have the vast prairie Provinces, where fruit can never be grown to any extent. This market is a growing market, and inexhaustible. The people of the prairie will never pay duty on fruit from the South, when it can be obtained within a few hours after picking from a sister Province. At present, very little of this fruit reaches further east than Calgary, and most of it is consumed by the miners and lumbermen of our own Province.

Again I repeat that, considering this ideal climate and soil which we have, and considering this vast, inexhaustible market, growing up with in our reach, a great responsibility rests upon the shoulders of the pioneer fruit-grower—a responsibility to teach and educate our newcomers and less-experienced fruit-growers to adopt the most up-to-date and improved methods of selection, culture and marketing; a responsibility to fight and keep out of this fair Province the codling moth, San Jose scale, and other injurious insects; a responsibility to establish on a rock foundation a market in the prairie Provinces; and, above all, to build up an industry which will reflect credit on our Province and on our Dominion.

We have a wonderful market growing up before us. See to it that we grow up with this market, and that we do it and ourselves credit, by producing and marketing a superior quality of fruit.

JAS. A. HAYES.

### THE TOBACCO CROP.

The area planted in tobacco in the Counties of Essex and Kent, Ont., has been considerably reduced in 1908, overproduction in the two previous years having caused such a fall in prices that many growers have decided either to cease their cultivation of tobacco, or to restrict it until such time as the market for Burley, which is the principal tobacco grown in the district, becomes more favorable. Meanwhile, says F. Charlan, Chief of the Tobacco Division, Ottawa, a good many growers have renewed the cultivation of black smoking tobacco.

It may be roughly estimated, he proceeds, writing under date of July 31st, that about 1,000,000 pounds of tobacco will be produced this year in Ontario. Of this quantity, the largest proportion consists of Seed Leaf, Big Ohio (Walkerville), Havana Seed Leaf, Comstock-Spanish, and the Zimmer-Spanish.

Seed-leaf plantations, and tobacco derived therefrom, are usually made by growers under contracts with the district buyers. These contracts fix the price for the sale of the produce and the area to be grown. The plantations have, as a rule, been established very late this season, and have suffered from drouth; but, since the rainfall of July, the situation has reverted to normal.

In Quebec, late plantations suffered at first from the drouth, but the present position is good, and the yield of tobacco in 1908 for Quebec may be estimated at 4,000,000 or 4,500,000 pounds. The area devoted to Comstock, especially, has increased, to the detriment of previous plantations of Connecticut Seed Leaf, or of heavier tobaccos. Provided that there are light showers of rain between now and the autumn, sufficient to sustain vegetation, the yield will certainly be very good, both as regards quality and quantity.

A large part of the Comstock-Spanish and Havana Seed Leaf plantations has been made with the distances closer than formerly. The object is to produce lighter tobaccos, of finer tissue, in order to meet the demand for tobaccos capable of use as cigar-binders. Upon the whole, the yield of tobacco in Quebec is expected to be a good average one, somewhat late; that of Ontario is considerably reduced, and is restricted to plantations of different seed-leaf varieties. The growth of Burley is practically nil. In both Provinces the yield will be governed by the atmospheric conditions of the autumn and end of the summer. Prospects are good, provided that there is more rain, and that the autumn frosts do not arrive too early.

### ONTARIO HORTICULTURAL EXHIBITION.

The Ontario Horticultural Exhibition will be held this year in the St. Lawrence Market Arena, Toronto, November 10th to 14th. Favorable railway rates have been granted. Single excursion rates, within a radius of 83 miles, may be purchased from November 10th to 14th, good to return until the 17th, these to include a coupon admission ticket to the show for an additional 25 cents. Single-fare tickets, on the certificate plan, may be bought from November 6th to 16th, and will be good up to the 19th.

## POULTRY.

## DOCTORING FOWLS.

A prominent authority on poultry states that, "To succeed in doctoring a stubborn case of sickness of a persistent epidemic in his flock, is one of the worst misfortunes that can befall a poultry-keeper," meaning thereby that it is much better, from the dollars-and-cents standpoint, for the poultryman to kill fowls as soon as they exhibit symptoms of disease than it is to potter about and endeavor to treat the infected birds.

As a general rule, this advice holds good. Unless a man can detect the trouble, diagnose the disease, and apply treatment, in the early stages of sickness, it is seldom that doctoring is of much avail. If he manages once or twice to be successful in checking a mild epidemic, or curing an individual case here or there, he gets into the habit of fussing about his fowls, dosing them up when they get sick, and usually ends up by getting his place stocked up with a lot of birds of enfeebled constitutions, predisposed to disease. A little knowledge of the different fowl diseases is essential to success in poultry-raising, but more as a means of detecting disorders in the early stages than for applying remedies to cure the trouble. The one fact that a poultryman wants to be able to grasp firmly is that, when once disease becomes established in his flock, the best thing he can do is to use a good sharp hatchet pretty vigorously. In the long run it will prove more profitable than all the drugs in the world.

## A PROVINCIAL POULTRY PLANT.

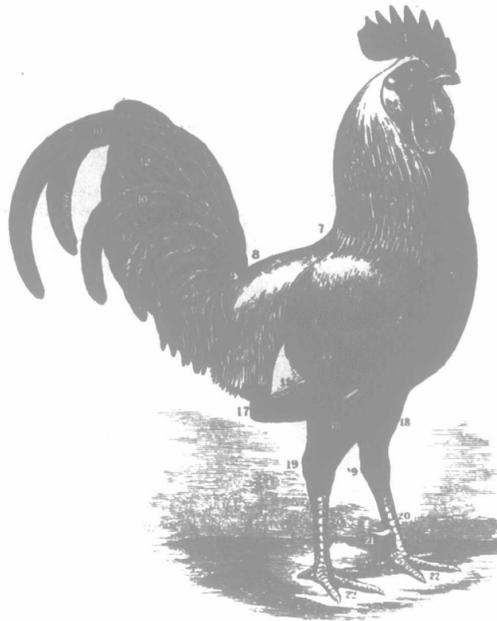
In response to a petition presented some time ago to the Hon. W. T. Finlay, Minister of Agriculture for Alberta, a Provincial poultry plant is being established in the City of Edmonton, on the Hudson's Bay reserve. Ten acres of most suitable ground has been leased for a term of years for this purpose, and a modern, up-to-date breeding-house is being erected, with a capacity of from 300 to 500 birds, to be added to as conditions require.

It is the purpose of the Department to put in breeding stock of the various utility breeds. Traps will be used throughout, with the object of building up laying strains, by selecting the most prolific layers from which to breed.

As soon as it is possible to do so, the Department intends selling to the farmers and others throughout the Province, birds and eggs for breeding and hatching purposes.

A suitable incubator house will be erected, and the various makes of incubators operated, with the object of furnishing the most reliable information possible as to the operating of the various machines.

As egg producers a mongrel flock of hens, if given a fair chance, will sometimes acquit themselves with much credit in egg production, perhaps about as well as most of the pure breeds of fowl, for the very good reason that most of our breeds of poultry have been developed with more regard for type and fancy points than for egg laying. Moreover, the inbreeding and close line breeding practiced by many has tended to reduce the stamina, which is after all a fundamental requisite of successful production, whether of eggs, milk or meat. Under these circumstances the introduction of a strain of other blood often tends to increase of vigor, and, indirectly, of egg production. But if the pure-bred is not always a better layer than the scrub, she is usually a superior table fowl, as are also the cockerels and pullets produced by mating her to a suitable male of her own breed.



The Technical Points of a Fowl.

- |                         |   |
|-------------------------|---|
| 1. Comb.                | 14. Wing coverts, forming the bar.                                |
| 2. Face.                | 15. Secondaries, the lower ends forming the wings or lower butts. |
| 3. Wattles.             | 16. Lower wing-butts.   |
| 4. Ear-lobe.            | 17. Primaries. Hidden by secondaries when the wing is closed.     |
| 5. Hackle.              | 18. Thighs.   |
| 6. Breast.              | 19. Hocks.  |
| 7. Back.                | 20. Legs or shanks.   |
| 8. Saddle.              | 21. Spur.   |
| 9. Saddle-hackle.       | 22. Toes or claws.  |
| 10. Sickles.            |   |
| 11. Tail-coverts.       |   |
| 12. True tail feathers. |   |
| 13. Wing-bow.           |   |

## THE FARM BULLETIN.

## THE FIRE AT UNION STOCK-YARDS.

A fire at the Union Stock-yards, West Toronto, on the night of August 25th, destroyed a considerable portion of the cattle and sheep pens, causing a loss estimated at from \$125,000 to \$150,000. Fortunately, there were but few animals in the yards at the time, this being the slackest season of the year on this market. Only half a dozen cattle and 96 sheep were lost. One dealer succeeded in getting out 240 head of cattle uninjured. Seven new brick houses, mostly owned by the Stock-yards Company, and occupied by employees, and valued at about \$2,500 each, were also destroyed. The company will rebuild without delay, but it is considered likely that the sheep pens will be built one story high instead of two, as in the case of those burned. The rapidly-increasing trade done at the West Toronto Stock-yards in the last two or three years has been gratifying to the company, and the insurance will go a good way towards meeting the cost of rebuilding. The management claim that they still have facilities left to accommodate all the trade offering at this season.

## FAIR DATES FOR 1908.

August 29th to Sept. 14th.—Canadian National, Toronto.  
 August 29th to Sept. 5th.—Sherbrooke, Que.  
 Sept. 2nd to 10th.—Nova Scotia Provincial, Halifax.  
 Sept. 11th to 19th.—Western Fair, London.  
 Sept. 12th to 19th.—St. John, N. B.  
 Sept. 15th to 17th.—Guelph Central.  
 Sept. 18th to 26th.—Ottawa Central.  
 Sept. 21st to 25th.—Sussex, N. B.  
 Sept. 22nd and 23rd.—St. Thomas Horse Show, St. Thomas, Ont.  
 Sept. 22nd to 25th.—Charlottetown, P. E. I.  
 Sept. 29th to Oct. 3rd.—New Westminster, B. C.  
 Oct. 8th and 9th.—Kilsyth Agricultural Society, Kilsyth.  
 Nov. 28th to Dec. 10th.—International Live-stock Exposition, Chicago.  
 Nov. 30th to Dec. 3rd.—Maritime Winter Fair, Amherst, N. S.  
 Dec. 2nd to 10th.—National Dairy Show, Chicago.  
 Dec. 7th to 11th.—Ontario Provincial Winter Fair, Guelph.

The Ontario Crop Bulletin, based upon returns from correspondents, under date of August 15th, states that fall wheat has yielded well, though, owing to wet, warm weather at harvest time, considerable sprouting occurred in stock. A fair proportion was cut early, and harvested in first-class condition. Sprung wheat was short in straw and thin on the ground, while the grain is uneven in quality and yield. In Western Ontario the yield of barley has been large. In the Eastern part of the Province the yield has been rather light and uneven, ranging from five to thirty bushels per acre in some of the former banner counties, near the Bay of Quinte. Except in the St. Lawrence and Ottawa counties, and in the northern districts, the yield of oats will be fully up to the average, and the grain will be much plumper than last year. Rainy weather while much of the crop was in stock threatened to injure the feeding value of the grain, as well as the straw. Peas promised an average yield. The weevil has not been much in evidence, but a green aphid, resembling the turnip louse, was injurious to pea fields in the Lake Ontario and adjoining districts. Favorable prospects regarding corn come from every district in the Province.

The annual meeting of the Pomological and Fruit-growing Society of the Province of Quebec will be held at Macdonald College, St. Anne de Bellevue, Que., on December 2nd and 3rd, 1908. A fruit exhibit will be held. Prizes will be given for best five and twenty varieties, and best seedling. The Secretary is Peter Reid, Chateauguay Basin, P. Q.

Growers about Burlington, N. J., state that the cranberry crop in New Jersey, as well as at Cape Cod, is the poorest in twenty years, and predict high prices for the fruit. Late spring frosts and summer hailstorms are attributed as the causes of the shortage.

The Scottish Agricultural Commission, who are now touring Canada, are greatly pleased with Canadian agricultural institutions. They are reported as saying that they would like to see such a college as the O. A. C. established in Scotland.

Fire wiped out the plant of the Canadian Packing Co., at Pottersburg, near London, Ont., last Saturday. The loss is placed at \$125,000, of which \$80,000 was tied up in stock. Insurance, approximately, \$40,000.

A fire, starting in the boiler room, destroyed the creamery at Greenwood, South Ontario, last week, causing thousands of dollars' loss, with only eight hundred insurance.



Scene of the Recent Conflagration in the Union Stock-yards, West Toronto, Ontario. Showing burned area, and the accommodation left to accommodate the trade offering at this season.

**THE PEACE MOVEMENT INTERNATIONAL.**

Editor "The Farmer's Advocate":

Will you kindly allow me space to voice a few of my sentiments on this burning question of militarism? I do not agree with Neil A. Edwards, that Miss Watts reasons falsely; contrarily, I think we ought to be deeply grateful to her for the good work she has been doing. I would remind Mr. Edwards that the peace movement is international. Socialists, Anarchists, Mennonites, Friends, New-thoughters and Labor-leaders are simultaneously working for and advocating peace in all countries. Only recently Mary Baker Eddy declared herself in favor of peace, which virtually means that 80,000 Christian Scientists are henceforth opponents of militarism. No nation need be alone in disarmament, and when all countries have turned their swords and rifles to plowshares, wherein will lie the danger to any one country? It is self-evident that there will be less temptation to engage in war with plowshares as weapons than when equipped with rifles and swords.

Again, Mr. Edwards believes war to be inevitable, because the Christian Bible declares "wars, wars and rumors of wars, will be to the end of the world." This will illustrate my argument nicely, that war is a barbarous relic of superstition, a terrible tradition that ought to have been brushed aside and buried ages since. We must not stifle our humanity in the dictates or prophecies of any book. God has implanted in our heart a love for our fellows—a love that is more sacred than any Bible. It is, indeed, regrettable that Christianity, with the single exception of Islam, has been spread and propagated more than any other religion by sword-point and bloodshed. But "even Christians," I firmly believe, will one day realize the useless and unnatural cruelty of war. The "heresy" of non-resistance, taught by Jesus himself, is to-day creeping into the church militant, and Christian ministers are reading Tolstoi and Ernest Crosby.

Mr. Edwards also asserts that "these Asiatics are just at present engaged in strong preparation for war." Nothing of the sort! They are merely arming themselves, so that after the purpose and fashion of Christian nations, they may promote peace, by force if necessary, and by independence and preparedness for war!

The foundations of war are ignorance, superstition, selfishness, pseudo-patriotism, and mistaken zeal. War exists for the amusement of kings, the support of war ministers and officials, the diversion of popular interest from bad government and selfish political motives, and the providing of a market for weapons, and various army supplies. Some newspapers may also encourage it, because their circulation experiences a phenomenal increase in war time. War is allowed to exist because people do not know the real horrors of war; because they are quite willing to pay high taxes and to teach their children that war is necessary and patriotic. War offices have too much freedom in the declaring of war. Does the average Canadian know how brutally were Chinese women wronged by Christian soldiers in the recent war, or how in the Transvaal strife British sentries were shot, by their general's order, for falling asleep after a hard day's march?

Middlesex Co., Ont. VERNE DEWITT ROWELL.

**AGRICULTURAL, HORTICULTURAL AND VEGETABLE-GROWERS' MEETINGS AT TORONTO EXHIBITION.**

During the second week of the Toronto Exhibition there will be a number of practical and interesting meetings held in the tent of the Ontario Department of Agriculture, located directly opposite the cattle-judging ring. These meetings will be in connection with the Agricultural and Horticultural Societies, and the Ontario Vegetable-growers' Association. The Executive of the Agricultural Societies' Association will convene on Tuesday, September 8th; that of the Horticultural Societies' Association on Wednesday, September 9th, and that of the Ontario Vegetable-growers' Association on Thursday, September 10th, the meeting each day being at 2 p.m. sharp. Short addresses on live subjects will be given each day by those present, and all officers and members of the three associations named will be cordially welcomed at these meetings. Programmes will be arranged for the annual conventions of the above-named associations.

An official of the Fairs and Exhibitions Branch of the Department of Agriculture will be present in the tent each day, from 9 a.m. to 6 p.m., from Friday, September 4th to Friday, September 11th, and all members of the above associations are invited to make the tent their headquarters while on the grounds.

**THEY ALL WANT "THE FARMER'S ADVOCATE."**

I have just taken your paper since January 1st, and do think it the most valuable paper I am taking, as every member of the family, even to a five-year-old boy, will grab "The Farmer's Advocate" as soon as it comes from the office, out of a number of other papers. Wishing you every success,  
THOS. K. SMITH.  
Lambton Co., Ont.

This year there will be at least eight standing field-crop competitions in Alberta, 45 in Saskatchewan, 46 in Ontario, three in Prince Edward Island, and about 20 in Quebec, says Seed Commissioner Clark, in the Census and Statistics Monthly for August.

**SIPHON NOT WORKING.**

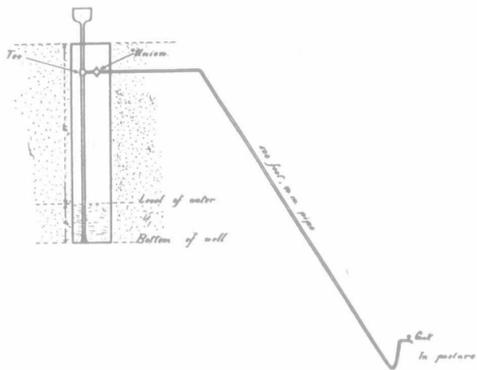


Diagram of Siphon.

I have been trying to instal a siphon, constructed of gas pipe, to convey water from well at barnyard to pasture. The water in well is never lower than 12 feet from surface of ground, and the fall from there to point of discharge, 500 ft. distant, is about 25 feet.



Itchen Royal Rose.  
Guernsey cow. First at Royal Show, Newcastle.

The pipe in well is 1 1/4 inch, and the discharge pipe from the tee (reducing) is 1/2 in. I extended pipe in well about 4 feet above tee to fill the siphon, having a foot valve on well pipe and a plug for upper end of pipe. I have filled the whole pipe by this means, inserted the plug, but still the arrangement does not work. There are no leaks in the pipes that I can detect. What is the trouble, and how can I remedy it?  
G. G. S.

Ans.—It is probable that you did not really have the pipe full of water, but that the water imprisoned sufficient air in the pipe to prevent the siphon from

working. If this is the cause of the trouble, the air would be imprisoned in the long 1/4-inch pipe extending to the pasture. Try the following: Open the stopcock in the pasture field so that air may escape; have ready in the pasture funnel sufficient water to fill all the pipes without allowing any air to enter—that is, without stopping to get more water. When the water is running freely out of the pipe in the pasture, close the stopcock and then insert the plug above the tee, making it air-tight. Next, open the foot valve in the well. The water should now flow from the stopcock in the pasture whenever it is opened. In case you fail the first time, try again, as these directions, if perfectly carried out, must ensure the working of the siphon, provided there is no leak. Possibly a stopcock in the pipe above the tee would be more convenient than the plug, for it could be more quickly operated.

WM. H. DAY,  
O. A. C., Guelph, Ont. Lecturer in Physics.

**FOUNDATION STOCK FOR NEW FRENCH-CANADIAN STUDBOOK.**

There has been recently completed the inspection of foundation stock for the National French-Canadian Studbook, which supersedes the old Quebec book now closed. The inspection was accomplished under the direction of the Live-stock Commissioner by a commission of five men—

two representing the Live-stock Branch of the Dominion Department of Agriculture, two representing the French-Canadian Horsebreeders' Association, and a Veterinary Inspector of the Health of Animals Branch of the Department, who also acted as secretary. The commission toured those counties of the Province where French-Canadian horses are reared. The total number of animals inspected complying with the standard for the breed include about 1,000 head, all of which had to be more than three years old when inspected. Such of these as are presented by their owners for registration will form the basis of the new studbook—that is to say, all further registration must

trace in breeding to these inspected animals.—J. B. Spencer, in Census and Statistics Monthly.

There are said to be in Iowa at the present time 170 farmers' co-operative grain companies, with a total membership of 28,000, and a capital of \$2,000,000 invested in elevator properties. A conservative estimate of the combined resources is \$50,000,000. Against all this the grain trust will begin a "relentless war of extermination."



Ox Teams, Kentville, N. S.



# HOME MAGAZINE

## Life, Literature and Education.

(Contributions on all subjects of popular interest are always welcome in this Department.)

### A TRIP TO QUEBEC.

(Continued.)

#### LAVAL UNIVERSITY, AND LE CHIEN D'OR.

We had some little amusement over the way by which we gained ingress to, or, perhaps more accurately speaking, egress from, Laval University. We had been in the Seminary Chapel, and, coming out by a door opposite to the one leading to the street, thought to gain time by making a short-cut to the big building looming immediately to our left. We asked a workman who chanced to be near, by what means we should enter the Seminary. He pointed to a door, and in we went. Not a soul was about, and at the end of five minutes we felt that we had most certainly got into a labyrinth or maze from which extrication, inside of any reasonable length of time, might be doubtful—corridors, and corridors, and corridors; windows, and windows, and windows, set so high that you could scarcely see out of them; bare walls, and bare walls, and bare walls, with everywhere closed doors, ranged like loopholes in a fortress. At some season these rooms, these corridors, must be filled with students and black-robed priests, but we had either struck the University in the vacation, or everyone was off to the celebration, for we had the whole place to ourselves, and our footsteps echoed eerily as we traversed the bare floors leading on and on, as far as we could see, to nowhere in particular.

At last we found a girl cleaning windows, who directed us to more corridors, these lined with curious old prints of Quebec in its early days, and finally we emerged into the University proper, where we discovered a few of the many tourists, whose general "rubbery" look had become so familiar, and a French priest, whose minus quantity in English was as great as ours in French, but who tried hard to give us various points of information about the institution.

"Laval" is certainly a wonderful place, rich in historic interest as in the wealth of art and other treasures which have accumulated within its walls. Its Seminary was founded in 1663, by Mgr. de Laval, first Bishop of Quebec, of whom you hear more in the Fortress City, perhaps, than of any other man. In 1701 this first building was destroyed by fire, but was rebuilt, and again burnt in 1705. Once more it arose from the ashes, only to be almost wholly demolished during the British bombardment in 1759. The older part of the present building was then erected, but was no more than its predecessor to be wholly free from the atmosphere of war, for, behind many of its doors—those closed doors which we had passed in the long corridors—were confined the American officers taken prisoners during the

siege by Montgomery and Arnold, in 1775.

The University proper is an outgrowth of the Seminary, and a fine place, indeed, it is. We did not see many of the class-rooms—the dissecting-room looms clearest in our memory—but we enjoyed to the full the art gallery and the immense museum, which is one of the finest on the continent. In the former are pictures by Lesueur, Salvator Rosa, Vernet, Van Dyck, Tintoret, Poussin, and other old masters—"real" originals, if one may be doubly emphatic, and of great value. The French Revolution, during which many art treasures were sent to Canada for safety, accounts for the presence of many of these pictures at Laval. . . I wish I liked old pictures better. To me they all looked "queer," and I confess with deep humility that I experienced, a few days later, in Montreal, a much more lively feeling of appreciation in looking at some specimens of more modern work, even that of some of our own Canadian artists. It seemed to me then that I wouldn't give a precious little Corot, of which I shall tell you later, for all of these old Laval pictures—but then, I have not had the proper training, perhaps. At all events, it was very fine and interesting to know that one

see what she could accomplish in the grotesque; such marvellous fish, such marvellous everything! In the geological department, among specimens of stone, minerals of great beauty, and fossils representing all the geological epochs, we noticed one plate containing two slices of meat, beautifully mottled; one hard-boiled egg with the shell taken off, and another split in two, so that the golden yolk was turned out just a little from the surrounding white. The whole plateful looked very tempting, but investigation showed that the viands were hard and forbidding as the transmuted fish which caused old King Midas so much perturbation; each had, in fact, been cut out of solid stone, just to show what could be done in that line.

Among other interesting things, we saw a collection of immense wax flowers—presumably for use in the class-rooms; a bronze lamp, taken from a church in the stricken City of St. Pierre; two or three Egyptian mummies; a bishop's cap, which once belonged to the famous Laval, and the coffin in which his body was confined for 170 years. The latter, which seemed to be made of dark-gray stone, rudely hewn, and cemented along the edges, was in a large glass case, surrounded by artificial

another, you can make out most things with reasonable accuracy, and the very fact of your being obliged to go thus slowly, insures your seeing things to advantage.

Having traversed practically the whole building, we finally reached the entrance hall—and the guide. And here came the funny part of it. We told him, of course, that we had come in at the back, and, of course, he imagined we were trying to "do him" out of his fee. "You come in at ze back. Ah, you make me seek!" he said, much to our amusement. We let him talk awhile, then gave him his quarter and got our guide-book. On looking over it, we found we had missed nothing of any consequence, save the entomological department, and the "collection conchyliologique."

In front of the University stands a fine statue of Bishop Laval, which was unveiled a couple of weeks before our arrival. The ceremony, as may be conjectured, was a great event in the city—greatest of all, perhaps, to a few of the cloistered nuns, who had not been outside of convent gates for over thirty years, but were permitted to emerge for the occasion.

But a short distance from "Laval" stands the post office. It is a fine modern building, of gray stone, and at first glance, perhaps, might be passed by as an edifice whose prototype might be met in any city. But stop, look above the side door, and your attention is at once arrested. There, inserted in the wall, is a curious slab, showing a brilliantly-gilded dog (but what a poor spindle-shanked, hard-looking doggie, too!) in bas relief, and an inscription, quite guiltless of punctuation, and in curious old French wording and spelling, and yet more curious lettering. It reads thus, but with V invariably written instead of U:

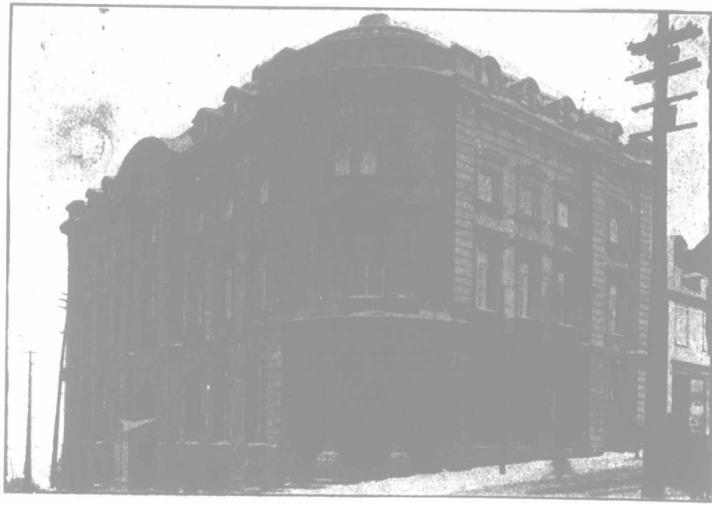
Je suis un chien qui ronge lo  
En le rongeant je prend mon repos  
Un tems viendra qui nest pas venu  
Que je morderay qui maura mor du.

Translated, this is:

I am a dog that gnaws his bone,  
In gnawing it I take my rest;  
The time is coming which is not yet,  
When I will bite those who have bitten me.

This is the famous "Chien d'Or," the "Golden Dog," with which is connected a tale which lends an unusual interest to the post office and its locality.

Upon the very site now occupied by the building there once stood a house known as "Le Chien d'Or," because of this same old tablet, which then held a place over its doorway. In the house lived a merchant, Philibert, and the reason of his having so strange an emblazonment to his dwelling was as follows: At this time, one of the most powerful men in the city was the Intendant Bigot, a man whose extortions and extravagance made him hated everywhere in the new colony, and whose dissipations, debaucheries, even, have made his name one of the most infamous in Canadian history. A little farther down the city, past the Hotel Dieu, on Palais Street, you may still see the remains of his old palace, whose massive walled cellars are to-day used as a storehouse for



The Post Office, Quebec.

In the space in the wall immediately over the side door is the tablet, "The Golden Dog."

was actually looking at real Tintoretts, real Poussins, real Salvator Rossas. To be accurate, I may say that the collection contained only one by each of the masters I have mentioned, except Lesueur, who is represented by two.

The museum, to our unaccustomed eyes, was certainly wonderful. There are rooms, and rooms, and rooms, filled with glass cases, containing stuffed birds and animals, geological and botanical specimens, fish, reptiles, Indian and Eskimo relics, curiosities, and a great variety of country under the sun. Such marvellous birds, including the rufous in brilliance of coloring, and ranging not as to shape and size as you would see in fashion plates of the time. Dame Nature had been at her best in such a

flowers. We were much exercised to know whether the body of the great bishop were still in it, but learned that thirty years ago it had been removed, and interred with great ceremony in the Basilica. Where the coffin had been before that, we could not find out, because, as yet, we hadn't found a guide, and couldn't understand the priest very well. In fact, we had been rather painfully working our way. Everything, of course, was labelled with explanatory notes, but as they were all written in French, and in a queer, old-time hand, you can understand the difficulties that beset us. However, you get along wonderfully, too, in such a place, if you can read even a little of the foreign language. Between

the casks of liquor manufactured in Boswell's brewery; and away out towards the mountains, four miles from the village of Charlesbourg (where the women and children found refuge at a later day, during the siege of Quebec), you may still trace the ruins of the old castle, "The Hermitage," with its walled garden, which was once the hunting-box of the unworthy Frenchman, and the scene of his worst revelries. In this last spot was it that the beautiful squaw, Caroline, was entrapped, and afterwards murdered by the ambitious Mlle. de Meloise, who wished to have the affections of the wicked great man all to herself. . . . But to the Golden Dog: Honest Philibert, as may be imagined, approved not at all of this overlord, this Bigot, the more especially since the latter had established a trade monopoly which conflicted sorely with his business. Again and again the two came indirectly into collision, and finally, out of sheer spite, Philibert placed the Golden Dog over his door. In retaliation, Bigot quartered more soldiers than were desired at the "Chien d'Or," and the upshot of the whole affair was that Philibert got into an altercation with Bigot's boon companion, the Count de Repentigny, by whom he was stabbed to death. The Count escaped to Acadia, was pardoned, and finally killed in a duel by a son of Philibert. . . . The story, as invariably happens in connection with such history, is told with several versions, but the above is generally regarded as the most authentic.

