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AND HOME MAGAZINE

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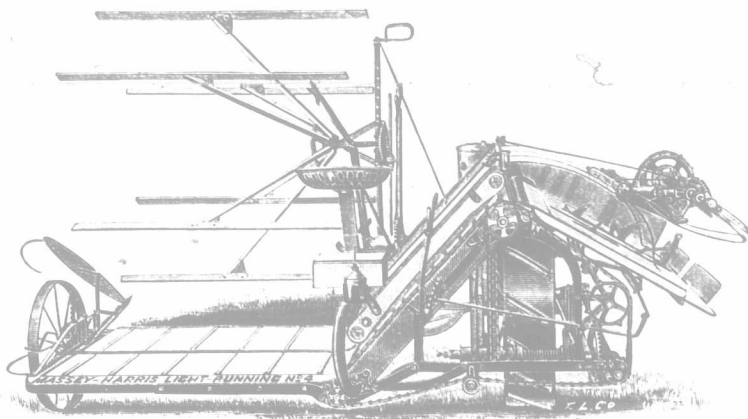
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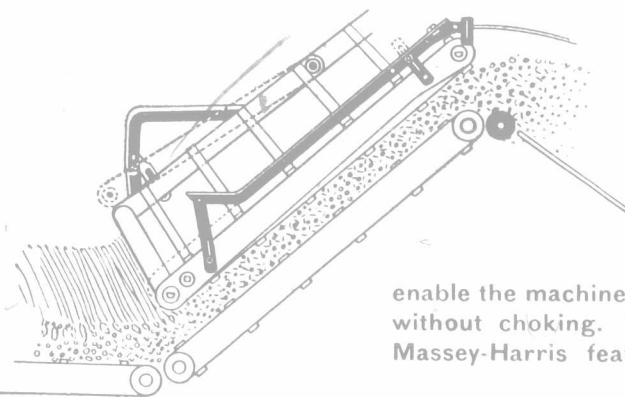
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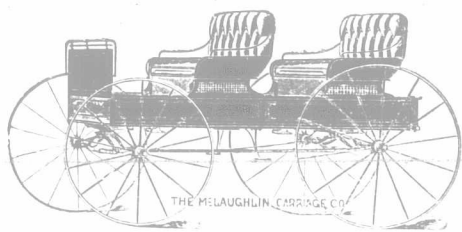


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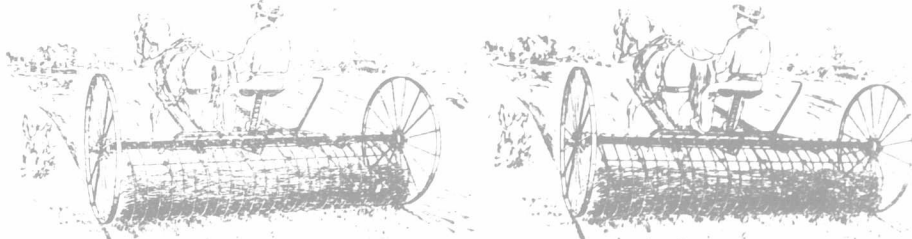
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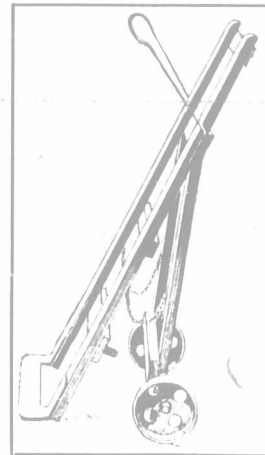
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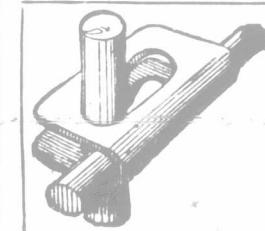
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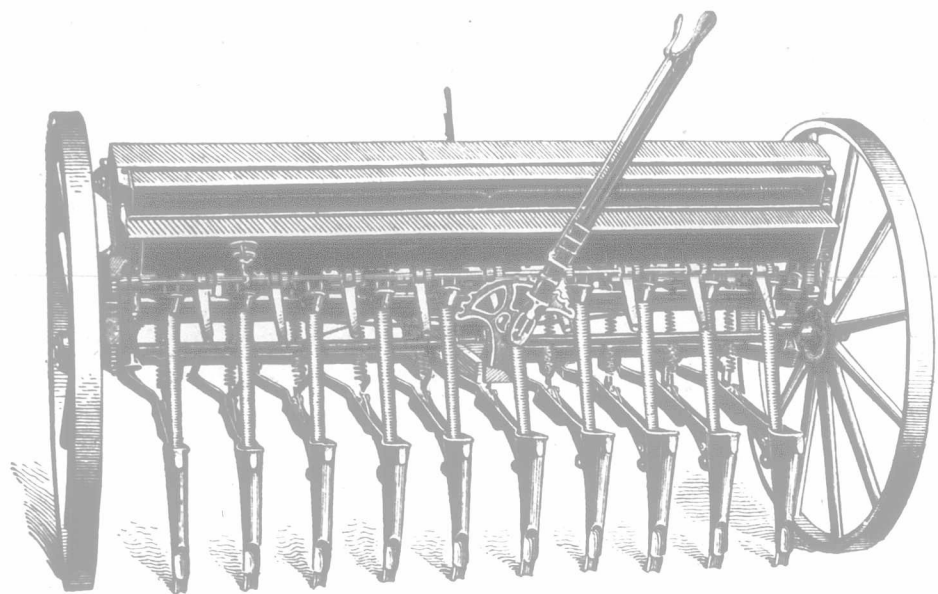
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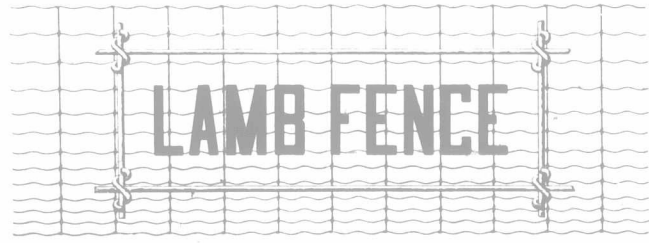
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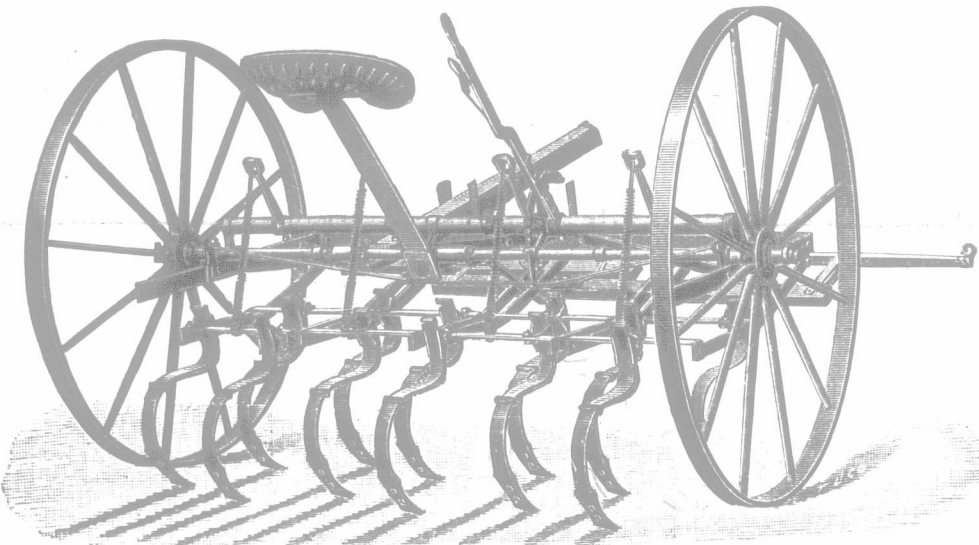
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many readers of the farm papers under-
stand the meaning of the term, "Nutri-
tive Ratio," or of "Carbohydrates and
Fat." Now, to sum up the whole sub-
ject and to put it in language that the
ordinary feeder can understand, let us
say: The true way to balance a ration
is to give something with the indiges-
tible part of the food that will make it
digestible. It matters not how great a
proportion of flesh-forming quantities the
food contains, if it cannot be assimilated
by the animals' stomach it is lost.

Theories are good, no doubt, and they
at least make good reading for those
who can understand them, but results in
practice are the usual object of the
practical man.

We give below reports by practical men
that fully illustrate the results of a
truly balanced ration.

"I have used Herbageum for several
years in fattening cattle for export and
find it a great advantage, not only in
laying on of flesh and keeping the ani-
mals always hearty and ready for their
feed, but the meat is much superior. It is
of a better color, is firm and of fine flavor,
and the difference in quality is very
noticeable. I do not feed oats, as I
can get better results with dry feed and
Herbageum. I feed a mixed chop of
peas, corn, bran and shorts, with straw,
and my cattle are doing well. Last
year I fed the same chop mixture with
hay, but this year I am not feeding hay.
I buy in cattle weighing from 950 lbs.
to 1,200 lbs., and have them in shipping
condition in from 100 to 120 days.
Last year the gain per head per day
ranged from two and a quarter pounds
to two and six-tenths pounds. In taking
weights, I always weigh the animals be-
fore watering them." D. Hanley, Cains-
ville, Ont.

"My Jersey herd, which took first
prize four consecutive years, was fed
Herbageum. I use it regularly, and
average not more than a tablespoonful
a day for each animal. It keeps them
in good health, which means the fullest
return in milk and butter." Joseph H.
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Part of this column will in future be
used for short articles on Stock Feeding,
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VOL. XXXVIII.

LONDON, ONT., AND WINNIPEG, MAN., FEBRUARY 2, 1903.

No. 567

EDITORIAL.

Live Beeves vs. Dressed.

A cable despatch from England reports Hon. R. Hanbury, chairman of the British Board of Agriculture, as congratulating the British farmers that Canada is relinquishing the live cattle trade in favor of dressed meat. A good many English papers are singing the same song. The wish is father to the thought. The Scottish Farmer, whose editor recently visited Canada, states that no complaints were heard here against the British embargo requiring our beeves to be slaughtered within ten days of landing in Britain. Probably not. The chief agitators against the embargo are the Scottish feeders, who want Canadian stockers, and the transportation people, who want the privilege of carrying across thousands of our lean cattle to be fattened in Scotland. It is better for Canada, and our stockmen know it, that their cattle should be fattened here. But Mr. Hanbury, the British papers, Canadian officials and all concerned, should distinctly understand that there is no disposition on the part of Canadian farmers and stockmen to relinquish the privilege of shipping finished cattle into Britain alive. On the contrary, they want that outlet facilitated and improved, and fair transportation rates over all Canadian routes to the seaboard. The dressed meat trade for local and export purposes is no doubt going to grow here by degrees, but the Canadian feeder knows very well that it would be a cold day for him to be left to the tender mercies of a dressed-meat trust.

Farmers for the Senate.

There are a lot of vacancies in the Canadian Senate at the present time. This "upper chamber" consists of members appointed for life. It is supposed to act as a check upon any ill-considered legislation of the Commons, making amendments or rejecting in toto measures presented for the benefit of its mature judgment. Agriculture being by far the most important of all Canadian interests, it is vitally concerned directly and indirectly in the doings of Parliament, hence the need for more level-headed farmers in both houses. The Senate has been undergoing a process of "reform." When members of one particular party die, their places are filled by members of the other. For the present vacancies various claims are urged—political, religious, financial, and so on—but what the "Farmer's Advocate" would suggest is that Premier Laurier, in his search for senatorial timber, should turn his special attention to the ranks of agriculturists, where he can find plenty of first-class eligible material. We are, therefore, not proposing their appointment on mere class grounds, but because the capability of the Senate would be vastly enhanced by the presence of men of judgment and experience, who, being actively identified with agriculture, are specially qualified to shape legislation affecting its interests, upon which the general progress and prosperity of the country are dependent. With a general boom on: with a rapidly increasing army of officials, and others with axes to grind at the public expense; with railways and other projects clamoring for aid, a strong phalanx of intelligent farmers in the Senate would have a most wholesome effect.

The Dairy Conventions.

Last month there met in convention two of the most progressive agricultural associations in Canada, the Eastern and Western Ontario Dairymen's Associations. In these conventions the producer and manufacturer met in earnest business conference with the commission merchants and dairy experts. The requirements of the market and the merits and defects of our dairy products were clearly explained by the merchants. The difficulties in the way of producing the high-class goods demanded by the markets were honestly discussed by the producers and makers. Experts in feeding, butter and cheese making, and in marketing, all contributed suggestions relative to improvements in our dairy industry. And we must improve, we must increase. The Hessian fly and pea weevil have cut off wheat and peas as a source of income in a great part of Ontario. Our main reliance, therefore, must be in the production of beef, bacon and dairy products. But we have not yet a monopoly of the trade in these products. Our goods are still lacking in quality. There is need for every farmer to engage in a long and thorough stock-taking, and in mental review of his farming operations. The makers of cheese and butter must study to improve in every detail of their business. The transportation problems are in the hands of capable experts, and by a harmonious working of the three interests we may hope to capture a much larger proportion of the British trade.

In the matter of dairy products, we have competitors springing up all around us. Prof. Robertson, speaking to the dairymen at Brantford, called attention to the fact that the people of Siberia but fifty years from slavery, were furnishing the British market a better class of goods than were Canadians. Ignorant Mujiks actually competing with us in a preferential market. The problem of transportation, as an obstacle in the way of supplying the Old Country with dairy products, is gradually being solved. The rates on our cheese now from Montreal to Liverpool are no higher than from Ayrshire to the same point, and our butter can be put on the British market cheaper than is that made in the North of England.

Another important lesson learned at the convention was based on the painful fact that the responsibility for much of the lack of quality in butter and cheese is traced to carelessness or thoughtlessness on the part of the farmers. There seems to be a tendency on the part of many farmers to slight their work and responsibility in dairying. Instance after instance was cited where the milk-can was left over night in such close proximity to the hopen or barnyard that clouds of dust, laden with bacteria, circled over and settled into the milk, where to produce off-flavors and taints. Milk, it should be remembered, is the most sensitive of commodities to bacterial infection, and cannot be too carefully attended to. We have now reached a point in our agricultural development when further progress shall depend altogether upon details. If the quality of our cheese had been improved so that it would have been worth one cent per pound more, our receipts for export cheese would have been increased by two million dollars in 1902. We cannot make people eat more cheese, but we can make it worth more money on the market.

There is still another factor to be considered by the producers of dairy products. For some time past the inferior grades of our products have

been finding a market at home in our cities, the home population being content to take the rejected portions of John Bull's bill of fare. Now circumstances are changing. Our customers at home are demanding better goods and there is an ever-increasing number who are able to pay for the best that can be produced. Here is another market demanding more care and intelligence in the manufacture of its cheese and butter. In fact the whole trend of our dairy industry should be toward greater care and more improvement in the production of cheese, butter and bacon.

Corn Ensilage.

One of the greatest benefits that has been experienced in recent years by Canadian farmers who make a specialty of feeding cattle either for dairy or beef purposes is the corn crop and the silo. Many were slow to believe in the advantages of the silo, and slow to adopt it, but these are becoming fewer as the years go by. If clover, roots and peas could be counted on as sure crops every year, corn and the silo would not be so much a necessity, but experience has proved that they are not to be relied upon as a certainty, and it is when any one of these fails that the benefit of silage is most clearly seen and frankly acknowledged. Corn, in the average of years, is about as sure a crop as the farmer can grow. It has a remarkable power of recuperation, recovers quickly from a setback, and thrives most luxuriantly in dry, hot weather, when most other crops wilt and fail to make progress. Only an extremely wet and cold summer, such as that of last year, can retard its growth and discount its success. Fortunately, such seasons are rare in this country, though even such seasons have their compensating qualities and most stock-raisers and dairymen found the last year financially one of the best in their experience.

The corn crop requires no great amount of manual labor, nearly all of the work being done by horse power, and a vastly larger amount of palatable and nutritious cattle food can be secured per acre from this than from any other farm crop. Cattle relish ensilage, and thrive satisfactorily upon it as the principal part of their rations in winter, and if sufficient is stored to be carried over into the next summer, it has been found that in a dry time, when pastures fail and the milk supply shrinks, silage is as much relished by cows at that time as in winter, and there is no more economical method of providing for such a contingency than by having a supply of ensilage on hand.

Formerly it was generally considered that silage was only suited to the feeding of dairy cattle, but experience has taught that by planting the varieties that mature early, and by cutting it when well advanced toward maturity, it forms a valuable food for fattening cattle, as is attested by many who are feeding on a large scale. Mr. McMillan, of Huron County, Ontario, in an able article in this issue on the feeding of beef cattle for export, makes the following significant statement:

"After a dozen years or more of experience in the feeding of ensilage, we should simply be lost to know what to do with our sixty head of cattle if it were not for the great place which corn silage holds in our system of feeding operations. It stands pre-eminently the cheapest bulky fodder of the farm, and possesses a nutritive value far beyond the realization of those whose practical feeding experience has not made them acquainted with its merits as a food material."

The only objection that can reasonably be

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made to the adoption of the silage system is the necessary expenditure in the building of a silo. That is a reasonable excuse in the case of the farmer of small means, or the one struggling with debt and striving to free himself, but even in that case it is a question whether he can afford to go on without a silo. Would it not be better to lengthen the term of payment of the debt, or if necessary borrow the money and use it in providing for a system of feeding that would assuredly put him in a better way of making money from his cattle? An expensive silo is by no means necessary. A plain stave silo need not cost more than from \$50 to \$100, according to the size required, and if carefully built will last for a dozen years or more. To the man who has ready means we would advise the building of a cement concrete silo, owing to its complete efficiency and practically endless endurance.

We feel safe in advising every farmer who can see his way clear to do so, to prepare for planting a few acres of ensilage corn next spring. Clean land plowed last fall and top-dressed with short barnyard manure during winter and spring may be prepared for the seeding by surface cultivation during the month of May, or may be shallow plowed if necessary, and will make a good preparation for corn to be sown the last of May or early in June, or a sod field plowed early in spring and well worked on the surface will make a good preparation. The seed costs but little, as half a bushel is more than enough for an acre, and it may be sown with the grain-drill in rows about three feet apart, by closing part of the runs, or in marked squares three to four feet apart, so that horse cultivation both ways may be effected. There is a difference of opinion as to which is the better plan, but in either case satisfactory results may be obtained. Plant corn and be happy in the possession of the greatest farm crop that grows.

To give assistance at times costs but little more than advice; try it with your neighbor.

The Improvement of Rural Schools in Canada.

BY JAS. W. ROBERTSON.

[Prefatory Note.—In writing these articles on the Improvement of Rural Schools in Canada, I hope to contribute some information, argument and suggestion to help on the movement. It is to be understood that I personally, as a citizen of Canada, and not officially as Commissioner of Agriculture and Dairying, am responsible for the opinions expressed in them. I propose to deal with the subject in five main divisions, viz., (1) Improvements in Organization, (2) Consolidation of Schools, (3) Courses of Study, (4) Plans Under the Macdonald School Funds, and (5) Some Ways in Which Improvements can be Continued and Extended.—J. W. R.]

(Second article.)

CONSOLIDATION OF SCHOOLS.

Some of the essentials for good rural schools are: (1) Good teachers with experience; (2) wholesome children; (3) efficient supervision; (4) good buildings; (5) neat and beautiful surroundings; (6) active public interest and adequate support.

If we cannot arrange at once to bring into existence all the desirable conditions for good schools, we should strive to create as many of those conditions as we can in as many places as we can. There is no withery or fairy charm in the word or fact of consolidation to put away all the present weakness and ills of small rural schools. However, consolidation will bring opportunities and means for improvement within reach of the teachers, the people and the children.



REV. PROF. BAIRD.
Manitoba College, Winnipeg, President Western Horticultural Society.

Ever increasing benefits may be found by using those to the fullest extent.

GOOD TEACHERS.

Teaching is a great art. It is the art of living, the art of living and laboring so as to lead young lives out into desire and ability to live usefully, and, therefore, happily. The greatest of all teachers said, "I am come that ye might have life and have it more abundantly."

In addition to scholarship the teacher should be an example of neatness, good manners, good temper and cheerful attitude towards life in general and towards the life of the schoolhouse in particular; and should know by experience that observing, investigating, recognizing and understanding real things are forms of mental activity and power superior to the mere remembering of words, names, forms and rules.

New methods of education such as Nature Study, Manual Training and Domestic Economy would be made easily possible at consolidated rural schools. The teachers would find great satisfaction and delight in them. As it is the part of the public to provide means for the education of the children, it is more particularly the duty and privilege of the teachers to make the best use of those means. Here, as elsewhere, for the public at large and the teacher in particular, the paths of duty, happiness and progress are in the same direction and run within the same bounds.

Centralization of schools would provide for perhaps fewer teachers, but better teachers of more experience. At the present time there are comparatively few, if any, prize places in the

teaching profession in rural schools. The coveted posts are in the towns and cities; they draw the teachers of approved ability from the rural districts. Large central schools in the rural districts would provide what might be called, relatively, "prize places" for teachers who would devote themselves to teaching as a life profession in rural districts. Teachers would stay in the same places far longer in consolidated schools than in one-room schools in the country parts.

WHOLESOME CHILDREN.

Various elements enter into the factors that make for a good education. Among these are a large enough attendance to form classes of children of about equal age and advancement in studies. The gathering of the children into a school where they could be properly graded, and, to a large extent, classified according to stage of advancement, would be a means towards that end. In that respect the town and city schools are in advance of the rural schools at the present time.

By centralization or consolidation, a large number of children could be brought together in one building. Strong classes could be formed; properly graded, and the children classified from time to time as advancement was made. Such classes stimulate every child to do his and her best. One child teaches another, on the whole, perhaps, quite as much as any grown teacher does. In other words, the stimulating, directing and informing power of a teacher is multiplied two, three or even four times to many of the individual pupils through the passing on, by pupils to their classmates, of the help they have derived direct from the teacher. It is not only the clever and bright pupils who do this. Every child, in some measure, interprets to its fellow child some part or some phase of a lesson. By gathering the children from five or six rural schools into one central graded school, the teaching power of the children of the locality for other children in the locality would be utilized. Each pupil in a class learns much from his fellow pupils. As the bright, quick ones see in part, others are helped to see; as they reveal their methods of study, other children learn. Children also learn from classes to which they do not belong, as well as from children in the groups of their own degree of advancement.

EFFICIENT SUPERVISION.

Supervision of rural schools by school boards, inspectors and departments of education must be intelligent, sympathetic and skilful, co-operating with the teachers to bring the schools into touch with the homes and with the occupations of the people. Those who have the power of governing and responsibility of guiding must needs be in close touch with the lives of the people whose children are being educated, and in sympathy with the life which the children themselves will follow when they come to mature years. It is most promising and hopeful that the public school inspectors are leaders and guides in education, rather than official valuers of other teachers' work.

It becomes necessary that members of school boards should have a clearer appreciation of the qualities essential to a good teacher; and of the fact that the best teacher becomes still better by at least two years of experience. School boards, for the sake of saving a few dollars in salary, cannot afford to have the children practiced upon all the time by young teachers who are gaining experience at the cost of child-time and of the opportunities which to those particular children never come again.

The indifference, ignorance and selfishness of some parents come between their children and the chance of a good education. The united power and influence of departments of education, inspectors, school boards and teachers, must be exerted more energetically and, patiently in behalf of those little ones.

GOOD BUILDINGS.

The rural schoolhouse is rarely a thing of beauty; it is sometimes a place of discomforts and a hindrance to the natural development of robust bodies and to the growth of mental vigor and activity. Many a school still lacks suitable desks with comfortable seats. In matters of heating, lighting and ventilation, the lonely little school has been left untouched by the improvements which have made town schools models for promoting comfort and health. Everybody admits the high educational value of a well-constructed, well arranged, well equipped schoolroom, with windows and floors shiningly clean, and walls decorated with pictures. "Day by day beautiful, comfortable and clean surroundings will have their ethical influence upon this development until he comes to abhor anything that is not beautiful, well ordered and clean."

NEAT AND BEAUTIFUL SURROUNDINGS.

Pleasant and well-arranged surroundings are silent, potent educational forces. The child naturally tries to put himself into harmony with what surrounds him. That effort, often unconscious to himself, is part of his education. What a charge that sentence brings against the untidy, uncomfortable, unlovely interiors and exteriors of

many schoolhouses in rural districts, and against their fenceless, uncared-for and hardly decent surroundings!

There are over 100,000 school gardens in use in European countries. These beautify the school grounds and are used for educational purposes as well.

Why should not the schoolhouse and school premises be the most beautiful and attractive place in the locality? If the children are to spend between six and seven hours a day there, should it not be made a place to be proud of, and known to them as worthy of all praise?

Would it not be a good thing if the bare, neglected, depressing and sometimes hardly decent surroundings of the schoolhouse were improved into gardens, expressing the refined taste and skill of the people of the locality, under the management of their teacher? If unsightly and repellent premises are not in themselves degrading, they have a tendency to dull the taste and the judgment of young persons as to what should be esteemed. It is of great benefit in early life to have one's surroundings of such a sort as to inculcate and develop a love of flowers, of pictures, and of good books. The school should be a place for supplying those conditions in such a way as to help on the harmonious development of the child's character.

The rural school, as every other school, should be so conducted as to bring about the formation of desirable habits. Among those are regularity, punctuality, obedience, industry and self-control. Children who observed beautiful things, nicely arranged inside the school and outside the school, would also be more likely to observe graceful speech, good manners and unflagging truthfulness, and to become respectful and reverent towards the beautiful and the good.

PUBLIC INTEREST AND SUPPORT.

It is not to be expected that simple consolidation of schools will create, at once, all the desirable conditions which have been referred to. If the centralizing plan enables communities and school authorities to do better for education than they can do at one-room schools, it is so far a helpful one. In 1902 I visited consolidated rural schools in Iowa and Ohio; and after personal examination and inquiry, am convinced that many valuable advantages can be gained through the system of consolidation as it might be applied in Canada.

As far as could be learned at the places visited, there was almost entire unanimity of opinion among the ratepayers respecting the marked success and superior advantages of consolidation. While the scheme was brought into effect under vigorous discussion and considerable opposition, the adverse criticism has been disarmed by the results of experience. With few exceptions "the kickers," as they are designated locally, were ratepayers without children, or persons who feared some depreciation in the value of their own property, or, worse still, some increase in the value of the property nearest to the centralized school. Experience has proven the former of these two fears to be groundless.

A PIONEER IN CONSOLIDATION.

Six years ago Gustavus Township, in Ohio, became the pioneer in that part of the United States in the consolidation of rural schools. There were nine school districts in the township, and as many small schools. Then the districts were united into one, and a central school was erected at a cost of \$3,000. It is a frame building, containing four large well-lighted classrooms, a small recitation room and cloak rooms. Instead of nine teachers in little isolated schools, there are now a principal at a salary of \$65 per month, and four assistant teachers at \$32 or \$30 per month, in the united school. Nine nice-looking vans are used to convey the children from and to their homes. These wagons, or school vans, have comfortable seats running lengthwise of the vehicle, waterproof canvas covers and spring gearings. Before consolidation the average attendance at the schools in that township was 125. On the day of my visit it was 143 out of an enrollment of 162. The year before consolidation the cost of maintenance of the nine schools of the township was \$2,900. Four years afterwards the cost of the centralized schools, including the conveying of the children, was \$3,156, being an increase in expenditure by the township on its school system of \$256. However, the average attendance at the central school was so much greater than at the single district schools, that the cost of education was decreased \$1.59 per pupil on the average attendance. Moreover, three years of high school work is carried on in the consolidated school, and the total cost of that is included in the \$3,156.

OTHER TOWNSHIPS.

The people in five adjoining townships have also consolidated their schools. Those of Gustavus, Kinsman and Johnston were selected for special scrutiny as presenting typical phases of the system. The schools of Kinsman and Johnston townships have been consolidated for two years. At Kinsman the enrollment of pupils was

146, and eight school vans were engaged; at Gustavus 162 pupils were on the roll, and nine vans were used; at Johnston 175 pupils attended school, and ten vans were in service.

Although the weather was rainy, and the roads as bad as three inches of snow mixed with mud could make them, the children jumped out of the vans at Kinsman school with dry clothing and dry feet. Little boys and girls of six years came three and four miles in comfort. The teachers said they came regularly in all weathers. Under the small district system in the Township of Kinsman, two years before, the enrollment at the schools was 110; under the consolidated system it has risen to 146, without any appreciable difference in the total enumeration of children in the township. The high percentage of young children (6 to 8 years) and the large proportion of older pupils (from 15 to 20 years) were eloquent of the gains in education during the first two and the later years of school life in a rural district.

SCHOOL VANS.

The contracts for conveying the children to and from the schools are given to responsible persons. These are under bond to provide comfortable covered wagons, and to comply with the regulations of the school authorities. The vans hold from 15 up to over 25 each. The longest route traversed was about six miles. The vans arrive at the school at from ten to twenty minutes before nine o'clock, the hour at which the forenoon session begins. The afternoon session closes at half-past three o'clock. At Johnston school where the closing exercises were observed, the children were in the vans starting for their homes in less than five minutes afterwards.

At Kinsman the eight vans are engaged at an

age attendance at the Kinsman school, which is in that respect typical, was 91 per cent. of the number of pupils enrolled. More striking in this connection is the fact that the percentage of regular attendance among the youngest pupils—those of five, six and seven years—was as high as that of any other class.

"The three lowest grades overtake the work ordinarily covered by the public schools in Ontario. The highest grade goes as far as our continuation class, Grade A, being competent to accomplish about three years of high-school work."

The large classes and larger schools seemed to meet the social needs of the children better than the small isolated schools. The older boys and girls, grown into young men and women, had opportunities for going on with a high school education without going away from home. There was said to be, and there appeared to be, a great development of a spirit of co-operation and of mutual goodwill and friendship from the wider and closer acquaintance of the children of the locality, and from the new interests created and recognized as being common to all and for the common good.

SUMMARY OF ADVANTAGES.

The carrying out of the plan for the consolidation of rural schools and the free transportation of pupils affords many advantages.

(1) It ensures the engagement and retention of some teachers of higher qualifications and longer experience in rural schools.

(2) It creates conditions for a proper classification of pupils and for such a grading of the schools as permits the pupils to be placed where they can work to the best advantage for their own improvement.

(3) It permits the time-table to be so arranged that teachers can give each class and every pupil in the class more direct help and supervision.

(4) It makes it practicable for rural schools to enrich their course for all pupils, by nature study, manual training and household science, as well as by better music; and for advanced pupils, by instruction in agriculture, horticulture and allied subjects.

(5) It provides the beneficial influences of fairly large classes of pupils of about equal advancement, (a) by more companionship; (b) by friendly rivalries to excel; (c) by children learning from each other; and (d) co-operating under careful discipline; and (e) by class enthusiasms.

(6) It results in the attendance of a larger number of the children in the locality, particularly of those under the age of eight years and of those over fifteen years.

(7) It brings about a more regular attendance of pupils of all grades of advancement; and encourages punctuality and promptness. The school van calls at a stated hour; instead of that being a cause of trouble in families it has been found a decided boon.

(8) It guards to a greater extent the health and welfare of the children. Transportation in covered vans protects them against wet feet, wet clothing and consequent sickness.

(9) It makes it convenient for boys and girls in rural districts to obtain a high school education without leaving home. That keeps boys and girls suited for life in rural localities in those localities.

(10) It leads to the erection of better school buildings and more satisfactory equipment in all the requisites of a good school.

(11) It stimulates the interest of the parents and the public in the schools, and brings to the people of a township an institution in which all can have an equal interest and a worthy pride.

(12) It establishes greater sympathy between the homes and the schools, enlarges the influence of the school, identifies it with the best efforts and aspirations of the people, and leads to the formation of reading circles and clubs for mutual improvement.

(13) It may lead to an improvement of the public roads in the country parts.

(14) It would facilitate the rural free delivery of the mail.



DISTRICT SCHOOL AT ROSENBERG, MISSISSQUOI CO., P. Q.

average cost of \$2.07 per school day; at Gustavus, the nine vans at an average of \$1.25; and at Johnston, the ten vans at an average of \$1.27. The price of the vans was from \$100 to \$135 each. All the vans observed were drawn by two horses each. The drivers who were conversed with said they had not known of any injury to any child. They said the regulations required them to wait for the children at any house for a period not exceeding two minutes; that as a matter of fact, it was rarely necessary to wait one minute, and that a case where the children missed the van or were left from being late was very uncommon. The average attendance at the schools confirmed all that.

THE SCHOOL WORK.

Mr. R. H. Cowley, Inspector of Schools for the County of Carleton, Ont., accompanied me; and through the courtesy of the Principals of the three schools we were enabled to obtain some information not hitherto recorded. That included, among other matters, the free expression of the opinions of the pupils themselves on the relative merits of the old and the new. Mr. Cowley summed up these points as follows:

"About five per cent. of the pupils preferred walking to the old school rather than riding in a van to the new school. Almost without exception these were pupils who now have four to six miles of a drive in place of a former walk of one mile or less. At the same time these pupils expressed a decided preference for the work of the consolidated school. The evidence of both pupils and teachers goes to show that riding in the vans is alike comfortable and free from injury to even the youngest children. The increased enrollment of pupils and the very high percentage of regularity in attendance struck the visitors as remarkable. For the past three months the daily aver-

HORSES.

Selecting Horse Judges.