The House of the Golden Dog, long after Philibert's death, was metamorphosed into an inn, which, under the landlordship of one Miles Prentice, who had come out as a sergeant under Wolfe, speedily became one of the most fashionable hostleries in the city. Fashionable though it was, however, it was destined to shelter, for a time, a youth who was fated to be, one day, greater than the worthy landlord could have dreamed. This was none other than Captain, afterwards the famous Admiral Nelson, who, in 1782, while commanding H. M. S. "Albemarle," spent a few months in Quebec. . . . And thereby hangs another tale: While at the Chien d'Or, Nelson is said to have become enamored of Miles Prentice's pretty niece, a Miss Simpson—so much so that he returned to shore on the very margin of his vessel's departure for the purpose of clandestinely marrying her. The little plan was, however, frustrated by one Mr. Davidson, who, probably by reason of some especial interest, bestirred himself to have the impressionable captain seized by a body of sturdy tars and conveyed to his ship. "Out of sight, out of mind," seems to have been the rule with Nelson. At all events, we hear no more, in connection with his name, at least, of the pretty Miss Simpson.

While the walls of Philibert's house were being demolished, in preparation for rebuilding, a curious corner-stone was found, bearing the letters "P. H." with a St. Andrew's cross between, and the date "1735." Immediately below was a plate of lead bearing the following inscription:

Nicolas Jacques  
dit Philibert,  
M'a posé le 26 Aout  
1735.

This stone has also been built into the post office, where, with the curious old dog, it keeps record of this little incident of those troublous times in the long ago. . . . It may be interesting to note, in closing, that it was from this bit of history that Mr. Kirby received the suggestion for his well-known novel, "The Golden Dog."

DAME BURDEN.  
(To be continued.)

What is defeat? Nothing but education—nothing but the first step to something better.

TRAINING THROUGH PLAY.  
II.

Mr. Kelso, well known to many of our readers for his philanthropic efforts on behalf of neglected children, after stating that "There is nothing more important in the life of any community than that the young should have an opportunity to play," affirmed his belief that if there was more play, there would be less to do in the straightening out of wretched homes and caring for children in Re-

terialized in a poem, eight verses long, written upon a page torn from the ledger of a near-by saloon, and it meant much to the Playground Lady, who had lived to see the children grow from the little ones of the early sand-pits to the big working boys and girls who come back in their brief holiday times, and offer 'to help.'"

If what this dear "Playground Lady" told of the great work of influence begun in the playground, but continued into wider fields of health and healing, is a type of the

count, I make no disposal of in this my will.

"My right to live, being but a life estate, is not at my disposal, but these things excepted, all else in the world I now proceed to devise and bequeath:

\* \* \* \* \*  
Item: I leave to children, inclusively, but only for the term of their childhood, all and every, the flowers of the fields, and the blossoms of the woods, with the right to play among them freely according to the customs of children, warning them at the same time against thistles and thorns. And I devise to children the banks of the brooks, and the golden sands beneath the waters thereof, and the odors of the willows that dip therein, and the white clouds that float high over the giant trees. And I leave the children the long, long days to be merry in, in a thousand ways, and the night and the moon and the train of the milky way to wonder at, but subject, nevertheless, to the rights hereinafter given to lovers.

"Item: I devise to boys jointly all the useful idle fields and commons where ball may be played; all pleasant waters where one may swim; all snow-clad hills where one may coast, and all streams and ponds where one may fish, or where, when grim winter comes, one may skate; to have and to hold the same for the period of their boyhood. And all meadows, with the clover blossoms and butterflies thereof, the woods and their appurtenances, the squirrels and birds, and echoes and strange noises, and all distant places which may be visited, together with the adventures there found. And I give to said boys each his own place at the fire-side at night, with all pictures that may be seen in the burning wood, to enjoy without let or hindrance and without any incumbrance of care."

The only comment upon this which I shall venture to make is to pass on to you the question asked by the writer of the article from which I quote, "Will you become the executors of this will?" H. A. B.

The Quiet Hour.

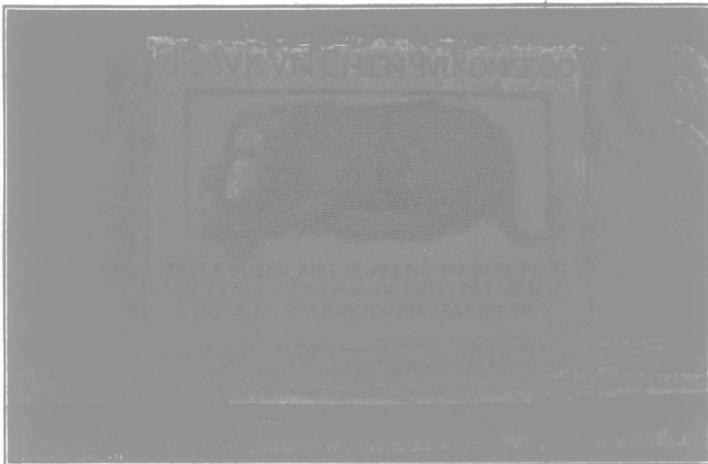
UNCONSCIOUS ACTIONS.

But when thou doest alms, let not thy left hand know what thy right hand doeth: that thine alms may be in secret: and thy Father which seeth in secret shall recompense thee.—S. Matt. vi. 3, 4 (R. V.).

"May every soul that touches mine—  
Be it the slightest contact—get therefrom some good,  
Some little grace, one kindly thought,  
One inspiration yet unfelt, one bit of courage  
For the darkening sky, one gleam of faith  
To brave the thickening ills of life,  
One glimpse of brighter skies beyond  
The gathering mists,  
To make this life worth while,  
And heaven a surer heritage."

The text given above is a remarkable one. It may be quite possible to give alms so secretly that a person in the same house knows nothing about your action, but it seems impossible to hide it from yourself—the text does not demand forgetfulness, but unconsciousness. This command fits in with the account of the Last Judgment given by S. Matthew, where those on the right of the King express surprise at the announcement of their kind actions, while those on the left are equally surprised to hear that they have let slip their opportunities of doing kindnesses.

It seems to me that the only way actions may be absolutely unconscious is to make them habitual. A lame person, who is painfully taking a few difficult steps, is conscious of every one, but most people walk without thinking of their steps—walking has become a habit. A beginner in the art of reading or writing, or any other task, works consciously, with laborious effort; but when the business has become habitual it is done



Le Chien D' Or. (The Golden Dog.)

Facsimile of the old tablet inserted above the eastern door of the Post Office, Quebec.

formatories. Another playground promoter, in telling his experiences, said, by way of postscript to the same, "And so profanity and cigarette-smoking have become amongst our lads almost a lost art."

Statistics prove that where playgrounds exist there are fewer arrests, and less frequent need for the intervention of the arm of the law in the person of the officer on the beat, for, even in the matter of neighborhood quarrels, we are told, "That they not seldom begin with the children, and extend over whole city sections." Speaking in this connection, a speak-

triumphs it has achieved elsewhere, may we not all pray that similar success may everywhere follow the preaching of this "gospel of relaxation," and the practical methods employed to provide wholesome food wherewith to meet the natural hunger of the young for "a good time"?

There are many more aspects under which my subject could be considered, but space forbids my enlarging upon them, especially as I am anxious to occupy what remains of my column in quoting the last will and testament of one whom the world called "mad," but from whom, maybe, we



The City Man in the Country.

(Photo by W. J. Watson, Toronto.)

er, who said that she was proud to accept the title accorded to her of "The Playground Lady," told of an incident which occurred to her in the course of her duties.

"Standing one day by the gateway of an erstwhile vacant lot, now transformed into a place for play, a longshoreman lounged near, and, approaching her, remarked, 'The neighborhood's thinkin' of writin' you a letter. I feels it here,' laying his hand upon his heart, 'but I cannot express it.' Later, this letter ma-

who claim to be in full possession of our senses may learn a valuable lesson. It runs thus:

"I, Charles Leinsbury, being of sound mind and disposing memory, do hereby make and publish this, my last will and testament, in order as justly as may be, to distribute my interest in the world among succeeding men."

"That part of my interest which is known in law and recognized in the sheep-bound volumes as my property, being inconsiderable and of no ac-

easily and almost unconsciously. Now, in doing kindnesses, as in everything else, if we wish to do them well and gracefully we must have practiced the art until it has become second nature. Then, and then only, are we likely to pour out kindness unconsciously, as flowers pour out fragrance. Good habits sway us just as easily as bad ones. Take the matter of a pleasant tone in the voice, for instance. We all know people whose tones are always amiable. To hear a cross ring in the voice from such a person would startle us considerably. And we make no mistake when we say that such a person finds it easy to speak in pleasant friendly fashion to every creature within reach—even to the cat and dog. Of course it is easy, as easy as reading is to you, because it has been steadily persevered in until it has become second nature, and to speak crossly would be next thing to impossible. And it is the same way in the matter of "giving alms"—and surely alms must include more than money. I live with a dear lady who finds the doing of kindnesses as natural as breathing—but it is simply the result of life-long habit. The Jewish children who come in at all hours to see me are regaled with any dainty that happens to be at hand; the grocer comes in for a cup of coffee or a bit of pie; the clerks in the stores are her personal friends, though she seldom knows their names. As for me, all through my time of lameness she even excelled her usual self in the way of heaping kindnesses upon me. And she is perfectly unconscious of all this. It has become a habit with her, and her left hand is entirely unconscious of the good deeds of her right. On the other side of our street a man is living whose harsh voice never seems to have a pleasant ring. I know nothing about him, except the certainty that I know his habitual voice is far from kindly as he calls out to his children on the street, ordering them to come in. It seems hardly possible that a man with such a rude way of speaking can be a pleasant man to deal with. Yet he probably has not the slightest notion that he is failing in kindness. He has spoken rudely so often that now it is second nature, and he does it unconsciously. Yet, if the parable of the "Sheep and the Goats" is true, we shall be rewarded for unconscious acts of kindness, and punished for unconscious acts of unkindness. We are making the habits which will control us, and have the power of forming good or bad ones. It is the little things which make up the bulk of life; it is the little things which bring us into vital touch with our fellows, or separate us from them. Alice Preston, in one of her delightful chats in the Ladies' Home Journal, tells of a dandy who was lazy, but who could not possibly be spared from the home of her Southern friend. This was simply because of his way of opening the front door to visitors. She says: "He flings it back wide, and smiles as though his one and supreme delight were to have people come to the house. . . . We certainly cannot afford to do without Uncle Jimmy's welcome! It enriches the whole place." Probably "Uncle Jimmy's" habit of welcoming people was quite unconscious to himself.

Think of the way some mothers are piling up these unconscious acts of kindness in the treasury of the King. He will not lose one "cup of cold water" held to a fretful child's lips by the weary, smiling mother in the dead of night. He never fails to notice when she lays aside her work to join in a game of play or go off on some little outing to please the children. And He sees, too, when she fails to seize the opportunity of doing a kindness, when she thinks that the credit of being considered a "hard worker," or a "first-class housekeeper," is of more value than the chance of getting into warm, uplifting personal touch with her own family or neighbors. Dean Hodges commends the mother who subordinates to the nurture of her children "the washings, the ironings, the sweepings, the bakings, breakfasts, dinners and suppers—these tasks which to some women are the chief reasons for existence." He says: "For her the most important room in the house is not the kitchen, nor even the parlor, but that merry chamber which is the terminus of railways, scene of building operations. . . . parade-ground of infantry and cavalry, and battlefield of contending armies. To

be a mother is her high and splendid vocation, the most ancient and honorable and influential of all professions."

God does not make life too hard for us. He gives us "Habit" as a valuable servant. When we set ourselves to doing anything as a duty, habit soon makes it easy and even pleasant. For instance, last October I was most unwilling to become the superintendent of a settlement, the burden of the responsibility kept me awake at nights, and weighed me down by day. I would have been only too thankful if my conscience had allowed me to refuse the position, and yet now—only a few months later—my great fear is that I may have to resign the post which habit has stripped of its horrors. Queer, isn't it?

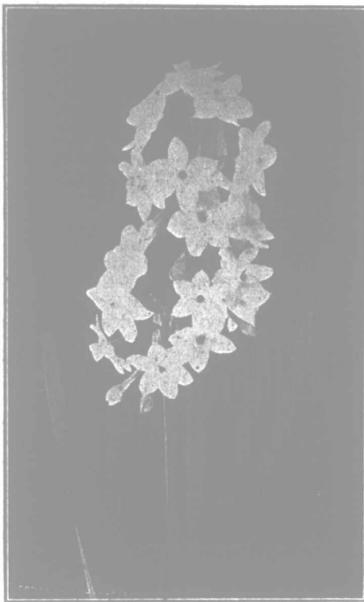
"Habits are soon assumed; but when we strive  
To strip them off—'tis being flayed  
alive!"

HOPE.

## With the Flowers.

### BULBS FOR WINTER BLOOMING.

If you want to make sure of a bit of sunshine for the winter, buy a few bulbs this fall. You will find them very little



One of the Polyanthus Narcissi.

(From Garden Magazine.)

trouble, but what an endless delight when the wind blows cold and the snows drift out of doors!

And now about how to do it: If you have a very cool cellar you may plant a few narcissi and daffodils early in September. At all events no bulbs at all should be planted, for indoor bloom, later than the middle of October.

The soil does not much matter—that is, provided it is not the kind that cakes or packs—a good garden loam loosened up with coarse sand is as good as any. Put some pieces of broken crockery or charcoal in the bottom of each pot for drainage, cover with sphagnum moss to keep the soil from filtering through, and shake in the soil, leaving it rather loose in the bottom, as if packed too much it will force out the bulb when the roots grow.

Next place the bulb or bulbs on the surface of the soil, right side up, of course, and press down until the upper side of the bulb is on a level with the surface; then firm the soil about each. One hyacinth bulb is enough to a five-inch pot, but three tulips, or narcissi, or daffodils, and six or seven freesias may be used.

Rooting the bulbs is by far the most important part of indoor bulb culture, and the part of the operation in which most people fail. It is simply imperative that they be placed at first in a cool, dark, well-ventilated place, at a temperature of 35 to 40 degrees F., if possible, and that they be left there until root-growth has become thoroughly de-

veloped. The cellar should be cool, as if too warm the growth above is likely to begin before the root-growth is sufficient, the result being spindly plants, and flowers choked in the bud. If the cellar is very moist a good watering on setting the pots away, and another, perhaps, before bringing them up, is likely to be sufficient; otherwise a watering every week or so may be necessary. Do not, however, keep the soil too wet.

And, now, here is the rule for knowing when to bring the pots out of the cellar into a warmer, lighter atmosphere. Turn the pot upside down and strike the side sharply on something, so that the soil will roll out in a ball—of course you must keep your free hand over the surface so that it will not fall out completely. If the roots show in a white network around the outside of the soil the bulbs are ready for removal; if not, put them back for a while longer. It is not absolutely necessary to bring up all the pots just as soon as ready; some may still be left for later blooming.

On bringing the pots up, keep them for a while at first in a room which is at about 50 degrees F., and in which the light is not very bright, then when growth is well under way remove to a place in which the temperature is about 60 or 65 (not more) degrees, and in which the light may be stronger.

Freesias are an exception to the rule that bulbs need to be kept in the cellar for a considerable time. They only require, in fact, a few days' darkness, before being brought to the living room. They do not come very quickly into bloom, but as the foliage is attractive this is no detriment. Do not keep the soil very wet until they are growing well, for fear of rotting the bulbs.

Narcissus, especially the "Chinese Sacred Lily" and the "Paper White," also need not be kept in the cellar as long as most bulbs, as they root quickly after planting. They are among the first to bloom, but a succession may be ensured by bringing the pots up gradually.

Tulips should be left a long time in the pots—until January at least. When brought up they should be forced as gradually as possible, with a very gradually increasing heat and light. Don't be in a hurry with bulbs, and don't be afraid to keep them cool. Rushing them into a warm sunny place too soon is responsible for more blasted buds than any other cause; and don't be alarmed over any bulb, tulip or other plant which shows a little top growth in the cellar. Leave it there, growth or no growth, until the roots have developed (freesias, Chinese and paper-white narcissus excepted); a sturdy tip of top



A Trumpet Daffodil.

(From Garden Magazine.)

growth is only to be expected before it is time to bring the plants up.

Now, someone is probably asking, "Just how long shall I leave the green, silent knave in the dark?" It is impossible to answer this, because cellar conditions differ so, examination of the roots, as described above, is the only way of deciding. In a cool cellar, most of the daffodils, tulips and tulips require several weeks.

Give the bulbs plenty of water, and

bringing up, but see that the drainage is good. Hyacinths, paper-white narcissus, Chinese lily, and a few of the early-flowering trumpet daffodils, may also be grown in water, but are not always likely to make so sturdy a growth. The hyacinths, when forced in this way, are placed in glasses manufactured for the purpose; the smaller bulbs are placed on beds of sphagnum moss or pebbles, arranged to hold the bulbs in place, and mixed with a little charcoal to keep the water pure. Pour in water to come barely to the root end of the bulbs, and keep adding as evaporation takes place. Change the water every week or two if there are signs of stagnation. When starting bulbs in this way, put them first in a cool, dark, airy place to root, and keep growing at all times in a cool place, just as though they had been planted in soil. The Chinese Sacred Lily should be in bloom six weeks after placing in water, the Paper White Narcissus coming next; other bulbs requiring longer to root (some even several weeks) come later.

### COLOR TABLE FOR THE MORE EASILY-GROWN BULBS.

White.—Snowdrop, White Crocus, Poet's Narcissus, White Hyacinth, Star of Bethlehem, White Tulips.

Yellow.—Yellow Crocus, Daffodils, Jonquils, Yellow Tulips.

Blue and Mauve.—Siberian Scilla, Crocus, Grape Hyacinth, Mauve Single Hyacinth.

Red and Pink.—Red Tulips, Pink Hyacinths.

### TWO ORNAMENTAL BUSHES.

While the chief reliance for lawn purposes and surroundings is yet generally placed upon grass, evergreen trees and hedges, and such trees as the maple, increasing attention is being paid to the growth of bushes which bloom, thus adding variety and richness of color to the homestead scene. For this purpose, the Althea, or Rose of Sharon, bearing in August a luxuriant profusion of white and purple flowers, the latter in varying tints, is very popular with many. Another very effective ornamental bush is the Japanese Snowball, the early floral display of which is followed in August with a fruitage of small scarlet berries, which are very showy among the dark-green foliage. The bushes vary in height from five to eight or ten feet, and are of a hardy character.

### RE HELIOTROPE.

I am a regular reader of your very interesting and instructive magazine, and have thought that perhaps you would give me some information which I need. I am very fond of heliotropes, and while I succeed in getting very profuse blossoms, yet my plants are ugly looking, generally, the most objectionable feature being the leaves, which get black. Just now one is before my eyes, which I cut down the 1st of June, and it came out nicely. I kept nipping off the blossoms or buds, as I wished all the strength to go in making a fair plant before it bloomed. It came out nicely, but very soon the leaves began turning black. Now there is scarcely a leaf without a black speck. Can you tell me how to help it?  
C. C. C.

King's Co., N. B.

Insufficient root room and insufficient water both cause heliotrope leaves to turn black. This plant should be given a pot rather generous as to size, plenty of sunshine, a warm yet well-ventilated atmosphere, and plenty of water. The soil should be light and rich, and the pot supplied with drainage material. An occasional watering with very weak manure water while the plant is in bloom will be found beneficial.

A Matter of Custom.—Two ladies who had not seen each other for years recently met in the street. They recognized each other after a time, and their recognition was cordial. "So delighted to see you again. Why, you are scarcely changed!" "So glad; and how little changed you are. Why, how long is it since we met?" "About ten years." "And why have you never been to see me?" "My dear, just look at the weather we have had."

## The Young People's Department.

[All letters for Young People's Department must be addressed to Cousin Dorothy, 52 Victor Ave., Toronto.]

### GOD OF THE OPEN AIR.

Thou who hast made Thy dwelling fair  
With flowers beneath, above with starry  
lights,  
And set Thine altars everywhere—  
On mountain heights,  
In woodlands dim with many a dream,  
In valleys bright with springs,  
And on the curving capes of every  
stream,  
Thou who hast taken to Thyself the  
wings  
Of morning to abide  
Upon the secret places of the sea,  
And on far islands, where the tide  
Visits the beauty of untrodden shores,  
Waiting for worshippers to come to Thee  
In Thy great out-of-doors!  
To Thee I turn, to Thee I make my  
prayer,  
God of the open air.

—Henry Van Dyke.

### DISCOVERIES MADE BY ACCIDENT.

There is an old and true saying that "necessity is the mother of invention"; but there is another fact quite as true, that accident is also the mother of many great discoveries.

In their search for gold, the ancient alchemists gave to man a great number of metals, salts and liquids hitherto unknown. In the same way, the searchers after perpetual motion have added many mechanical appliances to our store of knowledge.

Chloroform, which has proved such a boon to thousands of sufferers, was discovered by chance. Dr. Simpson, an English surgeon, set himself to find some anesthetic to take the place of ether, which had gained a bad name, owing to the fact that several deaths had occurred through its careless use.

Other scientists joined him in his researches, and carefully analyzed every substance which they thought was in the least likely to give the desired result.

One night the party were busily engaged in their self-imposed task. They had tested every substance which had been selected for experiment, without anything approaching to a favorable issue, and were beginning to feel a good deal disheartened by their lack of success.

As one of them was poking about the laboratory to see if he could find anything else which might be put into the little testing-glass with which each was provided, he happened upon a small bottle containing a mixture of water, alcohol, and chloride of lime, which was looked upon more as a curiosity than as possessing useful properties.

With scarcely a thought of success he poured a little of it into each of the tubes, and the members of the party began to inhale it. For a few moments, they seemed seized with an unusual gladness; but soon they one after another, fell to the ground, overcome by the powerful fumes. As they gradually came to again, they recognized that their search was over, and from that occasion dates the use of chloroform as an anesthetic.

The rollers which are used to spread the ink with which newspapers and books are printed, are the outcome of an accident. In days gone by, pelt balls were used for this purpose. A Shropshire printer was unable to lay his hands upon the pelt ball with which he wanted to ink the type. He was pressed for time, and caught up the first thing that seemed to him capable of serving the purposes of the missing pelt ball. This happened to be a piece of glue which had fallen from the glue pot, and which did the work so effectively that he mentioned his improvisation to his fellow workmen. Experiments followed, and it was soon discovered that glue, mixed with molasses, to give it the requisite consistency, was the best possible article for this purpose.—Kind Words.

### A LETTER FROM "FAY."

Dear Cousin Dorothy,—I have been intending to write for some time—in fact, have started two or three letters and never finished them. Thanks to your kind directions, I made some pie-crust the other day which mother said was all right. We have lots of ice and I set the lard pail on top of a cake and packed the sawdust around it to get it good and cold. I don't believe any of the girls ever made tougher crust than some I made last winter. I am pretty sure W. A. N. would not have wished anything to do with the eating of it. I don't think I would like to be the youngest of the family, but would not mind having an older brother.

Doesn't ice cream taste good these hot days? I think every farmer should have an ice-house, and put in lots of ice every winter. Hasn't this been a very hot, dry summer? For a long time we had to water our garden every evening, but we have not done so lately. It is really wonderful the way the weeds grow when everything else is wilting. If the vegetables only did as well, what a splendid garden we could have! What is your favorite vegetable? I believe I would rather have the tomato. I am eating an Astrachan apple at present. Do you get any? We have two trees of them, and sometimes we are afraid the little ones will make themselves sick, but they don't seem to hurt them. My little brother is very proud of the fact that

again, and to send your letter on to "Lily of the Valley." I rather agree with you about tomatoes. They are the only vegetables (if they are vegetables) which never grow old. Peas, beans, cabbages, corn—all of them get old and tough. In fact, in the city one very seldom tastes them in their first youth. I wish I had an Astrachan apple. Your letter makes me quite hungry! Did you ever make water ice, with crushed fruit, or lemon juice? I think it is almost as nice as ice cream, and costs almost nothing. Ice is a great luxury in the summer, and I'm sure everyone who could, should have it. It is really a saving, as nothing need ever spoil, if it is put into a refrigerator. C. D.

### A CHAMPION WALKER.

Prolonged physical effort entails a strain on the heart that may result in the sudden death of the victim at the moment of his triumph, or may manifest itself fatally years afterward. The boy who becomes famous as an athlete rarely becomes an old man. Let us take the case of Joe Scott, of New Zealand, who died the other day at the age of 40. Scott was, perhaps, the most famous professional pedestrian of modern times, and the mention of some of his exploits may prove timely in a day when records are threatened from so many quarters. Scott began his professional career at

proceeded to arrange for a series of exhibitions at different cities in New Zealand. The two made a twelve months' tour, the boy meeting and defeating the best men who could be found to walk against him. Afterwards, the young champion sat down and waited for the pedestrians from England and Australia to come along, and one after another he walked them "into the ground." At the age of 12 he won the New Zealand seven-mile championship, doing the distance in 52 min. 6 sec. Shortly after, he won the 100-mile championship, and thus, at the age of 12, was the best walker in the Antipodes at all distances from two to a hundred miles.

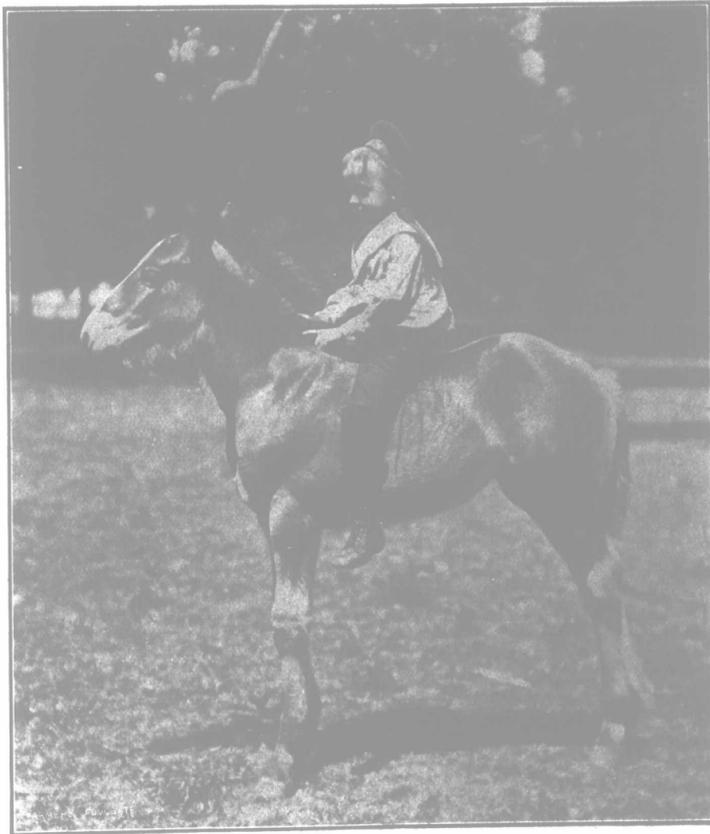
It was about 1880 that the craze for day-and-night walking, then at its height in England, reached New Zealand; and at the age of 15 Scott won the first big 24 hours' walk, and in the three succeeding years he won no fewer than 22 contests, at from 12 hours to six days, among his victories being one over Arthur Hancock, the English champion, who happened to visit New Zealand. In this race Scott walked 72½ miles in 12 hours. Then he went to England, and issued a challenge to any man in the world for 12, 24, 48 hours or six days, walking 12 hours a day. Finally he offered a prize of \$500 to any man who could defeat him at any of these distances. Three men accepted, each choosing a different distance; but young Scott defeated them all. A little later he won the world's professional championship for six days' walking, beating 75 men, not one of whom could make Scott extend himself. Nevertheless, he covered 863 miles in the 72 hours, which remains a world's record. His best records at other distances were 100 miles, 17 hrs. 40 min.; 220 miles, 48 hours. These facts are given in the hope that our amateurs, after studying them, will come to the conclusion that Scott walked far enough and fast enough, and that there is no occasion for them to try to improve on his performances.—Mail and Empire.

### THE GOOD OLD SUMMER TIME.

How hot some people make you feel! I have a particular lady in my mind who cannot help crying out when she is uncomfortable. Between each mouthful at every meal, she lays down her knife and fork, sighs deeply, fans herself, and almost gives up in despair. I defy you to be five minutes in her company on a warm day without feeling a consuming desire to get into a refrigerator. If you flee to another room, you still hear her exhausted gasps in the distance. No doubt she is unfortunately constituted so that heat hurts her more than it does stronger people, but I can't help thinking that she makes herself more uncomfortable by thinking about it. At any rate, she might let other people try and keep up their innocent little fiction that it is really not so hot as it was last week. There is a temptation which most of us feel in these days to meet every new arrival with that stale remark: "Dear, me! how hot it is!" And both of us feel a little more uncomfortable for saying it. It would be far better to suffer in silence.

Do you know, I think it is people who are off in holiday resorts trying to get cool who really feel so hot. There is a great blessing in having something to do, if we could realize it, instead of grumbling. I don't believe a girl feels a bit worse when she is wrestling with her Sunday-school class on a hot afternoon than she would do nothing at home, and wishing the day was over. You would think there could be nothing much worse than working every day in Eaton's or Simpson's, and coming home at night to sleep in a little close room on some crowded, dusty street, and yet, though I know lots of girls who are doing that, and looking pretty tired, too, I never heard one of them complaining of the hot weather. They are always thinking of going to the parks or on the Bay in the evening, and planning Saturday afternoon excursions. And, it is just these girls who turn up on Sundays at church and Sunday school all through the summer, while their rich sisters, who have nothing to do all the year round, find religion too heating for four months in the summer.

Moral: Forget yourself and keep cool!  
C. D.



"Chums."