In the proper management of horse shows there is no feature demanding greater care on the part of directors than the selection of conscientious men, who are competent to act as judges. Anyone who has closely followed live stock shows of any kind, and those of horses in particular, knows that even for our most important exhibitions men are sometimes chosen through the influence of exhibitors who hope to have their animals adorned with colors to which they may possibly not be entitled. It also happens occasionally that men known for their honesty and fairness, rather than ability to perform the important office of a judge, find a place within the ring. The latter type is, of course, preferable, but in either case dissatisfaction is the result, and the highest function of the show as an educator is lost, besides the discouragement which it brings to the owner of choice stock that has been turned down.

Just how to remedy this state of affairs is a question in the mind of those who would have the highest mission of our horse shows promoted. For the large shows the present practice of having judges chosen or recommended by the associations representing different breeds may seem on the face of it to be a very desirable one, but when it is remembered that much of the dissatisfaction which has existed in the past can be traced to the appointment of judges in this way, there is evidently a weak link in the chain. It is well known that in the membership of all these associations there are men more active and aggressive in attending meetings and furthering the interests of their breed than others. In this respect the enterprising ones are to be commended, but when amongst that number we find those who are in the front ranks to further their own interest rather than that of the breed, their presence there is to be regretted. When judges are being chosen or selected for recommendation to fair boards, we believe there is an unwritten law that when one member suggests the name of a competent person any other member may dispose of his name by merely filing an objection without giving any reason for so doing; when, therefore, a conscientious man and a competent judge is under consideration the professional juggler in show-ring tactics can readily make way for one more to his choice. Now we do not wish to be understood that this always happens, but it is true that such cases have occurred in the not distant past. It has been suggested that the appointment of the judges for important shows be placed in the hands of disinterested parties, such as the Superintendent of Agricultural Societies. While by this system some of the difficulties might be eliminated, there are still others equally objectionable or worse, viz., throwing the whole business into politics, sure to arise, and it would appear that if any improvement may be looked for it must be found at the hands of the directors of breeders' associations themselves.

There is a common idea abroad that unless small breeders have stock of very exceptional quality, their chances for winning are small. Only a short time ago a "Farmer's Advocate" representative was asked by one of these men if he knew who was going to judge a certain class at an approaching show? He said that if a party whom he knew was a special friend to one of the larger concerns was to be the man he would not risk having one or two favorite animals turned down. Such impressions as this should not be allowed to exist. It is finally in the interest of every breeder, whether carrying on business on a large or a small scale, that the best of the breed should win. Inasmuch as favoritism may be shown, to the same extent are the best interests of that breed being prejudiced. We believe that where disinterested persons who are competent can be obtained even from a great distance, the importance of having good placing done at our larger exhibitions merits their presence, even at considerable expense. Directors of associations and exhibition boards should awaken to the necessity for exercising greater care in their selection. No petty objection should be taken to the appointment of men having a good reputation in the horse ring; substantial and satisfactory reasons for such should be forthcoming, and the real function of our shows as educators allowed to be performed.

As a reader of the "Farmer's Advocate," let us hear from you occasionally on any topic of interest to yourself or your neighbors. Our columns are always open for the discussion of subjects pertaining to agriculture. Beautifully written articles are not necessary; send along the ideas and we will do the rest.

The Ottawa Ice Races.

The ice races at Ottawa this year promise to be the most successful ever held in Canada. All the classes are now filled, and some of them will have to be trotted in divisions. Horses from the States of Maine, New Hampshire, Massachusetts, Vermont, New York, Ohio, Michigan and Illinois are included in the entry list.

The meeting is to begin on the 10th of February, and will be patronized by the very best society at the Capital.



HEAVY DRAFT TEAM.
First prize at Brandon Exhibition, 1902.
OWNED BY J. A. S. MACMILLAN, BRANDON, MAN.

Food for Idle Horses.

In reference to the article on page 8 of 1st January issue, on "Wintering Idle Horses," I remember hearing of a man who, in the management of a popular summer resort, required to use quite a number of livery horses, for which he had no use during the winter months. After the season closed, he took off their shoes and put them in a large covered yard, and fed all the clean wheat-straw they could eat, and several swede turnips for each horse daily, and towards spring began to give a little grain. Of course a few weeks before his season opened, he took all into the stable again and had them shod and driven a little every day, and thus got them ready for work. For my own part I am of the opinion that well-saved wheat straw is much healthier and safer food for idle horses than hay of any kind. The idle horse should get food that will keep his bowels rather loose than otherwise, and wheat-straw and two or three turnips, and perhaps two quarts of oat chop and one of bran will keep an idle horse in much better health than hay. Of course he must have exercise in some way.

Oxford Co., Ont.

D. LAWRENCE.

Find your niche, then fairly fling your whole life into it. Be somebody with all the might you now possess, and ere long you will be somebody with ten times more power than is now your portion.

Good Manners in Driving.

There are probably no conditions in which the rules of etiquette and good manners are violated to such an extent as in driving; or where the careless or selfish man has such opportunities to make himself disagreeable and obnoxious. The statutes of our country state that certain rules shall govern, but it is impossible to make hard and fast rules that shall apply in all cases, hence each case of real or supposed infraction of said rules must be considered on its individual merits. On the roads or streets the man with a light rig is to a great extent at the mercy of him with a heavy, strong one, and if the latter be inclined to be selfish he can make it very disagreeable for the former, without actually rendering himself liable to an action at law. This is especially the case in winter when the snow is deep. A man on the road with a team, single horse in harness or under the saddle, is entitled to half of the road, but with few exceptions he is willing to turn out and give the whole road to the teamster with a load. Teamsters, or the farmer with a load, are so accustomed to being given the whole road by drivers with lighter vehicles, that they, in many cases, apparently think they have a right to it, whether loaded or empty, and having strong rigs, the man with the lighter one must either give way or come to grief in the collision. This is unfair to the man with the light trap. Of course where the roads are in good condition and wide it does not matter, but when they are rough on the sides or narrow, it is a hardship. The heavy team to a heavy rig without a load is better prepared to go on rough roads than the lighter horse to a light trap. Then again, the man with the light, clean rig is often forced out into a mudhole by the selfishness or the thoughtlessness of the teamster whose wagon would not be injured by mud, while it not only spoils for the time the appearance of the buggy, necessitates the washing thereof, but tends to dull its luster permanently. When the roads are in a bad state on account of depth of snow, more or less drifted, is when the light driver suffers the most, and when his patience is most severely tried. The teamster or farmer with a few bags of grain, a few sticks of wood, a pig or two for the market, or, perhaps, a heavy load, considers he is entitled to all the road and often a good deal of the sides. This is especially the case with wood-haulers. In order to protect himself as far as possible from the wind he has a board or stick of wood projecting out of the side of the load, upon which he may sit. This is usually on the near side, and the driver who meets him has not only to turn out to allow the team to keep the beaten tracks, but still further to escape damage by the projecting seat. It makes little difference to the teamster how deep the snow is, or whether the horse to the cutter is able to get through easily or flounders and cuts himself,



CLAYDESDALE STALLION, BONDSMAN [2513].
A son of the champion Young McQueen [2290].
OWNED BY JOHN HEWITSON, ALLANFORD, ONTARIO.

misses the cutter or does other damage; his team and load are safe on the beaten track, and let the other fellow look out for himself.

Then again, in towns and cities, where the street is divided by a trolley line running in the center, it is remarkable how little attention is paid by many in keeping the proper side of the street. In some cases there is room for teams to pass on either side of the track, but often only part of it well beaten, or if there be no snow, only part of it dry, and that part usually next to the track. The team that is being driven on the wrong side of the track forces the horse or team that is driving in the opposite direction out into the unbeaten or muddy portion of the street; here again, if the driver of the light rig disputes the right of way he will come to grief. We claim that this is not only unfair, but unjust. No person has the right to force another into bad roads when, if he were in his proper place, there would be good roads for both. Of course there are many drivers of heavy teams, both teamsters and farmers, who do not act selfishly on the roads. With these we have no fault to find, but are speaking of those who, either thoughtlessly or selfishly, take advantage of the superior strength of their horses and rigs to impose upon those who are not in a position to assert their rights on account of the lightness of their vehicles. We also are aware that there are some drivers of light rigs who are not willing to give way to a loaded team to any greater extent than they are compelled to, but we are happy to say that such men are scarce. The average man with a light rig or a light load is always willing to give the loaded horse or team all the advantages he can, even though it often causes him considerable inconvenience, and we claim, that in return for such courtesy the teamster should, when he is not loaded, give him all the road he is entitled to, and even more, if by so doing he will enable him to avoid driving into a mudhole or other objectionable place with his clean rig. If those driving on the streets or roads would consider each other's conveniences and circumstances, and endeavor to live up to the adage that "one good turn deserves another," there would be no grounds for complaint from any.

A few words might be written on the manners of pedestrians towards horsemen. The man or woman who is accustomed to drive will, while on foot, give the horseman no reason to complain, but he or she who has, either from choice or other reasons, not had such experience, often apparently think that the horseman has no rights. If a man rides or drives a horse on the sidewalk or other place where he has no right, they make a great fuss, but if owing to ice or sleet the sidewalk is not quite as safe to walk on as the street, they take the street and are highly offended if they have to deviate in the least to allow a team to pass. They apparently think that the whole town belongs to them, and that horses have no business on the street. Then again, while crossings are made especially for pedestrians to cross the streets upon, in some cases it is a little shorter to cross where there are none, and we often see people slowly sauntering across the street while a horse is jogging slowly along. If the pedestrian would quicken his pace a little he would pass safely, or if he would stand a few seconds the horse would pass, but no, the whole town belongs to him, and even though he is where he has no right, he continues to saunter along and the horseman is compelled to draw his horse up in order to avoid accident. This applies to crossings as well, but the violation of good manners on the part of the pedestrian is more marked where no crossing exists. If, under such conditions, the pedestrian gets injured, the horseman gets the blame, and possibly may have to pay damages, while it is the other who should suffer, not only bodily but financially. If horsemen and pedestrians would consider each other's rights and privileges, and endeavor to be courteous to each other, few accidents or grounds for complaint would occur, but when either tries to impose upon the other, or to deprive him of his rights, there is danger of both becoming angry or annoyed, and trouble may be the result.

Without Money.

Subscribers can have their own subscription to the "Farmer's Advocate" advanced one year for sending us two new subscribers, accompanied by \$2.00. We want every subscriber to send us a few new names this month. We are still able to give 1902 Christmas number to all new subscribers for 1903. Let us hear from all.

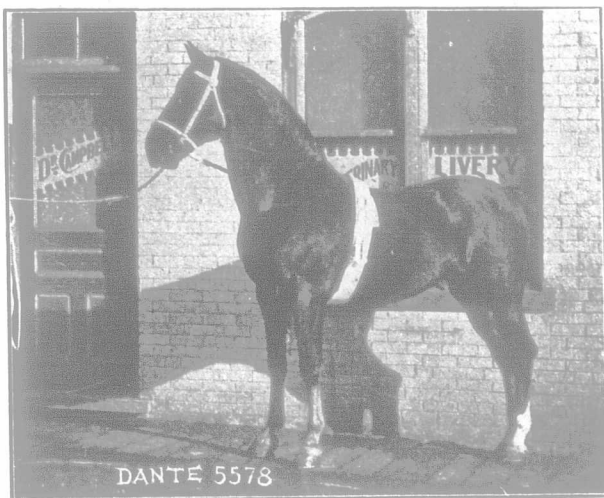
"In time of peace prepare for war," is a good motto to be considered at this season by farmers who intend to get there next year. It is not when the sunny days have come and the fields ready for the harrow that that implement should be on its way to the shop for repairs. Look over all the machines now and have everything in perfect order when the important day arrives. Time is valuable now; it will be worth more then.

STOCK.

Feeding Steers for Export.

The Conditions and Methods Under Which Feeding Steers can be Handled to the Greatest Advantage During Winter, to be Finished on Grass for the British Market."

In the prosecution of this important branch of the farming industry, there are three great factors to its success, with which we must contend, and which must constantly be kept in view.

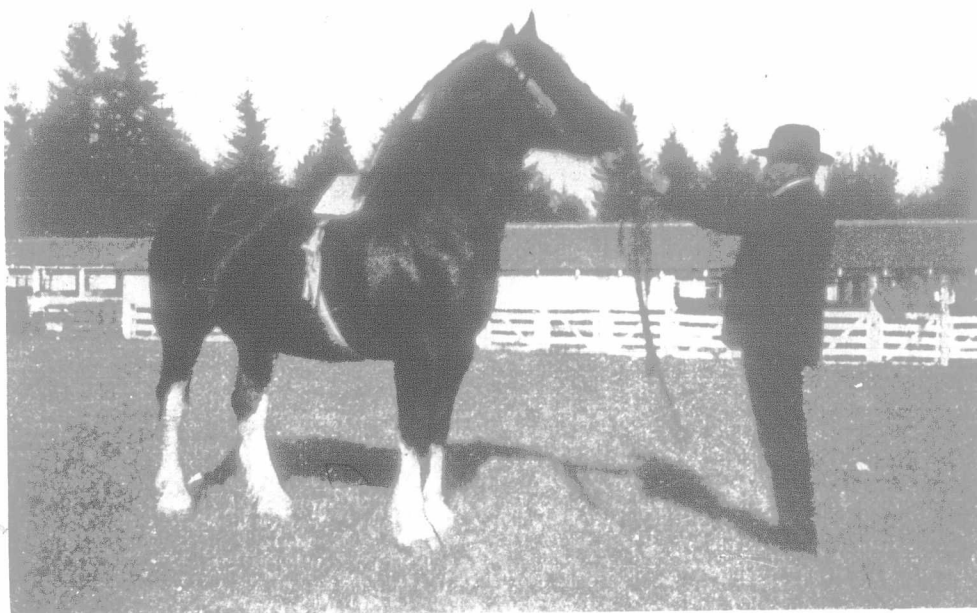


DANTE (5578) -133-
 Imported Hackney stallion. Winner of second prize at the Canadian Horse Show, Toronto, 1902.
 OWNED BY A. B. CAMPBELL, V. S., BERLIN, ONTARIO.
 (See Gossip, page 138.)

1. In this section of Ontario we are subjected to such a lengthened period of drouth during the summer season as totally unfits it from ever remaining the most profitable pasturing country, and it is unsafe and unwise, from a financial standpoint, to carry animals almost but not quite finished over this period of drouth.

2. Animals which are to be turned to grass must not be fed such an excess of concentrated foods during the winter as will prevent their being carried rapidly forward to a desirable finish by the rich and succulent pastures of early summer, by which the finishing process is completed.

3. Animals must be advanced to a sufficient stage of ripeness in the stable that by the middle of July at the latest they will be fully ready to market, as, if left on the grass longer they suffer to such an extent from the effects of the hot, dry weather, and the fly nuisance, as will, in many instances, place them behind animals which have been put upon grass in the spring in much thinner condition. This last consideration would not be so important were it not for the fact that for a longer or shorter period (according to the season) in the heat of summer animals upon grass improve very little, and experience from year to year



CLYDESDALE STALLION, PREMIER PRINCE [9250].
 First in his class and champion over all breeds at the B. C. Provincial and Industrial Exhibitions, 1902; also first at Toronto and Pan-American, 1901.
 NOW THE PROPERTY OF H. M. VASEY, LADNER, B. C.

seems to prove that the highest prices are obtainable from the first of June to the middle of July, after which prices shrink so much that any additional weight the animals may attain after this period does not at all compensate for such shrinkage in price.

With these danger signals constantly before us, we may commence with good thrifty animals in good condition, and an abundance of succulent

fodder in the form of corn ensilage, together with the ordinary foods of the farm, such as straw, clover hay, and a mixture of grain, composed largely of oats, with a little barley and wheat, and the mill feeds (bran and shorts). After a dozen or more years' experience in the feeding of silage, we would simply be lost to know what to do with our 60 head of cattle if it were not for the great place which corn silage holds in our system of feeding operations. It stands prominently the cheapest bulky fodder of the farm, and possesses a nutritive value far beyond the realization of those whose practical feeding experience has not made them acquainted with its merits as a food material. In fact, from the standpoint of economy in feeding, I make bold to say that no feeder is in the race who does not rely largely upon corn silage to supply a great portion of the bulky part of his food ration. In the first place, I believe feeding steers can be handled to the greatest advantage and profit by housing them in loose boxes. Labor has now become a matter of great consideration and expense, and animals can be fed and cared for in this way in nearly the same stable room and with much less labor. By having their freedom they rest more comfortably, thrive rather better than if tied in the stall, and the manure can be drawn directly from the pens and spread upon the land, thus enabling us, at one handling and small expense, to put it where it will give the most profitable return.

It follows without saying that warm and comfortable stabling must be provided, otherwise a much larger percentage of the food given must be burnt up by the animal system in thus providing its own heat and protection from the inclemency of our winter weather. To obtain the greatest return at least cost, water must be conveniently placed where the animals can have free access to it at any time. Regularity in feeding is also a consideration of great importance. Feed the animals at the same time each day, and they soon know just when to expect their next ration, and will rest contentedly until that time comes; but withhold it for half an hour or longer and they will rise and remain restless until once it is given. Cleanliness, more particularly in and about the feed alleys, is also a factor not to be lost sight of, and, along with these requirements, if we wish to obtain the greatest returns from any food ration, it must be supplemented with the kindest possible treatment. Very different results are often obtained from the feeding of similar rations, and I oftentimes think almost as much depends upon the feeder as the food given; thus far we may go: no food ration will give satisfactory results unless accompanied by kind and gentle treatment. The action of the profitable stock-feeder is always characterized by the pat of the hand in the stable, and giving to the animals the padded path in the yard.

With the above considerations, the most profitable ration we have found is composed of corn silage, up to as much as 35 or 40 pounds per day, mixed with a little cut straw, and a mixture, on an average over the winter, of about three pounds per day of the grains above mentioned. Although the bulk of the fodder is given in the form of cut feed, yet animals relish a change, and for this reason we feed them their hay uncut, by giving them a light feed each day of long, well-saved clover hay. We find from experience that with animals which we intend turning on grass, it is a mistake to feed them heavily upon pea or barley meal. In fact we would much rather never give any peas at all, as animals which during winter have been fed heavily upon these grains do not seem to thrive so well when turned to grass.

The question may be asked, how does this practice compare with heavier feeding and finishing in the stable?

There are two considerations in favor of the former system, that is, if in feeding to a finish in the stall your aim is to get the animals marketed before the hurry of spring seeding commences.

1st. The markets during the end of June and July are, as a rule, considerably higher than during the end of March and in April.

2nd. To the experienced feeder it is clearly a science in itself to be able to feed animals to a

desirable finish in the stable, and it is just in this connection that the successful cattle-feeder realizes the full meaning of the expression, "the eye of the master fattens his animals." At this stage of the fattening process such extreme care must be exercised in every detail that the wide-awake farmer who cannot afford to personally perform this important work, and is able to secure good grazing lands at practically the same cost per head as the additional grain ration will cost, decides to take the course which experience up to the present time has demonstrated to be the safer, more satisfactory and more desirable line to follow in this section of country.

Upon two or three occasions in the past we have decided to finish in the stable, but as often have we again gone back to the old practice of finishing upon grass.

For three years we followed the system of soiling our animals in the stable and finishing them in the month of June. This system we found the most profitable of any; that is, so long as a sufficiency of suitable labor can be obtained; but the labor problem has now become one of such great consideration that we must follow that system by which as little help as possible is required.

Seaforth, Ontario. THOS. McMILLAN.

Cow Tag By-law.

Previous to the year 1900, in our township we had a by-law prohibiting horses, cattle, sheep, swine or geese from running at large on the highways. I was going to say that we had this by-law in force; of course we had the by-law amongst the township records, but it was not in force in any sense of the word, for every man did what seemed right in his own eyes. Cattle of all kinds thronged the highways, so many of them that they were pretty hungry and were ready to break into any field that had not a good road fence; and even boar pigs were on the road, to the imminent danger of little children. And in the village, horses would go tramping on the sidewalk, breaking through the planks, and at night making enough noise to keep the tired citizens awake, when they needed rest so much.

The Farmers' Institute took the matter up and petitioned the Township Council to pass a cow tag by-law, and appoint an inspector to enforce its provisions. The council acceded to the prayer of the petition, and enacted a by-law providing that it should be lawful for milk cows and heifers and steers under two years old to graze on the public highway upon the owners making an annual payment of two dollars per head. The inspector appointed was instructed to impound all animals found running at large which did not have the tag suspended from their necks.

The Tag By-law had its opponents, who asked the court to quash it, as being illegal, but after the matter had been fully argued, not only in our County Court, but when an appeal was made to the High Court at Toronto, after a careful hearing the presiding judge gave out his decision that it be fully sustained. After it had been in force two years, the question was submitted to the electors on a special ballot at the municipal elections: "Are you in favor of a continuation of the cow-tag by-law?" And over two-thirds of them answered yes. There has been good pasture, generally speaking, on the highways, and those who purchase the \$2 tags say that they get good value for their money, and no horses or pigs are to be seen on the highways. The law has been fairly well enforced under our inspector, who has had a good many difficulties to contend with and unreasonable people to fight against. The first year's receipts from sale of cow tags were \$122; the second \$194, and the third \$288. Of this latter amount about \$85 went for the inspector's salary and commission, and cost of cow tags; leaving about \$203 of a gain to the public treasury. Is it a fair and equitable by-law? Is not the public highway set aside for the purpose of allowing the public to travel from one place to another? If that is correct, then those who want in addition to use it as pasture fields ought to be willing to pay for that privilege. Much of the success of the cow tag by-law depends upon the inspector, who should fearlessly do his duty without favor to any man, and appear here and there all over the township when least expected. I could say much more, but space in the "Advocate" is valuable, very much so.

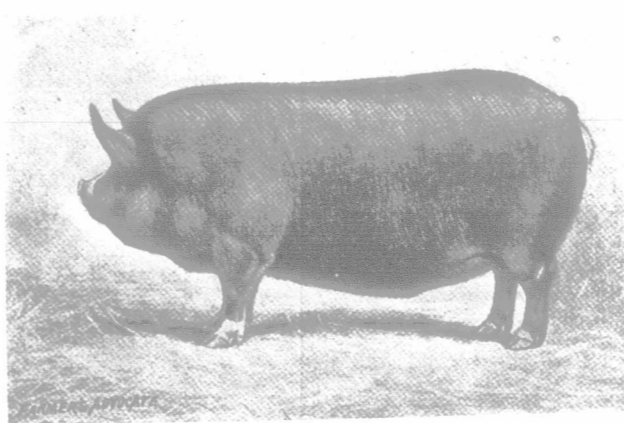
D. L.
Oxford Co., Ont.

A comparison of the numbers of the different classes of stock in Great Britain when the agricultural statistics were collected last June, with the corresponding figures of ten years ago, shows a decline of over 13,000 in the number of horses, over 388,000 in the case of cattle, and close on 3,000,000 in sheep. Pigs, however, show a considerable increase, the total last year being 2,299,000, as against 2,137,000 ten years ago.

Prevention of Milk Fever.

To the Editor "Farmer's Advocate":

I have read with interest the articles in late numbers of the "Advocate" on the cure of milk fever, and I am glad to learn that methods of treatment have evidently been discovered whereby the lives of a large percentage of cows becoming affected with this dread malady have been and may be saved. But since there is good reason to



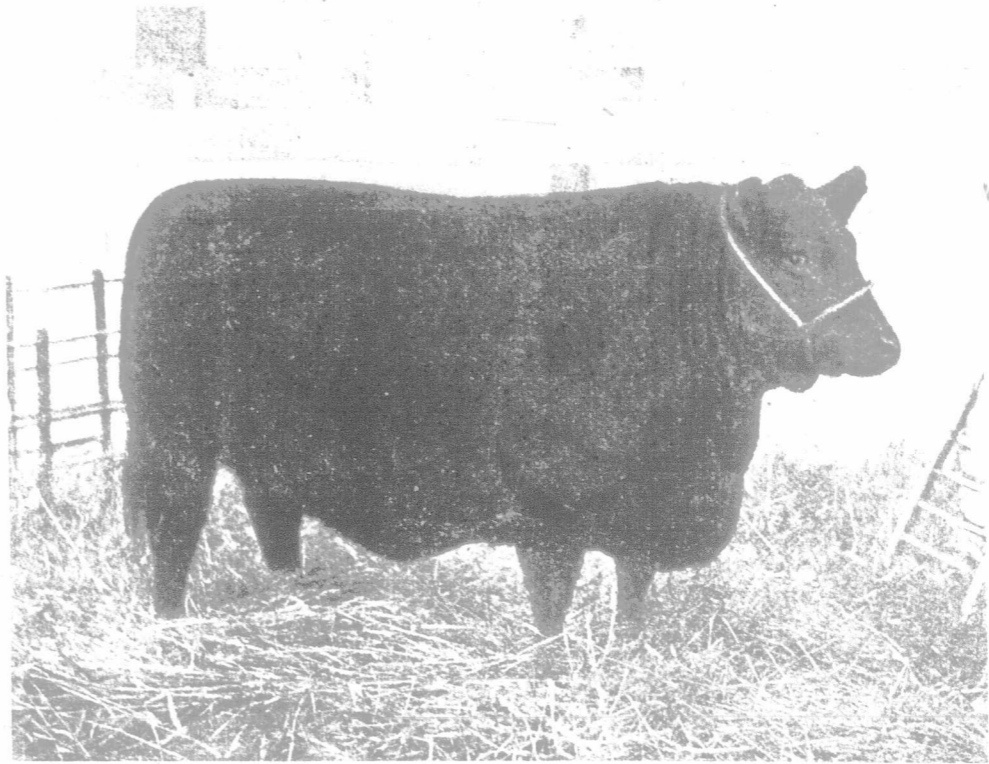
BERKSHIRE PIG.

Winner of champion prize as best single pig at the Smithfield Club Show, 1902.

BRED AND EXHIBITED BY HIS ROYAL HIGHNESS PRINCE CHRISTIAN OF SCHLESWIG-HOLSTEIN, K.G., CUMBERLAND LODGE, WINDSOR.

believe that a considerable proportion of the cows that have been affected and restored are by reason of unskilful treatment, or as a result of the disease, rendered less safe and less useful for future service in the dairy, it is surely desirable that earnest consideration be given to the possibility of prevention. It is surprising that so little attention has been given to this phase of the subject and it has occurred to me that our experimental stations might well take it up, and by comparison of different systems of feeding and management of cows immediately before and after parturition, seek to throw some light on the question. The impression, I believe, prevails that as a rule only cows that are liberally fed and are in high condition are liable to this ailment, but we know that it does occur in the case of cows not in high condition and not highly fed, and that it even occurs in the case of cows feeding on early succulent grass, in which case the bowels are naturally laxative and the blood, one would suppose cooled, making the conditions most favorable.

The idea has prevailed and has been widely published, that the administering of powerful purgatives previous to and after parturition is conducive to prevention and to cure, but that idea, it appears, is dissipated in so far as cure is concerned, by the testimony of veterinarians who have had signal success with the use of the Schmidt treatment, which consists in the injection of iodide of potassium into the udder without the administer-



ABERDEEN-ANGUS HEIFER, LYIA OF GLAMIS.

Champion at the Birmingham and Smithfield Fat Stock Shows, 1902.

THE PROPERTY OF THE EARL OF STRATHMORE, GLAMIS CASTLE, FORFAR, SCOTLAND.

ing of any medicine, the recovery in most cases occurring within four or five hours, the only unfavorable cases being those in which purgatives had been given before the doctor was called. The new theory that it is solely an udder complaint is supported by the testimony of the author of the new cure published in an English paper, the injection into the udder through the teats of pure oxygen, by which means recovery is made in 30 to 60

minutes, the only troublesome case reported being one in which the udder was milked out too soon after treatment, in which case a second injection of oxygen effected a permanent cure. So much for remedies.

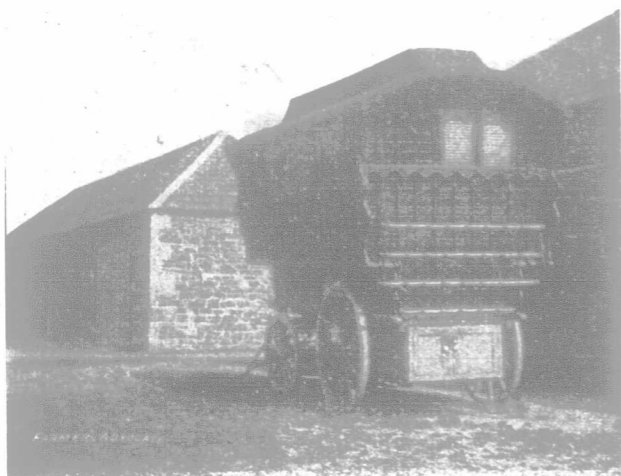
With regard to prevention, let me say that I have given considerable thought to the suggestion contained in an editorial note in a late issue of the "Advocate," setting forth as a possible cause of so-called milk fever, or, more properly, parturient apoplexy, the common practice in dairy herds of removing the calf from the company of the cow immediately after its birth, and emptying the udder of the cow by hand milking. Such practice is certainly contrary to nature, and the fact that cases of milk fever are almost entirely limited to dairy herds, and rarely heard of in herds in which the cows are allowed to nurse their calves, seems to support the idea that the course of nature is the correct one for the best interests of both the mother and offspring.

In the experience of the writer, extending over twenty years in the management of a herd of Shorthorns, in which the cows were liberally fed previous to calving, the calves being allowed to suck their dams, not a single case of milk fever can be recalled, although there were not a few heavy milking cows in the herd.

Later, in an experience of twelve years with a herd of Jerseys, during which time the calves were removed at birth and fed by hand, heavy losses from milk fever were sustained, though care was observed to feed lightly before calving, and the cows affected were not heavier milkers than many of the Shorthorns, though of course giving milk much richer in butter-fat. As remarked in the editorial note referred to, cows calving on the range and being relieved of their milk only by the calf, which cannot possibly take it all for many days, are practically exempt from milk fever, and this would also seem to favor the idea that nature's way is the safest. The impression prevails that by removing the calf at birth the cow is less disturbed and more quickly gets down to steady work in the dairy, and that the calf more readily learns to drink from the pail, thereby effecting a saving of time and trouble, and I have noticed the publication of an article in the report of Ontario Farmers' Institutes, in which the writer, who I suppose preaches the same doctrine, not only advocates separating the calf from its dam at birth, but withholding all milk from it for twelve hours, so that it may become so hungry that it will gulp the milk down when offered it, and thus quickly learn to drink. The supposition is that in the meantime the cow would be milked to relieve her. Could anything be more unnatural or unreasonable. In the natural way the calf takes a little at a time of the first milk, the composition of which is calculated to move its bowels, and in the process of sucking, the glands of the mouth which supply saliva are brought into action. This saliva aids digestion and the health of the calf. The udder is relieved by degrees, giving comfort to the cow, while if emptied at one operation collapse is liable to ensue, which may reasonably account for the attack of apoplexy which is incorrectly termed milk fever. This idea may to some advanced dairymen be regarded as a relic of old fogeyism, but to me it reads a little like common sense, and I would suggest to those who, to save time and trouble and milk, practice destroying the most of their calves at birth, that it might at least be worth their while to try the experiment of partial milking for the first few days after the cow has calved, if, perchance, there may be something in this theory of prevention. To my mind prevention is, as a rule, so much better than cure, and so much cheaper, that it is worth considering in this connection, and I would like to hear from others who may be able to offer more practical suggestions than I have done in this letter. The aggregate loss to the farmers of this country from this cause must be enormous.

EX ADVERSO.

Farmers fully realize the principle of reaping what is sown. Make a right start early, and all the years of your life will have added usefulness through that sowing.



A SCOTCH THRESHERS' CABOOSE.

Prairie Home Stock Farm.

Situated about one mile south of Crystal City is the home of the most noted herd of Shorthorns and Ayrshires in the Northwest. Here 2,000 acres of choice wheat land is owned and successfully worked on mixed-farming lines by the Hon. Thos. Greenway.

Crystal City is on the Pembina section of the C. P. R., 130 miles south-west of Winnipeg, and nine north of the international boundary.

This stock farm, located as it is in one of the best sections, thoroughly equipped with up-to-date buildings, and skillfully handled as regards methods of feeding, selection of stock, foresight in mating, and the closest attention in all matters of detail, has rapidly risen to the front.

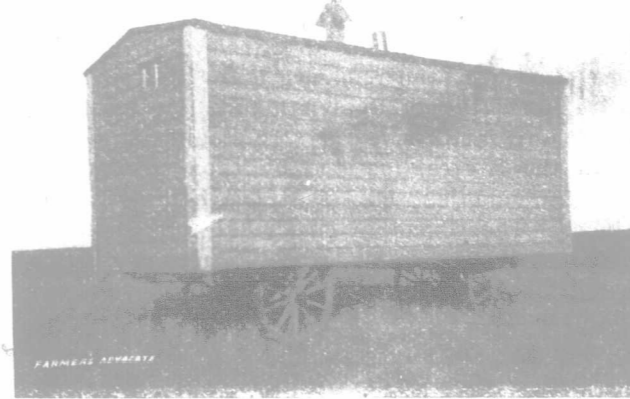
Since 1896, this farm has been ably managed by Mr. Jas. Yule, who later received the strong assistance of Jas. Oastler, a graduate of the O. A. C., Guelph. At present Mr. Waldo Greenway is manager, and under his care the same high reputation is being fully sustained.