(Photo by Sallows, Goderich.)

some corn he planted and took care of himself is taller than me. I have stopped at five feet three, with no appearance of getting any taller. I think I would rather be short than tall, as it takes quite a bit more to dress a tall person than a short one.

There have been quite a few swallows around here the last year or two. Some of them are very tame, and would light on the handle of the plow when the men were plowing last fall. Some of them have nests in the hogpen loft, and seem to think I am intruding when I go up in search of eggs. I don't see how any boy or man can find pleasure in the destruction of the little wild things of the woods. If you are still taking members for the "Dumb Animals' Protection Society" you may put my name down. Well, this letter is getting very long and they are wanting help with the churning, so I must close, with best wishes for the Y. P. D. FAY.

I was much pleased to hear from you

the tender age of ten years. He weighed 51 pounds, and stood 3 feet 4 inches. One can imagine the amusement and astonishment with which the 25,000 people who attended the annual Caledonian sports at Dunedin, New Zealand, beheld this child appear on the track to compete in the two-mile open walking championship. There were sixteen competitors, the favorite being J. Spence, the champion, who stood 6 feet 4 inches, and had yet to meet defeat. Spence took the lead at the start, with the boy sticking to him, and giving spurt for spurt. Two laps from the finish the child shot to the front, and, in a dazzling exhibition of the squarest and smoothest heel-and-toe walking, won by 40 yards.

The Governor of the Colony then and there predicted that the boy would one day be the champion of the world, and the crowd took up a collection for him on the spot. Fortunately for the future career of young Scott, he was already in the hands of a sagacious trainer, who

The Ingle Nook.

Stencilled Curtains.

Dear Dame Durden and Chatterers All, -I've never written to the Ingle Nook before, but have always enjoyed reading the letters, and have received some good suggestions from them.

Now, Dame Durden, I would like some information. I would like to stencil a set of curtains for our family living-room. I think linen-colored scrim, or cream cheesecloth, would be pretty stencilled in the "Greek key" pattern in "old blue," a soft dull shade I mean. What do you think about it? What would you use for the dye, and how prepare it? I think we will hang the curtains on brass rods, without tying them back. Which do you think would be the better length, just below the middle of the window or to the edge of the sill? If you or anyone can give me any suggestions I shall be ever so much obliged.

Perth Co., Ont.

I understand that stencilled curtains will wash nicely if the operation is very carefully done. First shake all the dust off the curtains, then wash by "sousing" about in a lather made of tepid soft water and white castile soap; no strong soap should be used, nor should the curtains be washed on a board. Rinse through several waters and dry quickly in the shade. In time, of course, the colored portion may fade a little, but if you have kept the stencil recoloring will be an easy matter.

I think your Greek-key pattern would be lovely, either on linen color or cream. There are two methods of stencilling; some use Diamond or other dye, some turpentine tinted with artists' tube paint. In either case, put the material over pads of blotting paper while working on it. The curtains should be made to reach the sill.

Some Useful Recipes.

Dear Dame Durden,-I am very much interested in the Ingle Nook letters. They have helped me in many ways, and I think it is my turn to try and do something in return. I enclose a few recipes, trusting that they may be as helpful to someone as those of others have been to me.

Here is a recipe for an ointment, which I think ought to be in every house where there are children: Take two drams of oxide of zinc, two ounces of vaseline, ten drops of carbolic acid; mix all well together on a pane of glass or the bottom of a dinner plate, and when well mixed place in a wide-mouthed bottle or box for use. It is splendid for sores of any kind, cuts, burns or scabs, such as sometimes disfigure the faces of little ones, and with the addition of three grains of sugar of lead it is almost a sure cure for salt rheum. For the last-named disease it must be spread on thickly, and protected by binding a cloth over it. Prick all the pimples as soon as they appear, and wash with boracic acid and hot water.

Another good medicine to keep by you is a liquid made by putting together in a bottle equal parts of menthol crystals and thymol. This will instantly cure toothache. Wet a plug of cotton with it and insert in the cavity of aching tooth. It is also good for headache or neuralgic pains in the face or limbs, bites and stings of insects, etc.

Sunglint's recipe for rheumatism is no doubt a good one, and I hope it may be a blessing to some poor sufferer.

I noticed a slight mistake in connection with her recipe for sore mouth. Hydrastis is not gold-thread. Hydrastis is golden seal, and Coptis is gold-thread. Gold-thread is a low-growing stemless plant, producing only one flower to a scape; leaves small, three-lobed, and shining dark-green. It is very common in cedar swamps, about old stumps and logs, and is easily identified by its long threadlike bright-yellow roots, which have often chewed the roots for relief from sores or ulcers in the mouth, and which have found relief.

Hydrastis, or yellow puccoon, grows in wet meadows, and is common in the early part of summer. The leaves are large and cordate, or heart-shaped, the root is thick and knotty, and of an orange color. Both are very

the taste, and both belong to the same genera, Ranunculaceae.

Wishing yourself and all the Nookers every success, I am, Yours, Brant Co., Ont. "NOOKER."

I am very sorry the publication of this letter has been so long delayed. Am delighted to find that you take an interest in botany, "Nooker." It is my favorite study, so let me shake hands with you over it. Many thanks for the recipes.

Cheesemaking.

Dame Durden,-In a Brant Farmer's Wife's letter to you on the above subject, I should perhaps suggest some improvement which I think would be advisable.

I would only heat the milk to 88 instead of 95, and would put in the coloring before the rennet, diluting it with, say a pint of water, and mix well by stirring. I should also recommend putting in the buttermilk before using the rennet; also dilute the rennet with cold water.

After the milk has coagulated, and a good test to know when it is ready, is to use the first finger of the right hand, and insert it into the curd in a slanting position, and should the curd break clean as you lift your finger up it is ready to cut.

I should recommend anyone to cut the curd into squares of, say, about 1/2 of an inch square, in preference to breaking it with the dipper, and as soon as the whey shows signs of coming, gently raise the temperature of the curds and whey to 98 degrees in the spring or early summer, to 100 degrees or even higher in the fall or early winter.

This can be done by using hot water, as soon as sufficient acid has developed.

About the House.

SOME SEASONABLE RECIPES.

Grape Catsup.-Take 8 lbs. grapes and cook until very soft. Put through a sieve, return to kettle and add 4 lbs. sugar, 1 quart vinegar, 1 tablespoon each of ground cinnamon and allspice, and 2 tablespoons ground cloves. Boil till thick.

Grape Wine.-To 1 gal. mashed grapes add 1 qt. boiling water. Let stand overnight and strain. To every gallon of juice add 3 lbs. white sugar, drop a few pieces of toasted bread in to hasten fermentation; stand in a cool place until it finishes fermenting; bottle and seal.

Unfermented Wine.-Put in a granite kettle 3 quarts water and a peck of stemmed Concord grapes. Boil five minutes after reaching the boiling point, then strain. To every 2 quarts juice add a small cup sugar and boil 5 minutes. Pour into sterilized bottles and seal.

Wild Plum Jelly.-Stew 4 quarts plums in 1 quart water until tender, then strain through a jelly bag. Measure the juice, and to each pint allow a pint of heated sugar. Let the juice cook for a while, then add sugar. Test it at short intervals, and, as soon as it begins to "set" take from the fire and put in sterilized glasses.

Plum Butter.-Put the plums left over in jelly-making through a sieve, add an equal quantity of sugar, and cook until as thick as desired. Spice to taste, and seal in glasses.

Grape Jam.-Pulp the grapes, putting skins in one basin and pulps in another. Put pulps in a granite kettle, bring to boiling point, put through a colander, add skins and measure. To every pint allow a scant half pound sugar. Boil

it is understood that tops and jars have been thoroughly sterilized before fruit is put in. Plums and pears may be done the same way.

Cream Salad Dressing.-Beat the yolks of 3 eggs, then add 1 tablespoon thick, sweet cream, 1 tablespoon softened butter, 1 tablespoon lemon juice, 1 teaspoon made mustard, 1 teaspoon sugar, and a dash of pepper. Beat well after each addition, then set the bowl in a pan of hot water on the stove and stir rapidly until cooked.

Stewed Tomatoes.-Scald ripe tomatoes and remove skins. Cut the tomatoes in pieces, stew in a granite kettle for 30 minutes, then add to every quart 1 tablespoon butter, and seasoning of pepper and salt. Stew until of the desired thickness, or add cracker crumbs to thicken, and then serve very hot.

Baked Garden Squash.-Cut the squash in pieces, remove seeds, and bake in the shell. When soft scrape out the pulp, and season with pepper, salt, and butter.

Cooking Salsify or Oyster Plant.-Wash and scrape the salsify. Keep under water as much as possible while scraping, then throw into water and vinegar for a few minutes to whiten. Drain, cover with boiling water, and cook about 40 minutes, adding a level teaspoon of salt and a squeeze of lemon after the first 20 minutes. When tender, drain, cut into pieces, cover with white sauce, and serve very hot.

To Bake Potatoes Properly.-Wash well, scrubbing with a small brush. Place in a baking pan and bake about an hour. Shake after the end of about 20 minutes to turn the potatoes. Do not pierce with a fork, but squeeze with the hands, in a clean cloth, to see if they are done. When soft, crack each in one place and serve immediately, wrapped in a napkin.

Boiled Onions.-Boil the onions in plenty of salt water. Drain, and put in a dish, seasoning with melted butter, salt and pepper. Serve very hot.

Cauliflower.-Place top down in a dish of salted water to draw out insects, and leave half an hour. Remove the head and wrap it in a piece of cheesecloth, drop stem downward into hot salted water, and boil 20 minutes. Lift out and drain in a warm place. Place on a platter, cover with a hot cream sauce, and serve.

Cream Sauce.-Melt 3 tablespoons butter in a pan, and when hot, stir in 2 tablespoons flour. Gradually add 1 pint milk, let boil up, and season with pepper and salt. A few drops of onion juice or a little chopped parsley may be added just before serving if liked.

Bread Sauce.-To serve with fowl or roast veal: Put 1 cup fine bread crumbs in a pan, and add to them 2 cups milk, 1/2 of an onion, chopped fine. Let boil 12 minutes, then add 1 tablespoon butter, pepper and salt to taste.

Apple Filling for Layer Cake.-Grate 2 large, mellow, tart apples, add juice and grated rind of 1 lemon, and 1 cup sugar, and cook all together for five minutes, stirring all the time.

Chocolate Filling.-Put 1/2 cup sweet milk and 1/4 cup grated chocolate in a saucepan and cook until creamy, then add 1 cup brown sugar, and cook 2 minutes longer, add 1/2 teaspoon butter, remove from the fire, and add 2 teaspoons vanilla. When slightly cooled pour on cake.

THOUGHT HE SAW DOUBLE.

A worthy professor was invited to dine at the house of a lady of fashion.

The day was hot, the wine cool, the professor's thirst great, and the fair neighbor with whom the professor was engaged in a lively conversation filled his glass as often as it was emptied.

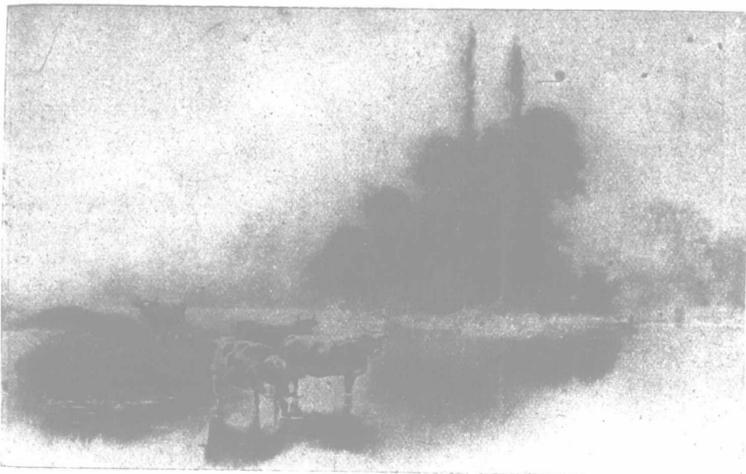
When the company rose from the table, the professor noticed, to his great consternation, that he was unsteady on his feet.

In his anxiety to save appearances, he repaired to the drawing-room, where the lady of the house yielded to the wishes of her lady friends and ordered the nurse to bring in the baby twins.

The pair were lying together on a pillow, and the nurse presented them for inspection to the person nearest the door, who happened to be the professor.

The latter gazed intently at them for a while, as if deciding whether or not they were two, or one, and then said, somewhat huskily:

"Really, what a bonny little child!"



Autumn Days.

This can be ascertained by taking a small quantity of curd and squeezing it dry in the hand, heat a piece of round iron in the fire, touch the curd on the hot iron, and if it strings with fine thread-like strings for, say, one-quarter of an inch in the spring to three-quarters in the fall, it is ready to take out of the whey. Keep warm, say 98 degrees for about three hours, when it ought to have that glossy, oily appearance, when it should be cut fine and salted, and put to press. Yours very truly,

PETER MACFARLANE.

Peter, N. S.

Many thanks for above information.

REPRINTING POEMS.

Several requests have come for the reprinting of poems which have already appeared in "The Farmer's Advocate." May we state once for all that we do not keep track of poems which appear from time to time in our paper, and that the only way in which it is possible for us to send a paper of selection without incurring expense is by a valuable time. May we suggest that our contributors send their poems as may be done in the "Notes" column every week, and that they be clearly headed, and no time lost.

POWER LOT

A Story of "Down East"

BY SARAH McLEAN GREENE.

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CHAPTER XVII.

Skipper's Wife and Rhody.

Rob could smile, for, though Mary Stingaree was out of his reach, no one else had won her; even the celebrated Margate had come a-courting in vain. Sordid life had bound him, and he was a fighter of beasts, but now for a little space he roamed kingdom-free in his own imaginings.

A little old woman standing on the top rail of a picket fence, her wrinkled face young with good fellowship, gathering lilacs of the choicest out of the reach of the common herd in honor of his approach—this met his eye, and he rushed to her.

"But, Mother Skipper," he gasped, taking her in his arms, "you must not, you might fall." He put her tenderly down to earth. Her arms were full of rare bunches of lilacs, and she did not care. "Pooh," she remarked, "I'm spry."

Skipper himself, rigging up the well-sweep near at hand, laughed indulgently.

"You, Rob Hilton," he exclaimed, "runnin' an' huggin' a gal, jest as soon as ye clap eyes on her. Me, all over—what I use' ter be afore rheumatiz got holt of me."

"I know it," Rob answered, "but what are you going to do when some are so handsome you can't help yourself, and so spry"—he added—"that you'd have hard work to catch them."

"Land sakes alive," said Mrs. Skipper, with pleasant disgust, "ef you two don't make a pair."

"Spry!" echoed Skipper wistfully; "why, I'm eighty, and when the rheumatiz ain't on me I c'n jump up, yit, an' hit my heels together three times 'fore I tetch to 'arth."

"The last tim' gittin' to sound kind o' faint, though, Skipper," said his wife, with conscientious literalness.

"Mebby you're gittin' a little deaf?"

"No, I'm extry good o' hearin', as you know well, Skipper. How much could you hear with the wads o' cotton-battin' that I got stuffed inter my ears? Whilst to the sound only comes pleasanter—it's too loud when I don't have my wads in."

Skipper admitted the truth of this with a look of proud confirmation directed toward Rob.

"Somebody a-preachin' to the River split her eardrums with his chantey," he explained, "and she's wore them breakwaters in her ears ever since."

"It wa'it his chantey, Skipper; 'twas his prayin'."

"Chantey or prayin', what's the odds? he stunted ye with his racket," mildly continued the Skipper, in full explanation.

"He done it to alarm souls," proceeded Mrs. Skipper, in grave extenuation of the offense which had smitten her own acute sense so grievously; "an' some there was that needed it"—she regarded Skipper complacently, never accusingly—"but they was not there. Only them was there that had been alarmed long ago and got all settled down after it, and the wrong way was took with 'em; all that was there felt it."

"She ain't been down to meetin' sense," said Skipper, in a tone of great self-congratulation.

"But I ain't give up the Lord, Skipper. I hold my own communit's an' I keep the Sabbath day strieter an' what I ever did, or than any does that goes down to meetin'. I seen some tourists trompin' around the beach last Sunday, an' it made my heart ache to think o' sech a dissipation. My folks was meetin' goin' folks, an' ef we don't hang on to our principles, where be we? High water or low, gale or calm, there's nothin' could tempt me to go

explorin' around on the beach on the Sabbath Day."

Rob, who never failed of a Sunday ramble along shore, and Skipper, who stole on that day of sacred observance as lovingly to the surf as if it had been his father and his mother—both hung their heads silently, though not without a sense of pride in Mrs. Skipper's facile walk among the religious proprieties, and a marvel at those moral distinctions, so dim to them, which she so well knew how to define; above all, a hidden hope, perhaps, of holding on by her skimpy little old-fashioned skirts for a smuggled passage through those final spiritual reckonings where she was so safe, and they so wide and tumultuously at sea.

"Ache an' pain, pain an' ache, beat an' throb, throb an' beat, an' sometimes roll an' toss," said Skipper, changing the subject, and pathetically stroking his knees—"toss an' roll—"

"Ye sleep like a log, Skipper," Mrs. Skipper corrected him, gently.

"You don't know what I suffer sometimes in the middle o' the night," said Skipper, his exceeding young and beautiful eyes wandering with a wild plaintiveness toward the horizon of mingled sea and sky.

"Ye never felt so much as yer conscience vexin' of ye, Skipper, but what ye'd wake me up an' start me for the camfire bottle. But women is better sufferers 'n men, as all the worl' knows."

"She took on dretful, dretful, when our only darter died," said Skipper to Rob merrily; "we was afeard she'd lose her reason. Wal', wal' he went on, tenderly, withdrawing his eyes from Mrs. Skipper's downcast face, "I've had ter do it, Rob. Come the season, I couldn't stan' it no longer. I've got me a boat and I've been a-paintin' an' ballas'in' of her."

"He's too old," said Mrs. Skipper, a still deeper gloom enshadowing her countenance as she shook her head.

"Old 'r young, I know how ter manage a boat, an' I couldn't stan' it no longer—a man 't 's been the dog I've been on the water! I've got my trawl geared up with a thousand hooks, an' I'm goin' ter bait 'em next Monday an' make out through the Gut ag'in."

"It's in his blood, an' nothin' 'll rest him of it tell he heaves up his las' sigh. His father an' his gran'-father was skippers afore him. Wal', ef that's the way he is to go, why, so it must be."

"Do ye know o' any other way to git to the fishin' grounds?" inquired the old skipper of his wife, in all simplicity, lifting eyes of skyeey candor from a weather-beaten countenance.

"I meant something else," she said significantly and solemnly. "Ye know I wouldn't feel so bad about it ef ye'd only been dipped."

"Good Tunket—wife. First ye're afeard I'll git drowned, an' then ye want me dipped. Le's take the water 's it comes. Ef'r my part I think it's 'hullsome ter be salt, an' enough of it," cried the innocent old sea-dog buoyantly. "Let alone o' the mux in that ol' Baptis' tank, Mother, an' le's take the water whatever way God A'mighty's mind ter send it."

Rob gave his helpless giggle. Mrs. Skipper's sad face broke up a little indulgently. "Wal', anyways," she said, "I believe 't Grace 'll save him somehow. It saves ter the utter'm'st, an' I believe it 'll fetch down an' git a-holt o' Skipper, somehow." It was plain that she had no intention of putting out on any sea, celestial or terrestrial, without her Skipper.

"Sure!" responded that scion of perdition kindly; "don't ye fret no more about it, Mother. Ain't ye goin' ter treat Rob to some butter-milk?"

Rob was still a famous drinker, according to his new lights. Spring water, milk, buttermilk—all was fish that came to his net; and the depth of the draught was mainly deter-

mined by the copiousness of the source of supply.

"My sakes, it's a pleasure to see ye guzzle," beamed Mrs. Skipper, looking up as at the splendid throat of an ox, while Rob drained the pitcher of buttermilk. "Come into the gardin'," she continued, giving out gratefully to the utmost of her hospitality, "le's see what we can do for ye there. Laylocks is purty, but they're kind o' common; they ain't like gardin'-raised flowers."

"Fix him up pretty, Mother," Skipper called after them without stint or jealousy. Mrs. Skipper stood in the tall grass in her flower garden; many of the flowers were hidden by the grass, but some tall "delilahs" and "pineys" held their own. She plucked several of the grandest specimens for Rob, who had the great good sense to know that the little old woman was, herself, the sweetest flower standing there.

But he had another heart's love farther on; and so, with a tender adieu to Mrs. Skipper, his hands embarrassed with a riches of laylocks, pineys and delilahs, he tramped on his picturesque way.

And now at his approach looked up gladly little Rhody Ditmarse, eight years old, and plain as sorrow, with a temporary absence of front teeth, and an old-world gravity of care resting on her small snubbed face.

She sat on the Ditmarse doorstep, barefoot, her brown, briar-scratched but sturdy legs plainly adapted for that toilsome and trial-beset path in life which they, in all probability, were destined to run.

"Hello, Rob," she cried, and the grin she gave him through her exposed gums declared openly as day that her heart was in his keeping.

"Hello, Rhody," replied Rob, with reciprocal affection. "I see you've got the cows home and the work all done up."

She nodded sagely. "Red Suke's gittin' to be a breecher," she said. Rob knew that this meant a cow that jumped and broke fences, and he received the news with sympathy. "But father says he's goin' ter rig up a poke on her ter-morrer 't 'll fix her so she won't jump no more fences."

Rob was sitting on the doorstep at Rhody's side by this time, and the little girl put up her hand and whispered confidentially:

"Mother an' Father 's a-havin' words inside thar." The sound of voices in the kitchen indicated that they were not only having words, but loud ones.

"Mother says Grammer's goin' ter come here ter live, an' Father says she ain't, neither—but Mother can beat Father every time," sighed little Rhody contentedly; "an' Grammer c'n come, I guess, pore, lonesome ol' crittur." Rhody's tone was such a faithful reproduction of the whine of some charitable elder, and her face was that of so confirmed a bearer of life's burdens, Rob actually felt a sense of edification in her presence.

"She c'n come, pore, lonesome ol' crittur—an' she c'n have my plate with the red mountings an' blue catarack painted onto it."

"It must be a beautiful plate," said Rob.

"Grammer giv' it to me when I was borned, an' it's only fair she sh'd have it back ag'in. Ef God 'll give me vittles," continued Rhody, evidently quoting from the paternal wisdom in this instance. "Ef God 'll give me vittles, I don't care what kind o' a tub I snout 'em out of."

"My heavens, Rhody," gasped Rob, "how you do remember sayings for a young one!"

"What ye goin' ter do with yer pineys an' delilahs?" observed Rhody, cying those splendid blooms with the moderate spirit of one who can admire without coveting.

"I'm going to give some to you," said Rob, at once holding out a pair to her, "and half of my lilacs."

"Ye'd better keep yer laylocks ef ye favor 'em," said Rhody, showing a disposition to accept only the rarer bloom; "they're common as

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sheep-weed 'round here. Bet ye," she suddenly challenged him, with a grin, for the dome of her thought was Shakespearean and embraced romping joy, as well as stern deliberation and bravely sustained sorrow; "bet ye a candy suckler I c'n tech Pompey Rock afore you kin."

The young man and the little girl sprang to their feet and ran like victims of spasmodic insanity, pursued by the furies, down the bluffs, over fences, down steeper bluffs, scampering out to where the tide had left Pompey's Rock as the solemn and tremendous goal of their endeavors.

Of course, Rhody touched it first, Rob looked out for that, and made a great show of panting forth his humiliation and defeat.

"Tuckered?" grinned the girl. "I ain't tuckered a mite. Wal," she sighed thoughtfully, "I had my spree, an' now I must go beatin' in to'ds home, or they'll be settin' up a pelly-loo for me."

"What is that?" said Rob, as a humble inquirer, and unashamed, for Rhody ever imparted her wisdom generously, with no hint of scorn for the unenlightened.

"A pelly-loo is a creech, or a yawlin', or a bawlin', ary one," said she.

Rob pressed the penny for a candy sucker into her hand. "You won the bet, Rhody."

"Ye needn't ter pay it, Rob. Bettin' is only jest f'r fun. Ef you'd a-tetched Pompey's 'fore I did, I couldn't a paid ye, for I didn't hev no penny." She handed it back, but Rob looked hurt and shook his head.

"Ef I keep it," continued Rhody, closing a very hard, red little fist over it, "it won't go for no suckler; it'll go to'ds gittin' me a meetin' hat."

"What! no sucker after all?" "No; I'd ruther have one, Rob—but Mother told Father I'd git dand like the heathin ef I didn't hev no meetin' hat purty soon. She said I'd never heern tell o' sech a thing as a Lord's Supper."

"Well, I don't know—I don't want to dispute your mother, and I don't know much about it," said Rob, reflectively; "but, somehow, I should think, you're so generous, and work so hard for your folks, and such a little girl, too, and giving your grandmother your own plate with the mountains and cataract, and all; and there's a kind of a spirit about you, Rhody—I can't explain—but I, honest, believe ef God had a supper table he'd want you to sit right near to Him at it, honest, I do."

"Ye'd ought to know," said Rhody meditatively. "f'r ye come from New Yar-r-rk. But I wouldn't care where I set to the supper, Rob," she added, with entire conscientiousness, "so long as I set alongside o' you."

"Same here," replied Rob, really deeply interested in the subject, and with a gravity as thoughtful as Rhody's own.

"S'posin' ye should spy me out in hell?" continued the fearless Rhody, whose mental range, as has been said, was Shakespearean, and who stuck at no finical barriers of ultra-polite English. "s'posin' ye sh'd spy me out in hell, Rob, what'd ye do?"

"Well, I guess you know very well, Rhody, I'd work day and night to get you out."

"Yes," said Rhody faithfully. "I bet ye would."

"And what," said Rob, following Rhody's trail along these novel theological altitudes, "what if you were in the other place and I was in hell—for, sharp though they are in New York, they might get there, you know—what would you do?"

"Wal, ef my own wings was growed," said Rhody, her plain blue eyes fairly ecstatic with this untraveled flight of her imagination. "I'd dive straight down an' get ye myself. But, ef I'm settin' 'round thar' moultin', I'd make such a pelly-loo that them full-growed angels wouldn't git no peeces till they dove down an' hove ye up, an' the their wings an' f'etched ye up, an' the sound I'd raise the angels an' 'tophit' 'em, an' the ex'cuse the angels, again choosin' a gene from the eternal

language, "tell they started ter go down an' fetch ye, Rob."

Thus, mutually secure in the dark mazes of the here and the hereafter, the comrades parted, Rhody making homeward, and Rob continuing his path along the beach; for even yet the sun had not reached its setting.

To be continued.

**I HEARD THE SPIRIT SINGING.**

I heard the Spirit singing in the ancient caves of Work:

"You are playing, Man-child, playing where the evil demons lurk; Yet I would not have you falter or count the awful cost, Lest your heart grow old within you and the zest for sport be lost.

"So toss the ball of empire, with its fatal coat of fire; And dig for gilded nuggets with the pangs of hot desire; And blow your flimy bubbles in the bright face of the sun, Tho' you know they'll tarnish, vanish ere your playing-day is done.

"Go, spin your humming-top of Thought, or brood with sullen lip, As you scrawl upon the canvas or load the merchant ship; Come, tell some old, old story, or rehearse some ancient creed, Or with many a lip of wonder draw the music from the reed.

"Let your playful hand in cunning devise a giant eye, And in long hours of frolic guess the secrets of the sky; Or peep with curious longing in the busy underhourne, Where microscopic beings are playing in their turn.

"And raise Love's swaying ladder to the dizzy heights of woe; And walk o'er desert places where the thorns and thistles grow, Where the Man-child gropes and stumbles and holds his quivering breath As he meets within the shadows his last playfellow, Death."

I heard the Spirit singing: "Laughter is the strongest prayer, And the zest of faith is measured by the mirth that toys with care; And he who plays the hardest and dares to laugh aloud Beyond the cavern's shadows may some day work with God."

—[June E. Downey, in N. Y. Independent.

**Current Events.**

The recent loss by fire in the Toronto Stock-yards amounted to about \$150,000.

A trust fund of \$1,000,000 has been created toward the beginning of an Australian navy.

The Richelieu River, between St. John's and Lake Champlain, is to be dredged out and improved for navigation, at a cost of \$200,000.

The entry of horses for the Canadian National Exhibition, at Toronto, is the largest on record. Upwards of sixty more horses than last year are on the lists.

Two new Dreadnoughts, with all the latest improvements, are now being built in England, and will be launched before the end of the year. These will make four vessels of this class in the British navy.

Abd el Aziz, Sultan of Morocco, has been defeated in battle by his brother, Mulai Hafid, and compelled to flee to Damascus for safety. In the meantime, Mulai Hafid is assuming control in Morocco. The contest is being anxiously watched by European powers, as complications, first between Morocco and France, and subsequently between France and Germany, may ensue.

GOSSIP.

SIMCOE LODGE CLYDESDALES AND HACKNEYS.

A long array of trophies and medals, representing winnings at the leading Canadian Exhibitions, as well as the International at Chicago, more particularly on home-bred stock, bears evidence to the standing of Messrs. Hodgkinson & Tisdale, of Beaverton, Ont., among Canadian exhibitors and breeders. While in years past they have led very many exceptionally high-class animals into the ring, it is just as true that never before was their entry made up of so uniform a lot of Clydesdale fillies (which, by the way, is their speciality), and possessed of so much of that dash quality, as those of this year's entry, accounted for by the fact that several of them are the get of that wonderful show horse and sire, for the last four years at the head of their stud, Royal Baron (imp), one of the greatest show and breeding sons of the greatest of them all, Baron's Pride, while his dam, Royal Queen, is a half-sister to the Scottish champion, Royal Gartley, being sired by the champion Mount Royal, and so on, all down the line his breeding representing very many champions and sires of champions, and his own show record bears out the old breeding adage that like begets like, as his winnings are: First at Ayr, second at Royal, first at the Highland, also winner of the Cawdor Cup; first at Toronto in 1904 and 1905, first at Chicago in 1904, first with four of his get, Toronto, 1906; first, Toronto, 1907. He was never in better bloom than just now. Look him up at Toronto. Second in service is Mackenzie 4798, bred on the farm, sired by Foremost (imp), dam Royal Princess 2845, by The Royal Standard (imp.). He is a horse of great substance and commanding appearance, while his underpinning and action are well-nigh faultless. Baron Lad 7172, is a brown two-year-old, a wonderfully nice-turned son of Royal Baron, dam Kate Thistle, by The Thistle (imp.). This colt, in sweetness of mould, style, quality throughout, and beautiful bottom, is certainly the foundation of a great horse. Bishopton Queen (imp.) 14072, by Prince Sturdy, dam by Baron's Pride, is a bay two-year-old, a coming champion, if not this year, as her combination of size, style, quality, smoothness and perfect action are very seldom met with in any one animal. Baron's Queen 12985 is a bay two-year-old Canadian-bred filly, by Royal Baron, dam Peerless, by Royal Peer (imp.). This filly is up to a very big size, and a model of perfection; a winner sure. Maple Dale Daisy 15562 is another bay Canadian-bred two-year-old, by the same sire, dam by Erskine Style (imp.). She is a grand quality of filly, and moves as true as a bullet; a very choice sort. Queen of Quality 15564 is a bay yearling, by Royal Baron, dam Gaiety (imp.), by Frivolity. This is certainly a great yearling, big and smooth and sweet. It will take a cracker to beat her. Coming on down in age, Royal Rose 15563, is a bay filly foal, by the same sire, dam Moss Rose, by Blucher. She is a superb foal, and will certainly shine in her class.

At the head of the Hackneys is the Toronto first-prize winner, Imp. Linden Renown, the bay son of the great horse, Danegelt's Son, dam by Renown, by Confidence. He was never in such bloom, and never acted better, and we look for him to give a good account of himself this fall. Dictator 400, is a brown yearling stallion colt, by Storm King, dam Wild Cherry, by Squire Rickell. This colt shows all the natural attributes of a coming champion, and the one that beats him will have to go some. Dainty Fashion 468, is a brown filly foal, a half-sister to Dictator, being out of that great show mare, Wild Cherry, and sired by Linden Renown. She is certainly a right good one, and moves grandly. Look up this lot on the Toronto Exhibition grounds.

TRADE TOPIC.

The T-Bar Steel Swinging Stanchions for cattle, manufactured by A. M. Rush, Preston, Ont., are advertised in this paper. For strength, convenience and comfort of the animals, these rank among the most complete of cattle fastenings. Farmers interested should look up the advertisement and write for the booklet, giving full information.



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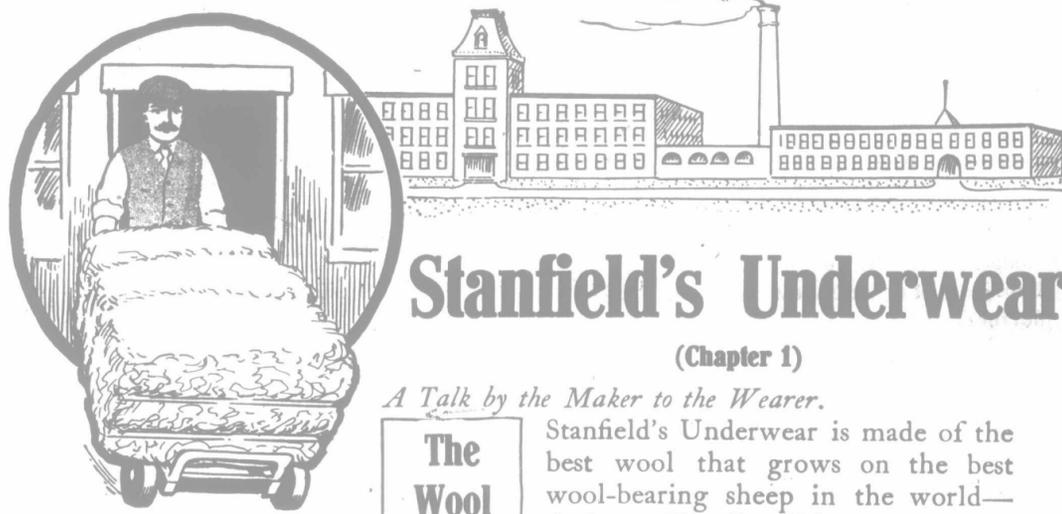
There's practically no work for you—just to move the handle back and forth. Ball bearings and perfect balance do the rest.

You simply fill the tub two thirds full of hot, soapy water—put in the clothes—and set the machine in motion. The suds are sent whirling back and forth through the fibre of every garment, and wash everything sweet and clean.

There's no rubbing—no torn garments—and light and heavy, thick and thin, things are washed equally well. Think how easy this makes washing at home—(no worn out irritable women)—no red, chapped hands—no smell—no mess—and the week's washing done in an hour.

"New Century" Washing Machine costs only \$9.50, complete with new Wringer Attachment, (Wringer not included) delivered at any railroad station in Ontario or Quebec. Write for full information. 41

The Dowsell Manufacturing Co. Limited, Hamilton, Ont.



**Stanfield's Underwear**  
(Chapter 1)

*A Talk by the Maker to the Wearer.*

**The Wool**

Stanfield's Underwear is made of the best wool that grows on the best wool-bearing sheep in the world—the long, silky-fibred Nova Scotia wool.

The founder of the Stanfield mills did more than anyone else to develop the wool industry throughout the Maritime Provinces. For half a century, the farmers of New Brunswick, Nova Scotia and Prince Edward Island have saved their best wool for the Stanfields—first for C. E. Stanfield—and now for his sons, John and Frank, the President and Treasurer of Stanfields Limited.

The wear of a garment depends on the quality of wool from which it is made. Underwear may be PURE WOOL, and ALL WOOL—and still shrink, ravel and wear out in a single season. Because the underwear is not made of good wool in the first place.

There are seven grades of wool in the fleece when clipped from Nova Scotia sheep. Only the first three grades of this best wool are used in making Stanfield's Unshrinkable Underwear for men and women.

There are no weak spots in the fibre to break in the garments.

There can be no unraveling because every stitch is locked.

Garments can't shrink, because of our perfected process of treating the wool BEFORE garments are woven, thus insuring absolutely Unshrinkable Underwear.

Stanfield's Underwear is right from start to finish. It is planned right, made right and wears right.

In all sizes from 22 to 70 inch chest measu.e. in three winter weights—RED label for light weight—BLUE label for medium weight—BLACK label for heavy weight.

Your dealer probably has all sizes and weights in stock. If not, he can easily get whatever you wish.

149

STANFIELDS LIMITED - TRURO, N.S.



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**WE WANT** you to help us to get them. We know you CAN and we believe you WILL.

**WE WANT** to pay you WELL for doing it.

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## Fall Exhibitions!

We will require a number of good circulation canvassers at all the leading fairs this fall, and would like to hear from any of our readers who have the time and ability to take hold of this work in earnest. Hustlers, whether men or capable boys, can earn big wages. Write at once for terms. Address:

**The Farmer's Advocate,**  
London, Ont.

## MARKETS.

### TORONTO. LIVE STOCK

The total receipts of live stock at the city and junction markets for the week ending August 28th, were as follows: 340 carloads, containing 5,659 cattle, 3,124 hogs, 5,234 sheep, 327 calves, and 71 horses.

The quality of fat cattle was, taken altogether, fair, but there were many of the common to medium classes, especially at the city market. Trade was brisk for the best cattle at a little firmer prices, but the lower grades remained about steady.

At West Toronto on Monday, August 31st, receipts of cattle were 1,705, quality fairly good, trade inclined to be slow. Prices about steady for butchers', but a little lower for exporters. Export steers, \$4.80 to \$5.40; prime picked butchers', \$4.75 to \$5; loads of good, \$4.25 to \$4.50; medium, \$3.90 to \$4.25; common, \$3.50 to \$3.75; cows, \$2.75 to \$4; canners, \$1.50 to \$2; milkers and springers, \$30 to \$55 each; calves, \$3 to \$6 per cwt. Sheep, \$4 to \$4.25; lambs, \$5 to \$5.75 per cwt. Hogs at \$6.50 for selects; \$6.25 f. o. b. cars, country.

Exporters.—Export steers sold from \$5 to \$5.60, with the bulk going about \$5.20 to \$5.35; light exporters sold at \$4.75 to \$5; bulls sold at \$3.75 to \$4.40.

Butchers'.—A few prime cattle sold at \$4.75 to \$5, but not many reached these figures; loads of good, \$4.30 to \$4.60; medium, \$4 to \$4.25; common, \$3.50 to \$3.80; cows, \$2.50 to \$3.80; canners, \$1.40 to \$2.25.

Feeders and Stockers.—Trade for feeders and stockers was dull. Feeders, 800 to 950, sold at \$3 to \$3.50; light stockers, \$2.50 to \$3.

Milkers and Springers.—Receipts fairly large; trade steady. Prices ranged from \$30 to \$55, with two or three of extra quality at \$60 each.

Veal Calves.—Receipts light, prices firmer at \$3 to \$7 per cwt., the bulk selling from \$4.50 to \$6 per cwt.

Sheep and Lambs.—Receipts larger, with prices lower for lambs and higher for sheep. Export ewes sold at \$4 to \$4.25; rams at \$3 to \$3.25; lambs, \$5 to \$5.75 per cwt.

Hogs.—Receipts moderate. Prices were reported by packers as being easier. Selects sold at \$6.50, fed and watered at the market, and \$6.25 f. o. b. cars at country points.

### BREADSTUFFS.

Wheat.—No. 2 white winter, 85½c.; No. 2 red, 85c.; No. 2 mixed, 85c. Manitoba—No. 3 northern, \$1.12, at lake ports.

Rye.—New, 70c., at outside points. Peas.—Nominal, at 90c. Oats.—No. 2 white, new, 39c. to 40c., outside; old, 45c. to 46c., outside.

Corn.—No. 2 yellow, 87c. to 88c., Toronto freights.

Barley.—No. 2, new, 57c. to 58c.; No. 3X, 55c. to 56c.

Bran.—Scarce, at \$20 to \$21, in bags, at Toronto.

Shorts.—Scarce, at \$22 to \$23, in bags, outside.

Flour.—Ontario 90 per cent. patent, \$3.30; Manitoba first patent, \$6; second patents, \$5.40.

### COUNTRY PRODUCE.

Butter.—Receipts larger, but prices remain about steady. Creamery pound rolls, 25c. to 26c.; separator dairy, 22c. to 23c.; store lots, 21c. to 22c.

Cheese.—Market firmer. Large, 13½c. to 13¾c.; twins, 13¼c. to 14c.

Honey.—Reports from dealers go to show that this year's crop of honey is both large and good. Prices easy, at 9c. to 10c. per lb., with a prospect of still lower quotations. No quotations for combs, as producers are asking too high prices to suit the dealers.

Eggs.—Receipts large, prices easier, at 20c. to 21c.

Poultry.—Market firmer. Spring chickens, alive, 14c. to 16c.; ducks, 10c. to 12c.; old fowl, 10c. to 11c.

Potatoes.—Prices by the load from farmers' wagons, are easier, at 60c. to 80c. per bushel.

Beans.—Market steady. Primes, \$2 to \$2.10; hand picked, \$2.10 to \$2.15.

Hay.—Baled, in car lots, on track at Toronto, firmer, at \$9 to \$10.

(Continued on next page.)

# Debentures

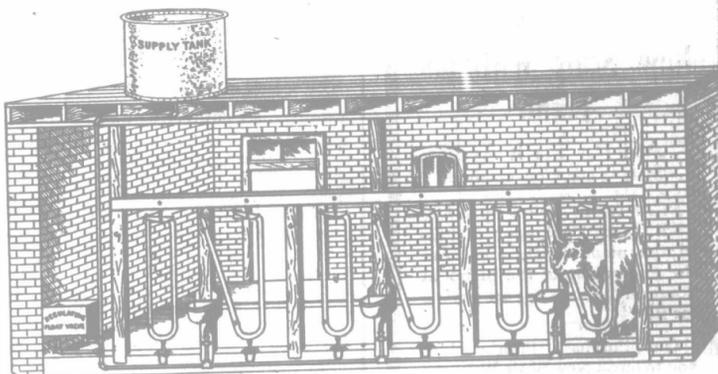
More people would put their savings in the Debentures of this Company if they realized the simplicity and safeness of this form of investment. It merely means that one deposits a certain amount—any sum over \$100—with this Company for a period of time, not less than one year, preferably five years, or less if desired. The debenture form which the depositor receives is a promise of the Company to pay

the sum mentioned, plus the interest, at 4 per cent. per annum at the time of expiration. This promise is secured by over \$11,000,000 of assets. The interest coupons attached are the same as cash and can be deposited as such. Huron & Erie Debentures are an investment of the highest class, and the man with small savings can share in it equally as well as the capitalist. Write for full particulars.

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Loan & Savings Co., London, Ont.

## Stanchions and Watering Bowls



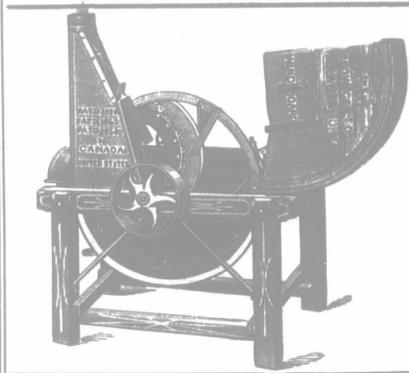
WE WANT EVERY FARMER IN CANADA to write for our new cuts and prices of our ROTARY U-BAR STANCHIONS and IMPROVED AUTOMATIC COW-BOWL for watering stock. We have had more experience, and spent more money in perfecting these lines, than any other firm in Canada, and in our goods we give you the benefit of our experience.

WE CLAIM that we can fix up your stables, old or new, at less cost than anyone else, and we want your name and address, so that we may tell you how we can do it.

We send samples for inspection and trial without charge. Write us, stating the number of cattle stabled, and whether the stables are old or new.

**The Metal Shingle & Siding Co., Limited**  
"Roofers to the Farmers of Canada."  
PRESTON, ONTARIO.

## ENSILAGE CUTTER



When you buy an Ensilage Cutter you want one which will not give everlasting trouble with breaks, getting out of gear, running hard, choking up, and the hundred other complicated ways that common cutters make trouble.

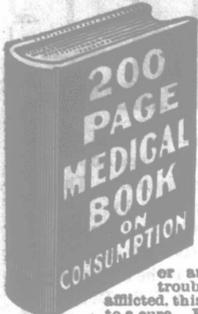
You want one that is simple, easy to run, strong, and will do good, fast and fine work.

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**FREE**

This valuable medical book tells in plain, simple language how Consumption can be cured in your own home. If you know of any one suffering from Consumption, Catarrh, Bronchitis, Asthma or any throat or lung trouble, or are yourself afflicted, this book will help you to a cure. Even if you are in the advanced stage of the disease and feel there is no hope, this book will show you how others have cured themselves after all remedies they had tried failed, and they believed their case hopeless.

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INSTEAD of "saving up to buy a piano," put your savings in the piano itself, and have the enjoyment of the piano at home all the time you are paying for it.

Our Purchase Plan enables you to buy a New Scale Williams Piano on practically your own terms. And you cannot buy a better piano at any price.

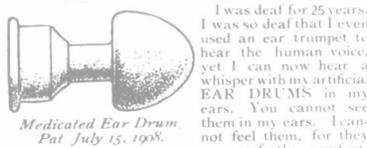
The "New Scale Williams" has won a place in the Canadian musical world, second to none. Its superb tone—its perfect action—its durability—are qualities that have taken the highest rank with all competent judges.

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**The Williams Piano Co. Limited, OSHAWA Ont. 24**

Please send me, free of all cost, booklets descriptive of the New Scale Williams Piano and special easy purchase plan. Name \_\_\_\_\_ Address \_\_\_\_\_

## DEAF 25 YEARS CAN NOW HEAR WHISPERS.



I was deaf for 25 years. I was so deaf that I even used an ear trumpet to hear the human voice, yet I can now hear a whisper with my artificial EAR DRUMS in my ears. You cannot see them in my ears. I cannot feel them, for they are perfectly comfortable. I keep them in my ears night and day. Write, and I will tell you a true story. "How I Got Deaf," and "How I Made Myself Hear."

I will be in Toronto, at the Rossin House, during the Toronto Fair; also during the Fair at London, at the Tecumseh House. All who suffer from poor hearing should be sure to call on me and see my new Ear Drum, Pat. July 15, 1908. Address: 1094 GEO. P. WAY, 18 Adelaide St., Detroit, Mich.

## A Choice Half-section

Of splendid land, about 12 miles from Calgary; all fenced; over 25 acres broken; contains good shack and corral; in excellent condition for immediate occupation. For sale, either all cash or easy-time payments. Apply BOX F. 581, LONDON, ONT.

Straw.—Market easy for baled straw, in car lots, on track at Toronto, at \$6 to \$6.50.

### HIDES AND WOOL.

The E. T. Carter Company, 85 East Front St., Toronto, wholesale dealers, report paying the following prices: No. 1 inspected steers, 60 lbs. and upwards, 10c.; No. 2 inspected steers, 60 lbs. and upwards, 9c.; No. 1 inspected cows, 9c.; No. 2 inspected cows, 8c.; country hides, cured, 8c.; calfskins, city, 12c.; calfskins, country, 11c.; horse hides, No. 1, \$2.75; horse hair, per lb., 28c.; tallow, per lb.; 5c. to 6c.; sheepskins, 90c.; wool, unwashed, 8c.; wool, washed, 13c. to 14c.; lamb skins, 35. to 40c.; pelts, 30c. to 40c. each.

### FRUIT MARKET.

Receipts of all kinds of seasonable fruit have been large, with prices easier. Some fine plums and peaches are being offered. Prices ruled last week as follows: Apples, 10c. to 30c. per basket; pears, 25c. to 50c.; plums, 25c. to 40c.; peaches, 30c. to 85c.; blueberries, 75c. to \$1; Lawton berries, box, 6c. to 9c.; grapes, 25c. to 30c. for small basket, and 60c. to 75c. for large basket; tomatoes, 20c. to 30c. basket; corn, per dozen, 7c. to 8c.; cantaloupes, 50c. to 75c. per case; gherkins, 25c. to 50c. per basket; red peppers, 30c. to 40c.; cabbage, per dozed, 20c. to 25c.

### SEEDS.

The Rennie Seed Company report a light demand for alsike clover seed, with prices easier than in our last. Prices are quoted as follows: Alsike, fancy, recleaned, per bushel, \$7.60 to \$7.70; No. 1 quality, \$7.30 to \$7.50; No. 2 quality, \$6.70 to \$6.90.

### MONTREAL.

Live Stock.—Shipments of cattle for the week ending August 22 amounted to 4,975 head, as against 3,613 the previous week, and 3,318 for the corresponding week of 1907.

The offerings of choice cattle have been very light on the local market of late, there being an ample supply of fairly good stock, however. Butchers are having hard work to secure all the choice animals they require. They were paying last week 5c. to 5½c. for the best obtainable, 4½c. to 5c. for good, 3½c. to 4½c. for medium, 3c. to 3½c. for common, and as low as 1½c. for inferior and canners. There was a plentiful supply of sheep and lambs and prices were steady, at 3½c. to 4c. for sheep and 5½c. to 6c. for lambs, according to quality. Calves were firm, selling at 4½c. to 5½c. per lb. for good to choice, and 2½c. to 3½c. for grass-fed. Owing to limited offerings of hogs, prices have advanced fractionally, packers now paying 6½c. to 7½c. per lb. for selects, weighed off cars.

Horses.—During the last week trade kept up fairly well, both for local and out-of-town trade. Prices, however, showed little change. Heavy draft horses, 1,500 to 1,700 lbs., \$250 to \$300 each; light draft, 1,400 to 1,500 lbs., \$225 to \$275; good blocks, 1,300 to 1,400 lbs., \$200 to \$225; express horses, \$150 to \$200; common plugs, \$50 to \$75 each, and choice saddle and carriage animals, \$300 to \$500 each.

Dressed Hogs and Provisions.—Tone of market for dressed hogs showed considerable firmness. Purchases at 9½c. to 10c. per lb. The demand for dressed hogs, as well as for all lines of cured meats and provisions, has been very fair.

Potatoes.—The market for potatoes shows very little change from week to week. Carloads of stock from New Brunswick and other places are not expected for two or three weeks to come, and the quality of the local stock is poor. Dealers are still paying farmers \$1.25 to \$1.30, and perhaps more, per bag of 80 lbs., here, and \$2.50 to \$3 per bbl. of 180 lbs., and selling these in single bags, or in a few bags at a time, at \$1.40 to \$1.50 per bag, and \$3 to \$3.50 per bbl.

Eggs.—Production light, demand good. Dealers last week were paying 19c. per dozen in the country, for straight stock, and selling here for 21c. No. 1 candled being 20c. to 21c., selects being 24c. to 25c., and boilers 27c. to 28c. per dozen.

Honey.—The new crop, coming in now, is bringing fairly good prices, demand being moderately active. It is said that the crop of white clover honey is

(Continued on next page)



**For Goodness Sake**

Don't let a paltry \$5.00 or \$10.00 in first cost come between you and Separator Satisfaction.

## De Laval = Cream = Separators

Mean Highest Quality and Efficiency. BEWARE OF CHEAP IMITATIONS. There's an Agent near you.

*The*  
**De Laval Separator Co.**  
173-177 William St. -- MONTREAL

## Sugar-Beet Meal

We will be on the market again with this new and popular stock food about October 1st, at which time we can take care of all enquiries. Your dealer will handle it. If you have never seen it, write us direct for sample and descriptive booklet.

MANUFACTURED BY

### The Wallaceburg Sugar Co., Ltd.

WALLACEBURG, ONTARIO.



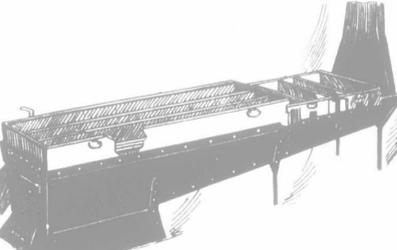
## Go to the Man Who Sells Paris Plows

And ask him to show you our line. Make a thorough investigation, compare ours with others, ask our agent questions, become familiar with every single part of our plows. We know for certain that the more carefully you go into the plow question the more surely you are to decide on the Paris Plow. Ask especially to see our Nos. 10 and 21.

### PARIS PLOW CO., LIMITED,

PARIS, ONTARIO.

## MAPLE SYRUP AND SUGAR MAKERS!



WE will exhibit our "Champion" Evaporator and a complete line of the best and most up-to-date appliances for the maple sugar camp at the Toronto, London, Sherbrooke and Ottawa Exhibitions, where our representatives will be pleased to meet intending purchasers and give them full information regarding operating our Evaporator. Illustrated Catalogues and Price Lists free on application.

THE GRIMM MANUFACTURING COMPANY, MONTREAL, QUEBEC.

comparatively small, that of buckwheat being large. Pound sections of white clover comb have been selling here at 13c. to 14c., those of buckwheat being 11c. to 12c., while white strained is 11c. per lb., and buckwheat 9c.

Butter.—The market continued to advance. Holders of light salted were asking 25c. here, and no choice stock could be had under 24c. Production light and of good quality. Shipments from port, for the week ending August 22, amounted to 4,000 packages, or 400 more than for the corresponding week of last year. Ontario dairies were 21c. to 22c., according to quality, and Manitobas 20c. to 21c.

Cheese.—Shipments for the week ending August 22 amounted to 70,000 boxes, which was 10,000 more than for the corresponding week of 1907. Westerns and Townships were still costing in the vicinity of 12c. last week, and the former were held here at 12c. On Monday, 31st, lower prices on country boards were reflected here in 12c. for Ontario and Townships, and 12c. for Quebecs.

Grain.—Prices of oats registered a slight decline, No. 2 Manitoba oats being 47c. to 48c. per bushel, car lots, in store, No. 3 being 46c. to 46c., and rejected 45c. to 45c. per bushel.

Hay.—Prices easier on spot, and demand fair, quotations being \$12 to \$12.50 per ton for No. 1 timothy, carloads, track, Montreal; \$11 to \$11.50 for No. 2 extra, and \$10 to \$10.50 for No. 2 ordinary; \$9 to \$9.50 for clover mixture, and \$7 to \$7.50 for clover.

Flour.—There has been some demand from those requiring old wheat flour and prices were steady, at \$6 to \$6.10 per bbl., in bags, for Manitoba patents, seconds being \$5.50. Ontario winter wheat patents, \$5 per bbl., and straight rollers, \$4.30 to \$4.50.

Millfeed.—Stocks exceedingly light and prices firm, being \$22 to \$23 per ton for Manitoba bran, in bags, and \$25 to \$26 for shorts. Ontarios are quoted at \$1 to \$2 less than these figures.

Hides.—Prices advanced 1/4c. per lb., dealers paying 7c., 8c. and 9c. per lb. for Nos. 3, 2 and 1 beef hides, and 11c. to 13c. for Nos. 2 and 1 calfskins, respectively, and selling to tanners at 1/4c. advance. Sheepskins were up to 30c. each; No. 1 horse hides \$2, and No. 2 \$1.50. Rough tallow, 1c. to 4c. per lb., and rendered 5c.

**CHEESE BOARD PRICES.**

Russell, Ont., 12c. bid; no sales. Napanee, Ont., 12c. Perth, Ont., no sales; all shipped to cold storage. Iroquois, Ont., 12c. Ottawa, Ont., 12c.; only few sold. Victoriaville, Que., 11c. to 11c. Listowel, Ont., 12c. bid; no sales on board. Picton, Ont., 12c. London, Ont., 12c. Cowansville, Que., butter, 24c., 24c. to 24c.; cheese, 12c. St. Hyacinthe, Que., 11c. Chicago, Ill., cheese, 11c. to 13c.

**CHICAGO.**

Cattle—Steers, \$4.75 to \$7.80; cows, \$3.40 to \$5.25; heifers, \$3 to \$6.75; bulls, \$2.75 to \$5; calves, \$6 to \$7.50; stockers and feeders, \$2.60 to \$4.50. Hogs—Choice heavy shipping, \$6.90 to \$7; butchers', \$6.85 to \$7; light mixed, \$6.40 to \$6.60; choice light, \$6.65 to \$6.85; packing, \$6.50 to \$6.75; pigs, \$3.75 to \$5.50. Sheep and lambs—Sheep, \$3.50 to \$4.75; lambs, \$4.75 to \$6.30; yearlings, \$4 to \$4.85.

**BUFFALO.**

Veals—\$6 to \$10.25. Hogs—Pigs, \$3.50 to \$6.10; dairies, \$6.25 to \$6.90. Sheep and lambs—Lambs, \$4.25 to \$6.40; yearlings, \$4.75 to \$5; good lambs, closing, \$6.25.

**BRITISH CATTLE MARKET.**

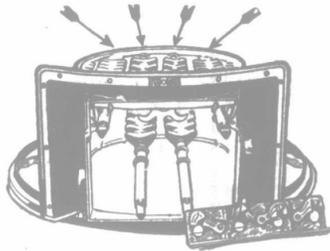
London cables for cattle at 12c. to 14c. per pound, dressed weight; refrigerator beef, 10c. to 11c. per pound.

**TRADE TOPIC.**

The Grimm Manufacturing Co., Montreal, Que., manufacturers of the Champion Evaporator, are too well-known to need any introduction now to our readers. They will have an exhibit at Toronto during last week of the fair there, and many of our readers will desire to inspect it.

**You shake down the ashes  
—not the coal—in the  
"Hecla" Furnace**

There are  
**four**  
grate bars  
in the  
"Hecla"



Each  
one can  
be  
shaken  
separately.

You don't have to shake the whole fire to get out the ashes around the edges of the firepot. You don't shake down a lot of good coal with the ashes.

You don't have to use a poker at all.

The "Hecla" Triangular Bar Grate allows you to shake just the part of the fire where the ashes are, without disturbing the rest of the coals.

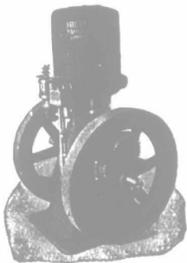
Naturally, one grate is easier to shake, than four all geared together. That is why people find the HECLA "no trouble to look after."

**Fused Joints**—a patented "Hecla" feature—keep the house free of gas, smoke and dust.

Write for free copy of our new catalogue which describes these and other special features. 58

**Clare Bros. & Co. Limited, Preston, Ont.**

**No Fan, No Tank, No Freezing**



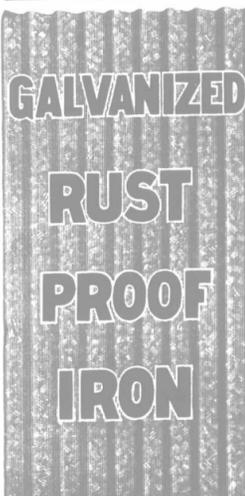
**2 1/2 & 4 1/2 H.-P. GASOLINE ENGINES**

Few working parts. Well-balanced, smooth-running motor.

No waste of fuel or battery, and no wear on pump between impulses. **No Packed Joints.**

See our exhibit of Engines and Engine Outfits at Western Fair, London, or write for catalogue 14 G.

**SCOTT MACHINERY CO., LTD., LONDON, ONT.**



**For Roofing, Siding or Ceiling**

**POSITIVELY THE BEST AND MOST LASTING COVERING MADE.**

Requires no painting. Economical and easy to put on; no previous experience necessary. Absolutely guaranteed. Brand new, clean stock. Bright as a dollar. Sheets are full size. Comes in Corrugated, "V" Crimped, Standing Beam or Plain Flat Sheets. Heavily galvanized on both sides, with the most approved galvanizing material that will adhere forever. "Galvanized" means that the iron has been coated with liquid zinc, which makes it absolutely rust and weather-proof; not affected by heat or cold. Makes buildings warmer in winter and cooler in summer. Drains perfectly and does not soak. Does not taint rain water. Fire and lightning-proof. Makes your insurance cheaper. Sold direct from our own roofing factory—the largest in the world. Chicago House Wrecking Co. sells more roofing material than any other concern. We sell thousands of squares of "Galvanized Rust-proof" iron every week. It is used in all climates and for every kind of building. Painted Steel Roofing at \$1.25 per hundred square feet.