The Shorthorn herd at present comprises about 100 animals, many of them representatives of some of Britain's most noted families, and in the selection of these, great credit is reflected upon Mr. Greenway. The famous Cruickshank Missies are at home here about seven strong. These came originally from the herd of W. C. Edwards, M.P., Rockland, Ont. The true worth of this valuable family can be best seen by the intense eagerness

which the very best breeders manifest to secure them at any public sale where Missie blood comes under the hammer. The Matchless family, with Kinellar breeding in the original, which is nearly akin to Cruickshank, make another strong showing here. They have been wonderful show-ring winners. Years ago, Messrs. Watt, of Salem, Ont., with this renowned family, won many prizes at Ontario's leading fairs. In 1899 the Matchlesses won the herd prize at Toronto, and this year Matchless 25th was sweepstake female, any age, at the Winnipeg Industrial. This beautiful heifer, bred by Watt, of Salem, is now owned by Mr. Greenway. As a yearling, she won first at Toronto and third at the Pan-American. She was sired by Royal Sailor (imp.), and out of Matchless of Elmhurst 9th; in size she is all that could be desired, with a fine feminine appearance, a strong back, very smooth and useful throughout, with great wealth of natural flesh.

Then we have representatives of the Strathallan family, brought out from the herd of John Miller & Son, Brougham, Ont.; the Cruickshank Lavenders, the Village Blossoms, the strongest of all, numerically; the Golden Drop strain, and others equally noted. The show-ring winnings of this noted herd have been so numerous and of such a high order as to be very gratifying to owner and all concerned. At Winnipeg, Toronto, the Pan-American, and other places, the showing of this herd has been excellent.

The present Shorthorn stock bulls are Judge 23419, Sittyton Hero 7th, and Moneyfuffel Banner. Judge, the famous old show and stock bull, is a Kinellar Mina, bred by Watt, Salem. His sire, Imp. Royal Sailor 18954, was not only a prizewinner, but also a sire of prizewinners. The noted Cruickshank bull, Hospodar, grandsire of Judge, was, owing to the excellence of his breeding and his marked ability to transmit to his progeny his superior characteristics, taken back from Canada to Scotland. Judge's calves, both male and female, have for the last four years in succession won first honors at the Winnipeg Industrial. Sittyton Hero 7th, sired by Sittyton Hero, and out of 39th Duchess of Gloster, won sweepstakes as yearling and two-year-old at the Winnipeg Industrial. At the Pan-American he was second, being beaten only by the \$5,000 Lord Banff (imp). Sittyton Hero 7th has developed into a magnificent show bull, with great width and depth, a commanding presence and the best of handling qualities. Moneyfuffel Banner was first as calf at the Toronto Industrial in 1901, and first at Winnipeg as a yearling in 1902. With sires of such outstanding merit,



A WESTERN THRESHERS' CABOOSE.

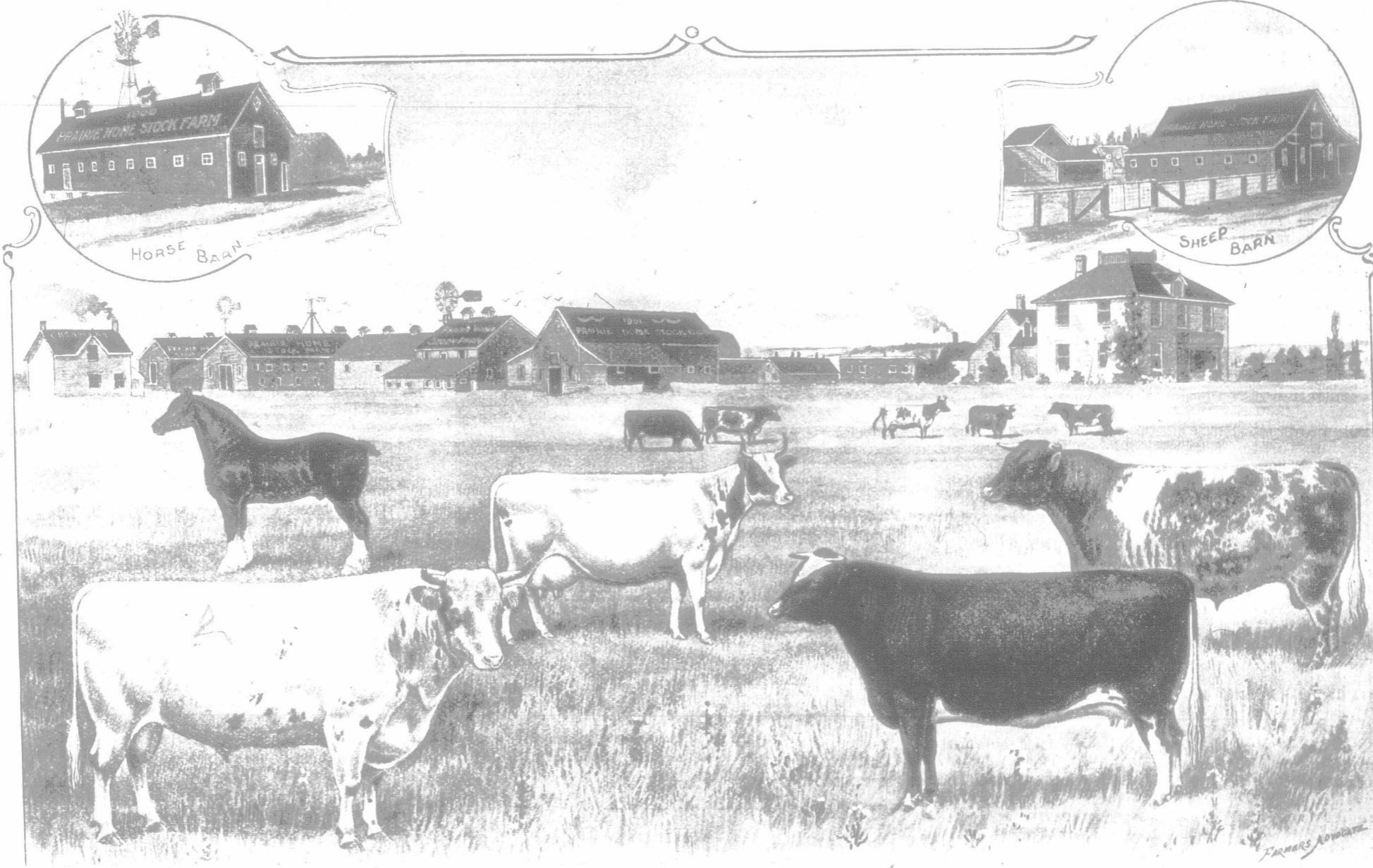
coupled with females of the families mentioned, show-ring winners may frequently be looked for in the progeny.

In Ayrshires, Surprise of Burnside heads the herd. He is a son of imported Glencairn 3rd and Nellie Osborne (imp.), and as male champion of the breed at Winnipeg he proved to a marked degree some of his outstanding qualities, such as size, shape and quality. He also is a splendid sire, Loyal Chief, a son of his, winning first in yearling class. Silver Maid, one of the Ayrshire matrons, another Winnipeg sweepstake winner of 1902, along with some forty others, compose this Ayrshire herd.

Shropshire sheep, to the extent of about 100, headed by Dreamer King and Combine, also are at home on this farm. In swine, Ycrks and Berks are largely kept.

Summer Hill Monarch and Prairie Home Duke are two extra fine Yorkshire stock boars. About 30 brood sows are kept, besides a number of fine litters of all ages. Victor, several times sweepstake winner at Winnipeg, and Milton Ranger, along with 20 brood sows and various litters, make up the Berkshire herd.

One Shire stallion, Robin Hood (imp.), and two Clydes, are kept. King of the Clydes, male champion of breed at Winnipeg Exhibition, 1902, along with Sittyton Hero 7th and Matchless, male and female champions of the Shorthorn class at same fair, and also Surprise of Burnside and Silver Maid, as upholders of the Ayrshire honors, will be seen in the illustration which this brief review accompanies.



PRAIRIE HOME FARM BUILDINGS, AND A QUINTETTE OF CHAMPIONSHIP WINNERS. The property of Hon. Thos. Greenway, Crystal City, Manitoba.

Scotch or Nothing: Often Nothing.

The uninitiated, whether townsman or farmer, might think we were expressing a very marked preference for a brand of whiskey. As it happens, however, the reference is to the present-day craze for not only Scotch blood, but for certain Shorthorn families. The stronghold of this craze is in the States, fostered by those owning such families, and just now they are having their innings. The Canadian dealer, always anxious to make an honest dollar, sees his opportunity, and handles only the bovine aristocrats and persuades his friends to do the same. The baneful influence of such a craze is not at once evident, but is far-reaching, if not at present noticed.

Two main effects are to be found if looked for; first, the limitation in the number of bulls possible to use in a pure-bred herd, and on this point Wm. Duthie said to the writer, when the craze for family was being discussed: "We hardly know where to go for our bulls." The second effect is the lowering in quality of the pure-bred bulls available for grade herds. The theory of herdbook registration is to-day prostituted in the States and Canada, the latter not altogether blameless, being a slavish follower, and influenced by the dollars, and not, as it should be, for the advancement of the breed.

A Shorthorn is not a Shorthorn after it crosses the Atlantic unless it traces to the first 20 volumes of Coates' Herdbook; *reductio ad absurdum!*

Under such protectionist restrictions, we find that the bull Inspector, a noted winner in Great Britain, is ineligible for this country and the States, and we are the losers by such an unfortunate regulation and infatuation for certain tribes.

At Collynie one may see a cow (of the Vine family), wonderfully thick and deep, of character unapproachable, lines of the straightest; such a model, in fact, that her owner, the high priest of the Shorthorn cult in Great Britain, considers her his best cow. One may look over many a herd in the Old Country and pick out what he considers the plums, only to be told that the animal won't register in America. Five crosses back a bull was used whose dam didn't trace beyond the 21st or 25th volume of Coates'! Herdbook registration was introduced for the purpose of improving a breed and setting up high standards of animal excellence; instead of which, the effect is quite strongly the other way. Culls become valuable in the hands of the generous advertiser or the dealer who sleeps more soundly at night when he has in his possession the half-sister to Nicodemus (or some other fellow that brought a couple of thousand on paper, at auction).

The day before yesterday it was Bates and Booth, yesterday Cruickshank, and to-day it is pure Scotch, and the student of live-stock husbandry or the well-wisher of the grand old breed will be wondering what to-morrow will call for.

Persons professing to be "in the know" of the Shorthorn trade express the opinion that the closing of the States to the British Shorthorn is close at hand, and that the Canadian-bred one will be made an alien only a little later on.

The few who profit largely by the market across the line cannot be expected to move in a direction just now against their own interests—but the breed should not and must not suffer for the few. Northern-bred Shorthorns will always be required to rejuvenate the corn-fed stocks, a fact that our cousins to the South may overlook for a few years; the neeps-outs-brain raised Shorthorn is more virile than his corn-fed brother.

Move forward the limit from the 20th to 30th volume of Coates, and ten years later it will be wisdom to step forward another ten!

As the adoption by the United States breeders of the doctrine of protection is to be expected, it is high time for Canadians to take such measures to improve their cattle that when protectionists return to a saner state Canadian cattle will be of such excellence as to sell themselves!

NOMAD.

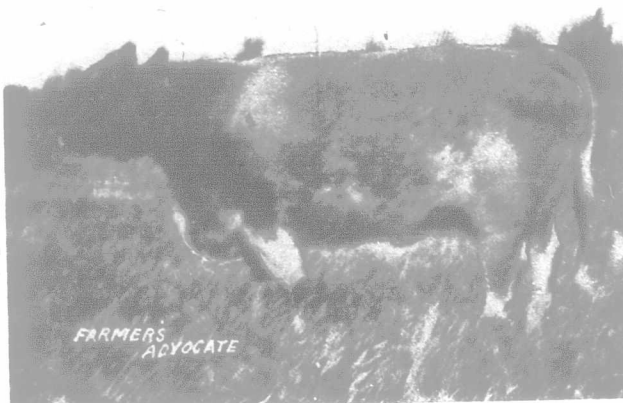
Smithfield Dressed Carcasses.

Summarized reports of butchers, regarding the carcasses of cattle and sheep purchased by them from the recent Smithfield Fat Stock Show, are published in the London Live Stock Journal. These cover about 70 cattle and 33 sheep. As a rule the reports on the cattle are particularly favorable, though there have been the usual disappointments, the butcher finding an excessive proportion of fat to lean. The sheep are not so well spoken of by the butchers. There are few remarkable figures under the heading of percentage of carcass to gross live weight. The best is 72.13 (Mr. J. Thorley's), Shorthorn steer; Mr. J. C. Williams' Devon steer gave a percentage of 71.32; the King's Shorthorn steer 71.10, and His Majesty's Devon steer 70.00. Among the sheep, the highest percentages are 69.78, for Mr. J. T. Hobbs' Oxford Down wethers, and 69.26 for the Earl of Ellesmere's Southdown wethers.

Collie Field Trials.

To the Editor "Farmer's Advocate":

Sir,—As a constant reader of your valuable paper I have been particularly interested by the various articles concerning the Training of Collies, Sheep Dog Trials, etc. Now I do not see why we should not have a sheep dog trial ourselves. In fact, I think that is the only way in which those who are interested can really get to know how useful a dog can be on the farm, and learn how a dog should be worked. I think it would be quite feasible by having the trial a simple one, but

**SHORTHORN COW, VINE 23RD.**

Owned by Mr. Wm. Duthie, Collynie, Tarves, Aberdeenshire.

should like to hear from some of the others interested so that we can find out what material we have to work on, and in what shape we should go at it to get up a trial. You could hardly have a trial on cattle, as they might not be very readily driven by a strange dog.

If we can manage to get up a test, I can give a sketch of a simple one, with the position of judge, shepherd, obstacles, number of points, etc.

As regards the training of collies, the subject was so fully and ably dealt with by Mr. Evan McIvor in a former number of the "Advocate," I can only say that the same method applies to the proper training of farm dogs all the world over, varied of course by almost every individual as to whether he can whistle or has to depend on his voice.

Unfortunately, most of our so-called collies are very poor specimens of the breed. They are mostly too large and off in color, and are decidedly lacking in dog sense. The latter quality is one of the inherited traits of a good collie, and cannot be developed in the ordinary cur. To maintain this characteristic, we should select our pups from a good active heeling bitch, and begin gently training him when about seven months old. He should be given practice with the flock, and patiently taught all the signals of his master. It is particularly important that he understand when

**HOME OF F. J. COLLYER, WELWYN, ASSA.**

to come off and to go further out. It is surprising how soon a dog of good breeding will develop into an intelligent worker under proper training. Hoping to hear from some of your readers who would like to see a trial, and thanking you for the space, I am, Yours, H. H. Ontario Co.

A Powerful Factor.

I prefer the "Farmer's Advocate" to any agricultural paper I have ever read, and believe it to be a powerful factor in the development and improvement of Canadian farming.

E. F. DWYER
Welland Co., Ont., Jan. 20th, 1903.

Much-Needed Reform.

To the Editor "Farmer's Advocate":

Sir,—Under the heading "Raise the Standard of the Veterinary Profession," in your last issue, you certainly advocate a much needed step, but let me point out why it is difficult to carry out this step.

If the three-year course were made compulsory at the Ontario Veterinary College, that institution would cease to be a paying concern, as fifty per cent. of the students are from the U. S. A., who would then go to their own three-year colleges, and of the remaining fifty per cent. a great many would not go to the expense, under the present condition prevailing in Canada, of the longer course. Now, as Dr. Smith is not running the O.V.C. for the benefit of his health, what is to be done? The inducements to fit oneself for the veterinary profession in Canada are limited at present, i.e., appointments, and when you come to practice what have you? The first thing you have to contend with is quackery on every side, which is very hard to deal with, as the offenders take care not to get within the clutches of the law, by not charging any regular fee or calling themselves V.S.'s, as you saw by a question to your paper lately (Dec.) one example.

Then again, I would like to ask you a fair question: Are you helping to raise the standard of the veterinary profession by your veterinary column of free advice? Are you not encouraging the quack by giving him prescriptions which he has no right to, at the expense of the legitimate practitioner, who has studied and earned the right to use them? These are some reasons why practices are unremunerative in Ontario, and why you see so many V.S.'s who have to adopt side-lines, as clipping, horse trading, keeping livery stables, etc., to help make a living, whereas the profession should be sufficient to give them a good honest living without. The remedy is:

1. For the Dominion Government to adopt a three-year standard for all the Provinces.

2. To give the veterinary profession a greater measure of protection by preventing anyone infringing on veterinary duties who is not up to the legal standard, such as travelling quack dentists, etc., and to have a penalty for doing so.

3. Government aid to help maintain a veterinary college is just as fair as to aid the agricultural college, and would certainly tend to help both the public at large, by better veterinary inspection, and the farmers also, by having a better veterinary service.

S. RANSOM, V. S.

Waterloo Co., Ont.

[Editorial Comment.—Dr. Ransom clearly discerns the need for veterinary educational reform, and is to be commended for speaking out frankly. We trust others will throw their influence in support of a proper standard of entrance to the college, and a three-year course, up-to-date in every respect. It has been a prosperous institution for its promoter for years, and by now stepping to the front will attract a better class of students. It is no advantage to any profession to be crowded with men who want something short and easy. By disseminating trustworthy information in relation to the preservation of the health of animals, the "Farmer's Advocate" is helping to put down quackery, the child of ignorance. Quacks and humbugs all hate the "Advocate," and don't like to read it. If they wanted prescriptions they could find books full of them. The demand for advice has been so widespread that we would be recreant to our duty as a public journal did we not respond. The more intelligent a stockman becomes, the more will he appreciate the value of his animals, and the more likely he is to call in the services of competent professional men, if such are within reach, so often advised in our veterinary department in all cases requiring such. But we must apologize to our readers for referring to this side issue, and ask their careful consideration of the three remedies which Dr. Ransom proposes.]

Double the Circulation.

We want to see the circulation of the "Farmer's Advocate" doubled. This can very easily be accomplished if our present subscribers will only recommend it to others who are not at present taking it. We get hundreds of letters like the following:

WORTH MORE THAN ALL THE OTHERS.

I have been a subscriber to the "Farmer's Advocate" since I commenced farming, nineteen years ago. I have a great many books on agriculture and live stock, and have been induced to subscribe to other papers, but one year's publication of the "Advocate" is worth more than the whole of them.

W. H. MILLER.

Victoria Co., N.B., Jan. 12th, 1903.

NONE AS GOOD IN ENGLAND.

Jan. 4th, 1903.

I enclose you postal order for 6s. 2d., for payment for "Farmer's Advocate." I find it better than any I can get here. I am, Yours truly,

S. WALTON.

We give valuable premiums to those sending us new subscribers.



UP-TO-DATE.
A Shorthorn-Angus cross-bred steer, 1,837 pounds. Fed at Lord Roseberry's farm for Smithfield, England.

A New Cure for Milk Fever.

M. Emile Thierry has contributed to the Journal d' Agriculture Pratique, an account of the new treatment of milk fever (parturient apoplexy), discovered and practiced with success by M. Knusel, a veterinary surgeon at Lucerne. The treatment consists of the injection of pure oxygen into the udder. M. Knusel had previously practiced the comparatively new treatment with iodide of potassium, administered sometimes through the mouth and at other times by injection into the udder; but he had found it to fail in the most serious cases, and he reckons that about forty per cent. of the cows treated with it are lost. This insufficient success led him to try the oxygen treatment, which he had applied in twenty-two cases when he wrote his memoir of the method. Some of the cows were in an extremely dangerous condition, prostrated, insensible, and with labored respiration, accelerated pulse and paralyzed tongue. Yet in thirty to sixty minutes after the injection they had so far recovered as to seek for food. Not one of them died. From six to ten litres of oxygen were injected, the gas being compressed to twenty-five atmospheres in an apparatus obtained from the firm of Hauptner, of Berlin, which contains a valve for regulating the pressure. After washing and disinfecting a teat, he introduced the teat probe, and slowly opened the tap to release the oxygen. When two quarters had been filled with the gas, an assistant compressed the two teats, and by massage the gas was distributed through all the glandular tissues. This operation having been completed, it was repeated with the other two quarters, the whole work occupying only about ten minutes. Gradually the treated cow showed signs of recovery, first raising her head, next shifting into a comfortable position, and soon getting on to her feet. In two instances a relapse occurred, through the cows having been milked too soon; but a fresh insufflation of oxygen quickly restored them. These were the only accidents in the twenty-two cases. M. Knusel believes that if his treatment be applied soon enough it will be successful in all cases. He suggests, as the explanation of the effectiveness of oxygen, that the poison formed in the udder and passed into the general circulation of the animal is produced by micro-organisms, which may be anaerobic, and therefore unable to live in the presence of oxygen.—[M., in London Live Stock Journal.

New Tuberculin Test Regulations.

To the Editor "Farmer's Advocate":

Ottawa, Jan. 23, 1903.

I beg to acknowledge receipt of your letter of Jan. 20th, asking for information as to the new regulations in regard to the testing with tuberculin of animals imported from Europe. The system hitherto pursued having been found very unsatisfactory, the Minister has decided to allow importers to make their own arrangements re testing in Britain. All cattle arriving in Canada from Europe will now be tested after they have been sufficiently long in quarantine to settle down and become accustomed to their surroundings. The test to be conducted under such conditions as will ensure fair play to the animals and their owners, as well as to the officer making the test. Any

animals which react will be permanently ear-marked, and may then be removed from quarantine at the expiry of the usual period without further restrictions, save that they must at no time be offered for export to the United States, so long as the regulations at present maintained by the Government of that country continue in force.

Under this system, this department will assume no responsibility for the testing of animals in Britain. Importers will naturally find it greatly to their advantage to have all animals purchased by them in Britain carefully tested, as otherwise the percentage of ear-marked cattle will

doubtless be very large. I have the honor to be, gentlemen, your obedient servant,

J. G. RUTHERFORD,
Chief Veterinary Inspector.

Ottawa.

FARM.

Mrs. Hoodless Questioned.

In looking over the January issues of your valuable paper, I was greatly disappointed to see that the wives of to-day could allow such an article as that written by Mrs. Hoodless in the Christmas number to go unanswered. The delay on my part was simply that some more competent person would take the matter in hand. I do not for an instant object to this new education, as it is a well-known fact that "knowledge is power," and the moral influence of these cultured women must raise men to a higher standard, but I decidedly disagree as to the reasons given which necessitate this education. Mrs. Hoodless states as a positive fact that "women are more conservative than men." It might be true had she commenced the sentence with "some," for there is no rule or saying that will hold good all the world over; but if she were to take a peep into the life of a farmer's wife, it would perhaps be surprising how many there are who have to work and plan for months, and sometimes years, in order that she may make some needed alterations in the general order of the home life. It is he who is in the rut, and it is a matter of time for his anxious partner to get him switched off onto another track.

"Farmers are not enabled to have wives worthy of them." May I ask how long the author of that quotation has lived on a farm and made a study of the farmer's wife? As a rule, girls are better educated than boys, because they are willing to go to school longer, and also apply themselves when they are there, and not waste as much of their time as the teacher will allow in nonsense and idleness. The majority of farmers are boys, as above mentioned, who have had but a public-school education, and even that might be sufficient if they would take advantage of their winter months in reviewing what they have forgotten, as their parents suppose they are doing, instead of killing time. But they are boys, as boys go, and these youths grow to manhood, and in time look for partners in life. Can it be possible they are unable to find any worthy of them? I speak not from the life of one home, but that of many in which I have lived, and having taught and studied the farmers' girls and boys,

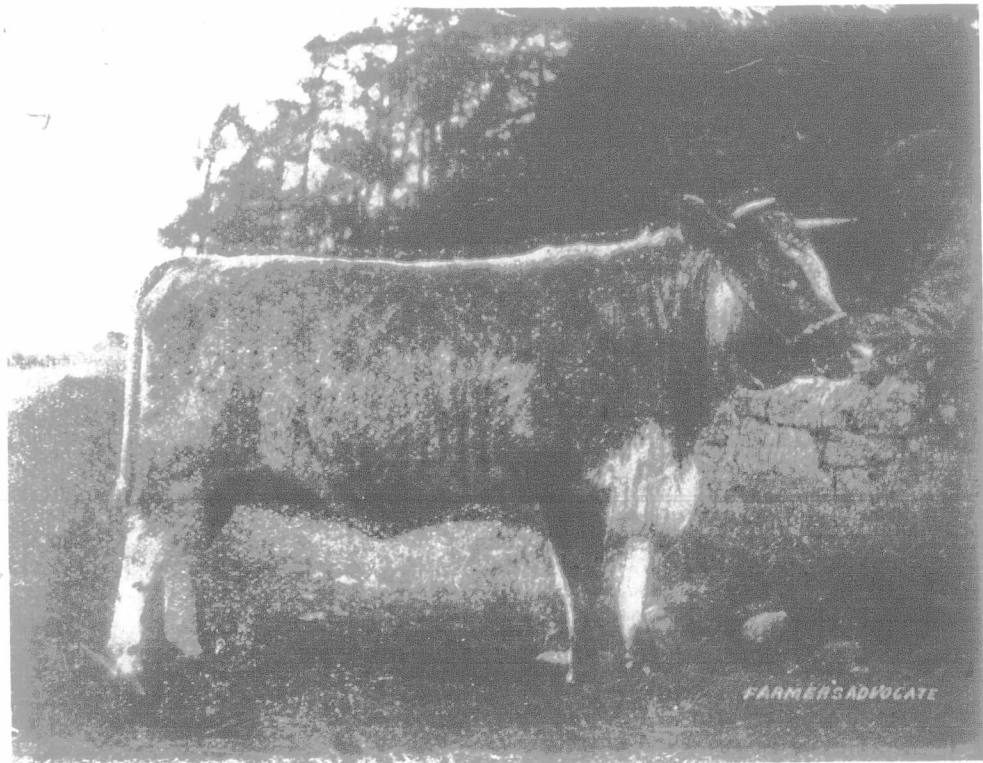
I truly think the little maids by far the superior class. This is taking them as a whole, for of course there are exceptions on both sides. You may say these are children. Yes, but "the child is father of the man." If the educated farmer is a good manly character, he will have no difficulty in winning a wife whose education far exceeds his own; and with regard to a wife keeping her husband's books, how many men are there who would relish the idea of coming home and accounting for every penny spent? After one month's trial, in nine cases out of every ten, they will conclude that it is better for each to keep his and her own. At any rate the public schools of to-day teach enough bookkeeping for every-day life. According to the ideas of Mrs. Hoodless, attending to bee-hives and orchards, dairying and poultry-raising are classed a part of woman's work or duty. Let me now ask, if man is such a superior being, why is he not capable of managing his own affairs?

QUESTIONER.

Preparing to Build a House.

The heading of this article well expresses the most important duty to be attended to before the actual work of building a house is begun; that is, to prepare. By this we do not mean so much the buying and hauling of material, though that is important also, and should be looked after in time—the hauling especially, as much as possible should be done in winter—as the perfecting of the plan on which the house should be built. It is well to take plenty of time for this. An architect could, on short notice, do it after a fashion, for that is his business; he is at it every day; but not many farmers build more than one or two houses in their lifetime, and, therefore, are inexperienced in the work, and we know how much longer it takes to do anything for the first time than after some experience has been gained. An architect can, of course, be employed, and in many cases it would be profitable to do so, though their rates are high, but before an architect could do his work properly he would need to know what is wanted. This is what should be decided on in making any plan. Just what do I want a house for, anyway? How much am I prepared to expend? How much room and how many rooms should I have to accommodate my family? How can the rooms be so arranged as to be most convenient, and best utilize the space? These questions, and such as these, should be carefully considered and answered. As we said before, plenty of time should be taken. A friend who is a practical builder says that a year is not too long. How often we hear one who has built say, "I would have had that different if I had thought." That suggests that thought more than time is the main thing, but still thought requires time. Other houses that seem suitable should be examined, as should also plans that are published in the papers. Paper and pencil should be used freely. A plan sketched on paper can be better understood, and its defects perceived and corrected more readily, than if it exists in idea only. Family consultations on the subject should be held, and no suggestion rejected without good reason.

The following points we suggest as being of sufficient importance to be kept in mind throughout. First, as to site, due attention should be given to elevation, drainage, water supply, prospect, convenience, etc. Next in order, though not in importance, is outward appearance, which should be neat and attractive, never bald or ugly.

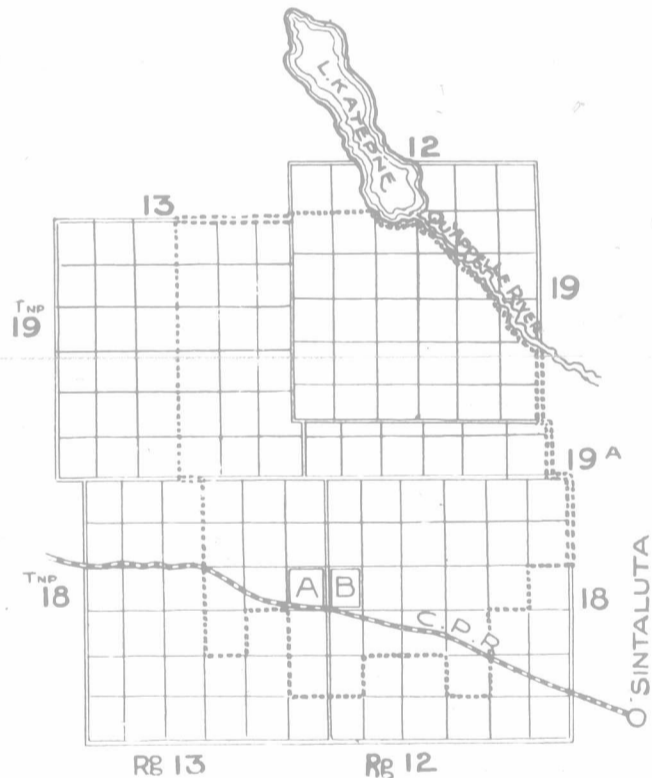


THE FEMININE BEEF TYPE.
Fed for Smithfield by Jno. Turner, Cairnton, England.

This is a matter more of design than expense, though some expense is generally involved. Then, what is of the first importance, for it touches health, is that provision should be made for the abundant entrance of sunshine into the rooms, and for free ventilation. Let the rooms be so arranged that when desired the breezes from every quarter may blow freely through, and "let the blessed sunshine in," thus getting at first hand what so many are sent to health resorts to obtain. A dungeon is a healthy place for microbes, but not for human beings. The kitchen, where so much of the time of the women is spent, should be a cheery room, with an outlook on the road, or on the fields where the men work, or some pleasant view, or better still, all combined. Let the internal arrangement be such as to save steps. Economy in fuel, which nowadays is with many a chief consideration, is secured by having the building in compact form and the kitchen in such position that heat from it is not lost, as is so often the case. The nearer square a house can be made the better for this, and it has also this advantage, that there is more room enclosed for cost of outside wall. Lastly, we would say have rooms enough, but not too much. Ladies all insist on having one room kept sacred for finery and great occasions, and if we are wise we will defer to them in this. But surely one is enough; why have two or three? Why should the best part of the house be shut up and the family live in the back? There is little real satisfaction in it; it seems a great waste of money, and we are glad to see that more sensible views are obtaining, and that more and more people are striving to build not merely houses but homes.

Indian Head as a Wheat Center.

The following is a list, so far as we can estimate, of Indian Head (N.-W.-T.) district farmers within the dotted line boundary who grow 8,000 bushels or more of wheat each: J. S. Court, John Boyd, Thos. Smith, Jas. Harrop, Alex. Stibbard, J. W. Miller, E. Williamson, E. Boone, W. J. Miller, Wm. Cathcart, Clayton Rigby, Peter Obelman, John McConnell, Fred Harrop, Ernest



A—Indian Head town site.
B—Experimental Farm.
Dotted line—Boundary of district in which the wheat as per list was grown.

Skinner, Geo. Harvey, M. McDermid, Thos. Jackson, Jas. Jackson, A. Davidson, Mrs. M. A. Boyd, Wm. Harrop, Wm. Douglass, A. E. Wilson, John Boden, Geo. Lang, H. Burke, A. McKay, R. Todd, Chas. C. Rigby, Jos. Obelman, Wm. Dickson, Lorne Stephens, Benj. Holden, J. H. Francis, Davidson & Gardiner, Otis Holden, Alex. Walker, John McDougall, Jos. Webster, Wm. Dixon, Peter Donald, Hugh Cargo, Chas. Hubbs, Sanderson Bros., Wm. Patterson, Harvey Brown, Jas. Cutt, Jas. Pollock, Frank Campkin, Josh Thompson, Wes. Forde, T. Livingstone, Alex. Dixon, Patterson Bros., Lyons Cargo, Geo. Bennett. In all, these 57 farmers would raise this year a total of about 456,000 bushels of wheat. It is only a partial list of the wheat growers, and includes only those south of the Qu'Appelle River.

Hops as Manure.

I wrote you about one year and a half ago concerning hops as manure, and we tried them, with astonishing results. For top-dressing meadows they are first-class. We gave them a hard test on white clay knolls, and they produced hay long and rank, where before it was short and spindly.
A. L. DUNNETT.
York Co., Ont.

Caleb Jenkins: His Letter.

IV.

Jenkins Corners Jan 20, 1903.

To the Edditer of the Farmers Advocat

deer Sir,—sense i rit you the las time we hev bin at it hammer and tongs over the electckshins hear in the corners & hed quite a time of it, spehshilly bout the fite fer reeve. the candates was



frank Tye and Gorge Small, and the grate questin of the campane was whitch of em wood git in. thay wusent no burnin ishoo es you mite say septin it mite be the cole questin fer Mistr Small is a cole dealer and made a big pint in his canvassin that he hod bin sellin cole way down below cost to keep the poor frum starvin consequently it wood be rite down meen if thay didint gin him the reeve ship. Mistr tye is a store keeper & a good lookin yung feler that is popler with the lady fokes and allus dresses very fashnibel so doorin the campane he wus ginerly spoke of es Neck tye. his idees on lokel affares wus thet he wood make a puttier pickter in the chare then Small & thase no dout es the fokes in toronto ses, its a good pint to hev a dood fer cheef magis-



trait who kin do the thing perlite & ware gloves es thade dot to be wore. Both the candates wus sound on the cow by law & promist to do way with the law we hed las yeer agin fokes lettin thare cows & pigs git a livin on the streets of the villege septin a boy is in charge of em. This will now be did away with & persnil libbity fer cows will be the sistem, in jinkins Corners. Tye got electcked by a large majorty, everbuddy ses it wus the wimmin vote thet dun it & Small don't make no bones of staitin that he will let his feler sittisens freeze after this es it dont pay fer a man to sakerface hissself fer the publick.



wants to help along the reel intrists of the kentry, but sech fellrs es Hiram dont rely no ner



care wot the questins is but jes pitches in to work fer thare party and coodint gin you no reesins wy thay stick up fer one party moren tother. We sot down in the store by the stove and got to tawkin bout farmin afares. Youde orter go in fer growin barley fer feedin yure stock up to yure place i ses, sense the pea crop hes bin a failure fer sevril yeers. feed em barley he ses, you dont ketch me doin no sech thing es that. barley is bad fer cattel, in fack it haint nothin bettern pizen. Wel i ses, wen its took to the lickker man-fackterer & made into grog you air bout coreckkt, but fer feedin cattel it is bout the best thing goin. 'it is bettern corn and most equil to oats fer putt-in on flesh and bettern oats & equil to corn fer starchy matter. i dont bleeve in lettin em hev no starchy matter he ses, it makes em stiff in the jints, starch allus acks that way. i spose he ses this is sum more teechin frum the Ageroultril colege. Yes i ses, thay bleeve it up thare es a scientifick fack but lots of farmers round hear hes proved it by tryin it. You dont want to gin much barley to very yung stock, but fer frishin of hogs or cattel fer markit you kin fix em up splendid with barley. You ast eny pork packer bout that or eny live cattel dealer. thay tell me barley will do more fer wot it costs then eny food you kin gin to yure stock. He jes sot & smoked fer a wile, then he ses wel, jinkins, that haint the kine of stock ime feelin intristid in jes now. You take a look at this he ses, and he hands me sum papers outen his pockit. One wus frum the states tellin bout the big fortins you cood make by sendin along sum munny to speklate in corn, and tuther wus frum a firm down in New York pintin out the big things that wus to be did in the cotton markit. i red em over careful. then i ses, i hopp you dont inten goin into this gamblin bisniss. it haint gamblin jinkins, its all did acordin to law he ses, and i heerd bout a feler makin a millin dolers jes slick es turnin over yure hand with that kine of stock. Yes i ses, and you cood heer bout ten thousand felers gitin turned over thareselves and losin all thay got on erth with the same game. Yude best steer cleer of them skeems, hiram, till you git yure i teeth cut enuff to save yurself frum gittin did up by the fakkers at the township fare. them yanky stock fakkers and buckit shop crooks is jes the same breed oney doin bisness on a big scale. Hiram didnt stay no longer. He see i node all bout the storey how he got took in las fall by a feler—whitch bet him five dolers he coodint fine the pea under the nut shell, and how another slick chap sole him a dimend pin wuth 35 cents fer ten dolers cash. Thase lot of felers like hiram allus on the look out to git sumthin fer nothin and to git rich quick thout workin, and sech hungry suckers is the natrel food fer sharpers sames barley is fer stock es i tole hiram. But i will close fer this time jes hear. Yurne truly,
Caleb Jenkins.



A Good Motto.

One of the late Governors of Nebraska had for a motto "Plant Trees." He talked this doctrine everywhere he went; he had it inscribed on all his stationery, and invariably enjoined it upon his friends when bidding them farewell. As a result of his persistent efforts, it is said much of the bare, bleak prairie of his State was converted into splendid groves, and the streets of the towns became lined with beautiful trees.

Spelt.

[Written for the "Farmer's Advocate," by S. A. Bedford, Supt. Exp. Farm, Brandon, Man.]

This grain is attracting considerable attention at present, and larger areas are being sown each year. Many farmers who grew it for the first time last year speak well of it, and it is evidently here to stay.

Although a true wheat, it differs very materially from the wheat in general cultivation, such as our Red Fife. The chaff, instead of separating readily from the kernel when run through a thresher, is firmly adherent and usually a small per cent. of the chaff is removed. For that reason it is used exclusively as a stock food, either whole or ground into meal.

It is found that the straw of this grain is remarkably free of rust even during unfavorable seasons. This no doubt accounts largely for its palatableness, stock generally preferring it to other wheat straw. On rich land the straw has a tendency to lean somewhat, but it seldom lodges, and the binder has no difficulty in cutting it. If allowed to become too ripe before cutting, it does not shell like other grain, but the heads break off and fall to the ground. Some years the loss from this cause is quite heavy, and for that reason it is a good plan to cut the crop on the green side and thus avoid risk of loss; this plan will also give a brighter sample of straw. Apparently the grain matures well in the stook if cut a little on the green side.

During the past two years some interesting experiments have been undertaken with this grain on the Experimental Farm, a summary of which will be found herewith.

Tests of thick and thin sowing were made during both 1901 and 1902, and with practically the same result. The fairly heavy seeding gave the largest return.

1901—				
Variety.	Drill set for per acre.	Date sown.	Ripe.	Yield per acre.
Spelt	1 bush.	May 15	Sept. 6	33.20
"	1 1/2 "	" "	" "	37.20
"	1 3/4 "	" "	" "	46.00
1902—				
Spelt	1 bush.	May 6	Aug. 20	42.20
"	1 1/2 "	" "	" "	46.40
"	1 3/4 "	" "	" "	52.20
"	1 3/4 "	" "	" "	54.40
"	2 "	" "	" "	50.20

During the year 1901, a comparison was also made between the yield of spelt and other kinds of grain, sown at the same time, and under the same conditions, with the following results:

All were sown on May 15th to 17th.		
	Days in maturing.	Yield of grain per acre.
Spelt wheat	106	3,080 lbs.
Red Fife	105	1,720 "
American Beauty oats	105	2,320 "
Mensury barley	95	2,320 "

In the same year summer-fallow yielded 51.20 bushels per acre, and unplowed stubble 48.40 bushels. Last year a test was made of early and late sowing, with somewhat negative results, and this series of experiments will have to be repeated before any conclusions can be reached.

Good results have been obtained from feeding the threshed grain to fattening steers and other horned stock, but so far no experiments have been undertaken in feeding it to swine. Owing to the large proportion of husk, I should consider it dangerous food for newly-weaned pigs, as they are easily injured from this cause. The following is a summary of results obtained from feeding fattening steers with chopped spelt, compared with the same number of steers fed with a mixture composed of one-third each of wheat screenings, oats and barley, valued at the same price per pound as the spelt:

	First cost of steers.	Value of feed.	Price sold for.	Profit.
2 steers fed on spelt...	\$81.31	\$23.41	\$129.26	\$24.54
2 " " mixed grain.	81.12	23.41	125.35	20.82

During the winter of 1901-02, comparative tests were made between Brome grass hay, Western rye grass hay and spelt straw [the two kinds of hay were valued at \$5.00 per ton, and the spelt straw at \$2.50 per ton], with the following results:

	First cost per steer.	Value of feed summed.	Price sold for per steer.	Profit.
Steers fed brome hay...	\$43.26	\$13.77	\$76.87	\$19.84
Steers fed rye hay.....	43.22	13.58	76.81	19.81
Steers fed spelt straw.....	42.90	11.01	73.69	19.78

Or in other words, the spelt straw was worth as fodder one-half as much as either of the two varieties of hay.

Progress of British Columbia.

British Columbia, from its contiguity to the Pacific Ocean, enjoys, for the most part, a temperate climate, altogether distinct from that of any other portion of the Dominion of Canada. It has an area four times as large as that of the British Isles and twice the size of either Germany or France. The mean temperature of what is called the lower mainland is about the same as that of the Midland Counties of England, but with greater rainfall during the winter months. The grass remains green all the year round, and clovers, both red and white, although not indigenous to the country, seem to have found a habitat most congenial to their production in the greatest superlative abundance and quality. The simple fact that the goat and the sheep are natives of the Province and wander in large flocks along the mountain slopes would warrant the assumption that Providence intended British Columbia for a stock country, otherwise these denizens would not be there. The quality of the products of the dairy are superior to that of any other part of Canada, and the industry can be continued all the year round without let or hindrance from frost or snow. The humidity of the climate is most favorable to the growth of roots

or less improved farms of 160 acres each which were mortgaged and abandoned for the more alluring gold-mining craze which proved so disastrous, not only to individuals, but to the Province at large. Many of these farms can now be purchased for \$1,000 each, with paying from a tenth to a fifth cash down, while the balance may usually remain on interest at six and seven per cent., according to circumstances.

In the Okanagon Valley the climate is altogether dissimilar to the coast, being much drier both in summer and in winter. Winter wheat is grown in this section, and the yield is about a ton, or 33 1-3 bushels, to the acre. A considerable quantity of tobacco is now being grown in this valley. Hops do very well indeed in B. C., especially in the Squamish Valley, about 35 miles north-west of Vancouver. In many parts of the interior, cattle ranching on an extensive scale is being carried on, and found to be very profitable to those engaged in it. The price of farm produce is far higher in British Columbia than any other part of Canada, and will continue to be so for many years to come, especially in the mining districts.

Sir Thomas Shaughnessy, when at the Coast last summer, declared that British Columbia would never have solid prosperity until she developed her agricultural resources, which have been almost entirely neglected by the Government.

It is estimated that purely agricultural products to the extent of \$6,000,000 annually have to be imported.

The total population of British Columbia is about 175,000, including 55,000 Chinese, Japs and Indians—a balance of 120,000 whites. Thus, it will be seen there is an enormous field for the development of agriculture on a profitable scale to fill the home demand, which latter is largely on the increase, as the coast towns contain about two-thirds of the total white population, who are non-productive in an agricultural sense, and, as things exist to-day, are almost entirely dependent for food on the importation from foreign countries, principally the United States and Australia.

These simple, plain and, I trust, practical facts are worthy of consideration by men whose business in life is agriculture, an occupation which has always been admitted in all nations from the earliest recorded times to be the most honorable of all and the most important. Without agriculture commerce must die of inanition and our boasted civilization descend to the primeval state of man, a truism which no sane person will attempt to deny.

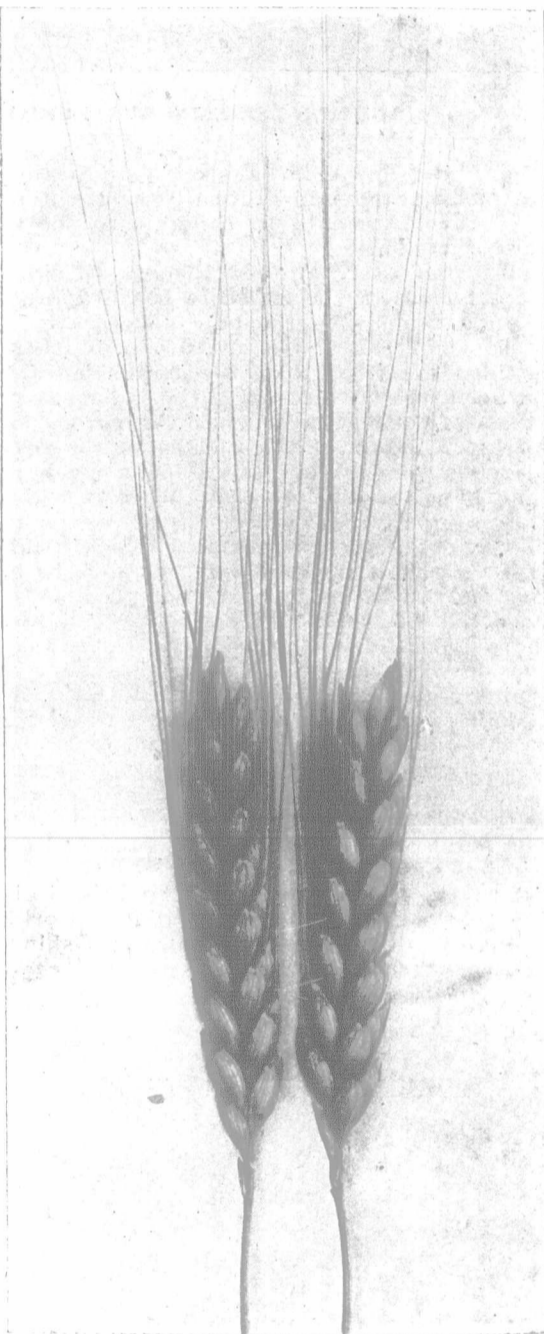
The remarks of the President of the C. P. R. on British Columbia are so pertinent to the situation that I cannot refrain from quoting them still further: "The fertile valleys of the Province have been neglected. British Columbia should to-day be a great agricultural Province. The people are, of course, to blame for this neglect. They have shown a tendency to insist upon the Government doing things they should do themselves. They have wanted bonuses for railways, and would not build without them, and the Government has been directing its efforts in that direction instead of the development of agriculture. Mining, manufacturing, and lumbering and fishing are great sources of wealth in that Province, but such industries require agricultural backing to give them stability. The wealth of the towns needs to have the wealth of the country to draw upon. The present industrial depression is due, in a measure, to some of the labor legislation that the Province has passed and to the lack of agricultural development."

I have made the practice and science of agriculture the study of my life, both in England and Canada, not as a theorist, but as a practical farmer, being thoroughly conversant with every detail of the farm, in all branches of the business, and the impression that I have formed is that some day British Columbia will be the most attractive Province in Canada to those who understand mixed farming in the truest sense of the word and are prepared to educate their minds by studying the higher branches of the business, combining practice with science as hand-maidens.

The benign climate of British Columbia will doubtless commend itself to the consideration of those who are not enamored with the frost and snow which prevail east of the Rocky Mountains with undeviating certainty for almost six months of the year, coupled with the intense, debilitating heat of the short summers. It has been my object to lay the plain, unvarnished facts before your readers, without embellishments of any kind, knowing as I do full well, from long experience, that to mislead a man by glowing false statements to break up his home and travel to a far country is a serious matter, especially to the man who has been misled.

In conclusion, I would simply say to those who are desirous of leaving their present surroundings, that British Columbia offers advantages that cannot be obtained in any other part of Canada; also, that the home demand for all kinds of farm produce is greatly in excess of the supply, and likely to be so for many years to come, hence the high prices they command. The imperative demand for the home market is more permanent than that of export, and being assured renders the farmer more independent and certain of fair returns for his skill and labor. In addition to which he sells his produce almost direct to the consumer, thus saving extortionate intermediate profits and charges which apply so frequently to the export trade in every country.

I. G. V. FIELD JOHNSON.



TYPICAL HEADS OF SPELT.

of all kinds, which are so essential to dairying. The production of hay on the alluvial lands in the Fraser valley is abnormally heavy, as three tons to the acre is not an unusual crop. All fruits of the temperate zone grow freely in British Columbia, but attain the greatest perfection in the interior, and more especially in the Okanagon Valley in the vicinities of Kelowna and Vernon. It is stated on good authority that the Earl of Aberdeen has shipped \$25,000 worth of apples this year from his ranch in the above named valley, and it must be remembered that the trees are very young and only just coming into productive bearing.

Farming in B. C. is only in its infancy, which renders it necessary to import 95 per cent. of all the agricultural products required for the sustenance of the present population, which is mostly congregated in the coast cities and principally engaged in mining, lumbering and fishing. New-laid eggs are usually 50 and 60 cents per dozen in the winter, and fresh butter 35 cents per pound. Useful dairy cows generally run from \$50 to \$75 each. It is estimated that in 1900, \$1,000,000 worth of pork was imported. Recent statistics are not available, but it is only reasonable to suppose that the imports have increased in proportion to the population.

On the lower mainland there are numbers of more

Winter Care of Manure.

A well-managed manure heap is a valuable resource on the farm, yet it is evident that this fact is not fully realized by the great majority of farmers. It has been demonstrated time and again by the best agricultural authorities, that through the practice of ordinary, careless methods the manure frequently decreases fully one-half in value. If we are willing to give the necessary attention to this work, it is clear that there will eventually be an addition to the profit side of our account. I prefer to apply the manure fresh from the stables, so long as this may be done in time to be available for the coming crop; but at this season it is not always convenient or wise. Hence we adopt other means by which the manure may be brought into proper condition, and at the same time preserve it as much as possible from waste. I wish to note a few facts that should be observed in caring for the winter accumulations that I have found to be productive of good results. First, it must be remembered that stable manure is composed of two parts, the solid and liquid excrement of farm animals. The former consists of the fertilizing elements of the food that has failed to be digested, while the latter contains those fertilizing constituents that have been digested and reduced to a soluble state. Liquid manure is very rich in nitrogen and potash, but is generally free from phosphoric acid; thus being an incomplete manure, it should be secured by some kind of absorbent and added to the solids. The care of manure should begin before it leaves the stable. Provide plenty of good bedding. Wheat straw will serve this purpose, and it has been estimated that 100 pounds of it will absorb 220 pounds of liquid manure in 24 hours. It will be more economical, and easier to handle, if the straw is run through a cutter before using in the stables. I like to have the gutters kept tight, and partly filled with the cut straw. In this way the moisture is more largely taken up than if long, coarse straw is used. It is not advisable to use more than is necessary, as such materials that are available for bedding are generally poor in fertilizing constituents, and tend to dilute the manure with which they are mixed.

The most careless observer will have noticed that manure is a substance that rapidly undergoes change; that certain microscopic organisms are voided with the dung, causing decomposition to begin at once. It will be seen that the sooner we are able to control this chemical action, the smaller will be the loss. In selecting a storage place for the manure, it is well to construct the heap in a shed, if there is one conveniently near. If not, I am of the opinion that it would not pay to build one expressly for this purpose. If sufficient pains are taken in managing the heap, I believe that the result will be almost if not equally as good. I always choose a level piece of ground; hollowing it out so that there is a slope from the outside towards the center; fill this with straw or other absorbent, and spread the stable droppings over it. Right here is where many farmers make mistakes. They throw the manure up into a great loose pile of any shape, where it ferments so rapidly that it becomes "fire-fanged," and those materials that go to form humus in the soil are destroyed. The right way is to make it broad and flat, tramping reasonably solid each day as a fresh supply is added. The object in doing this is to control fermentation, which if properly done is a valuable means in making the fertilizing elements of the manure more available as plant food.

The principal requirements of this process are a proper regulation of air, heat and moisture. If these are neglected the manure will be of an inferior quality. When much air is allowed to penetrate the heap, the temperature will be too high; if it is excluded, there will be no heat, hence the reason for having the heap moderately firm. Extremes of moisture should also be avoided, but if supplied judiciously will greatly assist in keeping the temperature of the heap at a uniform degree. In my own experience, I find that one of the most effective means in managing these essential aids to fermentation is to mix thoroughly the manure from different animals. A considerable loss of ammonia is certain to take place from time to time, but may be reduced to a minimum if suitable absorbents are used. In addition to the stable litter, a small amount of gypsum (land plaster) sprinkled over the manure is a popular means of fixing the ammonia. When the heap has received the desired treatment, carbonic acid gas, caused by decomposition, in time permeates the whole mass, and as the air is thereby displaced fermentation ceases. Thus we have prepared a quantity of fertilizing material that will be readily assimilated when we wish to apply it to tillage grounds in the spring.

J. HUGH McKENNEY

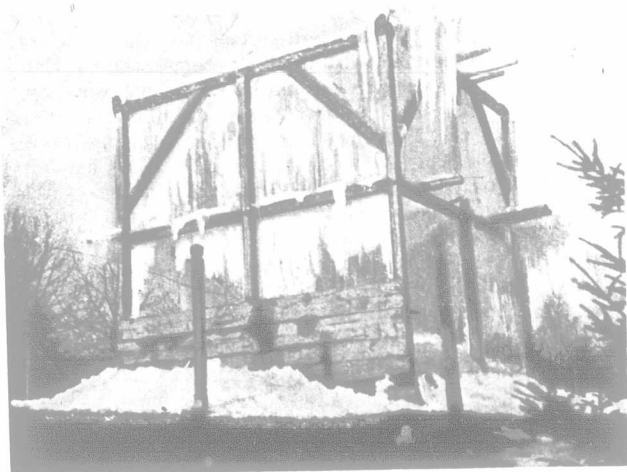
Elgin Co., Ont.

The man with a strong will, steadfast purpose and temperate habits is the one who forces the world to listen to him. Cultivate these; fall in love with your work and all will go well.

How to Cure Skins.

If the skin has been already dried, soak it in clean water for twenty-four hours, working it with the hands repeatedly during that time, until it becomes soft. Remove any small pieces of flesh or fat which may have adhered to it.

If the skin is fresh and has not been dried, it need only be washed to remove any dust or dirt. Now prepare the following mixture: Alum, very finely powdered, five pounds; salt, well powdered, two pounds; coarse wheat meal, two pounds.



ICE-MAKING MACHINE USED IN SWITZERLAND.

Mix the above in a large stoneware basin or wooden bucket, and add gradually sufficient sour milk or sour buttermilk to bring it to the consistency of cream.

Having previously allowed the soaked skin to drain until most of the moisture has evaporated, lay it on a table with the hair underneath, and taking some of the above mixture, rub it thoroughly into every part of the flesh-side of the skin, using as much force with the hands as possible, so as to drive the mixture into the pores of the skin. Much of the success of the operation depends upon giving the skin as much rubbing and handling as possible. When it will absorb no more, cover it with a layer of the composition about eighth of an inch thick, fold it over with the flesh surfaces together and the hair outside, and lay it aside in a cool place. Next day open out the skin, add more of the mixture, rub thoroughly, fold up as before. Repeat daily for two days more. Now wash the skin thoroughly in clean water, removing all the composition, hang up to drain, and when half dry rub in a fresh supply of the mixture, and repeat the rubbing daily for four or five days, adding more of the mixture when necessary. Now wash thoroughly in clean water, repeatedly changed. Make a strong solution of alum, without salt, and after the skin has drained, lay it out on a flat surface, exposed to the sun if possible. Apply the alum solution to the flesh side and let it dry, working it thoroughly all over. The more the skin is worked the softer it will be.

Ice-making in Switzerland.

The accompanying photograph illustrates the method of ice-making used in Switzerland, and the employment of this method might be practicable on certain farms in Canada where river or lake ice is situated at some distance from the farm, or where the water is not of sufficient purity.

As may be seen from the photograph, a stout framework is built, upon which loose poles are laid and a three-quarter inch or inch pipe is erected in the center of the framework. This pipe should project about a foot above the top of the frame, and should be coupled with a lawn sprinkler which revolves when the water is turned on. The water is thus distributed all over the area of the frame, and dripping from the poles soon forms long icicles. When these are large enough, the water is turned off, the icicles knocked down and the ice shovelled into the ice-house.

This framework may be built directly over the ice-house, or situated on an elevation near it, so that the ice may be shovelled on to an inclined trough placed between the bottom of the frame and the ice-house.

At the suggestion of the writer, the Copenhagen Milk Supply Co. erected one of these frames and now fill their ice-house (200x25x15 ft.) with ice obtained in the manner described. The method has given good satisfaction, and is very economical, as very little labor is required.

F. C. HARRISON.

O. A. C., Guelph, Jan. 17th, 1903.

Storing Ice.

As I have had a good many years' experience in putting away ice, I would like to say a few words to farmers about our plan. In the first place, farmers have a small ice-house compared with butchers and dealers in ice, so the bulk of ice is smaller and requires more attention. We always pack our ice on the flat; the first tier the cakes are left whole, then we break joints the next, by starting with half-cakes, so that the air has not the chance to circulate through it, and so on till we get to the top. Then just put a few cakes on top. We always leave a foot between the wall and the ice to fill with sawdust. Our ice-house is 12x12 feet, and 10 feet high to edge of roof. It supplies ourselves and two neighbors through the summer, and sometimes some ice is left in the fall. In packing we always chink up the holes with sawdust, and spread a thin coat over each tier to prevent the ice from freezing tight together. When warm weather comes it is a good plan to get into the ice-house and tramp the dust tight around the sides, first running a small handspike down around to work the sawdust down if there be any open space. It is not the amount a farmer uses that makes him shy of ice—it is the way it is preserved and kept. We are always glad to get our ice-house filled with good clean ice about ten inches thick.

Essex Co., Ont.

SUBSCRIBER.



LINCOLN WETHERS.

Winner of first prize, breed cup, cup for best long-wools, and the Prince of Wales challenge cup as best pen of sheep at the Smithfield Club Show, 1902.

THE PROPERTY OF MR. HENRY DUDDING, RUBY GROVE, STALLINGBORO', GRIMSBY.



WHEAT ON FIRST BREAKING.

Progress on the Irrigated Lands of Alberta.

BY J. M'CAIG.

There is so much of substantial and undoubted natural potentiality in the West, with its depth of wheat-feeding humus in the Red River Plains, and its airy undulations of rich prairie grasses, stretching away till checked by the rock-ribbed barrier of the great continental ridge, that it scarcely required the eye of the seer, even as early as Lord Selkirk's time, to tell of countless thousands of homes and peoples to be set down on our great central plain. There was still less of uncertainty in the hope when the great trans-continental railway brought this land to the eyes of the Eastern world. Since then the West has earned the title of "Granary of the World," and to her wheat have been added her cattle and her timber and her gold, until it looks as though the balance of Canadian population will be west, rather than east, of the Great Lakes before many years. It is not strange that such free and open facilities for home-making should be taken advantage of.

Much, however, as might have been expected, it is scarcely possible that anyone could have foreseen as great development as has actually taken place. Good as the country may be, a generation is a short pioneering stage, and it is yet some years short of a generation since the Canadian Pacific Railway came through and made general development possible. It was quite to be expected that some years of struggle, and some years of deprivation, should have elapsed before farmers should be able to sit down and count their wealth, or before they should be found freely utilizing the means and methods pertaining to the most advanced, progressive and intensive agriculture, instead of remaining a somewhat primitive agricultural people, struggling to make both ends meet. The most characteristic phase of this progressive feature has, perhaps, been the reclamation of dry or semi-dry lands, and the conversion of these to cultivation by artificial watering.

The largest irrigation enterprise in operation in the Territories is the canal of the Canadian Northwest Irrigation Company, in Southern Alberta. This canal is fed from the St. Mary's River, at a point some miles from the international boundary, and runs north-west, following the general slope of the Saskatchewan or Nelson basin, of which it is an outlying tributary. The terminus of the canal is at Lethbridge, which, from its being the headquarters of the company, and the center of the irrigated district, has been called the "Irrigation Town." The promoter of the enterprise was Mr. E. T. Galt, who is president of this company, and of the Alberta Railway & Coal Company besides. The company is under the management of Mr. C. A. Magrath, C.E., formerly a member of the Legislative Assembly, and a prominent figure in municipal interests of the town of Lethbridge. It is largely due to his energy that the irrigation enterprise has been attended with such success.

Some idea of what has been done may be gathered from the fact that during the present year settlers along the canal have harvested about twenty thousand acres of crop, principally wheat and oats, but including barley and flax. The wheat is a good sample, and will be a good milling grain. The total yield of grain is between six and eight hundred thousand bushels. Fifty binders and four steam threshers are running this year, where three years ago there was not one of either. A line of railway has been built from the Alberta Railway & Coal Company's line, which penetrates the irrigated district and links its settlements and interests together.

ment was on the canal. Though the first house was only erected in Raymond in September of last year, the town already has a population of over eight hundred people, and it promises to be the center of the district. Its interests are not limited to agriculture simply. A large flouring mill is now in operation. In conjunction with the mill is an elevator of fifty thousand bushels capacity. A beet-sugar factory is to be erected, with a capacity of four hundred tons of beets daily. Land is being prepared now for next year's crop, and contracts have been closed with the farmers for next season's crop of beets.



A SEA OF OATS ON THE MAGRATH LANDS.

Experience has proved in this and neighboring settlements that suitable beets of good saccharine properties can be produced. A flax mill will probably follow the beet-sugar business, as excellent crops of flax are grown on this land. The acreage of flax this year is nearly five hundred acres. It will be seen from the progress of these towns, and more particularly Raymond, that in the short period of three years the country has advanced to a state of mixed industrialism, instead of being purely agricultural, and that the irrigation enterprise has made possible a large addition to our natural resources.

The town of Lethbridge, already a substantial town, by reason of its coal interests, is profiting by the new agriculture. Its food resources are greatly increased, freight charges have been cut off by local production of many commodities, and its distributing business of produce to outlying places and over the mountains has grown very largely. There is every reason to believe that for some years to come the town will enjoy a substantial commercial prosperity. By the conversion of the surrounding country to agriculture, the town's interests have been put on a firm and lasting basis. Town property and homes have been beautified, with the aid of irrigation, by tree-planting. It has been asserted by some that a change

There are three towns on the canal, settled principally, but not wholly, by Mormon population. These towns have populations varying from six hundred to a thousand people, and are all growing rapidly. They are named Magrath, Raymond and Stirling. The town of Raymond is of considerable interest. Mr. Jesse Knight, a Utah millionaire, became interested in the district, and being philanthropic, conceived the idea of settling some of his poorer Mormon brethren in Southern Alberta. The Mormons are all practical irrigationists, and the site selected for his settle-

ment in climate is already noticeable. The distribution of water over the land must mean considerable evaporation, and consequently, perhaps, greater local precipitation. The growth of trees will doubtless check the winds that are characteristic of the prairies.

It must be said that, though the irrigation canal has been the primary cause of this agricultural development, it is not to be understood that all the land cultivated in this area is under actual irrigation. It is irrigable, but during the past two or three years artificial watering has not been generally necessary. The water has been used for gardens and for stock-watering purposes. If the precipitation continues as it has been for the past two years, the expense of irrigation will be light. It is a necessary safeguard, as it is recognized that we are in a rainy cycle at present and a dry day will come. The success of crops on the irrigable lands has led to farm enterprises of considerable proportions being undertaken, near the mountains more particularly. In this way the canal has done much to encourage general settlement of lands in Southern Alberta. If it proves the case that a considerable proportion of the lands of Southern Alberta are suited to agriculture, settlement will be very rapid. Its elevation and its sunshine will make it, along with its productivity, one of the most desirable areas in Canada for homes.

The impulse that has been given to agriculture, both under the canal and away from it, has had an important influence on ranching. The capacity of lands for cultivation is going to fill an important need for the rancher. With the limitation of the range, cattle do not keep as fat as they once did, and require supplementary food. This is furnished by devoting some land to grain crops to be cut green, or to tame hay, such as brome grass and timothy. On this account large proprietary ranches have been started, while hitherto it has not been considered expedient or profitable to purchase lands out and out for ranch purposes. In this way the ranching industry in this district will be put on a permanent basis, instead of being gradually limited and contracted by competition for the range lands.

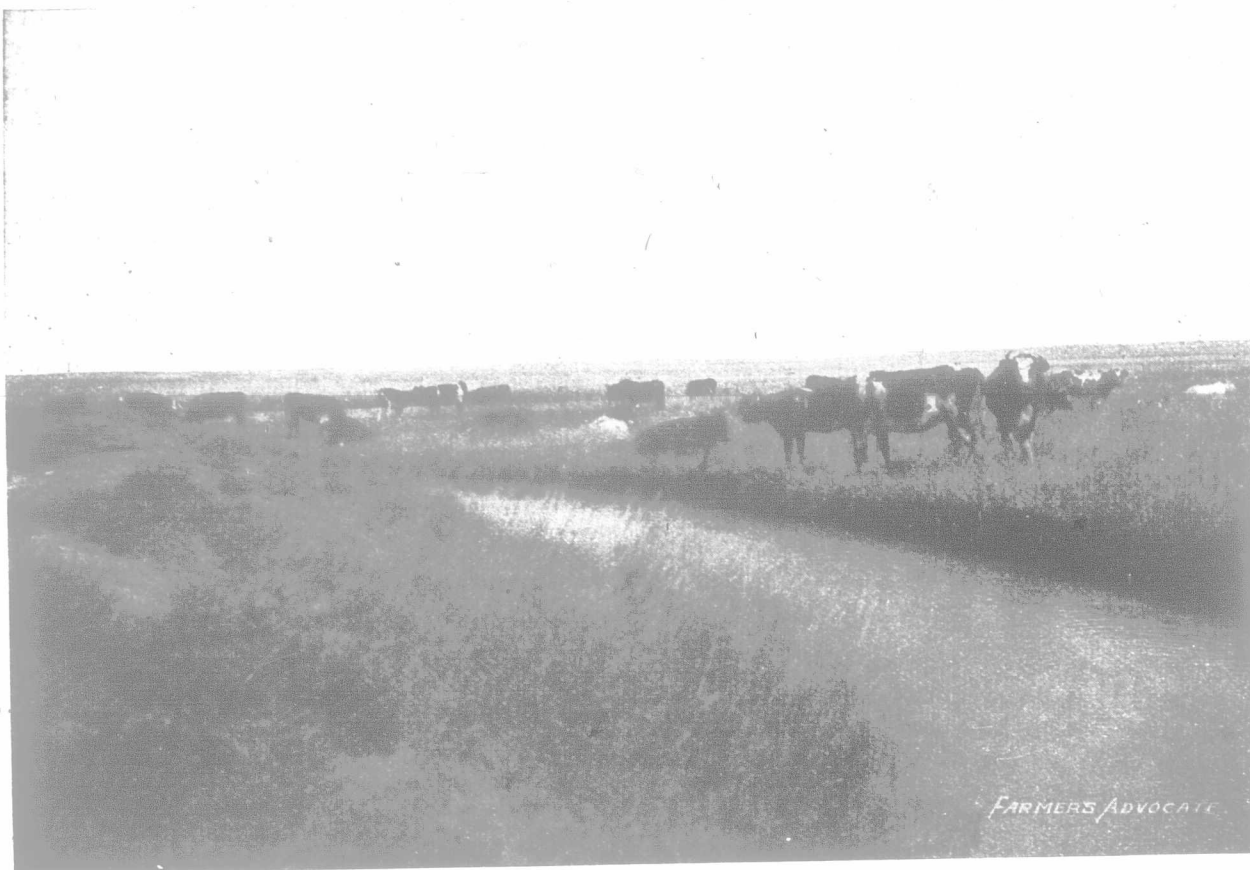
The Farm Labor Problem.