Also in stock a full line of painted steel and iron roofing, siding and ceiling, all styles at prices from \$1.25 per 100 sq. ft. up. Fill in the coupon below. We will send you samples free of charge together with a vast amount of **FREIGHT PREPAID PRICES** roofing information. On application we quote

**ROOFING SUPPLIES OF EVERY KIND**

**FREE OUR 500-PAGE CATALOG NO. 645** It is full of information for the shrewd, careful and economical buyer. Lists thousands upon thousands of rare bargains. Price offers that command orders. Millions of dollars' worth of merchandise, bought at Sheriff's, Receiver's and other forced sales, are plainly described in this book. Send coupon below and get a copy free.

**FREE BOOK OF PLANS!** If you are going to build or improve, we will send you free, our book of plans, containing many illustrations and descriptions of modern residences, farm homes, barns, etc. It will put you in touch with the wonderful situation in the lumber market. Contains thousands of money saving offers.

**FREE SPECIAL FURNITURE CATALOG!** Showing Rugs and Linoleum in their natural colors and designs. We save you from 20 to 60 per cent.

**We Buy Our Goods at Sheriff's, Receiver's and Manufacturers' Sales**

**CHICAGO HOUSE WRECKING COMPANY**

**35th and Iron Streets, Chicago, Ill.**

*We Can Save You Money On Wire and Fencing.*

**FREE SAMPLE COUPON NO. 645**

Kind of building.....  
 Size of Roof.....  
 If you want Siding or Ceiling give diagram and full dimensions  
 When do you expect to order.....  
 Name.....  
 P. O. .... R. F. D. .... State.....

Chicago House Wrecking Co.  
 35th & Iron Sts., Chicago

**The Ontario Business College,**  
 BELLEVILLE, ONT.  
 41st year. Students from 28 countries were this year in attendance.  
 Write for the catalogue to  
**Principal, J. W. Johnson, F. C. A.**

**WANTED!**  
 Professor of Field Husbandry for the Manitoba Agricultural College. Initial salary, \$2,000. Applications will be received up to September 20th by  
**G. A. SPROULE,**  
 Secretary of the Board of Directors,  
 Manitoba Agricultural College, **Winnipeg.**

SEND FOR CAT. No. 110 IT TELLS ALL  
**RELIABLE DURABLE**  
**U. CREAM SEPARATOR**  
**CLEANSABLE PROFITABLE**  
**S.**  
 KING OF THEM ALL ASK THE USERS  
**VERMONT FARM MACHINE CO., BELLOWS FALLS, VT.**  
 Canadian shipments are made from our Warehouses at Montreal, Calgary and Winnipeg.

**Mountain View Stock Farm**  
 Present offering: Three Red Polled bulls, from 1 to 12 months old. We claim to have the only strictly dual-purpose cattle in Ontario. Don't miss the chance to secure one of the oily-coated bulls to use on your grade cows, the calves will come 90 per cent. red and mulleys. Write or call on  
**BUTLER BROS., St. David's, Ont.**

**FOR 2 FRENCH STALLIONS!**  
 CANADIAN  
 Will be at Ottawa Exhibition.  
 Apply:  
**OWENS BROS., Monte Bello, Quebec.**

**FOR SALE—Pure Shropshire Ram and Ewe**  
 Lambs, born from 20th March to 1st of May. Price ten dollar each, including pedigree. Shearling rams and ewes at reasonable prices. 130 to choose from. Also five St. Lambert Jerseys. All ages. Prices right. **H. E. Williams, Sunny Lea Farm, Knowlton, P. Q.**  
 "Now I have an impression in my head," said the teacher. "Can any of you tell me what an impression is?"  
 "Yes'm, I can," replied a little fellow at the foot of the class. "An impression is a dent in a soft spot."



### The Largest Line of Grinders IN CANADA.

In sizes to suit any power. These cuts show three classes.

549. For use on the Farm. Three sizes.

550. Farm use or custom work (stationary or for moving from place to place).

551. Attrition Mills, for elevators, custom mills, etc. Finest work and greatest capacity.

We have just what you need in these "Rapid-Easy" Grinders, which do more work with same power than others.

Information, circulars, etc., upon request.

**J. FLEURY'S SONS, Aurora, Ontario.**  
Medals and diplomas: World's Fairs, Chicago and Paris.

### AN UP-TO-DATE STABLE

WILL BE FITTED WITH THE BEST LABOR-SAVING MACHINERY.



**Louden Machinery Company**

Are the leaders in all kinds of stable equipment. Last year these goods were the best on the market, but this year we have made them still better.



COMFORT AND CONVENIENCE

Cow Stanchions.

Nothing to get out of order.

Notice our display at the exhibitions, and see the improvements. Write for circulars and prices to

**LOUDEN MACHINERY CO., GUELPH, ONT., CAN.**  
Manufacturers of Hay Tools, Feed and Litter Carriers, Barn-door Hangers and Hardware Specialties.

### WE ARE LEADERS.



While they last 25 only. 38/55 Winchester and Marlin Rifles for \$12.95. We carry in stock a full line of Guns, Rifles, and everything for the hunter. If your Guns or Rifles require repairing send them to us. We are experts.

**WARREN & ELLIS, 302 YONGE ST., TORONTO.**  
SPORTING GOODS DEALERS.

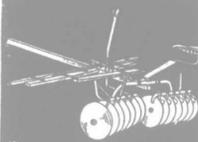
### WORKS EASY IN HARD PLACES

That's why this harrow is so popular with Canadian farmers—it's profitable to use—it makes hard work easy.

**THE BISSELL DISK HARROW**

is so constructed that it cuts cleaner and turns soil better than any other harrow. For farm and orchard. Is simple, compact, rigid—built to stand the severest strain. Free booklet explains how it's built—how it works. Write today. Address Dept. W.

**T. E. BISSELL CO. Ltd., Elora, Ont.**



Will Exhibit at Toronto, London and Ottawa Fairs.



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, and Pet Stock.

**TERMS**—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

**WANTED**—Persons to grow mushrooms for us during fall and winter months. Waste space in cellar or outhouse can be made to yield from \$15 to \$25 per week. Send for illustrated booklet. The Montreal Supply Co., Montreal.

**WANTED**—Position as working manager on farm run as paying investment by experienced single man, or will work on shares. Good references. Box 61, Melbourne, Ont.

**WHEN WRITING ADVERTISERS, PLEASE MENTION THIS PAPER.**



Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

**CHOICE** Barred Rock Cockerels for sale. A limited number. Both pullet and cockerel bred from the famous Latham strain. Price from \$2 to \$4 each. Would dispose of a few pullets also. Dr. W. J. R. Fowler, Clinton, Ont.

Pure-bred Shropshire shearing ram and ewes, ram lambs and ewe lambs at reasonable prices are advertised for sale in this paper by H. E. Williams, Knowlton, Que. Also five St. Lambert Jerseys.

### QUESTIONS AND ANSWERS.

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

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

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

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

### Miscellaneous.

#### CONSTRUCTING A DITCH.

Has a Township Council power to cut a large ditch along the side of the road, in front of a farm gateway, when the said ditch is not in the natural water-course?

J. H. M.

Ans.—Yes; but reasonable means of ingress and egress to and from the farm in question must also be provided by the Township Council.

#### WHAT COUNTS IN THE SHOW-RING.

At our county fair last week there was a special prize given for the best Clydesdale animal, any age or sex. I would like to know, through your valuable paper, what points a judge should go by. I always had the idea that the most valuable animal was certainly the best. The judge gave the prize to a three-year-old filly. I expected a four-year-old stallion to win; he had by far the better action of the two, and his conformation and quality of feet and legs were far in advance of the filly's. I consider the stallion is worth three of her kind.

A. C. McM.  
Indiana, U.S.A.

Ans.—Value and merit are not always proportionate. Value is contingent upon sex, age and breeding, which is to say pedigree. Merit, as the judge sees it, consists in the degree to which the individual entry measures up to the approved standard of its breed and sex as regards type and quality of limbs and body, intelligence and disposition, action, scale and symmetry, soundness being, of course, regarded as a sine qua non.

#### DODDER IN ALFALFA SEED—ALFALFA MEAL GRINDERS.

1. If a merchant sells as "choice alfalfa" seed which contains dodder, can he be fined? We have four acres seeded down this spring to alfalfa, and in that are no less than fifty patches of dodder. The seed is supposed to be Government inspected!

2. Do you know of any firms making grinders for making alfalfa meal?

F. R. W.

Ans.—1. Strange to say, dodder was not one of the weed seeds named in the Seed Control Act, 1905, hence we do not think you can hold the merchant responsible. It is to be hoped that the anticipated revision of the Act will effectually provide against the legal sale of clover and alfalfa seed infested with this pernicious impurity.

2. Advertisers should make note of this inquiry.

#### BINDWEED—SOW THISTLE—CHICORY.

1. I send you a plant of which I found two patches on my farm this year. It seems to be a bad weed. One patch was in the turnips. I hoed it up and thought that would be the last of it, but it came again as bad as ever. The other was in the clover seed field. Please tell me what it is and how to kill it, and oblige.

2. What is the best way to kill sow thistle? I have two kinds; one has a blue flower and the other a yellow. They are just alike, only for the flower.

D. P.

Ans.—1. The plant sent was too much shrivelled to enable us to identify it positively, but it looks like one of the bindweeds. If so, very thorough measures will be necessary to eradicate it, either smothering, as with tar paper, or thorough cultivation every four or five days with some implement that will cut off every stalk and prevent any green from appearing above the ground. If it is the species known as field bindweed, this cultivation will require to be continued for one whole season, and perhaps two. A fallow is recommended,

followed in the second year by a hoe crop.

2. Sow thistle may be killed by persistent cultivation in the same way as bindweed, though it is not so hard to subdue as the latter weed. It is important to prevent seeding. We have never heard of a sow thistle with blue flower, and are inclined to think the weed thus described is chicory. If so, it may be controlled by cultivation, and is not particularly troublesome in cultivated fields.

#### CEMENT FOR SILO.

1. How many barrels of cement would it take to build a cement silo 25 feet high, 12 feet across, and sloping from eight inches thick at the bottom to four at the top?

2. How much cement would it take to cement a barn 44x66 ft.?

3. Which is the best for cement concrete, fine or coarse gravel?

#### A CONSTANT READER.

Ans.—1. Seventeen to twenty barrels.

2. This question is not specifically expressed. Does it mean laying floors and building walls, or laying floors and plastering walls, or what?

3. The coarser the gravel the harder will the concrete be when mixed in any given proportion, but there should be in it enough of sand or fine gravel to fill all interstices when packed.

T.

#### TREATING INJURED TREES.

I have two birch trees which I wanted to spare from burning, but the fire reached both, one flaming right up the tree, while it ate round the roots of the other. A few green leaves appeared in the top of the former, but later have nearly all disappeared, while the latter has no leaves on branches, but is sprouting out from the body of the tree.

1. Should the limbs be removed from this latter tree, and if so, when would be the best time?

2. Is there any hope for the other tree another year, and could anything be done that would be beneficial?

#### A LEARNER.

Ans.—1. Yes. Spring would be the best time, though it might be done with safety now, or at any time if the wounds were coated over with wax.

2. Likely not, but it had better be left until late next spring at least. No other treatment would be of much use.

#### FEEDING A FOAL.

I have a filly foal, now on the mare, which I am about to wean. It is a fine big Clyde colt, but a little thin, owing to the dam being a poor milker, and I would like to know, through your valuable paper, the most satisfactory way of feeding it ready for the spring shows, without causing grease or scratches on its limbs.

1. How many pounds of hay should it have, and what kind, timothy or clover, cut or long?

2. How many pounds of oats or bran. Do you advise feeding stock foods or boiled feed?

Please state how this feed should be increased, according to its gain in weight. It has a large box stall, and I would like to grow it as much as possible.

J. T.

Ans.—To make the greatest growth, and secure the most flesh, judicious feeding with cow's milk, together with a liberal ration of oats and bran, is advised. The gradual addition of even two quarts of new milk daily to the food of a foal will cause considerable improvement in its condition, but it should start with less than one-half this amount, fed twice or three times a day, and about six quarts in three feeds daily is as much as should be fed at eight to ten months old.

1. Well-cured clover hay, fed long, as much as the colt will clean up twice or three times daily.

2. About a quart of equal parts whole oats and bran, three times daily. We do not advise feeding stock foods as a regular diet, though for unthrifty animals they are often helpful. We do not think boiled food is necessary to obtaining good condition, though some good breeders use it. No hard and fast rule can be laid down as to increasing the quantity of food. The feeder must use his judgment, and only increase the feed according to the appetite of the animal, keeping always within safe limits, and watching closely the effect. Keep salt, also water, within reach, and exercise regularly.

TRADE TOPICS.

"Read advertisement of Steel Trough and Machine Co., Ltd., Tweed, Ont., big reduction in steel hog troughs."

Note the special bargain announcement in another column of Winchester and Marlin rifles, by Messrs. Warren & Ellis, 302 Yonge St., Toronto.

Messrs. J. Crouch & Son, of La Fayette, Indiana, noted importers of French and German draft and coach horses, are exhibiting under a tent at the Toronto Exhibition, what is claimed to be the largest Belgian stallion in the world. This great horse weighs 2,600 lbs., and is the champion Belgian stallion of America.

It is generally true that an external remedy that is good for an animal is also good for the human body, and Gombault's Caustic Balsam is no exception to this rule. In fact, we sincerely believe that there is no liniment or external remedy on the market that is as good or as safe and reliable to apply to the human body as Caustic Balsam. We can safely recommend it in all cases where an external application could benefit. It is also cheaper according to cost, because it requires very little, and that little is effective.—[Editorial Horse Review, Chicago, July 14, 1908.

Stanchions and watering bowls for stock stables are advertised by the manufacturers, the Metal Shingle and Siding Company, Limited, of Preston, Ontario, who claim to have had more experience and to have spent more money in perfecting these lines than any other firm in Canada, and are prepared to give their customers the benefit of their experience in fitting stables, old or new, in a satisfactory manner, and at lowest cost for quality. See their advertisement and write for samples and particulars.

THE MARITIME STANCHION.—During the past few years—or we might say decades—there has been a marked improvement throughout the country generally in the manner in which cattle are housed and looked after. In our columns elsewhere will be found an advertisement of the "Maritime Stanchion," manufactured by the Bailey-Underwood Co., Ltd., New Glasgow, N. S.

This stanchion has been on the market now for several years, and on account of the increased comfort which it gives the cattle, as well as the cleanly condition in which they can be kept by its use, it is coming into favorable demand among progressive stockmen. The simplicity with which it is operated, and the safety, gives it an additional value, and we recommend our readers to investigate the merits of this stanchion.

ABSORBINE is a remedy that can be depended upon to do work without blistering or removing the hair, and the horse can be used. As an illustration, Mr. Joseph Crocker, Kingman, Me., had a colt with a large bunch on hock joint, and realizing that this blemish decreased the colt's value, he purchased a bottle of Absorbine at \$2.00, and says there is not a blemish to be seen on her now, and that the colt is worth \$50.00 more than she was before using Absorbine. Mr. W. C. Hilton, Dunkirk, N.Y., bought a driving mare with one hind leg enlarged four times its natural size, for \$77.50. Used Absorbine as per directions, which removed the swelling permanently, and in three months sold her absolutely sound for \$250.00. Absorbine has been on the market a great many years, and is used by horse owners who appreciate the value of having a preparation on hand at all times to kill pain, stop lameness, remove blemishes, etc. It is manufactured by W. F. Young, P.O.F., 73 Monmouth St., Springfield, Mass., Canadian Agents, Lyman, Sons & Co., 380 St. Paul St., Montreal.

# EXHIBITION SALE OF USED PIANOS AND ORGANS!

We are showing a superb Exhibition stock of Gourlay, Mendelssohn and McMillan pianos. To display them properly our wareroom must be stocked at once of every exchanged piano, every returned from-rent piano, and every piano that is not new style even though not actually used. Prices have been cut away down for the instruments to go quickly, so send in your order at once. Better still, send your second and third choices in case the first should be sold before your order is received. Remember, we guarantee every instrument, ship subject to approval, and agree to pay the return freight if not satisfactory.

**Terms of Sale:** Organs, under \$ 50, \$ 5 cash and \$3 per month.  
 over 50, 10 " 4 "  
 Pianos, under 150, 10 " 4 "  
 over 150, 10 " 6 "  
 over 250, 15 " 7 "

If monthly payments are not convenient, quarterly, half-yearly, or other convenient payments may be arranged. Every instrument is fully guaranteed for five years. A handsome stool accompanies each instrument.

**NOTE.—Our Mail-Order Department is at your service. If you wish further information about the offer or instruments, write us. We welcome correspondence, BUT do it now.**

ORGANS.

- BELL—5-octave organ by W. Bell & Co., Guelph, in solid walnut case. Has 5 stops, 2 sets of reeds in the treble, 1 set in the bass, knee swell. Sale Price. \$ 29
- MASON & HAMLIN—5-octave organ by Mason & Hamlin, Boston, solid walnut case without high top, suitable for school or chapel use. Has 9 stops, 2 complete sets of reeds, a very nice organ, in good order. Sale Price .....
- DOMINION—5-octave parlor organ by the Dominion Organ Co., in solid walnut case with high top. Has 11 stops, 2 sets of reeds throughout, 2 knee swells, mouseproof pedals. A splendid organ. Sale Price... 45
- THOMAS—A beautiful parlor organ by the Thomas Organ Co., Woodstock, handsomely carved and paneled, extended top, music rack, lamp stands, mouseproof pedals. Has 10 stops, 2 sets of reeds throughout, 2 knee swells, etc. Sale Price..... 45
- DOHERTY—6-octave piano-case organ by the Doherty Co., Clinton, in ebonized case, with mirror top and lamp stands. Has 11 stops, 2 sets of reeds throughout, couplers, 2 knee swells. Sale Price..... 67
- BELL—6-octave piano-case organ by W. Bell & Co., Guelph, in solid walnut case with rail top and fret panels. Has 11 stops, 2 sets of reeds throughout, 2 couplers, 2 knee swells. Sale Price..... 74
- DOHERTY—A walnut piano-case organ by W. Doherty & Co., Clinton, in up-to-date case, with solid panel carved in relief, mirror top, lamp stands, mouseproof pedals, etc. Has 11 stops, 2 complete sets of reeds, 2 knee swells, couplers, etc. Sale Price .....
- DOMINION—An almost new piano-case organ by the Dominion Co., in solid walnut case, full length music desk, solid panel carved in relief, mirror top, lamp stands, mouseproof pedals, etc. Has 11 stops, 2 full sets of reeds, 2 couplers, 2 knee swells. Sale Price...
- SHERLOCK-MANNING—A piano-case organ by the Sherlock-Manning Organ Co., London, in rich double-veneered mahogany case, full piano-front panels and music desk, and without mirror top. Has 13 stops, 2 sets of reeds throughout, couplers, vox humana, knee swells, mouseproof pedals, etc. Is a sample instrument, and has not been used three months. Sale Price .....

- WILLIAMS—A cabinet grand upright piano by R. S. Williams, in ebonized case with plain panels, full-trichord overstrung scale, double repeating action; in perfect order. Original price, \$375; Sale Price.....\$183
- WHALEY-ROYCE—A 7 1-3 octave upright piano by Whaley-Royce, Toronto, in rich mahogany case with full-length music desk, carved panels, trichord overstrung scale, 3 pedals, ivory and ebony keys, etc. Original price, \$350; Sale Price .....
- DOMINION—7 1-3 octave piano, by the Dominion Co., Bowmanville, in walnut case with full-length music desk, plain engraved panels, sliding fall board, continuous hinges, ivory and ebony keys. A medium-sized piano, in good order. Original price, \$350; Sale Price .....
- MASON & RISCH—7 1-3 octave upright piano, by Mason & Risch, Toronto, in dark rosewood case, with plain panels, trichord overstrung scale, ivory and ebony keys. A good toned piano, and in splendid order. Original cost, \$375; Sale Price..... 210
- MENDELSSOHN—An almost new 7 1-3 octave upright piano in rich mahogany case, full length music desk and carved panels, automatic sliding fall board, ivory and ebony keys, 3 pedals, etc. Cannot be told from new. Manufacturer's price, \$340; Sale Price... 237
- HARDMAN—A cabinet grand upright piano by Hardman & Co., New York, in attractive case of plain design, plain polished panels. Has full cabinet grand scale, ivory and ebony keys, finest double repeating action, in A1 order. Original cost, \$500; Sale Price. 245
- DECKER BROS.—A rarely good piano by this celebrated firm; has rich, sonorous tone; perfect repeating action; in dark rosewood case of plain design. Original cost, \$550; Sale Price .....
- GERHARD HEINTZMAN—7 1-3 octave piano by Gerhard Heintzman, Toronto, in walnut case, of up-to-date design, with plain panels and music desk, ivory and ebony keys, trichord overstrung scale, 3 pedals, etc. Cannot be told from new. Manufacturer's price, \$400; Sale Price .....
- HEINTZMAN & CO.—A large-size cabinet grand upright piano, by Heintzman & Co., in burl walnut case. Has full-length music desk, carved panels, automatic sliding fall board, ivory and ebony keys, 3 pedals. Manufacturer's price, \$500; Sale Price..... 265
- GERHARD HEINTZMAN—A large-style Gerhard Heintzman piano in walnut case, full-length music desk, carved panels, Boston fall board, trichord overstrung scale, ivory and ebony keys, etc. Sale Price... 275
- GOURLAY—The popular Empress design cabinet grand piano of our own make, that has won so much favor with professional musicians and music lovers. Its simplicity of design also appeals. Nothing but the finest materials and workmanship enter into the make-up of this instrument. In mahogany case. Used only about a year. Price is reduced to..... 305
- GOURLAY—A new grand scale Gourlay piano, in rich mahogany case of Ornate Colonial design. A rare piano. If we were to make a piano to your order at \$1,000 it could be no finer in tone, action or durability than this instrument. The rich, sonorous tone of this piano closely resembles that of a Grand. Has been used professionally for 15 months, but is just like new. Sale Price .....

PIANOS.

- VOSE—7-octave square piano by the celebrated firm of Vose & Sons, Boston, in attractive rosewood case, with carved legs and lyre, is finished alike back and front. Has overstrung scale, full iron frame, etc. Original cost, \$375; Sale Price..... 89
- DOMINION—An excellent square piano by the Dominion Co., Bowmanville, in rosewood case, with carved legs and lyre, serpentine mouldings, etc. Has large overstrung scale, full iron frame, action in perfect order. A good toned instrument. Sale Price... 107
- HAZELTON—An unusually good square piano by this old and reliable house of Hazelton Bros. Has 7 1-3 octaves, full overstrung scale, iron frame. Is one of the finest square pianos that we have had in the warerooms for years. Were it an upright, it would sell for nearly double the money. Originally \$500; Sale Price .....

## GOURLAY, WINTER & LEEMING

188 YONGE STREET. TORONTO, CANADA.

REDUCED RATES TO TORONTO via Grand Trunk Railway system, on account of Canadian National Exhibition. Return tickets will be sold at single fare from all stations in Ontario to Toronto, good going August 29 to September 12. Returning from Toronto on or before September 15. Low-rate excursions will also be run on certain dates, particulars of which can be obtained from Grand Trunk Agents.

GOSSIP.

At the auction sale of Berkshire hogs by Drs. Still & Laughlin, at Kirkville, Missouri, on August 19th, an average price of \$149.95 for 50 head, is reported as realized, seven boars selling at an average of \$67 and 43 sows at an average of \$158.50. The high average for sows was largely secured by the sale of Duchess 279th, the World's Fair champion, knocked down to an Illinois breeder

at \$2,000. The sellers made an offer of \$600 for the choice boar pig from her by Masterpiece, which greatly stimulated the bidding. Another sow was bid off at \$1,012.50.

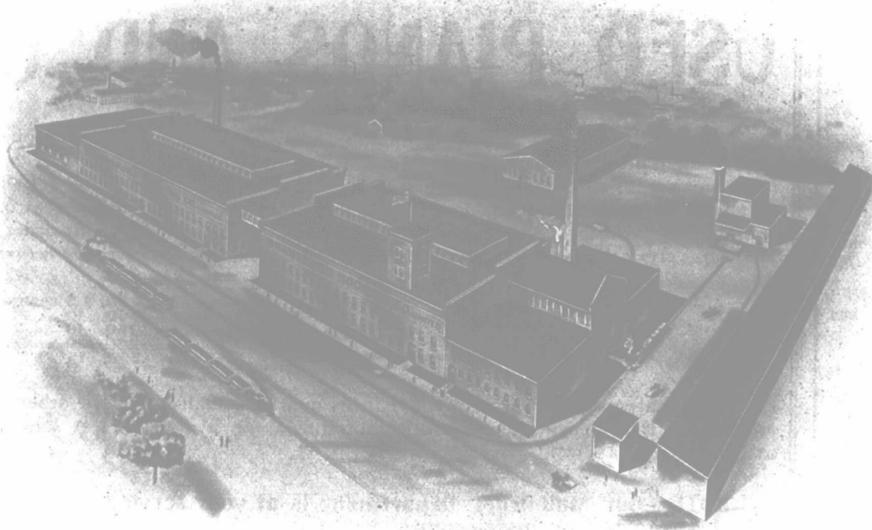
Widow Innkeeper—Do you know what people are saying about you and me? Widower Lodger—No, what is it? Widow—Well, they are saying that we are going to be married. Widower—Don't you believe that, till you hear it from me first.

### Brantford "Crystal" Roofing Requires No Paint.

Brantford "Crystal" is becoming immensely popular as a fire protection for pitch roofs. It is soft and flexible, yet very durable. Saturated and coated with fire-resistant materials. Will adapt itself to changes of temperature without cracking or crumbling. An especially good roofing for dwelling houses. Ask for sample.

#### FREE BOOK.

Write for our big, handsomely illustrated roofing book, which deals thoroughly with the roofing question. It's worth reading.



### Brantford "Asphalt" Roofing.

This roofing is one of the most astonishing wear-resisters in the world. The basis of Brantford "Asphalt" Roofing is a specially high-grade of wool felt. This felt is not only completely saturated with Asphalt, but the Asphalt is, by pressure, literally forced through the sheet, so that no single thread can possibly escape becoming thoroughly impregnated with this marvellously durable compound. Brantford "Asphalt" Roofing is proof against evaporation by heat or wind—does not absorb moisture, therefore cannot freeze—does not soften under heat of the sun. Secure samples and convince yourself of its high quality.

**BRANTFORD ROOFING CO., LIMITED, BRANTFORD, CANADA.**

### Brantford "Rubber" Roofing — Light, Yet Durable.

This is acknowledged by roofing experts to be the BEST Rubber Roofing on the market. Light, yet phenomenally durable. The saturating compound is a mixture of asphalt and mineral rubber, which completely waterproofs the sheet. Acids, gases, vapors, heat and cold have no effect on Brantford "Rubber" Roofing. With it there is no "sweating" or "dripping," as with metal roofs. Get samples from us and compare it with others.

#### GOSSIP.

The Secretary of the Alberta Wool-growers' Association reports that sixteen flock-owners in the Lethbridge district, from their 52,000 sheep clipped this year approximately 390,000 lbs. of wool. It is conservatively estimated that the clip will average seven and a half pounds per head, or 390,000 lbs. in all, which means a return for wool alone of nearly \$50,000, while the mutton output will probably be not less than twice that amount, making the sheep industry a very important factor in the product of that interesting section of Canada's domain.

Mr. G. B. Muma, Agr. Ont., in ordering a change in his advertisement of Large Yorkshires, writes: I have some sows for sale, bred to imported boars, also some to a Canadian-bred boar; also have some young boars about three months old; they are from an imported boar and Duchess sow. Also some young sows about the same age from imported and Canadian-bred sows. The sows that are bred are due to farrow the last of September and first of October. Have about 50 young Yorkshires for sale.

A noteworthy example of what can be accomplished in breeding high-grade sheep on properly-controlled open range is that of Allen Bros., who graze about 3,000 head of registered Cotswold sheep within the Uinta national forest in Utah. These bands are the increase of about 200 head of prizewinning stock from the Royal Show in England and the International Show at Chicago, purchased and imported to Utah by Allan Bros. since 1892. They have been grazed within the Uinta national forest since 1903, upon ranges which are practically ideal for sheep-grazing purposes, being well watered, grassed, and shaded, and protected from the grazing of other sheep. Careful breeding is developing a pure-bred type of Cotswold entirely adapted to Western range conditions, yet equal to anything raised under fences in the Eastern United States or in European coun-

### The Prizewinning Butter

For years at the leading agricultural fairs has been salted with WINDSOR SALT—that FINE, DRY, PURE, CLEAN salt—that all-salt, strong salt, that never cakes, but DISSOLVES QUICKLY and WORKS IN EVENLY.

Windsor Salt betters the butter—and KEEPS it better.

You can find no other salt so economical—no other salt that goes so far, or does the work so well.

Every grain of

## WINDSOR SALT

is a perfect crystal—fresh in savour as the hour it came from the salt-well. It gives a delicious taste to butter—so subtle, you do not think of SALT, but only of the delicate, satisfying taste.

Make up your mind—now—to no longer spoil your butter with coarse, bitter, badly-put-up salt—use what has helped the prizewinners to win—what's not good enough for them is not good enough for you.

Windsor Salt OUGHT to cost more than other brands—but it sells at the same price.

This perfect salt is also best for table use.

**Ask Any Dealer.**

tries. There are quicker and greater returns to be secured from the raising of high-grade stock than from inferior mongrel breeds, but in many sections stockmen have hesitated to invest in registered sires and dams because of the uncertainty of securing ranges upon which feed and water are absolutely assured and without which such ventures would not be so remunerative or so successful as the running of inferior grades of stock better adapted to the severe range conditions that are commonly encountered because of overstocking and lack of control.—Live-stock Report.

Messrs. H. S. Pipes & Son, Amherst, Nova Scotia, advertise their excellent herd of Jersey cattle in this issue of "The Farmer's Advocate." This is one of the very best herds of Jerseys in the Dominion, up-to-date in breeding, type, quality and performance, winners of first for herd, male and female championships, and in nearly every section at Provincial Exhibition, 1907. High-class sires of the best breeding head the herd. Write Messrs. Pipes for particulars and prices.

A splendid 7½ x 11-inch photo-engraving of that prince of Clydesdale stallions, Baron's Pride, may be purchased through this office for 50 cents in cash, or it will be given as a premium to any present subscriber of "The Farmer's Advocate" who will send us the name of one new yearly subscriber, accompanied by \$1.50.

Messrs. J. Crouch & Son, La Fayette, Ind., and the noted importers, write: We are exhibiting a carload of Percheron, Belgian and German Coach stallions at the Toronto Exhibition. We will also probably show at London.

The following are Ontario fair dates last formerly appearing in our published list: Brampton, September 22nd and 23rd; Delaware, October 7th; Simcoe, October 13th to 15th.

# WELSEY

## HEATING

**Going to build? What about heating?**

There is just one right way to warm a house and that is with fresh air direct from out-of-door, warmed to the correct temperature—not scorched or burned—and then FORCED to every room in the building.

The KELSEY Warm Air Generator with the Zig-Zag Heat Tubes is the only warm air apparatus that will accomplish these results even under the most trying conditions.

Some of the good reasons for the efficiency and economy of the KELSEY are: It has double the weight and heating surfaces of the ordinary furnace, warms air by a better method and utilizes all the heat to much better advantage. The Zig-Zag Heat Tubes do it.

33,000 sold—Sales increase every year.  
Let us show you a KELSEY.

**The Jas. Smart Mfg. Co.,**  
Limited,  
BROCKVILLE, ONT.,  
WINNIPEG, MAN.

**GOSSIP.**

**MERCER'S CLYDESDALES.**

A recent visit to the model stock farm of Mr. T. L. Mercer, near Markdale, Ont., and a careful inspection of his new importation of Clydesdale stallions, sustained his contention that in his stables at the present time were as choice a lot, and as royally bred a lot, of big, quality Clydesdales as ever crossed the water, the property of one man. In looking them over we were particularly impressed with their smooth, well-balanced conformation, their grand quality of bone, ankles and feet, and their straight, true action, characteristics that together make the ideal horse. The honor of first mention easily falls to that wonderfully perfect type of modern draft horse, Breadalbane (imp.), a brown six-year-old son of the invincible Hiawatha, dam Lady Gartley, by the noted Royal Gartley. In our opinion Breadalbane never got what was coming to him in the Canadian show-rings; and as a sire he is proving one of the best this country has ever seen, absolute proof of which is seen in the two yearling horse colts now in Mr. Mercer's stables, the one is Royal Albon, a bay, out of Louie's Queen, by Imp. Louie; the other is Lou Albon, out of a daughter of Imp. Royal Carrick. This last colt has five registered dams. Here are a pair of yearlings, the equal of which we have seldom, if ever, seen before, either imported or Canadian-bred. They are unbeaten in the show-ring, and we look for them to continue their record at Toronto. Golden Luck (imp.) is a bay-roan six-year-old by Gold Mine, dam Nellie Scott, by The Scott. He is a typical draft horse, smooth to a turn, beautifully finished, and has a grand set of underpinnings, which moves true and straight. Rowallan (imp.), is a dark brown four-year-old, by Lord Fauntleroy, dam Miss of Noranbank, by Dae Ye See. This is certainly a very high-class horse, with plenty of size, wonderful quality and faultless action, a show horse of high order. Watch this horse at Toronto. Royal Clendric (imp.) is a bay three-year-old, by King's Royal, dam Carina, by Craigmore Darnley. This will make a very large, thick horse, with abundance of bone of the right kind, well-sprung ankles and grand feet. A typical drafter. Mona's Rocket (imp.) is a bay three-year-old Shire, by Creslow Rocket, dam Edeyrn Colonel, by Calthorpe Gold. He is an immense big colt, on a bottom of splendid quality, which at Toronto last winter won first in his class, and was reserve for champion. Look up Mr. Mercer's stable at the Toronto Exhibition.

**TRADE TOPIC.**

The Tolton Brothers, Limited, Guelph, Ont., whose products (farm implements and machinery), have attained a wide reputation throughout the country, is undoubtedly doing its share in advertising the many and splendid resources of that city. The firm has been established for about thirty-two years, and is one of the leading manufacturing concerns in Guelph. The high grade of the goods turned out has won for them an immense trade, and is one that is constantly increasing. A number of travelling salesmen are employed, and large shipments are made, not only to different parts of Canada, but cater to a foreign trade also. Everything about the factory is first-class, machinery is modern and of the most improved kinds, employment is given to a large number of competent people. The goods manufactured include steel harrows, and these are made of any width to suit customers; pea harvesters, self-bunchers, double and single pulpers; up-to-date hay carriers and forks, double and single root cutters, etc.; in fact, the company claim to turn out a more complete line of specialties than any firm in Ontario. The members of the firm are: Edward Tolton, President; Benjamin Tolton, Vice-President; David Tolton, General Manager. They are all thoroughly experienced business men, eminently practical and up-to-date, and their ability has placed their business in the front rank. They make an important announcement in our advertising columns that will repay for the time taken in reading it.

## Radiol

**RADIOL TREATMENT**  
Prolongs the life of a horse's legs. Completely removes by radiation all soft swellings that disfigure and lame a horse, as Sprained Tendons, Windgalls, Bog Spavins, Capped Elbow, Big Leg, Enlarged Glands, etc.

**No Blister; No Laying Up; No Hair Removed.**

RADIOL TREATMENT fines down a worn horse's legs, and is a certain cure for puffing joints and Sprains. Prevents Filled Legs.

An intelligent use of the "RADIOL LEG WASH" counteracts that daily wear and tear of the legs unavoidable with the horse in constant work, whether training, racing or on the road. One flask of "RADIOL" will make a GALLON of valuable leg wash.

Carlisle, Uddington, Eng., July 28, 1908.  
Sirs.—Kindly forward on receipt of P. O. enclosed another bottle of "RADIOL." I have been using it with great success on a Hackney mare with a very bad windgall that the vet. had given up. Yours truly, Thos. Prentice.

WRITE FOR ILLUSTRATED BOOKLET AND USES OF "RADIOL." Ask your chemist for "RADIOL." Price \$2 a large flask, or post free from  
The "RADIOL" Co.,  
212 Westminster Bridge Road, London, Eng.  
Canadian Agt.: Thos. Reid, 9 Nicholas St., Montreal.  
Manufactured by The Radiol Co.,  
313 Westminster Bridge Road, London, England.

**You Can't Cut Out**  
A BOG SPAVIN or THOROUGHPIN, but

## ABSORBINE

will clean them off, and you work the horse same time. Does not blister or remove the hair. Will tell you more if you write, \$2.00 per bottle, delivered. Book 40 free.

ABSORBINE, J.E., for man and horse. Cures Varicose Veins, Varicocele, Hydrocele, Ruptured Muscles or Ligaments, Enlarged Glands, Ailays Pain. Genuine mfd. only by

W. F. Young, P.D.F.,  
73 Monmouth St.,  
Springfield, Mass.

Canadian Agents:  
LYMAN, SONS & CO.,  
Montreal, Que.

## 3 HACKNEY MARES FOR SALE

**O. Sorby, Guelph, Ont.**

## CLYDESDALES.

One 1,750-lb. 8-year-old mare in foal. One 5-year-old mare and one 3-year-old mare.

## SHORTHORNS

Two right good yearling bulls left yet, and a lot of heifers cheap. Write, or come and see them.

**JAMES McARTHUR, Gobles, Ontario.**

## CARRIAGES

Write for catalogue and prices.

**R. D. MILNER,**  
P. O. Box 26. Chatham, Ont.

## SORE SHOULDERS

Positively cured by Bickmore's Gall Cure. Also Harness Galls, Cuts and Sores. Good for man and beast. Sample and new horse book 10c.

**WINGATE CHEMICAL CO. LTD.,**  
Canadian Distributors, 645 Notre Dame St., W. Montreal, Canada.

## McKILLIP Veterinary College

Chicago—Chartered 1892

**AFFORDS UNLIMITED CLINICAL ADVANTAGES**  
New college building containing every modern equipment. Sessions begin Sept. 18, 1908. The new U. S. Sanitary and Pure Food laws require large and increasing number of Veterinary Inspectors. Write for Catalog and other information.

**George B. McKillip, Sec., Dept. N, Washburn Ave., Chicago**

Clydesdales, Shorthorns, At Kinellar Lodge we have for sale two 3-yr-old Clydesdale fillies, both reg.; a big, good pair. Several choice Shorthorn heifers. Nine shearing Cotswold ewes and nine shearing rams. This year's lambs, both sexes, and young Berkshire sows. **John I. Batsden, Markham, Ont., P. O. and station.**

**Dr. Bell's Veterinary Medical Wonder** cures inflammation of lungs, bowels and kidneys. The 20th-century wonder. Agents wanted in every county. Write for terms.

**DR. BELL, V. S., Kingston, Ont.**



## STEEL HOG TROUGHS!

For years we have been working out plans to enable us to sell our Steel Hog Trough—that no farmer could afford to be without it. Our modern and fully-equipped plant now enables us to do this, turning out our troughs at a minimum cost, and we can now offer our troughing to the farmers of Canada at 40c. per foot, at the same time offering the best trough made. It will not RUST nor leak, is perfectly sanitary, and is unbreakable. Guaranteed for ten years. Write for information and catalogue.

**THE STEEL TROUGH & MACHINE COMPANY**  
TWEED, ONTARIO.



## THE UNION STOCK-YARDS Horse Exchange

WEST TORONTO, CANADA.

Auction sales of Horses, Carriages and Harness every Monday and Wednesday.  
Private sales every day.  
Come and see this new Horse Exchange. It will interest you. Also the quarter-mile track for showing and exercising.

**HERBERT SMITH, Manager.**  
(Late Grand's Repository.)

## LARGEST IMPORTATION OF CLYDESDALES, HACKNEYS AND PERCHERONS OF THE YEAR.

My latest importation has just arrived home. I have now on hand for sale: 20 Clydesdale stallions from 1 to 5 years of age; 25 Clydesdale fillies from 1 to 4 years of age; 12 Hackney stallions from 2 to 8 years of age; 12 Hackney fillies, all young, and 4 Percheron stallions 3 and 4 years of age. A total of 73 head, with size, quality and action, and bred in the purple. Largest selection in Canada. Will be sold right, and on terms to suit.

**T. H. HASSARD, MILLBROOK, ONT.**

## Shires, Shorthorns and Lincolns

At present we are offering a very choice consignment of imported stallions, mares and fillies received from the great Shire stud of R. Moore & Sons, Beeston Fields, Nottingham, England. They are a grand lot, and will be sold at right prices. In Shorthorns we have a number of choice young bulls, three of them show animals; also an excellent lot of females—all ages.

**JOHN GARDHOUSE & SONS, Highfield, Ontario.**  
Toronto, 14 miles; Weston, 3 1/2 miles.

## IMPORTED CLYDESDALES

Up to over a ton in weight, with the very richest of breeding and the best of quality. I think no better shipment of stallions ever left Scotland. I have also nine fillies, without doubt the best lot in Canada. All will be sold cheap and on terms to suit. Long-distance phone.

**GEO. G. STEWART, HOWICK, QUE.**

## Imported Clydesdales

I have still on hand 1 stallion, black, rising 4 yrs., by Carthusian, a Toronto winner; 1 rising 2 yrs., by Baron's Pride. 1 rising 2 yrs., by Danure Castle; 4 fillies, a Toronto first and second prizewinner among them. Every one of these is an extra good animal, and the price and terms are right.

**T. D. ELLIOTT, Bolton, Ont.**

WHEN WRITING ADVERTISERS, PLEASE MENTION THIS PAPER.

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The Worlds Greatest and Surest  
Veterinary Remedy  
HAS IMITATORS BUT NO COMPETITORS!

**SAFE, SPEEDY AND POSITIVE.**

Supersedes All Caustery or Firing. Invaluable as a CURE for

- FOUNDER,
- WIND PUFFS,
- THRUSH,
- DIPHTHERIA,
- SKIN DISEASES,
- RINGBONE,
- PINK EYE,
- SWEENEY,
- BONY TUMORS,
- LAMENESS FROM SPAVIN,
- QUARTER CRACKS,
- SCRATCHES,
- POLL EVIL,
- PARASITES.

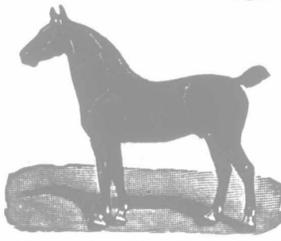
**REMOVES**

- BUNCHES or BLEMISHES,
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- STRAINED TENDONS.

**SAFE FOR ANYONE TO USE.**

We guarantee that one tablespoonful of Caustic Balsam will produce more actual results than a whole bottle of any liniment or spavin mixture ever made. Every bottle sold is warranted to give satisfaction. Write for testimonials showing what the most prominent horsemen say of it. Price, \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use.

**The Accepted Standard VETERINARY REMEDY**  
Always Reliable. Sure In Results.



None genuine without the signature of  
*The Lawrence-Williams Co.*  
Sole Importers & Proprietors for the  
U.S. & CANADA. CLEVELAND, O.

**THE BEST FOR BLISTERING.**

I have used GOMBAULT'S CAUSTIC BALSAM quite a good deal, and for a blister it's the best I ever used. I wish your remedy every success.  
CHAS. MOTT, Manager,  
Mayfield Stud Farm, Leesburg, Va.

**CURED CURB WITH TWO APPLICATIONS.**

Have used your GOMBAULT'S CAUSTIC BALSAM to cure curb. I blistered it twice, and there is no sign of it any more. The horse is as good as ever.—DAN SCHWAB, Evergreen, Ill.

Sole Agents for the United States and Canada.  
**The Lawrence-Williams Co.**  
TORONTO, ONT. CLEVELAND, OHIO.



## CLYDESDALES

At Columbus, Ont., the home of the winners, this year's importation just arrived. The pick of Scotland's best. For size, style, conformation, quality and royal breeding, they eclipse any former importation we ever made. Look them up in our barn on Exhibition Grounds. Over 30 head to select from.

SMITH & RICHARDSON, COLUMBUS, ONT.

### IMPORTED CLYDESDALE FILLIES

Young imp. mares in foal or foal by side. One Clyde and one Hackney stallion. They are the best that can be purchased. Write or come and see them. Terms reasonable.  
Stouffville, G.T.R.  
Gormley, C. N. R.

G. A. BRODIE, Bethesda, Ont.

### Clydesdales and Hackneys

Our entry at Toronto Exhibition of Clydesdales and Hackneys is certainly the best we ever brought out. For an extra choice filly, either imported or Canadian-bred, look up our stable on the grounds. HODGKINSON & TISDALE, BEAVERTON, ONTARIO. G. T. R. and C. N. R. Long-distance 'Phone.

### OAK PARK STOCK FARM HACKNEYS

Four imported and home-bred stallions for sale. Ten imported and home-bred mares for sale. Among these are prizewinners at Toronto, Chicago and New York. Prices reasonable. Visitors always welcome to inspect stock.  
JAS. J. BROWN, Manager, BRANTFORD, CAN.

### IMP. CLYDESDALE STALLIONS AND FILLIES

Our new importation of stallions and fillies are the best we could select in Scotland, particularly well bred, with the size, smoothness and quality that Canadians admire. Showing stuff. Come and see them. Will sell on terms to suit. JOHN A. BOAG & SON, QUEENSVILLE P. O. ONT.; NEWMARKET STA., G. T. R. Telegraph and telephone one-half mile from farm. Metropolitan Street Ry. from Toronto crosses the farm.

### Clydesdales

Imported and Canadian-bred. Our mares all are bred to Acme (imp.), the 8th best breeding horse in Scotland in 1907. Four male foals and one filly, all from high-class (imp.) mares, for sale right.  
R. M. HOLTBY, Sta. & P.O. Manchester, Ont., G.T.R.; Myrtle, Ont., C.P.R.

### IMPORTED CLYDESDALES, SHORTHORNS AND SHROPSHIRE!

I have on hand several Clydesdale stallions, as choice a lot as ever crossed the ocean. Missie, Stamford, Claret and Gem of Balechin Shorthorns; up-to-date in type and quality. 50 imported Shropshires, 30 ewe and 30 ram lambs from imported stock. Look me up at Toronto Exhibition horse barns. THOS. L. MERCER, MARKDALE, ONT., P. O. AND STA.

### ONTARIO VETERINARY COLLEGE, TEMPERANCE STREET, TORONTO, CANADA.

Established 1862. Taken over by the Provincial Government of Ontario in 1908. Affiliated with the University of Toronto, under the control of the Department of Agriculture of Ontario. College opens early in October, 1908. Course of study extends through three college years. FEES, \$60 PER SESSION. CATALOGUE ON APPLICATION  
E. A. A. GRANGE, V. S., M. S., Principal

### GOSSIP.

#### T. H. HASSARD'S CLYDESDALES AND HACKNEYS.

After being in this country for a year, the Clydesdales and Hackneys now in the stables of Mr. T. H. Hassard, of Millbrook, Ont., are in the pink of condition, and are certainly an exceedingly high-class lot, a lot that will bear inspection by the most critical of judges, or bear comparison with any lot in Canada. Prominent among the Clydesdales is the big, flash son of the great Hiawatha, First Baron, a bay three-year-old, dam Jean of Drumburle, by Triumph. This is a colt that for size, quality, character, style, and faultless action, has few equals in the breed. His best guarantee of excellence is his show-ring record in the West this summer, in the strongest of company. At Brandon he won first and championship, also championship as best draft stallion, any age or breed, thereby winning the \$100-in-gold premium, and the Winnipeg Free Press premium of \$100. He is a horse that has only to be seen to be appreciated. Look him up at the Toronto Exhibition. Another exceedingly high-class show horse is the bay two-year-old, Dunure Robert, by that great breeding son of Macgregor, Montrave Mac, dam by Montrave Ronald, second dam by the world-renowned Prince of Albion, breeding unexcelled, and a colt unexcelled. He is up to a big size, now weighing 1,580 pounds, and possessed of a smooth, sweet mould, and the flashiest of quality from the ground up, a colt very hard to fault from his superb top to his big, wide feet. Another, bred right royally, is the bay three-year-old, Pride of All, by the noted champion and sire of champions, Royal Chattan, dam by Sir Simon, the great breeding son of the great sire, Sir Everard. This is one of the very thick, smooth, close-coupled kind, standing on the grandest of bottoms, a right good sort he is, and closely related to such good ones as Top Gallant, Darnley, Lochfergus Champion, etc. There are several others of equally as high an order of breeding and individuality, but space is not at our disposal for extended descriptions.

Among the several aristocratic Hackneys, the visitor is instinctively drawn to the box of that great show horse and phenomenal actor, Marmion Cassius, the bay six-year-old son of the noted sire Cassius, dam Brocade, by Wildfire. His high-class type, individuality, and superb action, is best described by saying that at the late light horse show at Toronto, among past champions, he won first in harness class, open to all breeds, and first in class of Hackney stallions in harness, any age. Atwick Astonishment is a chestnut four-year-old, by Atwick Jubilee, dam by Danegelt. He is an immensely stylish horse, with high, natural, all-around action, a London prizewinner, and one of the highest-priced horses ever imported into Canada, a horse of superb quality and breezy appearance. Morbury Chieftain is another of the gilt-edged sort. He is a chestnut six-year-old, by Lincoln Duke, one of the best sons of the noted sire, Garton Duke of Connaught, dam by Lord Morbury. This horse will command attention in or out of harness, as he combines beauty, style, quality and action to a marked degree. Baron Moss is a chestnut ten-year-old that has to his credit on both sides of the water very many winnings, and as a sire he stands among the very best ever used in Canada; sired by Conqueror, a son of the great London champion, Ganymede, dam by Gold Finder 6th, by the great Danegelt. Several others, bred on just as fashionable lines, and strictly high-class individuals, are on hand just now, as are several fillies. Look up Mr. Hassard's stables at the exhibition, as inspection and comparison is invited.

It is doubtful if on any other farm in Ontario can be found farming in all its various branches, including the breeding and management of live stock, reduced to a more practical science than on the noted Annandale farm at Tillsonburg, Ont., for the last five years under the skillful management of the present lessee, Mr. Geo. Rice. This farm has been brought up to a standard of productiveness the equal of any in the Province, and certainly as we drove through the various lanes, between the beautiful rows of maples, and saw the splendid crops which everywhere showed an almost

phenomenal growth, we could not help thinking that this year, at any rate, Mr. Rice was reaping richly the result of his labors. But among the many beautiful features everywhere visible, nothing was quite so interesting as his large herd of Holstein and Ayrshire cattle. This is one of the oldest-established and best-known Holstein herds in Canada, in which have been bred or owned some of the most noted producers in the Dominion, including that great cow, Boutsje Q., now owned by the Guelph Agricultural College, whose yearly milk record is 20,778 lbs. At the present time in the herd are some very high-class animals, and probably at no previous time did the herd contain so many high-record cows, prominent among which is the great Idaline Pauline De Kol, who at seven years, or her last freshening, gave 90 lbs. of milk a day; her seven-day butter record being 24.798 lbs. She has a ten-months'-old bull calf, sired by King Veiman De Kol. The three nearest dams of this young bull have records that average 27.228 lbs. butter in seven days, and his nine nearest dams have records that average 24.38 lbs.; one of the richest-bred young bulls alive. Holstein breeders will be interested to know that the noted old cow, Calamity Jane, now in her 18th year, has dropped a beautiful heifer calf by that well-known sire, Prince Posch Calamity. The present stock bull is Paladin Ormsby, by Prince Paladin, whose dam, Paladin 4th's Lady De Kol, has a record of 23.24 lbs. butter; dam Duchess Ormsby 3rd, record, 20.14 lbs. butter; milk test, 4.33%. A daughter of hers, Duchess Piebe De Kol, gave 97 lbs. a day of milk, and her butter record is 29.4 lbs.; also her dam, Duchess Ormsby, has a record of 24.27 lbs. This whole Ormsby family have showed a butter-fat test of over 4%. A grand sight was the 17 yearling heifers—truly a high-class and a richly-bred lot—that are being bred to the stock bull. The Ayrshires in Mr. Rice's hands have demonstrated that they are not only very heavy, but also very persistent milkers, capable of maintaining their flow when roughing it to a considerable extent. The banner cow of this breed in the herd is Jean Armour, winner of first prize in the dairy test at Guelph last winter. She has made a seven-day butter record of 16 lbs., and her milk shows a butter-fat test of 4.25%. In 100 days she gave 4,770 lbs. milk, three months after freshening. Mr. Rice has a number of other Ayrshires that are doing splendid things in milk yield. For stock bull he is using Stadacona Advancer, bred by Mr. Gus Langelier, Stadacona Farm, Quebec; sired by Sir Oliver of Woodroffe, dam Stadacona Lily, a daughter of that great cow, Almeda, whose yearly milk yield record is 11,357 lbs., she having the distinction of being the first cow to enter the Canadian Advanced Registry list. From a bull bred on such richly-producing lines, coupled with the splendid producers of this herd, great results should be accomplished.

### TRADE TOPICS.

COOPER'S FLUID.—Through Mr. W. Staley Spark, the Canadian manager of Cooper & Nephews', Berkhamstead, England, the Agricultural College, Guelph, have received as a present a thoroughly typical Shropshire shearing ram. This, no doubt, will do something to improve the breeding of Shropshires in Ontario. The Canadian branch of Cooper & Nephews have also imported a great many sheep which will be shown at Toronto Exhibition. All these have been dipped with Cooper's Fluid. People wishing to see the result of this Fluid, which is advertised in our columns this week, should examine the wool and general condition of those sheep. Cooper's Fluid is unexcelled as a disinfectant, as a destroyer of ticks and lice, and as a cure for scab, ringworm and sores. We advise our readers to write at once for their free booklet P, to be obtained from Messrs. Wm. Cooper & Nephews, 506 and 507 Manning Chambers, Toronto, Ont.

Brick and tile machinery is advertised in this paper by H. C. Baird, Son & Co., Parkhill, Ontario, whose catalogue, mailed free on application, supplies information regarding their machines and yard supplies.

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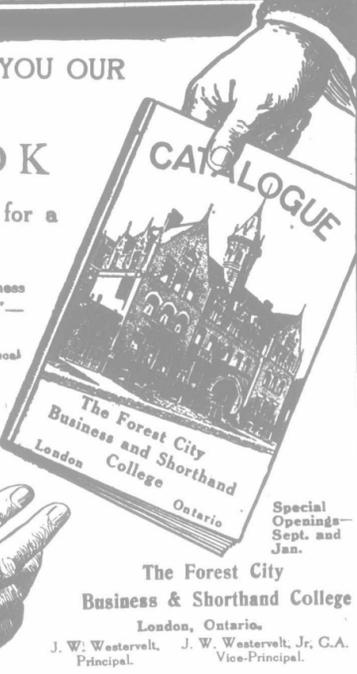
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We offer for sale our herd bull, imp. Lord Roseberry, also young bulls and females all ages, either imp. or from imp. stock. Prices right. Long-distance phone.

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BULLS: 4 choice yearlings, IMPORTED; 8 yearlings and a number of choice calves of our own breeding. FEMALES: A number of cows and heifers forward in calf, including showyard material. Tempting prices.

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For sale: A number of good Scotch heifers, mostly from imp. sire and dam, and bred to imp. bulls. One imp. yearling bull, red, a straight, smooth one. One 9-months bull from imp. sire and dam. One 10-months bull, by imp. sire and from Duchess of Gloster dam. Long-distance phone. Farm 1/4 mile from Burlington Jct. station.

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12 months old. A Clipper and a Martha. Priced low for quick sale. One of them out of an extra milker. Females of all ages for sale. Inspection solicited. Always have on hand some good Lincoln sheep for sale. Long-distance phone.

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Calves for sale by our grand quartette of breeding and show bulls:

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Females, imported and from imported stock, in calf to these bulls.

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Breeds SCOTCH SHORTHORNS Exclusively.

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**QUESTIONS AND ANSWERS.**  
Miscellaneous.

**LAMENESS IN MARE.**

I drove my mare 12 years without lameness. She has excellent-looking legs. Last autumn a bog spavin developed. I applied a mild patent blister; I also let her rest. She goes now with little lameness, but is stiff; is 22 years of age, but looks more like 10 years. Is blistering merely a palliative? What should I do? She was never bred. Would she breed now if she got the chance? She was in oestrus lately. J. F.

Ans.—In most cases of bog spavin of but a few months' duration the lameness and stiffness can be cured by repeated blistering with two drams each of biniodide of mercury and cantharides, mixed with two ounces vaseline. Clip the hair off the parts, tie so she cannot bite them, rub well with the blister daily for two days, and on the third day wash off with warm water and soap and apply sweet oil. When the scale comes off, tie up and blister again, and if necessary repeat again. Cases have been reported of mares over 20 years old breeding for the first time, and it is quite possible yours may, though the chances are slim.

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A SPECIALTY.  
Write for any information.

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**GIBBS WOODFIELD STOCK FARM, St. Catharines, Ont.**

**GOSSIP.**

**KINELLAR LODGE CLYDESDALES, SHORTHORNS, COTSWOLDS AND BERKSHIRES.**

Kinellar Lodge Stock Farm, so long and favorably known as the home of one of Canada's choicest herds of Shorthorn cattle, then the property of Mr. John Isaac, of Markham, Ont., is still retaining its popularity in the hands of Mr. John I. Balsdon, one of York County's leading breeders of Clydesdale horses, Shorthorn cattle, Cotswold sheep, and Berkshire swine. That Mr. Balsdon is a breeder of extra good stuff and keeps his animals in prime condition is proven by the fact that for years at the Markham show, acknowledged to be the leading county show in Ontario, he has generally won the lion's share of awards in the various classes in which he exhibited. In Clydesdales just now he has for sale two exceptionally choice Canadian-bred fillies, Queen Arthur 8475, a bay three-year-old, by Sir Arthur (imp.), dam by Sir Walter (imp.), and Lady Hiscol 9657, a bay three-year-old, by Baron Primrose (imp.), dam by Macarlie (imp.). Here are a pair of big, good fillies, just the kind the market demands.

In Shorthorns the herd is a mixed one, some pure Scotch, others tracing to Imp. Rachel. Among them are some very heavy and persistent milkers, of which Mr. Balsdon is very proud; and, justly so, for appearances of type and udder development indicate more than the usual profit at the pail. The Scotch end of the herd is represented by Snow Beauty (imp.), by Star of Destiny. Choice Beauty is a daughter, imported in dam, by First Choice. Then there are several other daughters and granddaughters, the bulk of the herd being the get of Imp. Rustic Chief, Prince of Kinellar, Champion Beauty, and the stock bull, Lothario Lavender = 59053 =, by Gay Lothario (imp.); dam by Mina Duke 8rd = 13304 =. He was an exceptionally choice animal, and was never beaten in the show-ring. For sale are several choice heifers and one 9 months' old bull. The Cotswolds have long been recognized as one of the best flocks in the country, now numbering about 50, of which there are for sale 9 shearling ewes, 9 shearling rams, and this year's crop of both sexes. In Berkshires the stock boar is Long Tom 18958, from imported sire and dam. Several of the brood sows are daughters of Imp. Danesfield Leibeg. Individually, the breed is not anywhere represented by choicer specimens of bacon-type Berkshires than in the Kinellar Lodge lot. Just now for sale are a number of young sows from three months to one year of age. Write Mr. Balsdon to Markham P. O., Ont.

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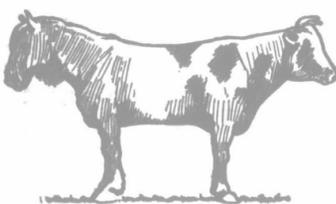
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Full instructions and veterinary advice enclosed. For \$3 you get drugs that would cost you \$10 in the ordinary way.