Not many districts in Ontario have been blessed with an excessive supply of farm labor for some time, and each year seems to generalize and intensify rather than localize and relieve the gravity of the situation.

A large majority of the farms in Ontario consist of 100 acres, more or less; then the large majority of the farmers in Ontario are one-hundred acre farmers. Even supposing one hundred per cent. of these farmers own their farms free of encumbrance, how many of them would engage and keep a good farm-hand from January 1st till December 31st. We venture eighty per cent. of them would try to "get along alone" for at least the four or five winter months. Where, then, is his hired man of the previous season, and what is he likely to be doing? If he is ambitious in the pursuit of agriculture, he will see to it that he finds a farmer who will employ him the year round. However, as only a minority of Ontario farmers can thus provide yearly employment profitably, a great many of this eighty per cent. are out of work one-third of their time, or else have secured work in a foundry, factory, or an industry of some similar nature, and by spring (when the farmer wants them) they are quite accustomed to their new occupation, and prefer to remain with it rather than run the risk, by leaving it, of being "out of it" the succeeding winter. Can we blame them for pursuing such a course? There



A SECOND YEAR'S HARVEST IN THE LETHBRIDGE DISTRICT.



A PARADISE FOR LIVE STOCK.

is not now the winter's wood-chopping, pea-flailing, etc., as in former times.

Then, too, the wonderful opportunities in New Ontario and the West for the young, ambitious and industrious is a sure drawing card and a good winner. Can we find fault because the man who is so fortunate as to have his own way to make chooses to fall into line with the ever-widening stream of humanity pouring into that land rich in both promise and fulfilment.

One of the suggestions we have heard, professing to affect a remedy, is that the farmer be a little more guarded in his investments in labor-saving machinery, lest, having acquired too many up-to-date implements, he awakens some morning to find himself minus a full day's work for his hired man. This cannot be the voiced sentiment of a modern agriculturist. It must surely be the echo of some past age.

Another suggestion is that of co-operation among the farmers themselves. Not necessarily a farmers' combine, but, we infer, a union of labor rather than of capital. For instance, four farmers on four adjoining hundred-acre farms could do practically all the work of the four farms, with probably one extra man, and with at most two complete sets of farm implements. This sounds better, and providing four or more neighboring farmers could be found who could arrange matters in detail agreeably, it might be well worth an experiment. A third suggested scheme is to seed down and pasture more, hence follow a system of farming which would not require quite so much labor, growing only sufficient grain for requirements of working animals, and to meet the demands of winter feeding. This idea, put into practice, would certainly yield many excellent unintentional results, though we can scarcely comprehend how this system will appreciably relieve the situation in question, since in Ontario a great share of the summer's work is simply preparation for winter, especially where much stock is kept; and since more pasture would most likely mean more stock, it is not just clear to us how the summer's work would be materially lessened.

Indeed the question seems of increasing dimensions, paralleling our endeavor to find the solution. Yet a solution there certainly is, and we hope to see it forthcoming in time to save the farmers from an increasingly awkward position, and ultimately save the Province serious loss.

In the meantime, the farmer who is at a loss to know what to do, because he cannot afford to pay the existing high wages, may study his business to likely advantage, finding out the weak-holes in his financing, and improving his methods or adopting new ones that have been tried and found successful. In short, he can greatly improve matters, and at least postpone the evil day, by a better system of farming.

Ontario Co., Ont.

W. G. COWLE.

Farm Laborers.

Mr. Thomas Southworth, Toronto, Director of Colonization and Forestry for Ontario, has made arrangements with the Dominion Deputy Minister of the Interior and the Superintendent of Immigration, in regard to securing agricultural laborers. There is a great scarcity of labor in Ontario at present. Blank forms are being sent out by Mr. Southworth to farmers who want laborers, to be filled in, so that the actual needs can be supplied from Great Britain.

Improvement of the Country Home.

Homes are where children are reared and trained to be men and women. If we are asked what we expect of men and women, we will reply, first, that they should be healthy and strong in order that they may do the work of the world; second, that they should be given an opportunity to develop whatever power or taste they may possess in order that they may do well their own particular part of the world's work; third, they should understand their own kind of work in all its relations in order that they may enjoy the doing of it. We are, in fact, hoping for a time when the home universally will be a source of health, efficiency and joy.

Many reasons may be given for the lack of interest which country women take in their homes; there seem to be three really good reasons. The first is, they have never been taught and do not understand their own business, that of housekeeping and homemaking. The second is, they know little about farming, either in plant or animal life, and so do not sympathize with their husband's business of farming; and, third, both husband and wife too often have not been taught to think about the wise use of money; the dollars often are very scanty, but even these scanty dollars are spent for food that does not nourish,



MRS. VIRGINIA C. MEREDITH.

School of Agriculture, Minnesota State University.

for clothing unsuitable in fabric and style, and for furniture not good in form or durable in construction, and these scanty dollars are so spent because these people were left untaught when they were young, when they could have been easily impressed.

It is too much to expect that fathers and mothers can, in addition to their own necessary work, teach girls and boys all they ought to be taught. We know that many earnest educated people going into a new country, have not taught their own children even to read and write. So

then, the highly-fitted teacher, the specially-fitted teacher, is the great need if homes are to be made what they ought to be.

The first effective step in bettering homes is generous support of the agricultural schools and colleges already established. Urge young men and women to attend these institutions; urge legislators to liberally provide for the growth of these institutions.

The idea seems to be gaining ground that the one who makes a home should be prepared for the undertaking, and that the principles should be taught in our common schools. There is now under way a new movement in education, whereby children (boys and girls) are taught numbers and reading while engaged in doing something else in the school. A pleasant exercise, illustrating the plan, is this: The teacher says: "Next Friday we are going to invite the children of the Locust Grove school to visit us. How would you like to make some cookies to have for a treat at that time?" Of course there could be but one answer to such a question. The teacher then writes upon the blackboard the recipe for cookies, with the explanation that this recipe is twice too much, and that when each copies it half the quantities should be written. Here is a lesson in reading, spelling, writing and arithmetic, learned with eagerness, because it is the necessary preliminary step in having cookies. Of course one will say, "Yes, but this is for a city school, specially fitted with an equipment of range or stoves, material and utensils." True, but could not wise school commissioners put such an equipment in any school? I have known school commissioners to equip the schools of an entire rural district with globes and charts (at the solicitation of a salesman) which cost far more than would an equipment for sewing and cooking (which the parents ought to solicit). The teacher wise enough to use some such system is, of course, trained at an agricultural or other technical school, and must be paid fair wages and employed for a long term.

If improvement is wanted along practical lines, then old, unpractical methods must be abandoned and something better be found and substituted. This same exercise of the cookies can be carried forward to teaching geography, commerce and manufactures. Where did the flour come from that is used in the cookies? In which State did the wheat grow, across which lake, down which river, across what country did the flour travel? And the sugar and the spice; the butter—what is a dairy cow? Where do dairy cows come from; how should they be taken care of? Where should milk be kept? At what temperature should cream be churned? Please look at the thermometer that hangs beside the door; what degree of heat is indicated to-day? And the eggs in these cookies—how many of you keep hens? What variety? How many varieties of pure-bred fowls have you ever seen? Do you think your hens are laying as many eggs as they should? Just how many eggs do they lay in a week? What does an egg cost? I know a bright farm boy who keeps an account with his hens with chalk on the door of the henhouse. He charges the hens with all the feed he brings to the henhouse, and credits them with every egg he takes away. It is a great accomplishment to know anything certainly from one's own investigation. And where did the iron come from of which the stove is made? The tin of the baking-pan? The clay of the mixing-bowl? The coal or wood used for fuel?

Why would it not be well to eat only cookies? What is diet? What does the body require for growth, for repair? Ought young and old, those working indoors and those working outside, to eat the same things? How could you have in your home a varied diet? Have you a garden? How many kinds of vegetables do you raise? Have you ever tried selecting the fine, large, plump seeds to plant by themselves, and then plant the little, shriveled seeds by themselves, just to see the difference in results? Have you ever tried planting vegetables in long rows and tending them with a horse and cultivator? Do you like roasting ears, tomatoes, cabbage, onions, oyster-plant, eggplant, lettuce, beets, potatoes, asparagus, and what about strawberries, raspberries, grapes, plums, apples? How do people have such things? Does it cost most in money or most in thought and energy to have these things?

Why were the cookies baked? What effect did the heat have on the dough? It would not be hard to interest even young boys and girls in yeast ferment, and demonstrating the effect of heat and time in changing a useful substance into a positively harmful one.

Possibly while the baking is being done the teacher may bring out the fact that the sun is the source of energy, and that the wood burns in the stove and gives off heat because the tree in the forest absorbed through years the sunshine, the warmth of the sun.

Young boys and girls will be interested in sewing. The evolution of the needle from a fish-bone to our present bright steel one, will arrest the attention; the children will like making the

stitches and seams, and learning how one leads up to another; they will like to tell what they know of cotton and linen, silk and wool, and before they realize the way they have come, boys will be making bags for marbles, and girls many useful things.

Instruction of this kind, under a competent teacher, can be carried forward without textbooks, and the result is sure to be felt in the homes. Such instruction gives opportunity for talks along household subjects in which both boys and girls are interested. The fact learned in the study of physiology, that the skin is an organ of excretion that carries away in a safe channel some of the waste of the body, may be the text for a talk on bathing; the plunge bath that the boy takes in swimming; the sponge bath that ought to be a weekly, if not a daily, exercise; the well-ventilated bedroom; the complete change of clothing for sleep; the two sheets, etc., etc.

A study of the use of money should be begun early, and the child taught that the way one's money is spent shows what kind of person one is, and also determines what kind of person one will become. Money in the family is spent in four lines: for existence, for comfort, for culture, and for philanthropy; and when the child is taught clearly what these divisions mean, there is likely to dawn a conviction that it is shameful not to spend a proportion of what one has or earns for one's own culture or education, and another portion for philanthropy, or helping those who need help. Moreover, the habit of spending wisely in the family fosters a citizenship that spends public funds wisely, fosters a spirit that submits cheerfully to taxation for schools, good roads, and, indeed, everything that uplifts and broadens.

So, then, if we would help the making of good homes and the improvement of bad ones in the country, we will encourage the sending of young men and women to agricultural schools, where home and farm topics are taught in their right relations, and the second step would be to secure such young people for teachers in country schools, by giving them ample, even generous, compensation, and employing them for a long period.

VIRGINIA C. MEREDITH.

DAIRY.

Western Ontario Dairymen.

The thirty-sixth annual convention of the Western Ontario Dairymen's Association was held in Brantford on January 13th, 14th and 15th. The attendance was large at all the sessions, and much practical discussion was indulged in throughout.

The President, Mr. Aaron Wenger, in his address referred to the immense commercial importance of the dairy industry. The work for this year should be to maintain our position as cheese exporters and endeavor to largely increase the volume of our butter trade. The success attendant upon Mr. Barr's instruction in cheesemaking indicates that we should have an instructor in buttermaking as well as in cheesemaking. For this purpose Mr. Arch. Smith has been appointed for the ensuing year. As the result of this year's operations, our people are richer in money, our soil is improved in fertility, and we are in better condition to go forward in 1903.

DIRECTORS' REPORTS.

The report of the directors heartily endorsed the appointment of a travelling instructor in cheesemaking, and recommended an enlargement of the scheme. Dairymen are urged to hold local meetings, except in places where the Farmers' Institutes do the work for them. The directors endorse the idea of having a short course of instruction especially suited to the needs of instructors. The competitions at the convention and at the large exhibitions are conducive to healthy rivalry among dairymen. The condition for the competition at the Toronto Industrial next year will be largely improved upon, and the management of the Western Fair has also been asked to make provision for a good competition. This year's report of the convention will be got out much earlier, so that it may be studied well before the season opens.

The Secretary-Treasurer's report showed a good balance on hand after a year of unusually active operations.

INSTRUCTORS' REPORTS.

Mr. James Morrison reports that the system of paying for milk for cheesemaking according to quality is not becoming general as fast as its merits seem to warrant.

Instructor Bristow reports considerable improvement in the conditions about the factories. He also urges every maker to become familiar with the alkali test.

Instructor Millar found a large number of makers who leave too much whey in the curd when dipping. This keeps the curd a long time on the way, and the texture harsh after milling.

BENEFITS OF THE ALKALINE TEST

was the subject of a paper by S. P. Brown. The changes in the general conditions and in markets necessitates a change in the methods of cheesemakers. The new test for acidity with the alkali solution, is a grand forward step in the industry. This test can be used at any stage of the process. Butter-fat does not interfere with its action. It is most decidedly accurate. Instructors should get acquainted with this test and teach it to all their makers.

CRUCIAL POINTS IN CHEESEMAKING.

Mr. Publow added his voice to the large number who are urging for cleaner and better equipped cheese factories. The most vital points in cheesemaking were taken up, as were reported in the last issue of the "Farmer's Advocate" from Mr. Publow's address before the E.O.D.A. (See page 66.)

Mr. Barr followed. He also emphasized the importance of keeping factories clean. The weakest points in our makers are that they do not select their milk, and they are not clean. Many makers are known who cut the curd too large and irregular. By using the alkali test the acidity of the curd can be tested at any stage of the operations. It is quicker and more accurate than other tests. The only difficulty is that some people cannot always detect the right shade of color. One per cent. of acid at salting is enough in a normal working curd, but if gassy it requires about 1.2 per cent. of acidity. Here again the alkali test is useful, as it is always safe to salt at one per cent. of acidity.

POINTS IN DISCUSSION.

Some factories have intermittent flavors, due to the influence of varying conditions.

The cause of fruity flavor was found to be a yeast or yeasts which are present on all kinds of trees, and which give to decaying fruit its characteristic flavor. These yeasts are blown to the milk-can, and develop rapidly in the milk. Rancid flavor was found to be caused by a microbe. This organism affects the body of cheese, makes the casein soluble and splits the fat up into rancid smelling compounds. Cheese containing these bacteria in large numbers breaks down quickly, giving the same effect as if twice or three times the amount of rennet had been used. Acid hinders the development of these germs, but in washing curd much of the acid and sugar is washed out, making conditions more suitable for the growth of the rancidity producing forms. These germs secrete enzyme substances similar to rennet, and which continue their evil effects after the germs are killed. This form of bacteria is found in dust and dirt. No maker should be held responsible for bad flavors when affected whey is returned in the milk-cans. Proper cooking will prevent the development of the fruity yeasts. A nice shady nook is often the worst place to set the milk-can. Cool the milk down well, and cover the can up at night where it is possible.

IMPROVE THE FACTORY.

At the Tuesday evening session, the convention was formally opened by an address of welcome from the Mayor of the City, and happily responded to by President Wenger. As Mr. A. F. McLaren, M.P., could not be present, Mr. Daniel Derbyshire, President of the E.O.D.A., took his place on the programme. In his opinion the best way to improve the quality of our products, is for the farmer to make it his business to look after the factory and the maker. Too many factories are built on a cheap plan, as if the business

wasn't worth a good building. We want factories put up on good stone foundations, with brick walls, cement floors, flower gardens and lawns. We want a better class of people to become associated with us in this business. We must all feel it our affair to increase the quantity and improve the quality of our dairy exports.

STATISTICS.

Mr. Wieland, of Montreal, took the place of Mr. R. M. Ballantyne, who was detained from the convention. He said Canada's success and increase in the production of cheese and butter has been monumental. Just a few years ago the States exported two million boxes of cheese to Great Britain, against

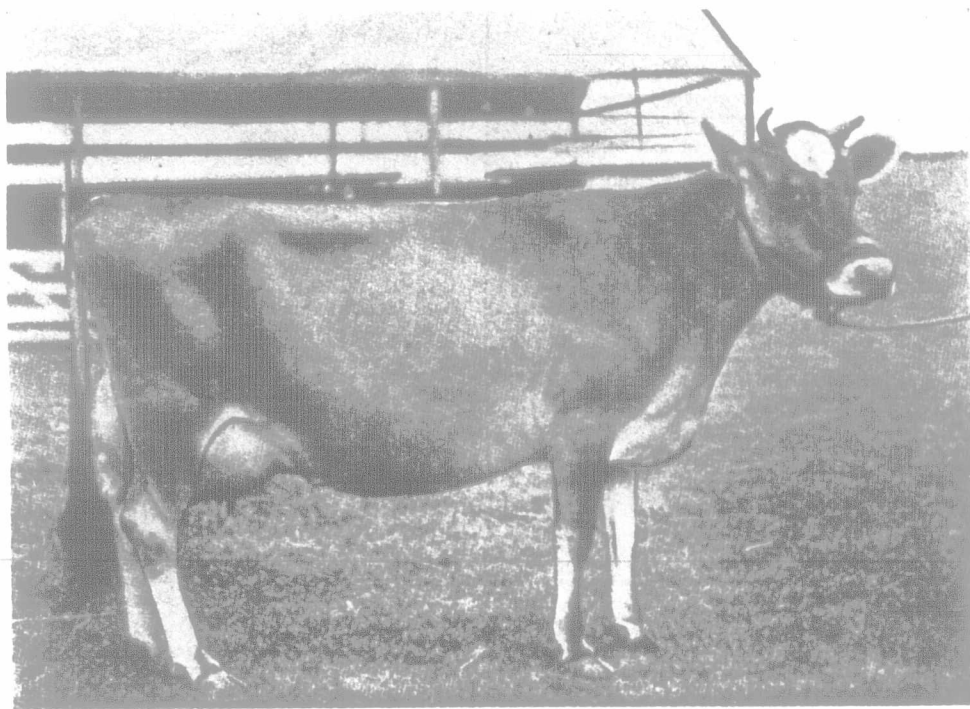
Canada's 200,000 boxes. Last year the Americans exported 204,000 boxes, while our exports composed 68 per cent. of the British trade. Our prospects in the butter trade are just as promising. Great Britain uses one hundred million dollars' worth of butter annually, of which Denmark supplies about one-half, and Canada one twentieth of the whole. In this direction we should push our export trade. Buttermaking is not less profitable than cheesemaking, and has many advantages over the cheese industry.

THE CHIEF OF THE U. S. DAIRY DIVISION.

As a visitor, Major Alvord offered a few friendly criticisms of our dairy industry. To him it is surprising that Canada is devoting so much time and energy to the cheese trade, which is now the best established of our industries, while the butter trade, which is just as important, is comparatively ignored. To his mind we should now exert every effort to increase our butter exports to the proportions of those of cheese. The Major then outlined the work and objects of the various dairy schools and organizations in the principal dairy States of the Union. The Americans are not now great exporters of cheese and butter, but are supplying a large home market. In many places they are turning their attentions to the manufacture of different types of cheese, Edam, Limberger, etc.

JUDGES' REPORT ON CHEESE AND BUTTER EXHIBITS.

We beg to report that after a careful examination of all the lots competing for the various prizes offered by your Association, we have awarded the cheesemaker's trophy to Frank Boyes Kingsmill P.O., whose lot scored 98 points. Following is the list of awards:



JERSEY COW, GARANTIE 5TH.

Winner of first prize at the Royal Show, 1902.

THE PROPERTY OF THE MARQUIS OF WINCHESTER, AMPFORD, ANDOVER, HANTS.

July is the month in which most bad flavors are found.

In weighing take a sample for testing from every can.

Get the alkali from a reliable source. Alkali test makes better cheesemakers.

Use judgment as well as alkaline solution in making the test.

When the curd is soft, even if the acid is right, put in a little extra salt to harden the curd.

When curds have bad flavors, it sometimes improves them to wash after first developing plenty of acid.

When fruity flavor is found, make a test of all the samples. If one is found faulty, visit the farm and see if the trouble cannot be located. In some cases it is from a whey starter.

It is a good plan to ask your patrons to the factory to see their milk made up.

Cheese that is turned out good after seven days' curing may be completely off in three months.

We must all co-operate to make a general improvement all along the line.

INJURIOUS FLAVORS IN CHEESE.

Prof. Harrison, of Guelph, gave this question a clear and practical discussion. During the past summer many samples of cheese were analyzed to determine the causes of some of the common injurious flavors. Samples of cheese were obtained from a Montreal dealer, which were described as having "off" flavors, "fruity" flavors, "rancid" flavors and "miscellaneous" flavors. The samples were bacteriologically examined, and organisms isolated which produced characteristic flavors in pure curd when it was seeded with the cultures of the different bacteria and yeasts.

CHEESE.—White September—1st, 98, Frank Boyes; 2nd, 97, R. H. Green; 3rd, 96½, A. T. Zell. Colored September—1st, 97, Robert Cuddie; 2nd, 96½, J. H. Evans; 3rd, 96, John Francis. White October—1st, 97½, Miss Mary Morrison; 2nd, 97, W. A. Bell; 3rd, 96, Frank Travis. Colored October—1st, 97½, S. P. Brown; 2nd, 95½, John Francis; 3rd, 95, Frank Travis.

BUTTER.—Prize 56-lb. box—1st, 98½, W. M. Waddell; 2nd, 98, Robt. Cuddie; 3rd, 97, A. C. MacEwan. Ten one-pound prints—1st, 98, Andrew Riddell, 2nd, 96½, E. M. Johnston; 3rd, 95½, J. R. A. Laing.

Cheese.—Flavor is the most important factor in cheese or butter, as no buyer could pass goods as best that were defective on this point. We found that many of the cheese submitted were sweet, fruity, or badly off. Considering the favorable season and time of year these were made, this should not have been the case. Many of the lots were seamy or streaky in color. This fault requires looking into. The texture and color of the bulk of the lots were satisfactory. The style was generally good, but an absence of cap cloths was noticed, and we would recommend all factories to use a permanent cap cloth.

Butter.—We are pleased to record that we found the box butter a most creditable exhibit; some of it of a very high class. Some of the samples were unsalted, others salted one, two and three per cent., all suitable for the various markets. The objections we desire to point out are stably and other undesirable flavors. Some lots overworked, some dry, caused by churning and working at too low a temperature. Many of the lots were poorly papered, having only one paper and that not the best quality. We strongly recommend all makers to use the best quality of heavy pure vegetable parchment and double paper.

JOHN MCKERGOW,
J. B. MUIR,
J. A. RUDDICK.

Mr. Ruddick then read a paper on this subject, the gist of which is contained in our report of the Ottawa convention.

MAKING UNIFORM CHEESE.

Mr. A. T. Bell outlined the process of making cheese of a good, uniform quality. In the first place the maker must have good judgment and considerable intelligence. He must weigh in the milk himself, and should sample every can. When the milk has been brought to the right temperature, it should be tested for acidity, then he can tell how fast it is going to work. Suspicious samples should be tested at once. Take no chances on rennet, but always use the best and plenty of it. Cut the curd uniformly and at the right time. See that the knives are clean and sharp. Be very careful with the cooking. When the curd is at the right temperature draw off half the whey, and when the acidity is right draw off the rest. Test for acidity at dipping. The mill should cut clean without pressing. Weigh the salt, put it on evenly, stirring the curd at the same time. Always put an equal amount in each hoop, and cure at an even low temperature.

IN DISCUSSION

the following points were brought out:

A three-eighths curd knife is about right.
Cut curd three times in the vat.
Pile curd about three layers deep. Agitators are preferred, but a rake is used to finish with. Start agitator as soon as the curd is cut.
Stir enough to keep the curd from matting.
Stir for ten minutes before turning on the heat.

In cooking raise from 86 to 96 in about half an hour.

Wash a faulty or gassy curd, but never a normal one.

On a greasy curd the hot iron is not always exact.

It is possible to make a dead-white cheese, and all markets are asking for them.

The wavy, streaky colors are decided defects, but cool-curing does not cause them.

Eastern Ontario has improved her cheese because the makers have got away from a stiff curd and long cooking.

OBJECTS OF THE MODEL DISTRICTS.

G. C. Creelman, Superintendent of Institutes, took up the question of model districts as they were operated last summer. In previous years it was found that instructors had too much to do, so the Department of Agriculture decided to put an instructor over a small number of factories. The experiment has proved so satisfactory that the scheme will be much enlarged in the future, and the factory men have expressed their willingness to bear a part of the expense. To make a successful instructor a man requires three qualifications. First, he must be an experienced, efficient cheesemaker; secondly, he must have tact to handle the owners and makers, and, thirdly, he must be agreeable with the patrons. The patron is the important factor. There is an inclination among farmers to slight his responsibility in the dairy business. He is apt to feel that when he has delivered his milk sweet his responsibility ceases. The instructors and directors of this

association could create much helpful discussion in localities between now and the opening of the season.

THE CENTRAL CURING-ROOM.

Mr. R. M. Ballantyne, in a short address, raised the question of the management of central curing-rooms. To his mind the erection by the Government of the curing-rooms at Woodstock and Brockville had a pauperizing effect upon the people using such rooms. He suggested that large refrigerators be built by private enterprise or by syndicates, to which cheese could be shipped and held until cured.

Prof. Robertson pointed out that the Government curing-rooms were erected more for the purpose of experiment than for commercial enterprise, and emphasized the fact that cheese should go into cool rooms within 24 hours after it is taken from the press, hence the necessity of having cool curing-rooms at the factory.

Prof. Dean: What we need is to have men with capital erect cool-curing rooms at central points. In experiment we have not found any fault with cheese kept for a week at ordinary temperatures and then cool-cured. Our results, however, indicated that cheese put directly into boxes and then cool-cured gave a cheese of better quality and flavor.

Prof. Ruddick believes that ice chambers could and should be put in curing-rooms at all factories.

INSTRUCTOR BARR'S REPORT.

Mr. Barr gave his report of the model district in Lambton. He found bad floors, curd sinks and rack responsible for most of the off-flavors and other defects in our cheese. He cautioned young makers not to work in poorly equipped factories, as it is impossible to make a good reputation under such circumstances. By the end of the season there was a marked improvement in the milk supplied and in the conditions about the factories.

THE RENNET, HOT IRON AND ALKALI TESTS.

Prof. Dean discussed the relative merits of these tests in cheesemaking. To a long experienced maker none of these tests is absolutely necessary. There is no relation between the action of rennet and the acidity of the milk; it is doubtful if it is any indication of acidity. The hot iron test is based on the happy result of an accident, and all tests made with the hot iron are mere accidents. It is like putting hot horse-shoes into the churn to make the butter come. The alkali test or acidimeter, is a test of the acidity of milk or curd, based upon a scientific fact. The main point for a maker to know is how to control the acidity of his milk and curd. Do not throw away the hot iron or rennet tests, but learn to use the acidimeter.

OBSERVATIONS.

Prof. Robertson summed up in a few words the lessons learned at the Cheese and Butter Fair. It was remarkable that the best appearing cheese did not score out near the top. We cannot depend upon appearance in cheese. The poor rinds and absence of cap cloths were unfavorably noticed by the judges. In white cheese the market demands a chalk shade rather than an amber. There is a pronounced lesson in the fact that twelve of the lots of cheese were termed not clean. Paraffining preserves the appearance of cheese, but should not be used unless the cheese is put in cold storage. Before we introduced cold storage in transportation, our dairy exports decreased to 32,000 packages; last year they rose to 523,000 packages.

COMPARISONS.

Mr. Heyd, M.P., gave figures to show the relative importance of Canada's great industries. The value of minerals exported last year was thirty-five million dollars; of timber and lumber, thirty-two millions; of fish, fourteen millions; of manufactured goods, eighteen and a half millions, and of agricultural products ninety-six millions.

The transportation problems were then discussed by Prof. Robertson, as we reported from the E. O. D. A.

Mr. A. F. McLaren, M.P., pointed out that the dealers in Great Britain were not wholly blameless of the poor condition of our butter and cheese when offered for sale over there.

The presentation of the \$150 trophy to Mr. Frank Boyes, for the best cheese, brought to a close the cheesemakers' day of the convention.

BUTTERMAKERS' DAY.

Mr. Arch. Smith, of the Strathroy dairy school, opened the buttermakers' session with a paper treating of the two classes of creameries, the cream-gathering and milk-separating. The fact that four-fifths of the butter made in Western Ontario is manufactured in cream-gathering creameries makes it plain that here is where there is most need for improvement. To overcome some of the difficulties in producing butter of good flavor, the Strathroy dairy school experimented with the pasteurization of sour cream. A large vat of cream was ripened to churning point and

divided into two equal lots, one of which was churned at once and the other pasteurized before churning. The pasteurized cream churned just as easily as the raw, the butter was always better, and the longer it was kept the wider the difference in quality. The dealers in the Old Country have reported very favorably on the butter from the pasteurized cream. One of the first steps to be taken in the improvement of the cream-gathering system is to gather the cream in individual cans. The best vats are now made narrow and deep, with plenty of space for ice. There are only about six or eight creameries in Western Ontario that have storage-room for more than one week's product. In many cases butter is left for hours on the station platform to melt in the summer's sun. We also want buttermakers to try to improve themselves.

DISCUSSION.

Butter should be subjected to a temperature of 10° F. above zero to thoroughly freeze the interior of the packages.

The skim milk from a hand separator is in many cases worth from 10 to 20 cents per cwt. more than that returned by some creameries, but where the returned milk is sweet there is very little difference.

Creamery butter should be sold regularly. Scorched flavor passes off the cream.

In pasteurizing cream, heat from 175 to 185° F.

Ripe cream contains from 5. to 6.5% of acid.

PROF. DEAN.

On taking up the question of buttermaking, Prof. Dean talked straight to the producer, the maker and the dealer. The producer should weigh and test the milk from each cow to determine her butter-producing capacity. Form is not a sure indication of dairy excellence. A cow should give at least 250 pounds of butter per year. After a careful selection, the farmer must feed his cows: eight pounds of meal per day for every pound of butter produced, is a good rule to follow. A mixture of four pounds of bran, three of oats and one of oil-cake, with ensilage and clover hay, is a good ration for an average cow.

Skim milk must have more care. The tanks, pumps and pipes are seldom clean. The patrons should receive only their just allowance of skimmed milk. Where the cream is gathered, it should be subjected to a temperature of 50° F. as soon as separated, and collected each day if possible. The oil-test churn has been a very serviceable apparatus, but the time has now come when we should adopt some more simple and scientific scheme, something based on the content of fat, rather than upon the butter oil. Too much acid will bleach the butter just the same as in cheese. In salting remember that a quarter ounce of salt per pound of butter gives one per cent. of salt; half ounce, two per cent. salt; three-quarter ounce, three per cent. salt, and one ounce 3.5 per cent. salt. Selling direct to the Old Country dealers is being experiment with at the O. A. C., but as yet no market reports have arrived.

Miss Rose said, in the course of a few remarks, there should be no such thing as baking butter. When we remember that this butter is the result of carelessness on the part of the producer and maker, it is a great reflection upon the skill of our people.

THE WORK FOR THE COMING SEASON.

G. H. Barr outlined some of the work before the dairymen for the coming season. It is simply surprising how many patrons do not know how to care for milk. The Eastern Association intend to put on twenty instructors next summer. The Montreal dealers have said they do not want any colored cheese from Western Ontario. Are we going to let this thing go on? The improvement in our cheese is dependent upon the willingness of our makers to improve their individual conditions. The instructor should visit his factories every three weeks, and to do this it will require about \$15 from each factory. Are we willing to pay this? The East, Quebec and the Maritime Provinces are away in the advance of us in progressive cheesemaking. Surely we are not going to take a back seat. We must have instructors, and we must improve or our business is doomed.

The officers for the ensuing year are: Hon. President, Hon. Thos. Ballantyne; Hon. Vice-President, Aaron Wenger; President, Jas. Connolly; 1st Vice-President, J. N. Paget; 2nd Vice-President, Robt. Johnston; 3rd Vice-President, T. B. Millar. Directors: District No. 7, J. McQuaker; No. 8, H. Eagle; No. 9, John H. Scott; No. 10, T. Ballantyne, Jr.; No. 11, W. K. McLeod; No. 12, I. W. Steinhoff; No. 13, A. F. McLaren. Auditors, J. A. Nelles and J. C. Hegler. Representatives to Industrial Fair, A. F. McLaren and J. N. Paget. Representatives to Western Fair, T. B. Millar and John Brodie.

As Represented.

Many thanks for knife premium received yesterday; found it quite as represented. Wishing you continued prosperity.
J. ANDERSON,
Wellington Co., Ont., Jan. 24th, 1903.

Methods in Dairying.

All signs point to the dawn of a great dairy season in 1903. Other branches of farming have their ups and downs, but dairying goes steadily forward. The reports of the two great Ontario dairy conventions, specially prepared for the benefit of our readers by one of our editors, indicate progress, especially in the manufacturing and curing end of the business, but less was said than at the old-time conventions about the fountain-head of the whole business—the cow and her management. We had better not lose sight of her. She must be bred, managed and fed aright, or else there will be little milk either for cheese or butter.

Returning from the Brantford dairy convention, a call was made at Rettie Bros.' dairy farm in Oxford County, who about eight years ago started their present herd with a \$28 Holstein cow. In their selections they have attached a great deal of importance to dairy form and handling quality, coupled with a creditable record at the pail. They favor a medium to a very large cow. By liberal yet judicious feeding and treatment, they have steadily aimed to increase the milk product, which is sent to the Brookbank creamery. Their judgment and methods have been vindicated not only at home, but at notable public tests, such as the Toronto Industrial Exhibition dairy test, two years in succession, and first in her class at the last Ontario Winter Fair, as recorded in the January 1st "Farmer's Advocate."