Send for our medicine chest at once—you may have a sick horse to-morrow, and by sending \$3 now you want save \$300 in a week.

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**Aberdeen- SUFFOLK DOWN SHEEP.** If you require either of these breeds, write: **JAMES BOWMAN, Elm Park, Guelph, Ont.**

**Aberdeen- Angus** For sale: The right sort, some of them by Klondyke, imp. Drumbo station. **WALTER HALL, Washington, Ontario.**

**Shorthorns,** Lincolns and Oxford Downs—Imp. Protector heads herd. For sale: Young bulls and cows; also ram lambs and ewes. All at reasonable prices. **JOHN McFARLANE & W. H. FORD, P. M. and M. C. Rys. Box 41, Dutton, Ont.**

**Scotch Shorthorns** We now offer four months old. All reds. Bred from imp. sire and dams. Will be sold right. **C. RANKIN & SONS, Wyebridge P.O., Ont. Wyevale Stn.**

**Brownlee Shorthorns** Three young bulls left yet, 14 to 16 months. Will sell at a bargain. Also a few heifers. Very reasonable. Good milking strains. **C. P. R. station. D. BROWN, AYR, ONT.**

**Athelstane Shorthorns** Three choice bulls and a few heifers; low-down, thick-fleshed sort, of noted families, and mostly sired by Star Prince = 53900. Prices very reasonable. **WM. WALDIE, Box 324, Stratford, Ont.**

### GOSSIP.

#### GRAHAM BROS.' NEW IMPORTATION OF CLYDESDALES AND HACKNEYS.

In this year's importation, Graham Bros., of Claremont, Ont., have certainly landed a class of horses that will doubtless carry off a big share of the red and red-white-and-blue ribbons at Toronto and Ottawa this fall; a class of horses that will surely be greatly admired by Canadians for their great size and flashy quality, a tribute to the superior judgment of the junior member of the firm, Mr. Thos. Graham, who made the selection in Scotland. They will be on exhibition at Toronto, where admirers of the beautiful in horseflesh will be given every facility for inspecting them. Prominent among the lot is the brown five-year-old, General Vasey, by Amiability; dam by Sir David. This is without doubt one of the very best horses ever landed in Canada, a horse of perfect mould, with a style of contour and majestic appearance seldom seen in a horse of any breed. This, coupled with his flashy quality, strong, flat bone and true action, makes him a model of equine perfection. Baron Laird is a brown three-year-old, whose superb quality is unsurpassed by any horse of any breed, and his stylish, proud carriage, and light trappy action at once commands and holds the attention of onlookers. He is certainly a marvel. Sired by Baron's Pride, and dam by Woodend Gartly, his breeding is in the purple. But probably the coming champion of the lot is the bay two-year-old, Lansdowne, a son of the great Everlasting; dam by Fitz Gallant. He is a colt, now in his two-year-old form, 17 hands high, and built in proportion; massive, smooth, and intensely sweet of mould, and, withal, is possessed of a vast amount of quality, and moves as true as a straightedge. Look up this colt at Toronto. Coming down in age, the pick of the yearlings is Baron Sceptre, a bay, by Baron's Pride; dam by Prince Romeo. He is a colt of superb quality, and will make a high-class show horse. General Favorite, a brown two-year-old, by Airies Prince, dam by Royal Favorite, is a massive, thick, heavy-quartered colt, on an ideal bottom, and will make considerable over a ton horse. Bonnie Doon, a bay three-year-old, by Baron Allister, dam by Eastfield Stamp, is one of the sweet-turned, stylish-quality sort, that moves with that trappy action that makes one keep looking. Boreland Chief is a brown three-year-old, by Baron's Chief; dam by Flashwood's Best. Last fall as a two-year-old he was second at Toronto and first at Ogdensburg, N. Y. He is an exceptionally well-balanced colt, with beautiful character and a style and quality at once impressive and admirable. Among so many high-class horses, individual mention of all is out of the question, and those mentioned are only representative of the entire lot, some 50 in number, but in passing some mention should be made of that really high-class horse, Baron Allister, the bay seven-year-old son of Baron's Pride; dam by Prince Gallant. This grandly-proportioned smooth horse more than won his spurs in the showing before leaving his native land. He has to his credit first and champion at Belfast, and first at Dublin in 1903; first and champion at the Royal in London in 1904; first and champion at Ayr and champion at Kilmarnock; first and champion at Dublin in the same year, which is his best guarantee of quality, style, action and form. In Clyde fillies there were seven in the new importation, a lot that has seldom been equalled in any importation made by any firm. One of the very best is the brown two-year-old, Queen of the Waves, by Netherlea; dam by Gay City. She is a filly of great substance and sweet mould, on a model bottom, and will certainly make her competitors go some this fall. Only one Hackney graded this year's importation, but he is a cracker sure, Shawhill Duke, a brown two-year-old, by Polonus; dam Worcester Cross, by Worcester Sauck. He is an immensely bred-looking chap, with phenomenal all-round action and majestic carriage, a coming champion in the best of company. Besides him there are several other Hackney stallions in the stables, aristocrats of the breed and winners of many honors.

#### SMITH & RICHARDSON'S NEW IMPORTATION OF CLYDESDALES.

In point of substance, flashy quality and rich, royal breeding, the importation of Clydesdale stallions and fillies, just landed, by the well-known firm of Smith & Richardson, Columbus, Ont., excels any previous importation made by this firm. Their many friends and patrons are cordially invited to look up their stable on the exhibition grounds, where will certainly be seen a class of horses that will please the eye and cheer the heart of lovers of man's most noble friend. Following is a short description of a few of the many now on hand: Prince Ascot is a black two-year-old, by Ascot, dam by Prince of Princes. He is one of the kind so much admired by Canadians, clean, flat, flinty bone, covered with beautiful silky hair, a stylish carriage, and a faultless mover. Dunure Peeble is a brown two-year-old, by Baron o' Buchlyvie, dam by Marcellus, royal breeding, and a royal colt. This year at the Royal, in a strong class, he was placed fourth, and when finished will certainly be a hard nut to crack in any company, as he combines size, style, quality and straight, true action, to a remarkable extent. Danure Acknowledgment is another bay two-year-old, by Baron o' Buchlyvie, dam by Baron's Pride. He is the making of a show horse that will be up to a great size and of flashy appearance and superb quality. Maiden Hall is a bay two-year-old, by Baron's Pride, dam by Montrave Matchless, a colt of exceedingly smooth, even conformation, full of draft character, and standing on the grandest quality of bottom, a characteristic that has made this firm's importations noted the country over, for above all things, Messrs. Smith & Richardson must have the proper kind of bone, ankle and foot, and straight and true action. Dunure Allan, a bay two-year-old, by Dunure Freeman, dam by Lord Lothian, is a rare good kind, with plenty of size, character, and quality galore. He will make a great show horse. Rab the Ranter is a brown two-year-old, by Everlasting, dam by Macgregor. This colt is a half-brother to the great horse, Silver Cup, being out of the same dam. He is an intensely sweetly-put-up colt, with quality characterized in his every lineament, with hard, flat bone, and faultless ankles and feet. Lord Dunure, a bay two-year-old, by Dunure Freeman, dam by Montrave Mac, is another of the smooth, nicely-finished sort. Still another two-year-old is Inheritor, a brown, by the great Hiawatha, dam by Casabianca. This is one of the very best of the two-year-olds, with size and quality to spare, a flashy, big show colt. In three-year-olds, the cream of the pair, for there are only two, is Black Ivy, by the champion Everlasting, dam by that prince of sires, Prince Thomas. This horse is certainly a marvel of perfection in build, style, quality, character and action. A show horse of a high order. The other three-year-old is Highland James, a bay, by Bucephalus (imp.), dam by Brown James (imp.). This colt is a Canadian-bred one, and a right good sort he is. In four-year-olds, Sir Henry, a bay, by Prince Thomas, dam by Primate, is one of the best. He has plenty of size and flash quality, is smooth to a turn, and moves like a machine. Douglas Chief is another bay four-year-old, by Hillhead Chief, dam by Baron's Pride. Bogie Marquis is another bay five-year-old, by Moncrieffe Marquis, dam by Royal Gartley. Duke of Malton is a black five-year-old, by Sir Everitt, dam by Londonderry. That grand quality show horse, President Roosevelt, the bay son of Marcellus, dam by Excelsior, was never in such fine bloom, and the horse that beats him this fall will certainly have to go some. In yearlings the pick of first prize in a strong class at Dumfries this year, sired by Baron o' Buchlyvie, dam by Montrave Mac. He possesses quality in a marked degree, and will make a future champion sure. In fillies the best of the new-comers is Saucy Queen, a bay two-year-old, by Royal Favorite, dam by Cawdor Cup, a flash quality filly that will take a heap of beating at Toronto. Last winter's Toronto champion, Flashend Princess, the bay four-year-old, by Prince Tom, dam by William Wood, is now suckling a beautiful horse colt, by Attractive Prince.

## Makes His Own Stock Food.

One pound package of Barnes English Compound makes ten pounds of stock food, by mixing it with three pounds of linseed meal and six pounds of corn meal. As a conditioner and flesh producer has no equal. Postpaid on receipt of 50 cents—money order or stamps. Address:

S. G. AMSDEN,  
Box 668. Windsor, Ont.

### MAPLE HOME SHORTHORNS

Our present offering is several very choice and richly-bred one- and two-year-old heifers, and three yearling bulls—away above the average. Pure Scotch and Scotch-topped.

A. D. SCHMIDT & SONS  
Eimra, Ont.

### SHORTHORNS

One imported bull, Good Morning (imp.) = 55018, five years old. Choice heifers, sired by Lord Lieutenant, imp. Some from imported dams, and all safe in calf to Good Morning, imp. Two extra good young roan bulls, one from imported dam. Come and see them.

M.C.R. Scott Bros., Highgate, Ont. P.M.R.

### Shorthorns, Cotswolds, Berkshires.

In Shorthorns, over 50 head—cows, heifers and calves from 2 to 8 months. In Cotswolds, shearing ewes and ram and ewe lambs. In Berkshires, a few young sows.

Chas. E. Bonnycastle, Campbellford, Ont. Post Office and Station.

### HAWTHORN HERD OF DEEP-MILKING

### Shorthorns

For Sale: 2 young bulls and 10 heifers, sired by Aberdeen Hero (imp.) = 28840. Some bred to the Lavender bull, Lavender Lorne = 68706.

WM. GRAINGER & SON, Londesboro, Ontario.

### Willow Bank Stock Farm.

Shorthorn Herd Estab. 1855. Leicester Flock Estab. 1848. I have a special good lot of rams and ewes to offer. Various ages and show material. Also choice Shorthorns of either sex, any age.

JAMES DOUGLAS, Caledonia, Ontario.

### Pleasant Valley Herd

Present offering: 7 high-class young bulls by Imp. Ben Lomond = 45160 = (80468) and Bud's Emblem = 63800, and good imp. and Canadian-bred dams. Write for particulars and prices, or visit personally.

GEO. AMOS & SON, Moffat Station and P.O. Moffat is 11 miles east of Guelph on C. P. R.

### Spruce Lodge Shorthorns and Leicesters.

In Shorthorns, we are offering young bulls and heifers, by imp. sires and out of heavy-milking dams. In Leicesters, we have a grand lot of shearing rams and ram lambs, and one two year old ewe of No. 1 quality.

W. A. DOUGLAS, TUSCARORA P. O., ONT. Caledonia Station.

### MAPLE GROVE SHORTHORNS

6 bulls and 2 heifers for sale. Bred from imp. and home-bred stock. A number of young cows safe in calf. Present stock bull, Stary Morning. **C. D. WAGAR, Enterprise, Ont. Stn. and P.O.**

### TWO IMP. BULLS of excellent quality, color and breeding.

One 7 months old, sired by imp. Joy of Morning = 32070; dam Blossom 2nd imp. Also heifer calves and young cows, and heifers in calf. And choicely-bred Yorkshires of either sex. Prices very moderate. **GEO. D. FLETCHER, BINKHAM P. O., ONT. Elm Station, E. P. R.**

**FOR SALE: FOUR** Fit for service. Dairy type. Some of them from imp. cows, and all got by Broadboks Prince (imp.) 55002. Prices the lowest. Also cows or heifers, 60 head to select from. **DAVID MILNE, ETHEL, ONTARIO.**

### IF INTERESTED IN Call and see my flock at

**Dorset Sheep** Toronto Exhibition, River-view Stock Farm Short-horns and Dorset Sheep.

**H. BARTLETT, Kimbo P. O., Ont., Lincoln Co.** Grassies Station, T. H. & B., 2 miles; Gimsby Station, G. T. R., 6 miles.

**GOSSIP.**

Messrs. Mac Campbell & Sons, Harwich, Kent County, Ont., in this issue renew their advertisement of Leicester sheep and Duroc-Jersey swine, offering yearling ewes and rams, and ram and ewe lambs, also Duroc-Jersey sows and boars of breeding age, and younger pigs of both sexes.

Veterinary instruments for the use of horsemen, dairymen, swinemen, and the general farmer, are advertised in our columns by the well-known house of Haussmann & Dunn Co., 392 South Clark St., Chicago, Ill., who will be pleased to forward their large illustrated catalogue to people who write them for it.

A splendid 7 1/2 x 11-inch photo-engraving of that prince of Clydesdale stallions, Baron's Pride, may be purchased through this office for 50 cents in cash, or it will be given as a premium to any present subscriber of "The Farmer's Advocate" who will send us the name of one new yearly subscriber, accompanied by \$1.50.

**SPRUCE LODGE SHORTHORNS AND LEICESTERS.**

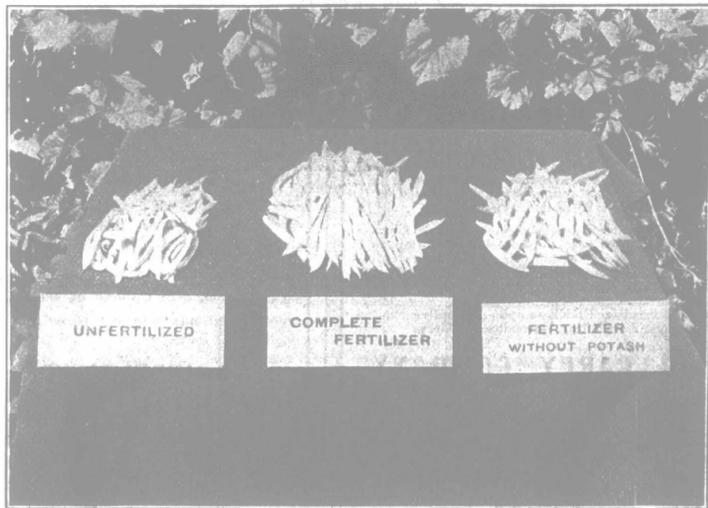
Mr. W. A. Douglas, Tuscarora P.O., Ont., Caledonia Stn., owner of Spruce Lodge stock farm, is one of the best-known breeders of Shorthorn cattle and Leicester sheep in Western Ontario. His Shorthorn herd is an exceptionally choice one of imported and Scotch-bred cattle of the thick, early-maturing beef kind, and the big, deep-bodied milking sort that for so many years have proved so profitable an investment in the hands of up-to-date Canadian breeders. None but the best imported bulls have been in use in this herd, which now are practically all in calf to that prince of stock bulls, Imp. Joy of Morning, a Toronto first-prize winner. Some extra choice heifers and young bulls are always on hand for sale at the Spruce Lodge farm. The Leicester sheep are among the best in Canada, year after year producing a number of the winners at the leading Canadian shows. This year is no exception. The crop of lambs are a choice lot, showing a phenomenal growth and a superb type. For sale are a number of shearling rams and ram lambs, one and two year old ewes of grand quality and type, all of which will be sold at reasonable prices.

**WILLOW BANK SHORTHORNS AND LEICESTERS.**

Fifty-three years ago, or over half a century, marks the foundation of the far-famed Willow Bank herd of Shorthorn cattle and Leicester sheep. For this great length of time, without a break, steady and persistent efforts have been continuously put forth to show at each year's end some noticeable improvement in the care, breeding and management of the herds, in all cases using, without regard to cost, the best possible sires, and infusing new blood in the female breeding end of the herd. This, coupled with unimpeachable honesty and truthfulness in dealing with his host of customers and patrons, is the keynote to wide and exceptionally large trade enjoyed by the owner of Willow Bank stock farm, Mr. James Douglas, of Caledonia, Ont. During the last year Mr. Douglas has sold a very large number of animals, but in a herd so large as his there are always a number left for sale of the highest quality and richest breeding. So it is now. There are a grand lot of yearling heifers, the best lot ever seen on the farm at any one time, and a number of very choice young cows, mostly sired by Imp. Rosierucian of Dalmeny, and in calf to that noted sire, Imp. Joy of Morning, now at the head of the herd. There is also for sale several grand good young bulls, from one year down. Owing to being related to so many of the herd, Mr. Douglas has decided to sell his assistant stock bull, Scottish Banner, a 3-year-old 2,250-lb. son of Imp. Rosierucian of Dalmeny, dam Imp. Boyne Lady. He is roan, thick and very even fleshed, an extra good individual, an extra good sire, quiet, sure, and absolutely right every way. The big flock of Leicesters are in prime condition, a high-class lot, and much show stuff among them. For sale are shearling rams, shearling ewes, and ram and ewe lambs.

**EXPERIMENT ON "WAX BEANS," 1908.**

Conducted by Mr. V. G. Hector, Erindale, Ont.



Plots.	1	2	3
Fertilizer per acre	—	180	— Muriate of Potash
Fertilizer per acre	—	420	420 Acid Phosphate
Yield, acre, baskets	702	1194	738

This experiment shows an increase of 456 baskets directly due to the application of POTASH.

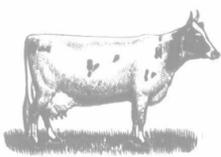
**Potash**

Is indispensable, and has no substitute as an ingredient of a complete fertilizer for all farm and garden crops, and can be obtained from all leading fertilizer dealers and seedsmen in the highly-concentrated forms of

**SULPHATE AND MURIATE OF POTASH.**

Apart from the fact that a profitable increase in yield invariably follows a judicious application of POTASH (in a complete fertilizer), the product is of a much higher quality and matures earlier. In the accompanying experiment, Potash not only increased the yield, but the crop was marketable two weeks earlier, thus commanding a higher price. For further particulars and literature, visit our exhibit at the CANADIAN NATIONAL EXHIBITION, or write direct to

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1102-1105 Temple Building,  
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**Stoneycroft Ayrshires**

Choice young bulls and heifers of the very best breeding, combining show and dairy quality.

Large Improved Yorkshire Pigs from imported sires and dams, now ready to ship.

Stoneycroft Stock Farm, Ste. Anne de Bellevue, Que.

**HOWGLEN AYRSHIRES!**

For sale: 75 pure-bred registered Ayrshires, all ages; prizewinners; many imported. Apply to

ALLAN P. BLUE, Eustis, Quebec.

SPRINGBROOK AYRSHIRES have been bred with a view to large milk and butter production, coupled with vigor of constitution, and being true to type. A few bull calves of 1908 for sale. W. F. STEPHEN, Box 163, Huntingdon, Que.

**MAPLE GLEN HOLSTEINS**

For Sale: Service bull, brother to Guelph dairy test champion, 1907; three bull calves, one from 22 1/2-lb. cow, one from 17.80-lb. 4-year-old, a Top Notcher from 19.48-lb. 2-year-old. Come and inspect the herd.

G. A. GILROY, Glen Buell, Ont.

AYRSHIRES Bull and heifer calves from producing dams. Right good ones. Hickory Hill Stock Farm. N. DYMENT, Dundas Station and telegraph. Clappison, Ont.

**Burnside's Champion Ayrshires**

My 1907 importation of 75 head being about all disposed of, I am preparing to import again. Mr. And. Mitchell, the world's most extensive dealer and breeder of Ayrshires, is at present securing for me the best young bulls from the best herds in Scotland. Send in your order now for a choice bull and a female or two. Bulls will be out of quarantine in time for spring service. Correspondence solicited. Long-distance phone in house.

R. R. NESS, Howick, Que.



**STONEHOUSE AYRSHIRES**

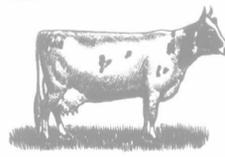
On hand for sale: A number of imp. cows and heifers, winners of high honors in Scotland and Canada; 4 young bulls bred from champions and winners themselves. Extra choice offering.

HECTOR GORDON, Howick P.O. and Sta., Que.

MILK-FEVER OUTFITS. Dehorners, Teat Syphons, Slitters, Dilators, etc. Received only award World's Fairs, Chicago, St. Louis. Write for illustrated catalogue. Haussmann & Dunn Co., 392 So. Clark St., Chicago.

Wardend Ayrshires Present offering: 1 two-year-old, 2 yearling bulls, and choice lot of spring calves from good milkers.

F. W. TAYLOR, Wellman's Corners, Ont. Hoard's Sta., G. T. R. Telephone in house.



**Springhill Ayrshires!**

A better lot of young cows and heifers we never had. They have only to be seen to be appreciated. "Deep milkers." "Good teats." Just the kind for foundation stock. Bull calves from best cows. Will leave for Scotland shortly to import. Order a choice yearling or bull calf or a female or two. They will be out of quarantine for spring service. Write for prices. Long-distance phone.

ROBERT HUNTER & SONS, Maxville, Ont.

**KELSO S. F. AYRSHIRES**

My winnings at Ottawa this year were: Aged cow in milk, 1st and champion; dry cow, 1st; Canadian-bred cow, 4th; Canadian-bred 3-year-old, 3rd. For sale, anything in herd, both sexes. Extra choice stuff.

D. A. McFARLANE, Kelso, Que. Athelstane Sta., G.T.R.

Ayrshires—Oldest-established herd in Ontario. Average B. F. test for the whole herd, 4.2; milk yield, 40 to 60 lbs. a day. For sale: Females of all ages, and several young bulls, all by imp. sire, and some out of imp. dams.

JAMES BENNING, Williamstown P.O., Ont. Lancaster station.

**Farmers and Cattlemen, Read This!**

When you cannot sell your export cattle at satisfactory prices at home, and wish to ship them to the Old Country markets, write or wire for steamer space, market and shipping information to

Donald Munro, Live-stock Forwarding Agent and Commission Salesman, 43 St. Sacramento St., Montreal.

Load your cattle carefully, and bill them to me. I provide the necessary feed, insurance, etc., pay freight and all other expenses from shipping point, and give liberal cash advances on all consignments. Cattle are loaded on steamer under my personal supervision, and placed in charge of capable attendants for the ocean voyage. I represent the most reliable salesmen at all the different British markets.

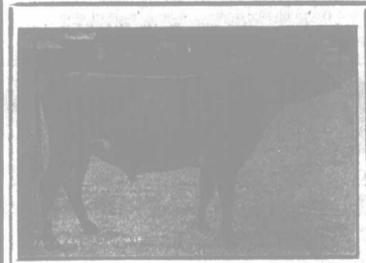
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COURT LODGE, EGERTON, KENT, ENG.,

Exporter of pedigree stock of every description to all parts of the world.

During the fall months light and heavy horses will be a specialty. Write for prices, terms and references.



**THE GOLDEN LAD BULL.**

Golden Fox of Dentonia. First-prize yearling and junior champion at Toronto, 1907, Exhibition. His calves coming from my pure St. Lambert cows proves this cross a wonderful success. Correspondence invited.

T. PORTER, Weston Road, Toronto Junction.

**DON JERSEYS**

We are now offering a number of heifers of all ages, out of producing show stock, and by champion sires, and in calf to Fontaine's Boyle. Also several yearling bulls out of high-class cows, and by same sires as the heifers. The best lot of young things we ever had for sale. Duncan Station, C. N. R.

D. DUNCAN, DON, ONTARIO.

**Brampton Jerseys**

Unbroken record of several years success at all leading Canadian exhibitions is unequalled by any other herd of any kind or breed of live stock on the American continent. When buying a family cow, a stock bull or a dairy herd, buy only the best. Our public record proves that we have them.

B. H. BULL & SON, Brampton, Ont.

FOR SALE - A FINE HERD OF

**St. Lambert Jerseys**

Twenty-four females (14 milking), nearly all young. Two bulls and four bull calves. On account of poor health, will sell the entire lot at a sacrifice. A rare chance to start in. For full particulars, apply to

GEO. W. A. REBURN, Massawippi, Que.

**W. Willis & Sons, Pine Ridge Farm, Newmarket, Ont.**

Breeders of registered high-class JERSEY CATTLE. Stock for sale of both sexes, and reg. Cotswold sheep. Correspondence solicited.

Jerseys—Choice heifer calves for sale, from 2 to 14 months old, granddaughters of old "Blue Blood of Dentonia" (1st in the aged class and sweepstakes at Toronto for years), out of large, heavy-milking dams. Inquiries solicited. ARTHUR H. TUFTS, Box III, Tweed, Ont.

# CAREY'S FLEXIBLE CEMENT ROOFING



TO CLAIM roofing durability is one thing; to PROVE it is another. Carey claims are supported by the TIME-PROOF testimony of bona-fide users, as witness the following:

**"Twenty-one years without a leak, and it looks as good to-day as when we put it on."**

That's what W. E. Baldwin, of Youngstown, O., wrote last April, and he is only one of thousands of satisfied users of Carey's Roofing.

Why buy an inferior roof, bound to leak in a year or so? Why not spend a trifle more for a roof that, with less trouble, will last as long as the building stands? Besides, Carey's Roofing is equally adapted for flat or steep surfaces, and may be laid OVER old leaky roofs.

Carey's Roofing is made of Carey's special-process Asphalt Compound, and fire-resisting cement, with best woolen felt and burlap as a binder and protector. The Carey patent lap completely covers nail heads, forming a perfect, permanent and neat union of sheet to sheet and roofing to roof-board.

Write the manufacturer direct for FREE sample, descriptive booklet, prices, and nearest distributing warehouse. Address

**THE PHILIP CAREY COMPANY**  
TORONTO MONTREAL

## Riverside Holsteins

STOCK BULLS:

Sir Pietertje Posch De Boer, two near-est dams have official records that average 25.67; dam test 4.34% fat.

Highland Veeman Korndyke, six near-dams average 26 lbs.

7 choice young bulls out of R. of M. dams.

20 yearlings and two-year-olds.

**J. W. RICHARDSON,**

Haldimand Co. Caledonia, Ont.

**Ridgedale Farm Holsteins**—For sale: 4 bull calves from one to ten months old; 2 heifer calves. All bred from choice dams. Also a pair of choice cows supposed to be in calf. **R. W. WALKER, Utica P.O., Ont.** Port Perry (G.T.R.) and Myrtle (C.P.R.) stations, Ontario Co.

**LYNDALE HOLSTEINS!** Bull calves out of cows with records of from 18 to 20 lbs., also three heifers coming two, and a number of young cows in Record of Merit, bred to a grandson of Pietertje Hengerveld's Count De Kol. **BROWN BROS., LYN, ONT.**

**Maple Hill Holstein-Friesians** Special offering: Two bull calves eleven months old; well bred; in fine condition; now fit for service.

**G. W. CLEMONS, St. George, Ont.**

## HOLSTEINS

We must sell at least 25 cows and heifers at once in order to make room for the increase of our large herd. This is a chance of a lifetime to buy good cattle at bargain prices. The best way to arrange to come and look the herd over. If you cannot, we will do our best for you by correspondence. Also a few young bulls, 100 head to select from. Imported **Pontiac Hermes**, son of Hengerveld De Kol, world's greatest sire, head of herd. All leading breeds represented.

Putnam station, near Ingersoll.

**H. E. GEORGE, Crampton, Ont.**

**The Maples Holstein Herd!** RECORD OF MERIT COWS. Headed by Lord Wayne Mechthilde Calamity, also in the Record of Merit. Nothing for sale but choice bull calves.

**WALBURN RIVERS, Falden's, Ont.**  
**Hilton Stock Farm**—Holsteins, Cotswolds and Tamworths. Present offering: Some young cows; a nice lot of young pigs; few boars six months old, and sows in pig. **R. O. MORROW & SON, Hilton, Ont.** Brighton Tel. and Stn.

**Only Bull Calves** FOR SALE, HOLSTEINS and AYRSHIRES, Of the best performing strains.

**GEO. RICE, ANNANDALE STOCK FARM, TILLSONBURG, ONTARIO.**

**Centre and Hillview Holsteins** 125 head to select from. 35 in the R. O. M. Stock bulls Bonheur Statesman, high official backing, and is closely related to Colantha 4th's Johanna; Brookbank Butter Boy. All nearest dams over 20 lbs. From these sires, out of R. O. M. dams, are several young bulls and a few heifers. Prices right. **P. D. EDE, Oxford Centre, Ont.** Woodstock Station.

## WOODBINE STOCK FARM

Offers a few fine young Holstein bulls and bull calves, sired by Sir Mechthilde Posch. Sire's dam holds world's largest two-day public test record, dam Ianthe Jewel Mechthilde, 27.65 lbs. butter in 7 days; average test, 4.46 per cent. fat; out of dams with superior breeding and quality.

Shipping stations—Paris, G. T. R.; Ayr, C. P. R.

**A. KENNEDY, Ayr, Ont.**

## LAKEVIEW HOLSTEINS

Herd headed by Count Hengerveld Fayne De Kol. His dam, Grace Fayne 2nd, 26.30 lbs. butter in 7 days, is dam of world's champion 4-year-old butter cow, Sire Count Hengerveld De Kol, 70 A. R. O. daughters, including world's champion milch cow. For sale: 1 service bull; 10 bull calves, by 20-lb. butter cows. 75 head to select from.