The feeding method and general care of the herd are decidedly simple. At present the herd is fed twice per day with a little chaff at noon to work over. First thing in the morning clover hay is given, followed by ensilage and meal. All the ensilage the cows will eat is given, but the meal allowance varies according to the period of lactation and amount of milk being produced. When the cows are fresh and milked three times per day, as much as 25 pounds of meal daily is fed in three feeds. In the evening clover hay is again fed first, the ensilage and meal being fed as in the morning. The meal, as fed at present, consists of ground oats, buckwheat and bran. An effort is made to narrow the nutritive ratio of the ensilage by feeding clover hay and narrow grains. Some roots are fed while they last, but no condimental foods are used. The cattle are let out to water once a day. It is thought the exercise in the fresh air improves the appetite, and so counteracts the harm done by lower temperatures. The cows are kept clean, but are not regularly groomed. The calves are mostly dropped in August, on account of the best cows having to go to the exhibitions. Rettie Bros. consider it important to keep the cows in good condition when they are dry, as it gives them more vigor when they freshen. The calves are fed on whole milk for about thirty days, then gradually weaned to skim milk, with a little oil-meal. The heifers drop their first calves at about two years of age, and are then kept steadily at work. In milking, strict attention is paid to regularity in time, and in order of the cows milked. At times when official tests are being made, and unusual regularity is practiced, the increase in the quantity of milk is very marked. Although their methods of feeding and caring for the herd are such as any person could practice, Rettie Bros. are free to admit that there is more in feeding dairy cattle than simply knowing how.

Grooming Cows in Winter.

Please give your views on the question of cleaning and carding of cows in winter. My neighbor asked me why I wasted my time in doing such work—there was no profit in it. My reply was, that by cleaning them the pores of the skin are opened, keeping the hide purer and producing a better circulation of the blood and so making the cow happy and contented.

Brome Co., Que. **SUBSCRIBER.**

Ans.—So far as we are aware, the question of grooming cows has never been reduced to a financial basis, and it probably never will be, as its benefits are too indirect to allow of a reduction to dollars and cents. However, in all matters of dairying the truth that "cleanliness is next to godliness" cannot be made too prominent. On most farms the work of grooming the cows is not felt to be obligatory or compulsory, but is simply one of the jobs that receives attention when other work is not pressing. There is never any doubt that it does good, it is simply performed or neglected according as time will permit. No fixed rule can be laid down in the matter. Some cows are in daily need of grooming, owing to their environment and condition of skin and hair. Others are plentifully bedded, and naturally sleek and clean. In every case, however, the rubbing of the skin stimulates the secretive action of the blood. The operation certainly adds to the usefulness and beauty of the herd, and is one of the most potent factors in increasing, by indirect methods, the productiveness of the cows.

A Balanced Ration for Steers.

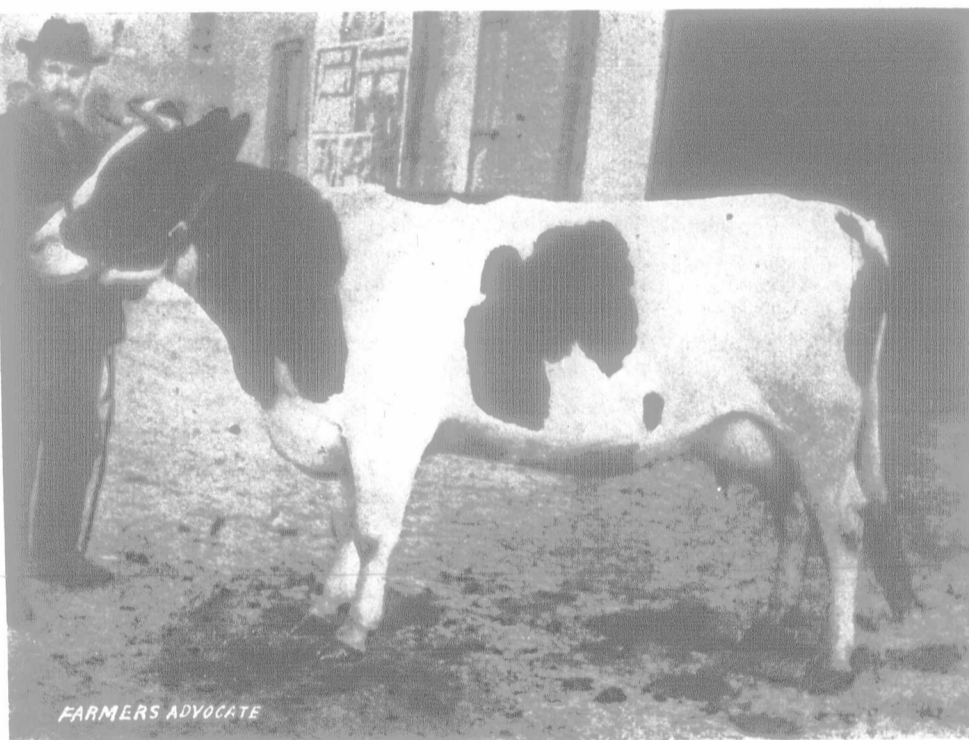
Is it practicable for the average feeder to work according to the balanced ration theory? I am stall-feeding a lot of steers two to three and a half years old, and have for roughage: clover hay, oat, wheat and barley straw, and a supply of fairly good ensilage, and oats, barley and wheat grain, but no peas nor corn. Can get shorts and bran readily. Now, how should I combine the feeds I have, or supplement them in order to make a properly proportioned ration, indicating also about the quantity that should be fed per head per day? D. A.

Perth Co., Ont.

Ans.—It is quite practicable and profitable for a farmer to feed according to the balanced ration theory. Generally speaking, however, the feeding standards given in scientific works appear to be somewhat richer in protein than is necessary to secure the most profitable results. The most noticeable divergence from the commonly accepted German feeding standards is the preliminary period, where a nutritive ratio of 1:6.4 is usually indicated. Our feeding operations here, and my observations of feeding operations in different parts of Canada and the United States, lead me to think that a much wider ration may be fed with very good results. The difference, however, between Canadian experience and European experience (the source of most feeding standards) seems to grow less as the feeding period advances.

To illustrate: In December, 1901, a lot of steers, with an average weight of 1,000 pounds, made gains of two pounds a day on a ration of:

- 35 lbs. corn ensilage,
- 20 lbs. Swedish turnips,
- 5 lbs. mixed hay.



IAN THE JEWEL MECHTHILDE 2708.

First-prize Holstein cow, over 36 months old, in dairy test, Provincial Winter Fair, 1902. OWNED BY RETTIE BROS., NORWICH, ONT.

The nutritive ratio of the above ration was about 1:10.5.

To maintain this rate of gain, however, it was necessary to feed the same steers in April:

- 50 lbs. ensilage,
- 5 lbs. mixed hay,
- 6½ lbs. gluten meal.

which ration had a nutritive ratio of about 1:5.5.

With such feeds as are mentioned by your correspondent, a good ration for this time of year, supposing the cattle to be intended for April shipment, would be, for a 1,000 pound steer:

- Corn ensilage 45 lbs.
- Clover hay 6 to 7 lbs.
- Oat straw 2 to 3 lbs.
- Bran 2 lbs.
- Oat chop 1 lb.

The nutritive ratio of this ration would be about 1:8.5.

In calculating the nutritive ratio, it is not wise to count upon too good a quality of roughage. The quality of clover hay or ensilage, for instance, is so variable as to make it absolutely necessary to leave a margin in estimating the quantity to be fed. The digestible dry matter in ensilage may vary seven to eight per cent., and so-called clover hay may be very poor stuff.

With reference to the above ration, therefore, allowance must be made for the quality of the roughage fed. As the season advances, the quantity of bran (or shorts) should be increased, and this will naturally permit the animal to eat less ensilage. About a month before shipping, a small amount of oil meal, say half pound per day, to begin with, could be profitably added to the meal

ration, which should then consist of, say, one and a half pounds oats, six pounds bran, and half pound to one pound oil meal.

The wheat and barley, while fairly good feeds for steers under certain conditions, had better be sold in the present case, and the money invested in bran or shorts or oil meal, preferably bran or oil meal. J. H. GRISDALE, Agriculturist, Experimental Farms.

Feeding Corn to Sow.

Is it advisable to feed a brood sow corn before farrowing; that is, to feed her continually? She is due about April 1st. F. B. J. Wentworth Co.

Ans.—A pregnant sow requires a food that will produce bone and muscle in the young pigs, and milk after she has farrowed. Corn is essentially a fat and heat producer, hence it is not suitable as a sole ration for breeding sows. It is useful, however, in the winter to maintain the animal heat of the body, but in this case should be supplemented with ground oats, barley or mill feeds.

POULTRY.

Feeding for Eggs.

I would not advise anyone that has a good healthy flock to undertake doctoring them with antidotes with a view of forcing egg production, either summer or winter. On most farms there are plenty of feeds that would go towards making a perfect balanced ration, if we took advantage of them. The secret of making hens lay is simply providing them with suitable feed, and it's the safe way.

Corn, wheat, oats, barley and millet seed are good poultry feeds; some do not believe in corn, but their reasons are mostly like the small boy's "because." The Agricultural Experiment Stations tell us that corn is one of the best feeds for poultry, but they do not tell us to feed it exclusively; still more, cool reasoning would not suggest that we feed it exclusively.

The natural makeup of their feed is a variety; a little of this and that, and a constant exercise in procuring it. Some tell us to make them scratch for their feed; a more correct way to say it would be to let them scratch for their feed—they would rather do it than not; besides, it does away with gorging and encouraging a lazy lummo disposition.

Corn exclusively—or, in fact, wheat or millet—is too heavy and too rich; something to make bulk must be added. I know of nothing better than wheat bran to balance up a heavy rich feed—it's so common that it is hardly popular. Bran makes bulk; not only bulk, but it clears the passages and keeps the digestive organs in condition. Bran alone would be too light for an exclusive feed; besides, it would not be in line with nature to feed nothing else. The crank is a grinding mill and we must keep it at work.

The different grains would not be a perfect feed alone; grass, insects, and dozens of things we hardly think of, go towards supplying the natural wants. Fowls on free range usually find these extra knickknacks, but penned-up fowls, or fowls in winter, must have their equivalent in some form, or they cannot do the very best. Cut clover or alfalfa, cut vegetables, green cut bone and meat scraps help to make summer out of winter, as near as it would be possible. All these things are within our reach, and the time required to procure them would return a nice profit. Nebraska. M. M. JOHNSON.

The Huron Poultry Show.

The seventh annual show of the Huron County Poultry and Pet Stock Association, held at Goderich, proved a great success this year. In all there were five hundred and forty entries, comprising birds from Waterloo, Ayr, Fergus, Berlin, Woodstock, Sarnia, Doon, Blair, and other points. Wyandottes, Leghorns and Rocks were the most numerous shown. Speaking of the quality of

the birds shown, Mr. Sharp Butterfield, the expert judge, said: "I have made a study of the breeding of poultry all my life, and desire to say a great many of the exhibits this year in Goderich are fit company for the big shows at Guelph, Toronto, Winnipeg, Minneapolis, New York, Boston or Rochester."

Roup.

Prof. Harrison and Dr. Streit, of the Ontario Agricultural College, have just issued in bulletin from the results of their work with "roupy" fowl. Their work has been very carefully and accurately done, about 300 birds having been examined and treated. By some authorities it has been claimed that roup in fowl is identical with diphtheria in man, but the experiments at the college have entirely disproved this contention.

The general condition of rroupy birds is thus described in the bulletin: "After the first symptom of the disease, which is usually a putrid catarrh from the nostrils, the affected fowl is generally restless, separates from other members of the flock, becomes dull, covers or mopes in the corner of the pen, with its head drawn close to its body and often covered with its wings. If there is a severe discharge from the nostrils or eyes, then the feathers upon the wings or back are likely to be smeared with it, stick together, and after some time fall out; and the eyes are often shut, the lids being glued together by a sticky discharge from them. An affected fowl frequently rouses itself, takes food, and especially water, and then returns to the apathetic condition.

"As the disease progresses, tumors or cheesy masses may be formed about the eyes, or in the nasal passages, and in the mouth or throat there are frequently greyish yellow exudations. Whether the disease is characterized by offensive discharge, cheesy masses, or false membrane in the throat, the cause is always the same."

After a great many attempts, Prof. Harrison and Dr. Streit succeeded in isolating a germ which causes roup. They also set up the disease in healthy fowl by inoculating them with the ordinary green pus germ; hence it would seem that roup is a complex suppurative process.

Treatment of the disease is only recommended when the birds are valuable. In such cases the nostrils are pressed between the thumb and forefinger in the direction of the beak, two or three times. Pressure should also be applied between nostrils and eyes in an upward direction. This massage helps to loosen the discharge in the nostrils and eyes. The bird's head is then plunged into a two per cent. solution of permanganate of potash for twenty or thirty seconds, or as long as the bird can tolerate it. This treatment should be given twice a day, and continued until all symptoms have disappeared.

GARDEN AND ORCHARD.

Pruning Fruit Trees.

At the request of one of our subscribers in York County, Ont., we give a few general hints on the pruning of orchard trees:

The transformation of fruit trees from the wild state to the symmetrical forms seen in our best orchards is due largely to the use of the pruning knife. Pruning is done to give the tree a desired shape and to improve the quality and color of the fruit. To give a tree the best form, it is necessary to have a model in mind and to begin early in the life of the tree to mould it to the model.

A good ideal to have in mind is a tree with a trunk about five to six feet high, to allow of cultivation with a horse, and with three main branches springing out of this trunk at points about six to ten inches above each other. The top will then be spreading, and will require comparatively little care.

To get a tree of this shape, it is necessary to begin pruning early in its growth. Always remember that the growth of a tree in height is at the ends of the main stem and branches, and never throughout the whole trunk. A branch that is allowed to remain on the tree three feet from the ground will never be any higher up the trunk, and will always be a hindrance to cultivation.

When the tree has been started aright, with the three main branches springing from the main stem, the thinning of the top may be done at will. The object in thinning out the head of the tree is to let in the light and air and to increase the size and quality of the fruit. No rule can be given in the matter of pruning, but a few general principles hold good. It is always well to bal-

ance a tree as nearly as possible, excepting, perhaps, that the windward side should be slightly heavier. The correct form of the tree should be kept in mind when pruning. Never leave one large branch directly above another to interfere with its usefulness, and do not allow the branches to rub together. When trees are carefully tended, there is no necessity of making a general thinning onslaught. The knife and saw may be used any month of the year, and should be used frequently.

The manner of cutting off large limbs is of vital importance in pruning. In cutting off these branches do not saw part way through and then let it fall, splitting a large chip out of the main trunk. Another common and serious mistake is to leave from two to ten inches of the stump of a large branch to the tree. In taking off a limb be sure to get right up close to the main, then cut in on the bottom side until the saw gets tight. If necessary prop the branch up before finishing the operation. When a stump of a limb is left on the tree it is not healed over with bark, as it is out of the line of the sap flow and must rot off, taking many years in the process. This rot when once set up is not easily checked, and eventually results in the death of the tree. Always make a clean, smooth cut in pruning. If the weather is warm and moist when the pruning is done, it is best to paint the wound with oil, tar or paint, to keep out the spores of fungous diseases.

Fruit Trees: Best Varieties.

At this season of the year, many people are thinking of selecting stock for the orchard, either to fill in or for a new plantation. In every case it is well to settle in one's mind what is really needed, rather than to wait for the nursery man's solicitor to come around to tell you what you want. Where a large plantation is to be set out it will be found most advantageous to submit to nursery men a list of the stock you want, and get them to quote their prices on their best stock of such varieties. In this way one may effect considerable economy and still secure superior stock. Even when more stock than is necessary has to be taken through wholesale lots, this method is often more satisfactory than buying retail; the surplus stock in most instances being easily disposed of. We caution farmers particularly against investing in novelties or untried varieties. Buy only such as have proved a success in your own district, such as are good keepers, and such as are most in demand for shipping and bring the best prices.

For guidance in the matter of selecting varieties, we give here lists of the most suitable varieties for different parts of Ontario. These are selected from the reports of experimenters at a recent meeting of the Ontario Fruit Growers' Association, and are given in the order of preference.

In the St. Lawrence Valley four varieties of apples have proved profitable, Fameuse, McIntosh Red, Wealthy and Crimson Pippin. In the Ottawa Valley, McIntosh Red and Wealthy are recommended; the Spy, Baldwin, King and Greening are not successful in this district. For a market apple in the northern counties, along the Georgian Bay, the Northern Spy has proved about the best. About the Bay of Quinte, a long list is submitted, the Duchess, Trenton, Gravenstein, Fameuse and McIntosh Red for summer and fall, and for winter, Spy, Ontario, Stark, Hubbardston, Seek, Cranberry and Ben Davis. In the southern part of the Province the Transparent, Duchess, Alexander, Gravenstein, Blenheim, King, Baldwin, Spy and Roxbury Russett may be grown. In planting an orchard, the mistake is frequently made of planting too large a proportion of summer and fall varieties. These generally bear heavily and the market for them, being, as a rule, only local, is easily glutted and the price falls too low to pay for handling them. Four to half a dozen trees of these is generally sufficient. The great majority of trees planted should be of good winter and shipping varieties, which invariably bring the best prices.

Mr. Hilborn, an experimenter with peaches in Essex County, listed St. John, Garfield, Fitzgerald, Eugal, Alberta and Smock as his favorites.

Raspberries, strawberries and currants should be grown on every farm. They are not difficult to handle, and are hardy over most of Canada. In many places much time and care is spent on inferior varieties, which give about one-half the crops obtained from the improved kinds. Among the varieties highly recommended at the convention are, in raspberries for early use, Reliance, Turner and Marlboro. Medium and late varieties, Cuthbert and Phoenix. Of the varieties of currants the Wilder, Cherry, Pomona, Fay and Red Victoria are commended. The varieties of strawberries most highly recommended are, for early use, Michel, Vandeman, Monitor, Beder Wood and Clyde. Medium and late, Haverland, Tennessee Prolific, Saunders, Glen Mary, Sample and Brandywine.

APIARY.

Bees and Alsike Clover.

In addition to growing quite an acreage of alsike clover each year ourselves, we also handle considerable seed for a well-known Toronto firm. Coupling this with our interest in the business from a beekeeper's view, I suppose there is no exaggeration when I say that we practically know the acreage and individual yields of the different fields of clover within a radius of three miles of us each year. In seasons that the acreage is limited, there does not appear to be so much difference in yields, as far as distance from the apiaries is concerned; accounted for, no doubt, by the fact that when pasture is scarce the bees forage over a much greater extent of territory in search of nectar. On the other hand, in seasons when there is a large acreage, the yields invariably decrease, after a distance of a mile or more is reached.

While yields of seven and eight bushels to the acre are not uncommon in fields near the bees, we have yet to hear of such turnouts of clover any considerable distance from the apiaries. For seven years our clover has yielded from six to nine bushels to the acre; our nearest neighbors' have done about the same. Others living one and a half miles and more from any bees, have had in the same years from two to five bushels to the acre. As the soil is practically the same in both cases, same methods of culture practiced, etc., I am at a loss to explain the difference, if the bees are left out of the question. These statements will be vouched for by nine out of every ten farmers growing alsike. In fact, I could name men who ten years ago would laugh at the idea of the bee as something necessary in alsike growing, who to-day are the most anxious to have bees near their clover fields. One in particular comes to my mind, who two years ago offered to haul an apiary from fifteen miles away to his place, so that he could have the benefit of them when his clover was in bloom.

Just a short time ago, while in conversation with that well-known agriculturist, Mr. Simpson Rennie, of Toronto, I remarked that the beet-sugar industry would not prove very tempting to the farmers who were growing alsike. He said, "We can't all grow alsike, we haven't got the bees." He was very emphatic about the matter, and stated that neighbors of his had tried again and again to grow alsike for seed, and had always failed. In the section referred to there are probably not half a dozen swarms of bees in the neighborhood. Surely the testimony of such men should bear some weight. Last, but not least, the opinion of the large seed firms should be considered. As they annually handle thousands of bushels of the seed, they should know what they are talking about. I think, without exception, they will say that they get the most seed, and of the best quality, from growers who are in close proximity to bees.

I am free to admit that as a beekeeper I may, perhaps, have "an axe to grind." However, the great majority of alsike growers will agree with me when I say that they can not get along without the bees any more than we beekeepers can get along without the clover. It is to be regretted that the honey-bee can not reach the nectar in the red clover. As the most of people are aware, they work only sparingly, some seasons, on the second crop. The difficulty, of course, is that the bee's tongue is not long enough for the corolla of the red clover. While the bumble-bees do their part, yet they are so reduced in numbers that they are hardly appreciable any more. This brings to my mind New Zealand's experience in this matter. For a number of years attempts were made to grow red clover seed without success. Finally someone suggested that they import some bumble-bees from England. This was done, and as the climate proved very acceptable to the big hummers, the result was that they multiplied very fast. To-day, if I mistake not, that country can produce red clover seed equal to any other part of the globe.

Yellow or hop clover (*Trifolium agrarium*).—In October 15th "Advocate," in answer to a query as to whether this plant is a bad weed or not, it is stated that "it is not likely to prove troublesome in cultivated fields, being closely allied to alsike and common white varieties." While I suppose there is no danger of it injuring a grain crop, it is nevertheless one of the worst pests the alsike grower has to contend with. The very fact of its being of the nature of alsike makes it impossible to eradicate it without destroying the alsike as well. Some fields seeded to alsike this spring are nearly smothered out with the stuff. As the answer was given in the apiary department, some might be led to think that it is a good honest plant; such, however, is not the case, as in our vicinity at least the bees never touch it.

York Co., Ont.

J. L. BYER.

QUESTIONS AND ANSWERS.

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

2nd.—Our purpose is to give help in real difficulties; therefore, we reserve the right to discard enquiries not of general interest, or which appear to be asked out of mere curiosity.

3rd.—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, as a guarantee of good faith, though the name is not necessarily for publication.

4th.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

Veterinary.

[Answered by our Veterinary Editor.]

CHRONIC LAMENESS.

Seventeen-year-old mare picked a nail four years ago; it penetrated the sole beside the frog for about 1½ inches. It was removed at once, and the foot poulticed. She was laid off for two months, and then put to work, but has gone a little lame ever since; sometimes she is very lame, especially on hard roads. She usually rests that foot when standing. The hoof is rather smaller than its fellow. I have had her examined for spavin, but there is none. E. H. Stormont Co., Ont.

Ans.—It is probable the nail penetrated to the bone, and injured it or its coverings, which set up a chronic inflammation. It is possible a small portion of bone has become detached and is causing trouble. The inflammation of the foot has caused it to become dry and small. If the sole is quite tender at the seat of puncture, pare down and see if pus is confined, and follow up with poultices. Keep the hoof soft with poultices, and blister around the coronet occasionally.

SEVERAL AILMENTS.

1. Four-year-old mare that has never worked much is stiff or lame in both fore feet. She has very large feet, but I can see nothing wrong with them.

2. Eight-year-old mare got one hind foot hurt, and had to stand on the other for five weeks. She then recovered the use of the injured foot, but went lame in the other. The accident occurred eighteen months ago. There is slight swelling around the pastern of the lame foot, and she is very lame.

3. Some of my cows have had swollen udders just after calving, and when the swelling goes down the quarters are useless. G. G. N.-W.T.

1. Put mare in box-stall and blister around the coronet once every month, with two drams each, biniodide of mercury and cantharides, mixed with two ounces vaseline. Keep her feet well pared down.

2. This mare overtaxed the strength of the sound leg while lame on the other; the pastern joint evidently is the part that suffered. Keep her in the stable and blister the joint with the same preparation recommended for No. 1.

3. When your cows' udders swell, place them in a comfortable box, excluded from drafts, purge with two pounds Epsom salts and feed lightly. Apply hot poultices to the udder, and rub the quarters well three times daily with camphorated oil. Draw the milk off four times daily. Continue treatment until recovery takes place. Any quarters that may now be inactive will probably be all right after next period of gestation.

UNTHRIFTY MILCH COW.

Cow calved two weeks ago, gives fair quantity of milk, but hair looks rough; udder is not filled out at milking time, and teats are cold. Fed on silage, hay and bran. She had inversion of the vagina before calving, but is all right now. She was thin last year after milking a short time. She is well fed. F. W. Middlesex Co., Ont.

Ans.—The symptoms given do not indicate anything in particular wrong, simply that the cow neither works as well nor milks as well as she should, considering the care and food she gets. It may be that she has some chronic disease that prevents assimilation of the food. The dryness of the hair indicates something of this nature. You had better have her tested with tuberculin to see if she is tubercular. If you do not care to do this, feed her a little grain, as chopped oats, and give a liberal supply of pulped mangels. As her appetite is good, she requires no tonics or stomachics to improve it.

COW WITH HACKING COUGH.

I have a cow that has had a hacking cough for some time. Give cure for it. J. M. Muskoka, Ont.

Ans.—The term "some time" is very indefinite. It may mean a week, a month, a year, five years, or longer. A dry, hacking cough is always symptomatic of pulmonary tuberculosis, especially if it has been present for some months or longer. At the same time, a cough may be caused by a chronic sore throat, or other conditions. We would advise you to have her tested with tuberculin; if she react, destroy her; if not, blister her throat. You need not be alarmed even if the cough continue, unless it is caused by tubercular trouble.

CHRONIC COUGH.

Aged mare has a dry cough, especially when allowed to stand after exercise, or after taking a drink. Sometimes she will not cough for a month, and at others will have several spells daily. L. W. E. Ont.

Ans.—Your mare has either heaves or chronic laryngitis (inflammation of the throat), it would require a personal examination to determine which. If the former, it may be helped by blistering the throat; if the latter, it cannot be cured. I would advise you to blister the throat well, feed lightly on food of first-class quality, and dampen all food with lime water.

MAMMSTITIS.

One side of cow's udder swells and remains so for a day or two, when lumps of matter will escape in the milk. This occurs frequently. N. K. Ont.

Ans.—The lumps of matter are the result of inflammation in the quarter. The frequent occurrence of mammitis without apparent cause lead us to suspect tubercular disease of the udder, and if this is the case the milk is unfit for consumption. You had better have her tested with tuberculin, and if she react destroy her. Treatment for the inflammation consists in purging with two pounds Epsom salts, and following up with two drams nitrate of potash, night and morning. Apply hot poultices to the udder, and draw the milk several times daily. Rub the udder with camphorated oil three times daily, when changing poultices.

HOG WITH SORE FOOT.

Give me a cure for a hog with a sore foot. I think it started from being tied too tight with a rope. It is very sore and swollen. G. R. Prescott Co., Ont.

Ans.—Place the hog in warm, comfortable quarters, feed a mixed grain ration with roots or clover hay. Examine the foot carefully. If there is any wound clean it out with warm water and a little carbolic acid. See that there is no foreign substances in the tissues, and he should come around all right.

WORMS IN PIGS.

What is the cause of worms in store pigs, and what treatment would you advise? H. J. C. Dufferin Co., Ont.

Ans.—Pigs take the germ into the stomach with their food, and the worms develop according to variety. Give the pigs from two drams to an ounce of oil of turpentine, mixed with two to six ounces raw linseed oil, according to size of animal. Repeat treatment in a week if necessary.

HEAVES.

I have a horse that coughs some at the change of the seasons, and sometimes shows signs of heaves, but gets better after a little care and nursing, but this fall he is worse than usual. King's Co., N.B. A. B.

Ans.—Your horse has developed heaves, and there is no cure. The symptoms can be relieved by feeding straw of good quality, instead of hay, feeding in small quantities and often, not allowing his stomach to become overloaded, and dampening everything he eats, both grain and bulky food, with lime water.

CRACKED HEELS.

Draft horse's hind fetlock joints become cracked and itchy, and swell when not exercised; there is a discharge with a disagreeable odor. Am feeding cut straw, clover hay, six quarts oats, daily, and a turnip at night. T. A. C. T. York Co., Ont.

Ans.—Your horses have cracked heels or mud fever. Give a purgative of about nine drams Barbadoes aloes, and two drams ginger; feed nothing but bran until purgation commences. Follow up with two ounces Fowler's solution of arsenic, twice daily. Poultice the parts for two days and nights with boiled turnips and a little powdered charcoal; apply warm and change three times daily; then apply the following three times daily: Sulphate of zinc, one ounce; acetate of lead, one ounce; carbolic acid, two drams; water, one quart. Do not wash. If the parts become too dry, use carbolized oxide of zinc ointment occasionally.

STEER AILING—ABORTION.

1. Steer in good order and doing well, but his penis swells.

2. Cow calved three weeks before time; calf died in five minutes. She has not been untied since she came in the barn; is in good order, and I know of no accident as slipping, or anything of that kind. N. F. Compton Co., Que.

Ans.—1. The swelling of the penis is probably due to foreign matter in the sheath. Flush the sheath out well with warm water, and inject it once daily with carbolic acid one part, warm-water thirty parts.

2. Unless you have infectious abortion in your herd, your cow must have slipped or been kicked or bruised in some way unknown to you, else the food was of impure quality. There are so many causes of abortion, in many cases unnoticed by the attendant, it is impossible for me to say what caused it in this case.

PREGNANT MARE.

My nine-year-old mare aborted in September of 1901. She was bred last spring, and is due to foal in March. I feed one quart whole oats, night and morning, and a liberal amount of hay, and allow regular exercise. Is it safe to feed boiled barley, or what should I feed to ensure milk and safety? P. J. Algoma, Ont.

Ans.—There is no manner of care or feeding that will ensure safety in foaling; abnormal conditions occur occasionally under all systems. It is not well to make sudden changes in feeding, especially when parturition is approaching. Do not feed boiled barley, feed a reasonable quantity of hay of first-class quality; for the grain ration crushed oats are better than whole; bran also should be liberally supplied, say three quarts crushed oats night and morning, and four to six quarts bran at noon. Allow all the pure water she wishes, and give regular exercise or light work.

Miscellaneous.

LANDLORD REPAIRING LINE FENCING.

We are tenant farmers, having lived on this same farm for fifteen years, up to last April. Just about when the lease ran out, we went to them (the landlords) and asked them to fix the barn. After some time had been wasted, as usual in cases of this kind, they consented. They took down the items on paper of what was to be done in the way of repairs. This will give you some idea of what is to be done: Barn needs new sills, almost one new end, and to be shingled. But they did nothing. Also, we had to abandon part of house on account of leakage; the shingles are rotten.

1. Can they collect rent when no lease was signed, and misleading us last year in this way?

2. Has a tenant got to keep up poor line fences along the road and between him and his neighbors? Ontario.

Ans.—1. Yes, but you might be able to support a counter claim for damages for their breach of agreement to do the special repairs arranged for.

2. If such fences be old, worn out or decayed, and really past repair, and there be no express agreement that the tenant should repair them, he is not bound to do so—as between himself and his landlord at all events. It is otherwise, however, if they be simply "poor" as stated. In such case he is obliged to keep them up, unless there exist an express agreement to the contrary.

GAS LIME FOR LAND.

Would you please inform me as to the value of gas lime sowed on the land? Which way would be the best to sow it, on raw land or on new meadows? Prince Edward Co., Ont. H. A.

Ans.—Gas lime is slacked lime which in the purification of illuminating gas has been saturated with a number of gases, some of which are injurious to vegetation. Because of this fact, it is often used on walks and drives to destroy plant life. In all gas manufacturing plants in Ontario, the gas is carburized with petroleum; consequently, there is no ammonia in the gas lime. It, therefore, contains nothing but lime that is of value, and this can be applied very cheaply and much safer in the form of ordinary lime. On standing for some time exposed to the air, the injurious substances in the gas lime are partly or wholly removed. European farmers apply it in this form, at the rate of 100 to 200 bushels per acre on fall plowed ground; but it is very doubtful, all points considered, if it would not be better and safer to apply the ordinary lime. O. A. College. R. HARCOURT.

INCUBATORS.

Could you give plan for making an incubator? Norfolk Co. CHARLES CAMPBELL.

Ans.—Experience has shown that it is much more satisfactory and economical to purchase some one of the many good incubators in the market than to attempt constructing one. Most "homemade" attempts have been complete failures.

PREVENT LICE.

Is any remedy known to prevent young cattle from getting lice? C. M. BURGESS. Welland Co., Ont.

Ans.—No; but keep the hair free from dirt, feed well, and occasionally apply some good sheep dip or other good insecticide.

LIEN FOR SERVICES.

Some time ago there was a bill before Parliament to guarantee the owner of a sire for services on mare. Has he a lien on mare and colt until the service charges are paid? Did this become law? Wellington Co.

Ans.—No.

HARVESTING CLOVER SEED.

Please inform me whether the first or second crop of clover is best for seed? Is any special machine needed for harvesting the crop for seed?
Stormont Co., Ont. S. M.

Ans.—In the case of common red clover, the second crop is used for seed, the first being cut early, say last of June or first of July. Some of the best yields of seed are secured by pasturing the first crop pretty closely up to the 15th or 20th of June, and taking the second crop for seed. The harvesting is generally done with the mower, having a narrow table attached to the cutter bar, a man walking behind to put the clover off in bunches with a fork or hand rake. If one has an old self-raking reaper in working order it answers the purpose admirably and saves the work of one man. Alsike clover seed is taken from the first crop. Mammoth red clover should be pastured down, and seed taken from the second growth.

OWNERSHIP OF CALVES—A NUISANCE.

1. A. rented his farm to B. for one year, beginning first of April, 1902, with twenty milk cows at \$18 per cow. Three of the cows had calved before B. took possession. Is B. entitled to more than three calves? Several of the cows will be in before April, 1903.

2. There is an old cheese-factory just across the road from my house. The building and surroundings are kept in a most filthy condition. The only drainage is the open ditch by the road, and the lot is covered with weeds of all descriptions. How can I compel the owner to keep his property in a clean and sanitary condition?

3. Is there any special act in regard to factory drainage? If so, who would enforce it, and at whose expense?
OLD SUBSCRIBER.

Ontario.
Ans.—1. Judging as well as we can from the facts stated, we should say that he is.

2. He should be warned that he is liable to an action, in respect of the nuisance, and then, if the warning go unheeded, a solicitor should be consulted with a view to legal proceedings. The solicitor's letter proposing action might of itself bring about the desired relief.

3. Yes; see the Ontario Factories Act (R. S. O., Chap. 256), and particularly sections 15 and 16. See also the Public Health Act (R. S. O., Chap. 248), and especially Sections 74, 75 and 76.

PAYING THE VETERINARY.

On or about March 30th, 1902, I paid a farmer \$130.00 for a young mare. For the following four or five weeks I allowed him the free use of the mare. During this time it took distemper, and the veterinary was called in. I happen to know that the veterinary has the account debited to the farmer. Who should pay the veterinary?
FARMER.

Muskoka, Ont.
Ans.—We assume that the veterinary was employed by the farmer, and not by you, and we think that it is to the farmer that he must look for payment of his account; and we cannot see that the farmer is legally entitled to call upon you for reimbursement.

FEEDING ANIMALS AT SALE TIME.

Are there any laws relating to the shrinkage of animals, dead or alive, when there is no bargain made to that effect? Can they be fed and watered at the usual time?
York Co. SUBSCRIBER.

Ans.—We think that there are no special regulations having the force of law, unless, perhaps, locally under Section 580 of the Municipal Act, and especially Sub-sec. 3, which provides for municipal by-laws for regulating the buying and selling of animals exposed for sale or marketed, and Sub-sec. 5, providing for by-laws for regulating the manner of selling and weighing meat exposed for sale. But there are, of course, general principles of law and equity relating to fraud and misrepresentation that may be invoked if occasion should arise in the way suggested. Generally speaking, we would say that we can see no reasonable objection to the feeding and watering of animals in the ordinary way and at the usual time, from the legal point of view, even where weighing is soon to take place, in pursuance of sale of the animals.

WIFE SELLING COW.

Is it legal for a wife to sell a cow off the farm without her husband's permission, and put the money to her own personal comfort?
Simcoe Co., Ont. SUBSCRIBER.

Ans.—Strictly speaking, no.

COMMUTED STATUTE LABOR.

Would you kindly describe, as fully as your space will allow, the system under which statute labor is performed by Townships which have commuted the statute labor?

Ans.—By Section 561 (5) of the Municipal Act, the Council of every Township is empowered to pass by-laws for regulating the manner and the divisions in which statute labor or commutation money shall be performed or expended, and it is to such local municipal by-law that reference must be made in order to ascertain the system which has been adopted by the particular township.

CLYDESDALE AND PERCHERON—SEED PEAS.

1. Why are there so few Percheron horses bred and used in Ontario? Are the Clydesdales superior to the Percheron as a general purpose breed?

2. I want to get some seed peas that will not grow too much straw, and yield well. The Potter, Canadian Beauty and the American Wonder, which I have tried, grow too much straw and not enough grain. My farm is a rich clay loam. What variety would you recommend?
M. H. P.
Algoma.

Ans.—1. By taking a retrospective glance at the horse-breeding operations in Ontario, one can arrive at an answer to this question. The importers and improvers of horses in Ontario have invariably been of British descent, and nothing is more natural than that they should continue their allegiance to the British breeds of horses, rather than promote the interests of the French breeds, when the former had all they considered necessary in a draft horse. At the time when Ontario breeders began improving their horses the Percheron was not the improved breed he is to-day, nor was there a desire on the part of our importers to deal with the French people. Both the Clydesdale and Percheron are draft breeds, but their grades make good general purpose horses, their relative value being determined by individual merit and by the preference of the owners.

2. The pea that has best combined heavy yields with short straw, in experimental work in Ontario, is the White Wonder. This pea is said to be suitable only for very rich land. We recommend you to use great care with seed peas from the older parts of the Province, as the weevil is very prevalent here.

REGISTRATION STANDARD.

I have a brood mare whose dam is a registered Clyde, and whose sire is an imported registered Shire. Is she eligible for registration? If not, how many crosses must I have before they can be?
NEMO.

Bruce Co., Ont.

Ans.—Your mare is eligible to registry in the Dominion Draft Horse Studbook, which accepts animals of mixed Clydesdale and Shire breeding. Secretary, James Mitchell, Goderich, Ont. The Clydesdale Studbook requires for the registry of mares four top crosses, in each case by sires registered in the Clydesdale Studbook.

THE "SCOTTISH FARMER."

Is the Scottish Farmer a general agricultural paper, and what is the subscription per annum?
Elgin Co., Ont. J. Y. P.

Ans.—Yes. Price, 10 shillings to British, or 12s. 6d., post free, to colonial subscribers. It is a weekly paper.

NOTES AND NEWS.

Every reader is invited to write something for this department that other farmers ought to know. Do it while you think of it. Put it on a post card if you haven't time to put it in a letter.

We take pleasure in calling the attention of our readers to the advertisement of Alex. Galbraith & Son, which appears in this issue. This firm has always been particularly careful in the selection of their stock, and by honorable business methods have established a wide clientele both in Canada and the United States. The most recent addition to their stables consists of an importation of 35 stallions of Clydesdale, Shire, Percheron, Suffolk Punch and Hackney breeding. In this assortment, something may be found to suit the most fastidious buyer. Write for particulars, to Alex. Galbraith & Son, Janesville, Wis., or Jas. Smith, Brandon, Man.

Rural Mail Delivery.

The "Farmer's Advocate" for January 1st devotes a great deal of attention to free rural mail delivery. One letter is written from British Columbia, which goes to show that free delivery would strengthen the morals of the rural districts, help to keep the boys and girls on the farm, and enhance the value of property in the rural districts, and tend to double the business done by the post offices there. Another correspondent says that a number of the present mail routes could be made the basis of delivery routes at a very small increase of cost. It is also pointed out in an editorial that the farmers of this country are entitled to increased facilities in connection with the mail service of this country, and that all they have to do to get an improved service is to demand it of the Government and of their representatives in parliament.—Toronto World.

The Spring Stallion Show.

Horsemen and farmers interested in the continued development of horse-breeding upon correct lines should make a point to be at the Spring Stallion Show in Grand's Repository, 136 Simcoe St., Toronto, on Feb. 4, 5 and 6. The fact that there are over sixty entries in the various classes, representing the leading studs of the country, guarantees keen competition and a good attendance of spectators. It will prove a fitting inauguration of the approaching season's business.

Better Mail Service Wanted.

To the Editor "Farmer's Advocate":

Sir,—I saw in a late issue of the "Advocate" a request for the opinions of people on free mail delivery. Now, sir, we in this locality would be satisfied with a good daily mail service. Some time ago we had a service of three times a week, but our officials saw fit to change it, for political or economical purposes, I don't know which, so that I don't know what to call our mail now. If we want to mail a letter and get our mail at the same time, it will be four days before the letter reaches Millbrook or Peterboro, a distance of ten miles. The authorities have been written to regarding the matter, and they said they would investigate it. It is now nearly two years under investigation, and it has not been changed. If it takes the P. M. G. that long to investigate the rights of one post office, I don't know how long it would take him to arrange for free mail delivery. With a properly arranged mail service we could have a mail from Toronto and back the same day, and it would not cost any more. I suppose it takes a letter so long to reach the P. M. G. that he thinks Bensfort P. O. is away at the North Pole, and is not worth consideration, but for his information I will tell him that it is in South Monaghan, one of the most prosperous townships in the Province, and that the mail service in this locality is a disgrace to the officials in charge of the Post Office Department.
J. W. HALL.
Peterboro Co., Ont.

Cattle-guards Commission.

All things pertaining to railways appear to have a special interest these days to the agricultural world, in all probability largely due to the failure last session of the bills on Drainage and Cattle-guards, respectively, to go through the House. When the Cattle-guards Bill was laid over, the Minister of Railways appointed Messrs. Holt and Robertson as a Cattle-guards Commission to examine and investigate the merits of the various kinds of guards in use and others which have been put forward as satisfactory; and the findings of the committee to be reported at next session.

During the summer, the guards in use on the different railways have been examined, and for the past two weeks, at the exhibition grounds, trials of various new guards have been going on. What is required is a guard which will prevent the passage of the animals without doing them any injury. As yet, although a great many have been tried, nothing has been found which in an actual trial will entirely meet the requirements. A few have been experimented with which are successful in not allowing animals to cross, but as spikes either fly up and strike the jaws or injure the feet, fall short of what is desired in that they do harm to the animal.

Upon the ultimate result of the inquiry will depend to a certain extent the success of the Cattle-guards Bill at the next session. If a recognized serviceable guard can be found, its adoption will be demanded in even stronger terms than last year, otherwise the argument will be on practically the same premises as last year, strengthened greatly by a consensus of public opinion.

Premiums Popular.

"Well pleased with the watch."—S. M. McClinton, Simcoe Co.

"Would not like to be without the knife or the 'Advocate.'"—F. S. Gosnell, Elgin Co.

"A splendid knife and the best farm paper."—Dell Brown, Ontario Co.

"Pleased with the collie dog. Worth my trouble in getting the 12 subscribers."—Stuart Ferguson, Elgin Co.

"Well pleased with the Bible."—Mrs. James Armour, Huron Co.

Mr. Publow Appreciated.

On the evening of the 7th ultimo, when the Eastern Dairymen were assembled in Ottawa, the friends of Mr. G. G. Publow, instructor in cheesemaking in the Kingston Dairy School, took the opportunity to present him with a token of their appreciation. The token consisted of a beautiful gold watch and chain, which was presented in the Russel House, by Mr. Derbyshire, in the presence of a large number of Mr. Publow's friends. Mr. Publow suitably replied, thanking his friends for their kind expression of their appreciation of his services.

Date Label.

We ask every subscriber to be sure and notice the date on the address label of his paper. It should read December 15, '03. If you have not already remitted for 1903, please do so at once, and if you have remitted and the date on the label is not changed, be sure and advise us at once, and state when and in what manner the money was sent.

An Appointment.

Mr. J. S. Jeffery, who took the O. A. C. course in 1886-7, subsequently engaged in the poultry industry. He has just been appointed to take charge of the Poultry Department of the State Agricultural College and Experimental Station of North Carolina, and will begin work at once.

Cash for the College.

Sir Wm. Macdonald, of Montreal, has given an additional \$45,500, making a total of \$170,500, for the buildings for manual training and domestic science at the Ontario Agricultural College.

The Short Course at O.A.C.

The two-weeks course in stock judging and the judging and selection of grain and seeds at the Agricultural College, Guelph, closed on the 21st inst. The short course has now become an established factor and an important feature in the study of agriculture at the O. A. C. About 220 farmers, from the various parts of the Province, were present and obtained no small amount of valuable information, as well as being firmly convinced of the necessity for further agricultural study if they are going to successfully compete in the crowded markets of to-day. The professors who took part in this work, and for the success of which much credit is due, were Profs. Day, Cumming, and Dr. Reed, who lectured on farm live stock; Prof. Zavitz, on the judging and selection of farm seeds; and Prof. Loughhead, on various injurious weeds and insects. The evening meetings were addressed by the Hon. John Dryden, Toronto; F. W. Hodson, Ottawa; President Mills and other members of the staff.

The Professors mentioned above were ably assisted by the following stockmen: Beef Cattle—Hon. John Dryden, Toronto; Richard Gibson, Delaware; and James Bowman, Guelph. Swin—J. E. Brethour, Burford; Maj. Hood, Guelph; and Wm. Jones, Zenda. Sheep—W. Smith, Maple Lodge; D. J. Hanmer, Mount Vernon; Henry Arkell, Arkell, Ont.; and James Hume, Arkell, Ont. Dairy Cattle—G. W. Clemons, St. George. Block Test—By several local butchers.

The following resolution was unanimously carried by the members of the second Short Course Class in Stock and Grain Judging held at the Ontario Agricultural College during the two weeks extending from Jan. 8th to 21st, 1903: That whereas the Department of Agriculture of the Ontario Provincial Government has provided such a course, which has this year been attended by a body of over 200 farmers and farmers' sons of Ontario, and not a few from other Provinces of the Dominion; and whereas the quality of work done at this course has been eminently adapted to the needs of its members, who hereby wish to tender to the President, Professors and others who have directed the classes, our hearty appreciation of their valuable services; and whereas the new Live-stock Judging Pavilion, especially constructed for the use of this and succeeding classes, has very greatly ministered not only to the comfort of the members of the class, but also to the facilities for the best judging of live stock; therefore be it Resolved, that the members of this class not only endorse but express their highest appreciation of the action of the Government for providing such a course, but especially for equipping the College with the Live-stock Judging Pavilion, so well adapted to the needs of the class.

Signed on behalf of the class,
 R. M. YOUNG,
 A. G. SMILLIE,
 W. C. SHEARER,
 W. A. MILLER,
 Committee.

Canada's Exhibit in Japan.

Since the great Colonial Exhibition in London, about thirty years ago, Canada has resorted more and more to exhibitions in various countries as a means of advertising her products and manufactures, with a view either to encourage emigration or to develop trade in her surplus products. The system is one which can be adapted to exactly suit various conditions. At Paris, Glasgow, Cork and Wolverhampton the chief aim was to forward our export industry, and the exhibits were largely of food products of all the various classes, for which there is such an unlimited demand in these countries; emigration was secondary. At Buffalo, exhibits were arranged more with the object of encouraging immigration of Americans to the Northwest and of American capital to develop Canadian resources; the United States wanted but little of our export products.

This year, the exhibition at Osaka, Japan, is to have a Canadian exhibit, and Exhibition Commissioner Hutchison is already on the ground putting the exhibit in shape for the opening on March 1st. As there is not the least desire to encourage emigration from Japan, the exhibit is largely made up of manufactured products, and the aim throughout will be the furtherance of trade between the two countries. One of the chief features will be a wheat and flour display, and a baker has been taken along to demonstrate the superiority of the Canadian product over that of the soft American coast wheats now in common use in that country. The Hon. Sydney Fisher is also on his way to Japan, where he intends staying for a couple of months to forward the cause of the Canadian agriculturist.

We Live to Serve.

You certainly take pains to please your readers. The answers in paper were much appreciated, yet this is an added kindness in your writing to me with such kindly interest. I shan't forget it, I assure you. A good New Year to you all of the "Advocate." You deserve one.
 H. TWIGG.
 Northumberland Co.

Forestry Lectures.

Prof. Fernow, Director of the New York State College of Forestry, began a course of lectures on January 26th, in the Engineering Building of the School of Mining, Kingston, on the subject of scientific forestry.

The Late William Charlton.

In the death, on January 19th, of Mr. William Charlton, of Mapleton, Elgin County, Ontario, a pioneer of the pioneers, passed away in his 99th year. Of English descent, though a native of Sorel, P. Q., then Lower Canada, he was born August 21st, 1804, and removed with his wife and little children to the Elgin wilderness about 69 years ago, the trip from Kingston to Mapleton by wagon occupying eleven days. Six grandsons were pall-bearers at his funeral, the service being conducted by Rev. John Morrison (Methodist), of Springfield. Mr. Peter Charlton, of St. Thomas, aged 90 years, is a brother of deceased, and six sons and three daughters survive. In addition, there are 32 grandchildren, 49 great-grandchildren, and one great-great-grandchild, the juvenile in our portrait. Those shown in the engraving are the late Wm. Charlton; Peter Charlton (son), aged 72; Sylvester Charlton (son of Mr. Peter Charlton), aged 47; Mrs. Ethel Dawes (daughter of Sylvester), and Austin Dawes (her son), aged 16 months. The late Mr. Charlton was one of the grand stalwarts who made Canada what it is to-day, and whose record of integrity and strenuous endeavor in the face of difficulties now unknown is a fitting example to the youth of to-day.



FIVE GENERATIONS OF CHARLTONS.
 The late Wm. Charlton, of Elgin Co., Ont., and four of his direct descendants.

Hamilton Shorthorn Sale.

Hamilton, Ont., Jan. 28th.—The breeders' combination sale of Shorthorn cattle here to-day in the Stockyards Pavilion was a great success, there being a large attendance of Canadian and American buyers. The auctioneers were Capt. T. E. Robson, Hderton; George Jackson, Port Perry, and Thos. Ingram, Guelph. The American visitors bought largely, but Canadians also bid eagerly, being anxious to retain as many of the high-grade cattle as possible in the country. Fifty-four head were sold, at an average price of \$446, making a total of \$24,084. The average per head was \$26 more than the last sale. The best price paid was \$1,500, by Mr. E. A. Stevenson, of Detroit, for Diamond Prince, a nine-months calf, imported by Mr. W. D. Flatt. Mr. Flatt's Airy Duchess, imported, went at \$900. Hon. Mr. Dryden bought Dalmeny Fannie, an imported yearling heifer, paying \$735 for her. Another yearling heifer brought \$800. Mr. Flatt's Lovely Tulip, an imported two-year-old, was sold for \$1,100. Mr. William Hendrie and his daughter, Mrs. Eckford, of Alberta, N.-W. T., purchased seven fine animals. C. Heitz & Son, Ohio, bought a number of choice animals at high prices. Pettit & Son, of Burlington, bought a high-priced cow and calf, and several splendid heifers were taken to Stouffville by Mr. Robert Miller. Messrs. J. & W. Watt, Salem, Ont., purchased the imported bull, Scottish Beau, from Senator Cochrane's farm, paying therefor \$1,200.

Goes Everywhere.

To the Editor "Farmer's Advocate":
 Dear Sir,—It might be interesting for you to know that an enquiry was received by us from a firm in Mysore, South India, asking for prices on our second-hand typewriters. The firm state that they saw our advertisement in the "Farmer's Advocate." Thanking you for past favors, and trusting that business is good with you,
 Yours very truly,
 B. C. SIMMONS.

[Editor's Note.—In last issue another advertiser reported getting an enquiry from South Africa, where the advertisement had been read in the "Farmer's Advocate." One of the leading manufacturing establishments on this continent reports receiving 1,784 enquiries in response, to their advertisement in the Christmas "Farmer's Advocate," while from another agricultural paper only 26 enquiries resulted. It may come a little higher, but it pays to have the best.]

P. E. Island.

We are having pretty close winter weather here just now, with the ground well covered with snow and good roads. So far, the winter has been very favorable for grass lands, and we are hoping that the clover, that made such an excellent catch last season, will come through all right. The weather has been very favorable for farmers getting their work along. Shipping continued quite brisk from our eastern ports till after the New Year, and since that time the winter steamers have carried away a lot of produce for maritime markets. Prices continue good. Best quality of live hogs sell for 6c., and carcass pork at 7½c. Oats are moving at 35c. There is a large trade in carcass beef to Sydney and other Nova Scotia ports. The price here is about 6c. per lb. Mutton is also going forward to these markets at about 5c. Many farmers are engaged in the frozen smelt business during December and January. It brings in a lot of money, usually, but this year the price is not so good in Boston and New York, and the catch has been smaller here. A good many of the dairy stations have closed or are about closing on account of scarcity of milk, and will not open till May. The average price paid for milk at the cheese factories in 1902 was about 77c. per hundred pounds. The average price of cheese was 10½c. The price of butter has averaged about 19½c. for the season.

The fruit-growers will hold their annual meeting in Charlottetown on February 10th. In connection with the meeting there will be for the first time a fruit show of our winter-keeping apples. Diplomas will be given for the best exhibits in the different classes. This will be a meeting of more than ordinary interest, as we are to have in attendance Prof. Robertson, Prof. Macoun, from the Experimental Farm, Ottawa; W. A. McKinnon, chief of the Fruit Division, Ottawa, and Harold Jones, a prominent horticulturist from Maitland, Ont. We look

for practical addresses from these gentlemen that will give a stimulus to our growing fruit industry here. These gentlemen will also address meetings at five principal points through the Province. The last census gives the total number of apple trees on the Island at 202,910, plum trees 27,480, cherry trees 70,431, pear trees 1,962, peach trees 163. The yield of fruit in the last census year is given as 184,487 bushels. The yield this year will be double that.
 W. S.
 Jan. 19th, 1903.

"The News."

The transformation of the News, of Toronto, under the editorial management of Mr. John S. Willison, who lately retired from the editorship of the Globe, is one of the journalistic events of the year. The decision to discard party for independent journalism, as in this instance, is of far-reaching significance. It crystallizes a new element or tendency in the mind of the people in a manner so noteworthy as to command general attention, and its effect will be wholesome. With ample capital to finance the project, free from all disentangling alliances, political or corporate, and under the control of one who understands so well both the function and the making of a newspaper of the very best type, the new News will be welcome in Canada, and it makes its advent at an opportune time in the life of the nation.

The Importance of Seed Testing.

The testing of seeds is not so important in these days of honest seedsmen as it was formerly. I do not mean to say all seedsmen are honest, for it is a business allowing much scope for dishonesty, but accidents will happen in the best regulated families, and so it is with the seedsmen. Sometimes his seed crop is a partial failure, or the percentage of germinating seeds raised is small. But, take it all together, there is more honesty now practiced in the seed business than ever before. Still, seeds should be tested before the farmer or gardener is willing to run the risk of a partial failure of his crop on account of poor seeds. Grass seed is, above all others, the most adulterated, not purposely, but usually contains so much weed seed that the difference in price between a good and a poor grade would make a greater difference in a larger or a smaller crop. Clover seed is also, in many cases, impure.

The germinating qualities of the seeds are also very important, especially in the case of vegetables, and I will now tell how the farmer or gardener can find out the proportion of weed seeds or the proportion of seeds that are of good germinating qualities, and I am sure he will be benefited by the practice of always finding out what his seed is like before he is ready to plant it. The adulteration of grass and clover seed is almost impossible to detect with the naked eye, so that a cheap pocket microscope, costing from 25 cents to 50 cents, such as the "Farmer's Advocate" offers as a premium, is especially valuable for the examination of seeds. No farmer or gardener should be without one. Take a pinch of the seed in the palm of your hand, and carefully look at it with the microscope, and in many cases you will be surprised with the result. You can thus easily tell the percentage of poor seed, dirt or weed seed, and form an idea from that what grade it will pay you best to purchase. Besides being a handy instrument for that purpose, this microscope is splendid for examining soils and insects, and innumerable other purposes.

The testing of seeds as to their germinating qualities is a different matter, and the percentage is found out in a different way. One method is to sow a small quantity in a flat or shallow box and put it in a warm place till the seeds are well up, and then judge by the number of plants from the amount of seed sown their sprouting or germinating percentage. But probably the most satisfactory way to the busy man is the dish and flannel test, which, although I have used for some time, I have never seen a published account of. A soup plate is filled nearly level with a medium grade of sand, and then water is added until the plate is full. A pane of glass is then put over the plate and the surplus water allowed to drip off. After smoothing the damp sand, the seed can then be put on it. A few is sufficient, and they should not be buried, but pressed into the sand. Then replace the pane of glass, and lay another plate on top of the glass, upside down, so that the light will be kept from the seed. When kept in a warm place for a few days the top plate can be removed, and by looking at the seeds you can see in an instant almost exactly how many have sprouted. There should be over seventy of every hundred tested show signs of growth, and with grains, corn and peas the percentage ought to be much greater. "Does testing seed pay for the trouble?" some readers of this will say. Yes, it does pay. You have no idea of the poor quality of many seeds on the market and the quantity of hulls and sand they often contain, or else the low vitality which manifests itself after the seed is planted. I believe that if only clean seed of good germinating quality were planted on every farm, and the crop properly cared for, there would be few who would say there was nothing in farming. Of course, there is little need for the gardener or farmer to do this with packet seed, as they are usually of good quality, but seeds worth a high price and bulky seed should always be tested in order to know whether it pays to buy them or not. The color and plumpness of the seed should also be considered, as they are also very important factors in good seed. When people come to realize more than ever that plants are like animals, and like produces like, then will there be a great improvement of the crop-producing capabilities of our farms, and great good will result to the farmer who is as particular as to the seed he sows as of the stock he raises, for carelessness as to the quality of seed grown is one of the greatest drawbacks to successful farming and gardening. E. MACKINLAY.
Halifax Co., N. S.

Stallion Show Prospects.

Mr. Henry Wade, Secretary, writes that the Spring Stallion Show, which is to be held at Grand's Repository, Toronto, on the 4th, 5th and 6th of February, promises to be a great success, as the management have been successful in securing splendid transportation facilities, and entries are coming in very satisfactorily. Any animals being sent to the exhibition are taken on the railways at one full fare going, and are returned free if not sold. A man in charge of animals in less than car-load lots is brought to the show free and returned at the rate of one cent per mile.

P. E. Island Fruit Growers.

The annual meeting of the Prince Edward Island Provincial Fruit Growers' Association will be held in Charlottetown, on February 10th. It will be attended by Prof. Robertson, Prof. Macoun, W. A. McKinnon, C. F. D., and Harold Jones, of Maitland, Ont.

The Greater Marvel.

Ottawa, January 21th, 1903.

Gentlemen,—I am very much obliged to you for sending me your Christmas number so promptly. It is indeed a work of art. But your fortnightly issue is a far greater marvel. As a farmer's son, and as one who has for years taken a great interest in the development of the Dominion, I know of no one agency more calculated to aid the farmer and stock and fruit raiser than the "Farmer's Advocate." Its contents are invariably fresh, up-to-date and pre-eminently helpful to everyone having an interest in the progress of the great staple industry of Canada, and who has not? I study each fortnightly issue as carefully as I do any periodical that comes under my notice, for I know I will find the latest and best information that is obtainable for the aid of the tillers of the soil, the growers of fruit, and the breeders of animals.

Yours sincerely,
J. D. CLARKE.

MARKETS.

Western Cattle Market Summary, 1902.

The live-stock receipts show a large increase over previous years, and a fair estimate of the average value per head of the live stock delivered at the market works out the following average:

Cattle	\$40.00	per head.
Sheep	4.50	" "
Hogs	10.00	" "
Calves	6.00	" "
Milch cows	55.00	" "

At these figures the total valuation of live stock received at the Toronto market during the year 1902 amounted to \$10,401,033, or \$1,327,711 more than 1901. The following is the comparative statement of the receipts:

	Cattle.	Sheep.	Hogs.	Calves.
1902	197,408	163,075	170,152	11,557
1901	174,860	141,277	153,306	8,582
Increase—				
1902	22,548	21,801	16,846	2,975
Per cent.....	12.8	15.4	10.9	30.6
The weighing fees amounted to:				
1902				\$9,566.91
1901				8,029.10
				\$1,337.81

an increase of 16.6 per cent.

This will be the banner year of the Toronto market for quantity of stock and high prices. It will be safe to say that there was fully \$12,000,000 worth of live stock handled at the market during 1902.

It will be seen that there has been a substantial increase in each kind of live stock. But the reference to hogs does not do justice, as there were many thousands of these animals consigned to the different packing-houses that are not taken into account in the above table. In regard to numbers, the increase of live stock is over 20 per cent., which surpasses all records. The facilities of the market have been at times severely taxed during the past year, and much more requires to be done in the way of enlarging and improving the yards and grounds at an early date. The outlook for the live-stock trade is bright, and we look forward to a still more prosperous season for farmers in 1903.

Chicago Markets.

Chicago, Jan. 28.—Cattle—Good to prime steers, \$4.50 to \$5.90; poor to medium, \$3 to \$4.50; stockers and feeders, \$2.25 to \$4.40; cows, \$1.40 to \$4.50; heifers, \$2 to \$4.60; canners, \$1.40 to \$2.40; bulls, \$2.25 to \$4.40; calves, \$3.50 to \$7; Texas-fed steers, \$3 to \$4.50. Hogs—Mixed and butchers', \$6.40 to \$6.60; good to choice, heavy, \$6.70 to \$6.92½; rough, heavy, \$6.40 to \$6.60; light, \$6.20 to \$6.40; bulk of sales at \$6.40 to \$6.65. Sheep—Good to choice wethers, \$4.25 to \$5; fair to choice, mixed, \$3.50 to \$4.25; native lambs, \$4.40 to \$6.35.

Buffalo Markets.

East Buffalo, Jan. 28.—Cattle—10c. to 15c. lower; veals, 25c. higher; tops, \$8.50 to \$9; common to good, \$5.50 to \$8.25. Hogs—Heavy and medium, \$6.90 to \$7; Yorkers and pigs, \$6.85 to \$6.95; roughs \$5.80 to \$6.20; stags, \$5 to \$5.25; early sales a shade higher. Sheep and lambs—Top lambs, \$5.90 to \$6; culls to good, \$4.25 to \$5.85; yearlings, \$5 to \$5.25; ewes, \$4.50 to \$4.65; sheep, top mixed, \$4.25 to \$4.50; culls to good, \$2 to \$4.15.

Montreal Markets.

Montreal, Jan. 26.—Slight advance in the prices of cattle, but trade was not brisk. The best cattle sold at about 5c., but they were not very choice heaves. Pretty good animals, 3½c. to 4½c., and common stock, 2½c. to 3½c. Calves sold at from \$3 to \$7 each, or from 4c. to 5c. per lb. Sheep sold at from 3c. to 3½c., and lambs at from 4c. to 4½c. per lb. There has been a considerable decline in the prices of fat hogs, which sold at from 5c. to 6½c. per lb., weighed off the cars.

Toronto Markets.

Trade at the Western Cattle Market has been slow and unsatisfactory to buyers and sellers. A good many of the cattle have been lying over from each market day, and prices have fallen about fifteen cents per cwt., all round.

Export Cattle.—The best exporters sold at \$4.75 to \$5.00; medium, \$4.40 to \$4.65. The bulk on offer were little better than short-keep feeders, and two loads of this class were carried over two markets.

Butchers' Cattle.—Choice, picked lots, \$4.40 to \$4.75. This class of cattle finds ready sale. They must be equal in quality to export, and weigh 1,025 to 1,150 lbs., live weight. Medium butchers' cattle, \$3.60 to \$3.80; good, \$3.85 to \$4.25; common, \$3.00 to \$3.50; rough common butchers' cows, \$2.80 to \$3.00; very rough canners, \$2.00 to \$2.25.

Messrs. Bentz Bros. is the new firm of canners at the Union Stock Yards, Toronto Junction. As soon as these works are in full running order, they intend shipping 200 head per week of pickled beef.

Bulls.—Choice heavy sell on sight, \$4.00 to \$4.25; light, \$3.50 to \$3.75.

Feeders.—Good short-keep feeders, 1,000 to 1,100 lbs., wanted, \$4.25 to \$4.40; light feeders, 800 to 900 lbs., \$3.00 to \$4.20.

Two of our distillery feeders have been obliged to send to Chicago Stock Yards on account of the scarcity of good feeders. They imported four car-loads.

Stockers.—Stockers of good quality, 500 to 700 lbs., wanted, and sold at from \$3.00 to \$3.75; poor quality, inferior grades, black and white off-colors, \$2.25 to \$3.00.

Calves.—Steady demand for choice veal calves, good quality, \$4.00 to \$12.00 per head, or from \$4.50 to \$6.00 per cwt.

Milch Cows.—Good dairy cows are in request. Milch cows and springers are worth from \$30.00 to \$55.00 per head.

Sheep.—Export demand still holds good; prices steady; \$3.50 to \$3.75 per cwt. for ewes, and \$2.75 to \$3.00 for bucks.

Hogs.—Best select bacon hogs, not less than 160 lbs., not above 200 lbs., off cars, not fed or watered, \$6.00; light and thick fat, \$5.75; sows, \$4.50; stags, \$3.00. Prospects are not good at present, too many light hogs coming forward, and prices are likely to go lower.

	Extreme comparative prices to-day, Jan. 26th, 1903.	Two weeks ago, Jan. 10.	Same date last year.
Export cattle	\$ 5 00	\$ 5 45	\$ 5 35
Butchers' cattle	4 75	4 50	4 50
Export bulls	4 25	4 00	4 50
Feeders	4 20	4 50	4 00
Stockers	3 25	3 25	3 50
Sheep (per cwt.)	3 75	4 50	3 50
Lambs (per cwt.)	4 75	4 75	4 50
Hogs	6 00	6 12½	6 75
Milch cows	55 00	57 00	55 00

PRODUCE MARKET.

Despite the rough weather, the receipts at the St. Lawrence Market were large.

Wheat.—Red and white are worth 7½c., middle freight; goose, 65c.; Manitoba No. 1 hard, 87c. Spring sold at 70c.

Barley.—No. 3 extra for export sold at 46c., and two thousand bushels sold here at 47c. to 51c. per bushel.

Oats.—New oats are quoted on the Board at 31c. for No. 2, north, and 32½c., east, for No. 1, in Toronto; 300 bushels sold at 35c. to 35½c. per bushel.

Corn.—Canadian, 51c. for new on track at Toronto. Bran.—City mills sell bran at \$15.50 and shorts at \$17.50, car lots, f. o. b. Toronto.

Hay.—First-class hay having a little snow on top of load sold at from \$13.00 to \$15.00 per ton for timothy, and at from \$5.00 to \$9.00 per ton for clover.

Straw.—Four loads sold at from \$9.00 to \$10.00 per ton.

Potatoes.—Little change in prices, although an easier feeling pervaded the market. Car lots are quoted at from \$1.00 to \$1.20 per bag, on track.