**W. D. BRECKON, Mgr., Bronte, Ont.**

**Maple Grove offers a richly-bred bull calf**, 6 weeks old, sired by an Aaggie, Cornucopia Pauline, A. R. O., 34.31 lbs. butter; his dam is sired by a son of Beryl Wayne, A. R. O., 27.14 lbs. butter. For particulars write: **H. BOLLERT, Cassel, Ont.**

**Spring Brook Holsteins and Tamworths.** 32 choice young Tamworths from imp. sows, and sired by imp. Knowie King David, of best British blood and Royal winners. Correct type. Holsteins of best strains. Write for what you want, or, better, come and see. Will not exhibit this year. Stock better than ever. **A. C. HALLMAN, BRESLAU, WATERLOO CO., ONT.**

**Glenwood Stock Farm—Holsteins and** Holsteins all sold out. Have a few young Yorkshires sows, about 2 months old, for sale cheap. True to type and first-class. Bred from imported stock. **Thos. B. Carlaw & Son, Warkworth P.O., Ont.** Campbellford Station.

**FAIRVIEW HERD** offers you another son of the great Pontiac Korndyke, who has more high-testing daughters in Advanced Registry than any other living bull. We have four of his daughters that have seven days' records that average over 28 lbs. each, and over 4% fat. This young bull was born Nov. 2, 1907, is two-thirds white, and a beauty. His dam is sired by a son of De Kol 2nd's Paul De Kol, the sire of Aaggie, Cornucopia Pauline. You cannot find better breeding than this. First check for \$150 takes him. **E. H. DOLLAR, Heuvelton, St. Law. Co., N. Y.** Near Prescott, Ont.

**To Head Your Herd** Why not buy Korndyke Lily De Kol? Born January, 1904. Sire, Korndyke Queen's Butter Boy. Dam Miss Lily. This is a handsome young bull, and has proved himself a getter of good stock. Write for particulars. We also have a few cows and calves for sale. **E. & F. MALLORY, Frankford, Ontario.**

Subscribe for "The Farmer's Advocate and Home Magazine." \$1.50 per Year in Advance.

## QUESTIONS AND ANSWERS. Veterinary.

### UNTHRIFTY COW.

After cow was on grass for some time her feet became sore and she failed in flesh and milk supply.

Ans.—She probably has "foul in the feet," which is caused by standing in or walking through irritating substances, as liquid manure, wet ground, rushes, etc. Keep her in a clean, dry stable; apply hot linseed-meal poultices to the feet until soreness ceases. If eruptions occur, dress three times daily with carbolic acid, 1 part; sweet oil, 20 parts. Feed well and give a heaped tablespoonful of equal parts of sulphate of iron, gentian, ginger and nux vomica, three times daily.

### FARDEL-BOUND.

Heifer was brought home from pasture two weeks ago. In a week she began to fail, refuses food and water, breathes jerky, and emits a grunt when breathing. When lying she is very uneasy.

Ans.—She has impaction of the third stomach, and it is doubtful if she will recover. Give her 1½ pints of raw linseed oil. Give 2 drams nux vomica three times daily. If her bowels do not act freely in 24 hours, give 1 pint raw oil and 1 pint treacle, and repeat daily until her bowels act freely. Continue the nux vomica, and keep her strength up by drenching her with boiled flaxseed and ale.

### BLOODY MILK.

Heifer is very hard to milk, and there appears to be a soft substance in the teats that moves up and down as she is milked. At first we noticed bloody specks in the milk, but now the milk is bloody all through, and clots of blood are forced out when we commence to milk.

Ans.—The blood escapes from the small vessels, which become ruptured during milking. The vents of the milk ducts are very small, hence the trouble in milking. Various methods are recommended to remedy this, but it is seldom they are successful. Probably the safest treatment is the insertion of little plugs slightly constricted in the center, in order that they will not fall out. These are left in between milkings, with the idea of dilating the opening. I believe plugs made of gutta-percha can be purchased from dealers in veterinary instruments, or they can be made of hardwood, made very smooth. Treatment is not often successful, and unless very carefully conducted will set up inflammation of the parts and complicate matters. I would advise you to allow her to go dry and fit her for the butcher.

### FATALITY IN COW.

1. Cow moped for two days and she failed in milk supply. She then commenced to breathe very hard, and there seemed to be a rattle in her throat. She refused food, but drank freely. Saliva flowed from her mouth and she died, evidently from suffocation. A post-mortem revealed the lungs twice the normal size, and covered with black spots.

2. Cow had caked udder. This is better now, but she does not eat well and is dull. Is there danger of infection?

Ans.—1. The symptoms indicate that the cow was tubercular, and from some cause the lungs became inflamed, and this caused death. Tuberculosis explains the enlarged condition of the lungs, and inflammation the dark spots. It is not probable that any treatment would have been successful. Of course a careful post-mortem by an experienced man would have determined whether she really was tubercular.

2. Take equal parts of sulphate of iron, gentian, ginger and nux vomica, and give a heaped tablespoonful three times daily. There is no danger of infection from this case, but if the cow was tubercular there is danger that other cattle may have contracted the disease, the symptoms of which may not be apparent for a long time.

## Miscellaneous.

### POISON IVY.

1. Which is the poison ivy, the kind with the three leaves in a bunch, or the kind with five in a bunch?

Ans.—Poison ivy has three leaflets. It belongs to the Cashew family, and is known also as poison oak. It climbs by rootlets over rocks, etc., and ascends trees in the same way; leaflets 3, rhombic-ovate, often sinuate or cut-lobed, rather downy beneath. A vile pest, common in low ground. The variety radicans is more erect, less poisonous with more entire leaves.

### APPLYING ASHES FOR ALFALFA.

Would ashes be good to apply on a field during the winter which I want to seed to alfalfa next spring? How many to the acre?

Ans.—Preserve the ashes until spring, in some dry place; then broadcast evenly over the field and incorporate with the harrow. It is, perhaps, safer to apply the ashes some little time in advance of the crop. A wagonload of wood ashes to the acre makes a fair dressing, though we doubt not that twice that quantity could be used to advantage on a field intended for alfalfa.

### DIFFICULTIES IN CHURNING.

1. What is the cause of butter coming soft when cream is kept in a cool cellar at a temperature of from 60 to 65 degrees Fahrenheit? The cows are all fresh. The butter when it comes is greasy and soft, but tastes sweet. Cream is separated twice a day and cooled before mixing.

2. When I churn I cannot get the butter to come in any but very small granules. What is the matter, and what would you advise?

Ans.—1. In all probability you are churning at too high a temperature. If you are skimming a heavy cream (30 to 35 per cent. fat) cool it to about 50° F., or say 53° to 54° F., if the cream is only 20 to 30 per cent. fat, and hold at this temperature for at least four hours before churning begins, this will overcome the difficulty.

2. You do not state whether your difficulty occurs before or after the buttermilk has been drawn off. If before, the chances are that your cream is too thin. But butter should never be churned into one solid piece. As soon as the granules are the size of wheat, and the buttermilk appears blue, the buttermilk should be removed. If you cannot get the butter to gather into granules this size, draw off a portion of the buttermilk and complete the churning. Of course, you can avoid a repetition of this difficulty by skimming a heavier cream next time, say 30 to 35 per cent. fat.

Washing the butter with very cold water is the only thing that would tend to prevent the butter granules from uniting during working.

### GOSSIP.

Parties interested in Dorset sheep should look up the advertisement of Mr. H. Bartlett, of Kimbo, Lincoln County, Ont., in this paper, and write him, or make it a point to see his flock at the Toronto Exhibition.

Berkshires of the best class sell high at auction sales in the United States. At the sale of a selection from the herd of A. J. Lovjoy & Son, at Roscoe, Ill., August 12th, 35 head sold for an average of \$100, the top price, \$410, being realized for the breeding sow, Princess Belle.

The third annual Fall Horse Show of the St. Thomas Horse Show Association, will be held under cover at the Grande Park, St. Thomas, on Sept. 22nd and 23rd. The entries already made assure the success of this year's show. Not only are the entries more numerous than last year, but the quality of the horses entered is of the highest. Entry list remains open until Sept. 15th at double the regular price. Prize list and all particulars can be obtained from W. Wallace, Grande Park, St. Thomas.

## Ring-Bone



There is no case so old or bad that we will not guarantee

**Fleming's Spavin and Ringbone Paste** to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 6-minute applications cure. Works just as well on Elbow and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of

**Fleming's Vest-Pocket Veterinary Adviser**

Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durable, bound, indexed and illustrated. Make a right beginning by sending for this book.

**FLEMING BROS., Chemists,**  
75 Church Street, Toronto, Ontario

### Hampshire Down Sheep.

**SPLendid MUTTON,  
GOOD WOOL,  
GREAT WEIGHT.**

This highly valuable ENGLISH BREED OF SHEEP is unrivalled in its rapid and WONDERFULLY EARLY MATURITY, hardness of constitution, adapted to all climates, and in quality of MUTTON AND LARGE PROPORTION OF LEAN MEAT IS UNSURPASSED.

Full information of

**Secretary, Hampshire Down Sheep Breeders' Association,  
SALISBURY, ENGLAND.**

#### PROGRESS.

Near the Town of Up-against it, in the land of Root-or-die,  
We have found our finest inspiration, you and I.  
Toiling up the hill called Have-to, with Compulsion for a guide,  
We have made the sort of effort that was never yet denied.  
In the way were Can't and Couldn't, with their brother, What's-the-use,  
While our dearest foe, Born-weary, seized with joy each poor excuse.  
Yet behind us, unrelenting, drove our heartless master, Must,  
And our feet essayed no lagging, spite of hill or heat or dust.  
It was there we grew the sinews for the struggle—you and I—  
Near the Town of Up-against-it, in the land of Root-or-die.

Near that village, Up-against-it, in the land of Root-or-die,  
We discovered possibilities undreamed of—you and I.  
Were there heartaches in that journey? Little, then, our master cared,  
As along that stony highway under whip and spur we fared.  
Broad-and-butter trudged besides us, with a keen and ruthless goad,  
That should quicken halting footsteps if we loitered on the road.  
Pride and Spunk, two comely sisters, lured us on with myriad wiles—  
All the master's welts were painless as we feasted on their smiles.  
So our hearts grew strong to conquer, as we plodded—you and I—  
Past the hamlet, Up-against-it, in the land of Root-or-die.

—[S. W. Gillilan, in Success.



Men should look for this Tag on Chewing Tobacco. It guarantees the high quality of

## Black Watch

The Big Black Plug.

2272

#### QUESTIONS AND ANSWERS. Miscellaneous.

##### ALFALFA QUERIES—COLT SIDLES IN HARNESS.

1. Is alfalfa a good pasture for cows that are milking?
2. Would alfalfa grow well on land near a creek that is quite heavy white clay in some places, and black loam in others? It is quite low land; barley and oats will do well on it.
3. What is the best pasture for hogs that are getting about all the grain they will take?
4. Is there any curing a colt of the habit of leaning heavily against the tongue of wagon or cultivator while working? Colt has worked considerably.

R. H. McL.

Ans.—1. Yes and no. As far as the feed is concerned it is exceptionally well adapted to milch cows, but a degree of care must be exercised in pasturing ruminants on alfalfa, as it is liable to cause bloat, especially when wet with dew, rain or hoarfrost. It is much like clover in this respect, only a little more dangerous. When mixed with grass and pastured judiciously it is all right. Grazing is not good for the alfalfa meadow, however, especially a new seeding, and should on no account be close or continued late into the fall, unless it is desired to kill the alfalfa so as to make the sward easier to plow the next spring.

2. It might, though usually it does not do well on low land. Considerable depends, however, on the drainage, both surface and subsoil. Lands subject to overflow by water are not suitable to alfalfa.

3. Alfalfa, next to that clover. Grass and rape are also good.

4. Possibly the harness is in need of adjustment. Look especially to the reins, tugs and collar. A piece of board might be nailed on the tongue, so as to force him out into place. If necessary a few nails might be driven into the edge far enough to prevent any serious injury to the colt, but still projecting sufficiently to keep him away from it.

##### A DISEASE OF PLUMS.

Plums growing on young trees, varying from 5 to 12 years old, partly develop and then become wizened; some produce pinkish growths on the outside, similar to a hard fungus in composition; others remain green, and harden quickly, showing a small depression on one or both sides, but no grub hole is visible. The blossom was very free and healthy, and no blight or worms could be found in the flowers; the fruit set well, none dropping off, but after about 6 or 7 weeks nearly all the plums dry up and mould on the outside, but remain on the trees in most cases. The blooms were sprayed this year with a solution of coal oil and soap suds, in the proportion of 1 to 12. The trees are planted in a good sandy loam, on a north slope, sheltered by balsams and spruces; plenty of sun and wind.

Ans.—The above question, received a month ago, has been referred to two authorities in turn. The following answer is by W. T. Macoun, Horticulturist, Central Experimental Farm, Ottawa:

It is difficult to tell from the description whether the disease is the "Spot or Blight of the Plum" or the "Brown Rot," but as some of the diseased plums remain on the tree it is more likely to be the "Brown Rot," which also affects the twigs, leaves and flowers. The diseased fruit produces spores which infect the tree in the spring. The disease is also carried from one fruit to another by means of the spores which are given off from the outside of the skin, on which they have that purplish appearance referred to in the letter. There is no good remedy known for this disease. If there are only a few trees affected, the best plan is to pick and burn all affected fruit as soon as seen. If the trees are loaded with fruit, thinning so that the plums will not touch one another will check it. Spraying with Bordeaux mixture has been found beneficial, beginning when the trees are dormant in early spring, with a second application just as the leaf buds are breaking; another after the petals fall, and a last one with potassium sulphide when the fruit begins to ripen, but even this thorough treatment is not altogether satisfactory.

## COOPER'S FLUID

For dipping SHEEP. For washing CATTLE, HORSES and DOGS.  
Cures Mange and Ringworm. Cures Maggot wounds in Sheep.  
Cures Ulcers, Sore Udders, etc.

APPROVED BY THE BOARD OF AGRICULTURE FOR GREAT BRITAIN.  
COOPER'S WORM TABLETS a sure cure for worms in CATTLE, HORSES and SHEEP.

Write for free Booklet P.

**WM. COOPER & NEPHEWS, TORONTO, ONTARIO.**  
506-507 MANNING CHAMBERS.

#### Maple Villa Oxford Downs and Yorkshires

For sale: Sunset, imp., 2 yrs. old—a grand ram and a grand, good sire; 15 shearing ewes; 4 shearing rams; this year's lambs of both sexes. A high-class lot. Yorkshires of both sexes and all ages. Satisfaction is guaranteed. J. A. Cerswell, Bond Head P. O., Ont. Beeton or Bradford Sta.

Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs.—Present offering: Lambs of either sex. For prices, etc., write to John Cousins & Sons, Harriston, Ont. Buena Vista Farm.

#### IMPORTED HORNED DORSETS

My importation for 1908 will arrive in a few days. Look me up at Toronto Exhibition. I have for sale a few of both sexes, the get of last year's champion all round the circuit, imp. Romulus 2nd. Canada's banner flock of Dorsets. JAS. ROBERTSON & SONS, Milton P. O. and Sta., C.P.R. and G.T.R.

Sheep and Cattle Labels! If you are starting a flock you will want labels. Write for sample and circular, free. F. G. James, Bowmanville, Ont.



### Belmont Shropshires!

THE CHAMPION FLOCK OF CANADA.

Just arrived at the farm: We believe, the best selection of Shropshires ever imported from Britain. If you want flock headers, show rams, field and show ewes and lambs at moderate prices, visit the Belmont Farm and inspect our flock. We import Welsh cobs and Shetland ponies. J. G. Hamner & C. Hodgson, Props. Belmont Stock Farm, Box 92, Brantford, Ont.

## WOOL HIDES

E. T. CARTER & CO., TORONTO  
Consignments solicited. Write for prices.

### Linden Oxfords!

Having sold our farm, our flock of Oxfords will be sold without reserve. Composed of ewes all ages, this year's crop of lambs, an imp. Hobbs ram and yearling ram. All sired by good imp. rams.

R. J. HINE, DUTTON, ONT.

**SHROPSHIRE**  
Flock of the most approved type. We offer good animals at reasonable prices.  
W. D. MONKMAN, BOND HEAD, ONT.

### I CAN FURNISH JUST NOW A LARGE NUMBER OF EXTRA GOOD Shropshire and Cotswold Rams

A large number of extra good Shropshire and Cotswold ewes, twelve months old. And a few very high-class Shorthorn bulls and heifers. Any of which will be sold at moderate prices.  
ROBERT MILLER, STOUFFVILLE, ONT.

### Shropshires, Cotswolds Oxford Down Sheep

I am now offering a lot of large, well-covered rams. They weigh from 160 to 200 lbs. each. Also shearing ewes, ram lambs and ewe lambs, of both breeds, fitted for showing.  
JOHN MILLER, BROUGHAM, ONT.  
Claremont station, C. P. R.

AT FARNHAM FARM.  
We are at present offering a number of superior yearling rams and ram lambs, by imported sire and partly from imported dams. Some splendid yearling ewes and ewe lambs. Also a few imported yearling and ram lambs. Price reasonable.  
Henry Arkell & Son, Arkell, Ontario.  
Arkell, C. P. R. Guelph, G. T. R.

**SOUTH DOWNS AND COLLIES!**  
Imported winning collie at stud.  
HOLLYROOD PROFESSOR.

Breeding ewes, imported and home-bred; 15 shearing rams; 20 shearing ewes. Ewe and ram lambs by the same sire as the grand champion wether, over all breeds, at Chicago International, 1907.  
ROBT. McEWEN, BYRON, ONT.  
Long-distance telephone. Ry. Station, London, Ont.

**FAIRVIEW SHROPSHIRE**  
We are now ready to book orders for Show rams and ram lambs, Show ewes and ewe lambs, Also field sheep of each sex. Our flock is in fine shape, and we are sure they will suit customers. Come to see them, or write for quotations.  
J. & D. J. Campbell, Fairview Farm, Woodville, Ont.

**Clayfield Stock Farm**—Buy now—buy something good of the **Champion Cotswold Flock** of America of 1906, also of the oldest and most reliable flock in Canada. We now offer for immediate sale, flock headers, ranch rams, and ewes of different ages, of first-class quality, at reasonable prices for next 60 days; also our entire flock of Hampshire. Inspection and correspondence solicited.  
J. C. ROSS, Prop., Box 61, Jarvis, Ont.

### MAPLE SHADE FARM

Will sell 24 excellent shearing SHROPSHIRE EWES, also 6 thick shearing rams. All are by an imported ram and from imported ewes, and would be splendid sheep for foundation of new flocks. They are offered at a reasonable price, either in one lot or in smaller flocks. Come and inspect, or write.  
JOHN DRYDEN & SON, Brooklin, Ont.  
Stations: Brooklin, G. T. R.; Myrtle, C. P. R. Long-distance telephone.

### HAMPSHIRE DOWN SHEEP! Springbank Oxford Down Sheep

Yearling rams and yearling ewes. All bred from imp. sire and dams. Price reasonable.  
L. E. MORGAN, MILLIKEN, ONTARIO.  
Bell Phone. P. O. and Stn. (G. T. R.)

Bred from high-class show stuff. Our flock of 70 is now one of the very best. For sale are 12 shearing rams, 2 two-shear rams, a number of shearing ewes, and this year's crop of lambs of both sexes. Show stuff among them. WM. BARNET & SON, LIVING SPRINGS P. O., ONT. Fergus Station.



**LARGE ENGLISH YORKSHIRES**—We have a limited number of choice young pigs for sale, bred from our choicest sows, and got by the imported boars, Dalmey Joe 13577 and Broomhouse Beau 14514. Pigs from the latter won all the first prizes at the Ottawa Fat-stock Show last March for the best dressed carcasses, and sweepstakes over all breeds or grades. We guarantee satisfaction in all mail orders.  
**JOSEPH FEATHERSTON & SON, Streetsville, Ont.**

**OHIO IMPROVED CHESTER WHITES.**—Largest strains. Oldest-established registered herd in Canada. Young sows in farrow. Choice pigs 6 weeks to 6 months old. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe delivery guaranteed.  
**E. D. GEORGE, Putnam, Ont.**

**CHESTER WHITE SWINE AND SHROPSHIRE SHEEP.**  
 Write for prices.  
**W. E. WRIGHT, GLANWORTH, ONTARIO.**



**Maple Leaf Berkshires** Now offering young sows with pig, bred from imported stock. Pigs 10, 12 and 13 weeks old, both sexes. Lengthy, well marked, large bone and well haired.  
**JOSHUA LAWRENCE, OXFORD CENTRE, ONT.**  
 Woodstock Station.

**Elmfield Yorkshires** 50 pigs, 4 to 10 weeks old; pairs not akin. Bred from imp. and Canadian-bred sows. Also young sows due to farrow in June and July. Young stock never better.  
**G. B. MUMA, Ayr, Ont.**  
 Ayr, C. P. R.; Paris, G. T. R.

**Duroc-Jersey Swine** and Leicester sheep. 25 one and two shear ewes, 3 shearing rams, and this year's crop of ram lambs. Also sows in pig, and sows ready to breed; boars fit for service, and pigs ready to wean.  
**Mac Campbell & Sons, Harwich, Ont.**



**MONKLAND YORKSHIRES** are the easily-fed, quick-maturing kind. The sort the farmers want. All ages for sale. 100 sows bred now.  
**JAMES WILSON & SONS, FERGUS, ONTARIO.**

**SUNNYMOUNT BERKSHIRES** For Sale: A few boars fit for heavy service.  
**JOHN McLEOD, MILTON, ONTARIO.**  
 Importer and Breeder.  
 Post office and stations, C. P. R. and G. T. R.

**GLENBURN HERD OF Yorkshires** Winner of gold medal three years in succession. Six young boards from 6 to 9 months; also 75 young sows, from 6 to 12 weeks old.  
**DAVID BARR, JR., Box 3, Renfrew, Ont.**

**WILLOWDALE BERKSHIRE HERD.**—Don't forget while at Toronto and London Exhibitions to see the wonders of the world, the Berkshire pig show. Everybody welcome. The show is free.  
**J. J. Wilson, Prop., MILTON, ONTARIO**

**Newcastle Tamworths and Short-horns.**—For Sale: 90 spring pigs, both sexes; boars fit for service; sows ready to breed and sows bred to Imp. Cholderton Golden Secret, descendants of Colwill's Choice and Newcastle Warrior, both Toronto champions. Also several Shorthorns; females of high class. Prices right, quality considered.  
**A. A. COLWILL, Newcastle, Ont.**

**QUESTIONS AND ANSWERS.**  
 Miscellaneous.

**REGISTERING CROSS-BREDS.**

Can a colt whose dam is a registered Shire and his sire a registered Clyde be registered as a draft horse? Kindly let me know through your valuable paper.  
 S. W.

Ans.—No. There was a register for that class at Goderich, but it has been discontinued.

**ALSIKE POISONING.**

Mare, 4 years old, with two white fetlocks, running on alsike clover, has got poisoned, breaking out on the white parts; is swelling up the leg; is very stiff on it; has been sore for four days. Please let me know what to do for it.  
 T. J. H.

Ans.—Remove from alsike pasture; give a purgative ball composed of six drams of aloes and two drams of ginger. Feed only bran till purgation commences. If this fails to purge, repeat the dose in 48 hours. Wash the legs with a five-per-cent. solution of Zenoleum, or of carbolic acid.

**LARGE CRAB GRASS AND OLD WITCH GRASS.**

In reply to the New York State correspondent who enclosed three specimens of plants for identification, we beg to say that No. 1 was in such a poor state of preservation that to make sure of the name we shall require a more perfect plant—one that is in flower preferred. No. 2 is the large crab grass, and No. 3 the old witch grass. These plants are generally found in waste places and around buildings, and are spread into gardens and fields by various agencies; for instance, in manure, on the sole of a person's boot, especially when the ground is wet and the soil sticks to the boot, and by birds, etc. The most successful method to combat weeds of this type is hoeing and cultivation, for by taking away the moisture from the root they are very quickly killed.  
 W. BOND.

**FERTILIZER FOR WHEAT.**

1. What kind of commercial fertilizer would you recommend for fall wheat?  
 2. Are such kinds as those advertised in your paper inspected by a Government inspector? If so, who is the officer in charge?  
 3. Is there any standard test? If so, what is it?  
 INQUIRER.

Ans.—1. In order to prescribe with any degree of accuracy, a fertilizer suitable for fall wheat, it would be necessary to know something of the nature of the soil and its previous treatment. However, the following mixture, per acre, would be suitable under average conditions:

- 350 lbs. acid phosphate.
- 120 lbs. muriate of potash.
- 120 lbs. nitrate of soda.

If the soil has been heavily manured, the above quantities could be reduced, and if the wheat is sown on a clover sod the nitrate of soda might be altogether omitted or sown at the rate of not more than 60 lbs. to the acre.

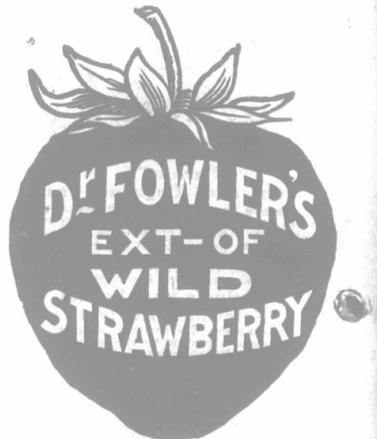
The potash and phosphate, with one-half the quantity of nitrate of soda, could be broadcasted after seeding the wheat, the other half of the nitrate being applied in spring.

(The above fertilizer ingredients may be obtained from the Messrs. W. A. Freeman Co., Hamilton, Ont.)

2. According to the law of the country all fertilizers which are sold at \$10 or more per ton must be registered at Ottawa, and the minimum contents of potash, phosphoric acid and nitrogen guaranteed. An analysis of all registered fertilizers is made in the laboratory of the Inland Revenue Department at Ottawa, under the supervision of Mr. A. McGill, Chief Analyst, and the results are published in an annual bulletin entitled "Standard Fertilizers."

Those for 1908 are published in Bulletin No. 151, of which we would advise you to secure a copy.

3. There are certain standard tests for determining the percentage of various fertilizer ingredients, but it is only in the chemical laboratory that these can be employed.  
 B. L. E.



**CURES**

**Dysentery, Diarrhoea, Cramps, Colic, Pains in the Stomach, Cholera, Cholera Morbus, Cholera Infantum, Sea Sickness, Summer Complaint, and all Fluxes of the Bowels.**

It has been on the market for 63 years. Its effects are marvelous. It acts like a charm. Relief is almost instantaneous. Ask your druggist for it. Take no other. Substitutes are Dangerous.

The genuine is manufactured by **THE T. MILBURN, Co., LIMITED, Toronto, Ont.**  
 Price 25 cents.

**COUPLE OF DOSES CURED.**

Mrs. W. J. Wilson, Tessier, Sask., tells of her experience in the following words:—"I wish to tell you of the good I have found in Dr. Fowler's Extract of Wild Strawberry. Last summer my little girl, aged two years, was taken ill with Summer Complaint, and as my mother always kept Dr. Fowler's in the house when I was a child, I seemed to follow her example as I always have it also. I at once gave it to my baby as directed and she was at once relieved, and after a couple of doses were taken was completely cured."

**CEDAR LODGE YORKSHIRES**

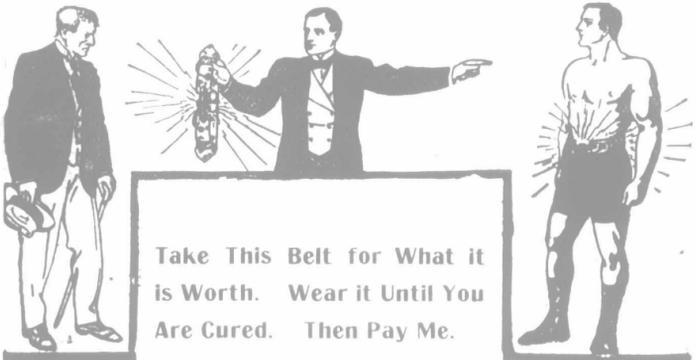
100 head of brood sows, imp. and the product of imp. stock, weighing from 500 to 800 lbs. each. Stock hogs by imported sires and dams, very large and full of quality. Young stock of both sexes constantly on hand for sale. Pairs not akin. Satisfaction guaranteed.  
**P. O. COLLINS, Bowesville P. O., Ontario.**  
 Mantick Sta., C. P. R.

**WILLOWDALE BERKSHIRE HERD.**

SAY! Call when visiting Toronto and London Exhibitions, and see the only money-makers for the farmer, the Berkshire pigs. No trouble to show good goods.  
**J. J. WILSON, PROP., MILTON, ONT.**

A teacher in a downtown school has for her pupils the children of Russian parents. The other day she was explaining a sum in subtraction which the little ones found difficult to understand. "Now," said she, to exemplify the proposition, "suppose I had ten dollars and went into a store to spend it. Say I bought a hat for five dollars. Then I spent two dollars for gloves, and a dollar and fifty cents for some other things. How much did I have left?" For a moment there was dead silence; then a boy's hand went up. "Well, Isaac, how much did I have left?" "Vy didn't you count your change?" said Isaac, in a disgusted tone.

**Pumps Vim Into Worn-Out Men**



**Take This Belt for What it is Worth. Wear it Until You Are Cured. Then Pay Me.**

If you feel tired and stupid, with no ambition to get out and hustle; if you have spells of despondency and a desire to give up the fight, you need new energy. The race is to the strong. Show me a failure and I'll show you a weakling, lacking in courage, strength and ambition, three essentials to the make-up of a successful man.

I can take a man like that and pump new energy into his body while he sleeps, and in a few weeks' time transform him into a giant in strength and courage. It is proven that energy and electricity are one and the same thing. If you lack this energy you can get it only by filling your nerves with electricity. Dr. McLaughlin's Electric Belt does this. Wear it while you sleep. Feel its invigorating stream of electric life in your nerves, its vitalizing spark in your blood. You wake up in the morning full of new life, new energy, and courage enough to tackle anything.

My Belt sends a steady current of electricity into the nerves and vitals, building up vitality and strength, and removing the cause of disease. No pain can be felt as the body charged with electric

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Dear Sir,—I am pleased with your treatment. I feel like a new man. I have gained over twenty pounds. I would not be without it for any money.—**DAVID CRAWFORD, Oso Station, Ont.**

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