Butter.—Prices are steady, at about 20c. to 24c. per lb.

Eggs.—Strictly new-laid are more plentiful, and sold at from 25c. to 30c. per doz.

Cheese.—There is a good deal of talk about cheese, but no prices are quoted for publication. It is said that about half a dozen are in possession of about half the stock of cheese in Canada, and intend holding for higher prices; 12½c. to 13c. mentioned, but none to sell.

Seeds.—Alsike, choice No. 1, \$7.25; alsike, No. 2, \$6.50; timothy, \$1.80; red clover, \$6.85; white clover, \$10.00.

Dressed Hogs.—Prices unchanged, \$7.50 to \$7.75 for heavy, and \$8.00 to \$8.25 per cwt. for choice butchers' hogs.

British Cattle Markets.

London, Jan. 28.—Live cattle steady at 11½c. to 13½c. per lb. for American steers, dressed weight; Canadian steers, 11c. to 12½c. per lb.; refrigerator beef, 9½c. to 10c. per lb. Sheep steady.

Home Magazine



"Come share with me the ingle-nook,
While wintry winds are high;
A couch, a screen, a pleasant book,
A glimpse of wood and sky;
And let the world go by, my dear,
And let the world go by!"

The Face in the Glass.

Two large, mournful eyes, straight brown hair combed back from a high forehead, dark skin and a sad little mouth—that was what Em'ly Caroline saw every time she looked in the glass that hung over the teacher's desk at school. Em'ly hated that glass, and she hated the face in it, too.

It was a bare little schoolroom, containing only a big, ugly stove, many battered benches, the teacher's desk, and blackboards all around the room, with examples on them that made Em'ly Caroline sick at heart to look at, because they were so hard to understand.

All the other children went home to their dinner, but Em'ly Caroline lived too far away. So there she stayed a whole hour all alone, with that mournful little face in the glass for company. Sometimes she sat down and cried after taking a look, and once in a great while she boldly made a face at it. It was her very own face, Em'ly Caroline knew that well enough; and she never wondered that the teacher lost patience with her or that the scholars made fun of her.

The night when Em'ly's Cousin Rosabelle was coming to make a visit the aunts were invited over to tea. The stage happened to be late; and, as the aunts were obliged to go home early, they all sat down to supper before Rosabelle and her mother arrived. Em'ly Caroline couldn't have told afterward what was on the table.

"They say Rosabelle's real smart with her books," said Em'ly's mother. "I suppose she's way ahead of Em'ly Caroline."

The hot blood rushed all over Em'ly's face, for everybody at the table knew how dull she was.

"Well," sniffed Aunt Bathia, "I can assure you that Rosabelle's mother never had to drive her to school. She's always ready and glad to go."

Em'ly Caroline kept her eyes on her plate and tried hard to swallow what was in her mouth. She remembered very well once, when Aunt Bathia was there visiting, she had sat down on the roadside and cried instead of hurrying along to school. Aunt Bathia had caught her at it, and Em'ly knew she had never forgotten.

"Rosabelle's a real pretty child," said aunt Sue, "and I don't know's I ever heard her cry."

"Em'ly Caroline wouldn't have looked up then and met those two pairs of scornful eyes for the world."

"Pity Em'ly couldn't take lessons of her cousin Rosabelle," brother James remarked; and then, just as Em'ly was longing to creep away under the table, she heard a knock at the door, and there was Rosabelle and her mother.

Em'ly Caroline had never seen anything so beautiful as her cousin Rosabelle. She had white skin and pretty light curls, her eyes were blue; and she walked right round the table and kissed everybody without being told. Em'ly Caroline couldn't take her eyes off of her. Rosabelle wasn't one bit afraid of all the strangers; not even when everybody was looking at her, and talking about her; and when Em'ly father and brother James asked Rosabelle questions, she spoke up as quickly and laughed as Em'ly had never dreamed of laughing.

"Seems to me your Em'ly Caroline's a dreadful sober little piece, isn't she?" asked Mrs. Tenny, Rosabelle's mother, "not much like my Rosabelle."

"No, she isn't much like Rosabelle," sighed Em'ly's mother.

"Terrible dark, isn't she?" said Mrs. Tenny. "Yes, she's dark," admitted Em'ly's mother with another sigh.

"Who does she take after? I can't see as she favors any of our folks."

Everybody began to talk about Rosabelle now, and Em'ly Caroline took a long breath of relief.

The next day after Rosabelle came Mrs. Tenny decided to send her to school with Em'ly Caroline. "I guess I won't have her go but half a day," she said to Em'ly's mother. "I think that's enough for her this spring."

Em'ly was happier to have Rosabelle's company, and she walked in the grass all the way to school, so that Rosabelle might have the path. At the

schoolhouse the children crowded around them, and were very kind to Em'ly because she was Rosabelle's cousin. Miss Smith, who was almost always cross, smiled whenever she looked at Rosabelle.

Em'ly's days would have been quite happy now if only Rosabelle could have stayed with her through the noon hour; but every day she tripped away, leaving Em'ly Caroline with the same old things to look at—the big stove, the blackboards, the empty benches. Em'ly felt as if they all knew she was dark and homely and dull.

But changes come into everybody's life, even into a little lonely schoolgirl's. One bright, sunny day, after long days of rain, Em'ly and Rosabelle were on their way to school. Suddenly they looked up and spied a field of buttercups. Rosabelle had never picked buttercups in her life, and after she had picked one bunch she wanted to pick another. Em'ly helped her, and then urged her to hurry because it was almost school time.

"I don't want to go to that old school. I don't like it," said Rosabelle, decidedly.

Em'ly Caroline stared at her.

"No, and I'm not going," continued Rosabelle. "I'm just going to pick these flowers. It isn't my school, anyway."

"But you didn't ask your mother," said Em'ly.

"I don't care," replied Rosabelle. And then Em'ly trugged off to school alone. At night when she came into the yard, Rosabelle met her. "Don't tell 'em that I didn't go to school, will you? They didn't ask me a word, and they don't know."

Em'ly stared at Rosabelle, and shook her head.

"No, I won't tell," she said, and then fell to thinking.

At the supper table something happened that made Em'ly Caroline think harder than ever.

"Where'd you get all those buttercups, Rosabelle, you brought home this noon?" asked Aunt Sue, who was there spending the day. "I didn't see one on the road when I came along. Must have taken 'an hour to pick them."

Rosabelle looked at Em'ly Caroline, and then spoke up just as if she were telling the truth. "The children gave them to me," she said.

"Didn't they give you any, Em'ly Caroline?" asked Aunt Sue.

"No, they didn't," said Em'ly.

"Rosabelle was always a favorite," said Mrs. Tenny.

Em'ly didn't look at Rosabelle once during supper. No, nor during breakfast next morning. It seemed to her that Rosabelle's pretty face must be all spoiled, and she couldn't bear to look at her.

At noon, when she was alone again, she climbed up and looked at the face in the glass. It was a straightforward gaze that she met, and Em'ly looked at the face a long time. At length she spoke to it. "You wouldn't lie, would you?" said Em'ly Caroline. And the big dark eyes and the little firm mouth, and even the nose and the high forehead seemed to say, "No! No! No!"

"I'll never make faces at you again," said Em'ly, "never."

"Certainly not," said the face.

"I won't cry about you, either."

"I'd be ashamed to have you," said the face.

It was strange, perhaps, but Em'ly wasn't afraid that noon, and she climbed up and looked out of the window and watched the trees, and the birds, and the spring blossoms. She wasn't afraid when school began, either; and she answered questions very well, indeed.

Even Aunt Sue and Aunt Bathia noticed a change in Em'ly Caroline. "I wouldn't wonder if the child turned out all right, after all," they said one day.

"Oh, Em'ly Caroline isn't the worst child that ever lived," said grandmother.

Em'ly looked up quickly. "How'd you know, grandmother?" The question came out before Em'ly Caroline thought.

"Why, child," said grandmother, "you didn't suppose you were, did you?"

Em'ly shook her head. "I used to," she said, "but I don't now." And that was every word Em'ly Caroline would say on the subject. She kept her word to the face in the glass, and never made faces at it or cried over it any more.—[Frances J. Delano, in the Congregationalist.]

Humorous.

A distinguished lawyer and politician was travelling on a train when an Irishwoman came into the car with a basket, bundle, etc. She paid her fare, but the conductor passed by the lawyer without collecting anything. The good woman thereupon said to the lawyer: "An' faith an' why is it that the conductor takes the money of a poor woman an' don't ask ye, who seem to be a rich man, for anything?" The lawyer, who had a pass, replied: "My dear madam, I'm traveling on my beauty." The woman looked at him for a moment, and then quickly answered: "An' is that so? Then ye must be very near yer journey's end."

There is some pleasure in coming upon an anecdote in which the barber does not have the last word. Judge relates this dialogue: "Hair's very thin, sir." "It was thinner than that thirty years ago." "Indeed, sir! You surprise me. Why, you don't look more than thirty now, sir!" "Thirty yesterday!"

'Twi' a Christmas and New Year Over Two Decades Ago.

III.

To pick up the thread of my story, I must take a few steps backward. I must even go as far back as to one of the many, many evenings spent on the deck of the "Bonnie Bessie," when the terrible heat of the day over, my poor friend and myself would sit on deck, talking sometimes, sometimes in silent, sympathetic companionship, and sometimes exchanging an occasional remark with the Captain, or the officer of the watch. There would be the southern cross above us, and an outspread canopy, bediamond with stars, reflected in the waters beneath; the sky above and the reflected sky below being as one unfathomable mystery of beauty.

"How near heaven seems," one of us would be almost sure to say. "It is as though we could put out our mortal hands and choose our particular star, and grasp it now, without any revelation," for so it seemed to us, and we indulged our fancies, asked and answered our, perhaps, childish questions, and did not strive to curb our imaginings. Somehow they comforted us, and I think they were surely forgiven us. But on this especial evening our little Captain tried to cheer us, and we gladly listened as he told us of his early days in his home in the village amongst the Welsh hills, of the little maiden who used to sit by him on the form at school, how he had carried her books and slate, and fought her battles, and never thought of any girl but Lizzie as his wife to be some day. "And she is my wife, and she is to come to London to meet me in the docks when I arrive, as this is the first time I have been the captain of a ship." He then passed on to tell of kindness shown him in Natal, a port he had sailed to and from as seaman and mate for some years, winding up with showing us a curious seal which had been given him, in the form of the hock of a horse, with the initials T. M. engraved upon it. Happily we noted this, for this seal has a place in the story which I seem to linger in the telling. The night arrived at last when, in answer to our signals, the pilot came aboard, after many futile efforts. He brought his budget of newspapers, the first we had seen for many a long week, and his tale of casualty after casualty, which had happened from day to day "during storms such as had seldom or never been heard of before." I can recall how we huddled around the little stove lashed to the floor (which had to be watched most carefully to guard us from accident), as we listened to all the pilot had to relate. No one attempted to go to bed, for our peril was great, although not one of us pretended to be aware of the fact. "Here, Miss H.," said our captain, "please read out to us some of the news. Take the shipping first." I obediently put forth my hand, but column after column seemed full of disaster. "Why, Captain, you'd better leave the shipping news until we get safe into port," but he would not, and so there was nothing to be done but for me to read and for them to listen to such as "The Barque St. Quentin foundered on 30th December," "the 'Saucy Sally' and all hands wrecked off the Silly Islands," "The Steamer Cassemir broke from her anchorage and went to the bottom," etc., etc. "Don't they give any names of those lost?" queried the Captain. "Yes, there is Thomas Smith, of this, and James Williams, of that, and there's Lawrence Littleton, of the Schooner Sarah Milloy, and many more." "So Lawrence Littleton is gone, is he? He was a mate of mine on the Seagull," said the Captain. "Well, his time had come, I suppose. It's what we sailors have to expect," words which seemed meaningless then, but yet were prophetic, had we but known it.

Without a minute's unavoidable delay we got into the London docks, no one but the Captain at first going ashore, and he had to do so to report to the owners of the "Bonnie Bessie." He returned at the earliest possible moment, but I could see, without any telling, that he had met with some serious disappointment. Seeing my look of sympathy, he placed in my hands one of the most touching letters I had ever read. It was from his wife, telling him in language half Welsh and half English, but almost weird and poetical in its choice of words, "that she had had such a dream, a dream of coming calamity, a dream so direful that until she got word from himself that he was safe in port she could not come—something held her back—but directly she got word of his safety she would take the first train to London." "Well," I said, "you see her dream was all wrong. Your second mate, by right of privilege, is the first to leave the ship, and he goes straight home to your village. He will tell her that all is well, and she will be here at the beginning of the week." On the Sunday he was to have come to our lodgings to dine and go to church with us, for we wanted to mark our sense of gratitude by introducing him to friends who could thank him on our behalf. "You must meet me at the station," he said, "or I'll surely be

lost. I could easier find my way back to Natal in our little ship than to Bayswater by underground railway." On Sunday we waited over several trains, and then resigned ourselves to our disappointment. "Captain E. must have lost his way after all," we said. And so he had, as we afterwards learnt, but not on his road to Bayswater, only in the path of duty, or rather in excess of his duty, impelled by an over-conscientious scruple. On the Saturday the "Bonnie Bessie," having discharged her cargo, was to be taken down to the dry-dock at Rotherhithe for the usual overhauling. The routine rule under such circumstances is always that a Thames River captain should take over the full charge of a vessel, her own captain being free to leave her. But though no longer responsible, Capt. E. could not resist going with his dear little vessel, even if he were not to command her. The chief mate and the cabin boy were aboard of her too. All might have gone well had not a sudden squall caught her, and being emptied of freight, and thus insufficiently ballasted, she was capsized in one moment of time, the mate being the only one able to scramble up into the rigging, from which he was quickly rescued. The bodies of the river captain and the curly-headed little lad who had shared our perils with us were found shortly afterwards, but the search for that of the faithful Captain of the "Bonnie Bessie" brought no results for many a long day.

Shall I ever forget the sad-faced little woman who came to London too late to see him whom she so dearly loved? It was my privilege to be with her each day for the first week or so of that long waiting time. Science found a means of raising and restoring to use and beauty the dear little barque which had been for so long our home, but for the shipwreck in the home in that hill-surrounded village, of which we had heard so much, science was powerless and sympathy could do but little. But the one earnest wish of her heart was at last granted to the widow. "If my Evan can be found, and if you will find a resting place for him in some God's-acre near by, I think I can be brave to fight the battle of life single-handed for our three bonnie boys. A few weeks later I was away from London, when the owners, who had been generous and kind to poor Mrs. E., sent me the sketch of a seal, a horse's hock and the letters T. M. engraved thereon, saying: "A body had been found in the Thames below Gravesend. The pockets had been emptied, evidently by river thieves, but in the lining of the coat was the seal as described. Could I tell them if I knew if Captain E. ever possessed such a seal, and had he worn socks with such and such stripes above the ankle." To both of these questions I could answer "yes," for had he not shown us that seal on that star-light night in the southern seas, and on another occasion had brought out of his cabin a pair of socks with just those stripes, saying, "My Lizzie knitted them for me. I have plenty like them, for she never lets me want for anything which her fingers can supply." All this happened nearly five and twenty years ago, and from time to time letters come to the writer, telling of the ups and downs of the strenuous life which this brave little woman has lived since then, which is indeed another story, but one well worth the telling, one which some day I may be able to record in simple fashion in the pages of the "Farmer's Advocate." H. A. B.

H. A. B. has again occasion to thank a friend who sends her the following kind message regarding her short articles from the Cotswold Hills: "Although I have not heard directly from you for a long time, you seem to have been addressing me in your interesting letters from Birdlip. My husband's family lived for years in Painswick, and I have often heard him speak of it. How I should like to have been with you in your rambles."

He Gave the Reason.

Uncle Silas, an inveterate horse-dealer, was one day called upon by an amateur in search of "something fast."

"There," said Uncle S., pointing to an animal in a meadow below the house, "there, sir, is a mare yonder, who would trot her mile in three minutes were it not for one thing."

"Indeed!" said the amateur.

"Yes," continued Uncle S.; "she was four years old last spring, is in good condition, looks well, and is a first-rate mare, and she could go a mile in three minutes were it not for one thing!"

"That mare," resumed Uncle S., "is in every way a good mare; she trots square and fair, and yet there is one thing only why she can't go a mile in three minutes."

"What in the name of thunder is it, then?" cried the amateur, impatiently.

"The distance is too great for the time," was the old man's reply.

"I don't care for looks or riches," she said. "The man I marry must be a hero."

"You are right, my child," said the father. "he must."

THE QUIET HOUR.

What is Your Life?

"That low man seeks a little thing to do,
Sees it and does it;
This high man, with a great thing to pursue,
Dies ere he knows it;
That low man goes on adding one to one,
His hundred's soon hit;
This high man, aiming at a million,
Misses an unit.
'That' has the world here—should he need the next,
Let the world mind him!
'This' throws himself on God, and unperplexed,
Seeking shall find Him."

When St. James asks the question, "What is your life?" he immediately answers, "It is even a vapor, that appeareth for a little time, and then vanisheth away. That sounds rather discouraging, doesn't it? And if we had no other information on the subject, we might act on the old heathen motto, "Let us eat and drink: for to-morrow we die." To use a more modern phrase—which always sounds heathenish to me—"It will be all the same a hundred years hence." As a matter of fact, that common remark is as untrue as anything could be; for the most trifling action helps to build up character, and its influence is never lost through all eternity. It is folly to imagine that it doesn't matter what we do or think secretly; to fancy that "God hath forgotten: He hideth His face. He will never see it." Surely the words of Job are true: "Thou numberest my steps: dost Thou not watch over my sin? My transgression is sealed up in a bag, and Thou sewest up mine iniquity."

The question, "What is your life?" is a very solemn one for each of us. We may, as Browning suggests in the verses given above, reach our ideal even here, if that ideal be a low one, or we may have such a high ideal that our life, in comparison with our aim, seems a failure—aiming at a million, we may miss even an unit. What then? If our life be rounded and complete here, what is left for us to aspire after through the ages of eternity?

"Others mistrust, and say, 'But time escapes:
Live now or never!'
He said, 'What's Time? Leave Now for dogs and apes!
Man has For Ever!'"

If each day is but as a drop in the ocean of eternity, we might fancy that it matters very little what becomes of it. What is one day, when we have uncounted ages before us! So one who had millions of dollars at his disposal might recklessly waste a few cents. But it is just because this short life is not all. Just because we must live through all eternity, whether we like it or not, that every day is valuable. A seed would be of very little value if there were no resurrection, but it must be respected when we consider that it contains within it the power of reproduction to an unlimited extent, and might, by careful management, produce food for millions in years to come. Those who have the responsibility of handling great wealth are the very people who, above all others, should learn the value of money, lest they do great mischief with it and lose the opportunity of doing great good.

A modern writer suggests that capitalists are really members of a new profession, and that special training is required for it at least as much as for any other of the so-called learned professions, that it may be used for the greatest good of the greatest number. Because eternity lies before us, because we are powerless to escape our heritage of immortality, the question of how we are spending our life here becomes one of tremendous importance. Let us look at each day from God's point of view, and see how it may be laid out to the best advantage. The German grammarian who said he had devoted his life to the dative case may have made good use of his time—that is not a question for us to decide, "to his own Master he standeth or falleth"—but let us make sure that the life which has been placed in our keeping is accepted as a sacred trust from God, and made good use of.

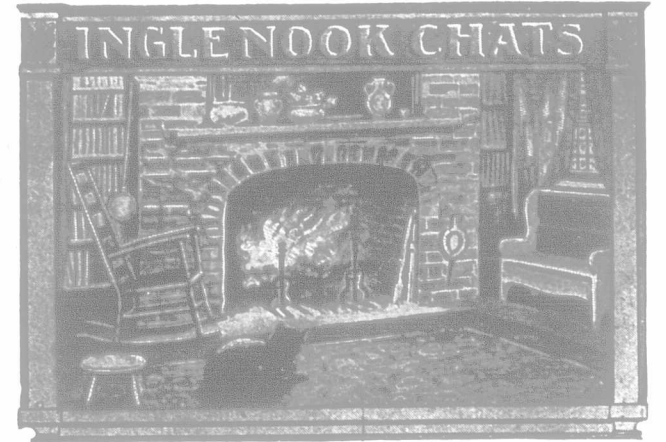
What is your life? Are you called to fill up a few years with a meaningless succession of trifling duties, and then are you to be snuffed out like the flame of a candle, leaving behind only a passing memory of one who had once lived? Surely we are living now in eternity. Everything we do is of consequence because it leaves its mark forever on character, and character can never die. Looking at life through God's eyes we shall see the importance of the secret thoughts and acts which are known only to Him and to ourselves. We shall see that the work he gives us to do is worth doing with all our might, whether the world knows about it or not.

Are we spending time, strength and thought on work that is really worth while in God's sight, or is our life being wasted in heaping up treasure which must be left behind when we step over the threshold of death into the mysterious life beyond. A man may be very busy, in the world's opinion,

and yet be wasting his life, throwing away every opportunity of laying up treasure in heaven, and find at last that his soul is poor indeed. Whose fault will it be if, when called to meet the Bridegroom, we have nothing to offer Him, if in all our lives we have not given even a cup of cold water for love's sake?

"This life is but an empty void,
If but in selfish deeds employed;
And length of days is not a good,
Unless their use be understood.
While if good deeds one year engage,
That may be longer than an age.
But if a year in trifles go,
Perhaps you'd spend a thousand so.
Time will not stay to make us wise—
We must improve it as it flies."

HOPE.



My dear Guests,—

"We ought to be as cheerful as we can, if only because to be happy ourselves is a most effectual contribution to the happiness of others. According to the Italian proverb, 'if all cannot live on the piazza, everyone may feel the sun.' With most of us it is not so much great sorrows, disease or death, but rather the little 'daily dyings' which 'cloud over the sunshine of life. How many of the trials of life are insignificant in themselves and might easily be avoided!"

Sir John Lubbock, the writer of the above quotation, tells us that he was naturally prone to low spirits, but found that frequent dwelling upon cheerful thoughts, and the consideration of the many blessings he enjoyed, did much to banish this distressing trouble. When called upon from time to time to address a youthful audience, he endeavored to imbue his hearers with an optimistic view of life, and to impress upon their minds the fact that each individual's share of that enviable possession—happiness—may be decreased or augmented at pleasure. In his own case he formed the habit (evidently not without effort) of causing his thoughts to dwell on pleasant things, and of memorizing the ennobling words of others, and seems to have made a liberal collection of quotations of this nature. These he used very freely in his addresses, which he afterwards gave to the world in book form.

I noticed in a magazine a few months ago, a novel but laudable suggestion, namely, that at the beginning of the new year every one should procure a neat blank book, to be thereafter known as a "Pleasure Book." In this were to be recorded all the pleasures of each day: the visit of a friend, the caress of a child, the reception of a welcome letter, the delight afforded by beautiful scenery, the kindly word of praise, the unlooked-for gift; all the many trifles that go to make up the happiness of the day. Then when the compiler of this wonderful little book feels discouraged, down-hearted, and just a little inclined to rail at fate, let him read over his "Pleasure Book," and behold! like a magician's wand he shall find it has caused all his worries to disappear entirely, or, at least, to have shrunk into comparative insignificance in view of his many blessings.

A somewhat similar plan was adopted by a boy, who called his little volume a "Thank Book"; in it he made a note of every kindness shown him by his schoolmates or others; when something caused him to feel angry with someone he looked up his "Thank Book," and usually found some kindness on the part of the transgressor that overbalanced the offence. Ah me! how few of us keep our accounts so carefully! Don't you think these are good suggestions? Suppose we try the first one? Yes, you who are reading this, and I. I need such reminders quite often, and possibly they may not come amiss to you. If by the magic aid of a "Pleasure Book," we may diminish the little "daily dyings" that rob us of our just share of sunshine, we shall have conferred on ourselves and others a valuable boon.

Apropos of Memory Gems, why not have a little book in which to jot down your favorites and any relevant notes you wish to add, such as the author's name, the work from which taken, etc.? One often wishes for a certain quotation, but remembers it only in an indistinct way, and it

would be so easy to look it up if this plan were followed? Then, too, one might often secure precious items, which for want of time to commit to memory would otherwise be lost.

We hope for something specially good from Canadian authors. There are many to select from: Jean Blewett, Bliss Carman, C. D. G. Roberts, Dr. Drummond, Ralph Connor, Louis Frechette, "Fidelis," etc. Let everyone who can find ten quotations try this time, there is nothing to lose and something to gain, even if you do not win a prize. Do what lies in your power to let the world know something of your country and its people. Plenty of time to begin now, as contest is open until February 20th.

THE HOSTESS.

Ingle Nook Chats, Pakenham, Ont.

PRIZE MEMORY GEMS.—CLASS III.

By Janet Waterman, Fraserville, Ont.

If a man stand for the right and the truth, though every man's finger be pointed at him, though every woman's lip be curled at him in scorn, he stands in a majority, for God and good angels are with him and greater are they that are for him than all they that be against him.—John B. Gough.

The heights by great men reached and kept
Were not attained by sudden flight,
But they, while their companions slept,
Were toiling upward in the night.

—Longfellow.

Let the grandeur of men be discerned, not in bloody victories, or in ravenous conquests, but in the blessings which he has secured, in the good he has accomplished, in the triumphs of benevolence and justice, in the establishment of perpetual peace.—Charles Sumner.

'Tis easy enough to be pleasant
When life flows along like a song,
But the man worth while is the one who will smile
When everything goes dead wrong.
For the test of the heart is trouble,
And it always comes with the years,
And the smile that is worth the honor of earth
Is the smile that comes through tears.

—Ella W. Wilcox.

True Politeness.—"It is a perpetual attention (by habit it grows easy and natural to us) to the little wants of those we are with, by which we either prevent or remove them. Bowing ceremonies, formal compliments, stiff civilities will never be politeness; that must be easy, natural, unstudied, manly, noble.—Lord Chatham.

Aye, go to the grave of buried love and meditate! There settle the account with thy conscience for every past benefit unrequited, every past endearment unrequited, of that being who can never, never, never return to be soothed by thy contrition! But take warning by the bitterness of this, thy contrite affliction over the dead, and be more faithful and affection-

ate in thy discharge of thy duties to the living—Washington Irving.

Count that day lost
Whose low descending sun,
Views from thy hand
No worthy action done.

—Longfellow.

Our brains are seventy-year clocks. The angel of life winds them up at once for all, then closes the cases, and gives the key into the hand of the angel of resurrection. "Tic-tac, tic-tac!" go the wheels of thought; our will cannot stop them; madness only makes them go faster. Death alone can break into the case, and, seizing the ever-swinging pendulum which we call the heart, silence at last the clicking of the terrible escapement we have carried so long beneath our aching foreheads.—Oliver Wendell Holmes.

Be good, be womanly, be gentle—generous in your sympathies, heedful of the well-being of those around you, and, my word for it, you will not lack kind words or admiration.—John Greenleaf Whittier.

True worth is in being, not seeming;
In doing each day that goes by,
Some little good, not in dreaming
Of great things to do by and by;
For, whatever men say in their blindness,
And spite of the fancies of youth,
There is nothing so kingly as kindness,
And nothing so royal as truth.

—Alice Cary.

One of the Family.

What a pretty home picture is this! and what a chord it must touch in many a heart upon the farms of our big Northwest, where such a scene is doubtless again and again reproduced. The many-paned window, with its useful ledge for plants, granny's knitting and mother's mending-basket, the door with its movable upper-half, through which Dobbin can look and plead for dainties—all tell us it is a scene in rural England, and the home that of a well-to-do yeoman in the dear Old Land. Father is reaching for the keys of the stable, where Dobbin will be made comfortable before his master takes the vacant chair or helps himself to a big slice from the huge pie placed before it. Granny is the bread-cutter still, an office she is loath to relinquish, whilst she has a wary eye upon Bobbie, who is her more especial charge. Sturdy Jim has no eyes for any member of the family but his hungry young self. Jenny stretches out her well-filled palm, with a shout of welcome, whilst mother, taking her foot off the rocker of baby's cradle, leans back with the slice of bread which is Dobbin's share of the family fare, taking, very properly, no notice for the moment of Rover, the jealous, who will have more bones than he can eat when she has cleared the table at the end of the meal.

H. A. B.

Resolve.

As the dead year is clasped by a dead December,
So let your dead sins with your dead days lie.
A new life is yours, and a new hope. Remember,
We build our own ladders to climb to the sky.
Stand out in the sunlight of Promise, forgetting
Whatever the Past held of sorrow or wrong.
We waste half our strength in useless regretting:
We sit by old tombs in the dark too long.

Have you missed in your aim? Well, the mark is still shining.

Did you faint in the race? Well, take breath for the next.

Did the clouds drive you back? But see yonder their lining.

Were you tempted and fell? Let it serve for a text.
As each year hurries by let it join that procession
Of skeleton shapes that march down the Past,
While you take your place in the line of Progression,
With your eyes on the heavens, your face to the blast.

I tell you the future can hold no terrors
For any sad soul while the stars revolve,
If he will stand firm on the grave of his errors,
And instead of regretting, resolve, resolve.
It is never too late to begin rebuilding,
Though all into ruins your life seems hurled,
For see how the light of the New Year is gilding
The wan, worn face of the bruised old world.

—Ella Wheeler Wilcox.

Hymns Up-to-date.

An old gentleman of eighty-two, whose occasionally cynical speeches are always tinged with good humor, was asked his opinion of modern church music.

"It's all very fine," he said dryly, "and I like to hear it; but there's one thing I've noticed. It may be just chance, but I've noticed it a good many times.

"When I was a boy the people went to two services a day, and sometimes three, and they sat on hard seats with straight backs, and sang with all their hearts,

"My God, the spring of all my joys."

"Now the congregation lean comfortably back in softly cushioned pews and listen to the choir singing,

'Art thou weary, art thou languid?'

I may be mistaken, but it comes home to me every now and then, that hymnology is changing to suit the times."



ONE OF THE FAMILY.

THE CHILDREN'S CORNER. In the Saddle: Some Famous Riders.

PRIZE ESSAY.—CLASS II.

Life on a Canadian Farm.

Life on the farm is the happiest of all. In the spring, before the snow is off the ground, the sugar-making begins. They all like to gather around, and watch the sap boil in the big kettle. But the best time is when they sugar off. Soon after the sugar-making is over, it is time to begin to work in the fields. The flowers start to come out in the woods, and it soon begins to look like summer again. Then there are the hens and the geese to set, so that we may have chickens to sell in the fall. After a while the men start to cut the hay, and after it is dry they bring it in. The boys like to ride on the loads to the barn. Strawberries are ripe about the time haying starts. We like to gather the wild ones the best, for they are the sweetest. Summer has begun and so the boys can go barefooted. They can go fishing, and paddle in the creek. The cows have to be brought from the pasture every night and morning to be milked. The eggs have to be hunted every day. The raspberries are ripe, and have to be put up for winter. There is always beautiful scenery in the country in summer. You see the grain waving in the fields, and the wild flowers all around the fences, but the prettiest of all is the sunset. After all the grain is gathered in, the leaves are beginning to turn on the trees, and that shows it is autumn.

Then there is the corn to be cut and brought in, and the apples picked, and the roots to be put in the cellar, so that the cattle may have something to eat in the winter. There are also the chickens to be killed and taken to market. By the time everything is in the barn and the fall plowing done it is cold weather. Oh! for the fun we have in the winter! There is always good ice somewhere that we can skate on, and always good sleigh-riding, too. We all like to make snow forts and snow men, etc. Winter is soon gone, and it is springtime again.

ANNIE BAKER (age, 14 years).

Alberton P. O., Ont.

PRIZE ESSAY.—CLASS III.

Napier, Ont., Dec. 20, 1902.

Dear Cousin Dorothy,—

I thought I would write you a short letter about "Canadian Life on a Farm."

I have not been here very long, and I think it is so nice to live on a farm. I am from Dr. Barnardo's Home for girls. I lived in a town in Muskoka for over two years before I came here, and there they had to buy everything that they would like to make use of, but here on the farm they seem to have almost everything they need without buying it. We keep a lot of cows, and send the milk to the factory to be made into cheese in the summer time, but now we are keeping it at home and making butter. We have all the nice sweet milk we want to use all the time. I thought it strange to see them cutting the corn and filling the silo to make feed for the cows; and then we had the threshing machine for three days.

We have a lot of calves, and such a lot of pigs, and we have five or six horses and three colts; one little colt is so pretty we call her Birdie, and she will stand quiet for me to pet her. I have six Belgian hares, and they are beauties. We have a lot of fowls—turkeys, geese, ducks, chickens, pea-fowls and guineas. Our hens are laying now, so we still have fresh eggs to use.

We had so many pears and apples this year that we did not know what to do with them. We grow all our currants, gooseberries, strawberries, raspberries and cherries. We keep some bees, and have plenty of honey to use.

I often have a ride in the buggy. We always drive to church every Sunday. I have about two miles to go to school, and we have fine times sleigh-riding down a hill which is close to the school. We are going to have a Christmas tree and entertainment on Christmas eve, and we expect Santa Claus himself to be there. I am practicing some pieces to sing with some of the other children for the entertainment.

We take three papers, but we like the "Advocate" best of all.

Wishing you a merry Christmas and a very happy New Year. FLORENCE TOYE (11 years old).

An Easy Way of Washing.

Cut up one-half pound bar of soap into three quarts of soft water; put on stove until all is melted; add one tablespoonful of coal oil; stir well with clothes-stick. Have the boiler three parts full of cold soft water, turn in the soap, put it on the stove and put in the soiled clothes without rubbing. Do not let the water get warm before putting in the clothes. Stir and press the clothes with the stick, and when they boil for about ten minutes put into tub with cold soft water. Lift out of boiler with stick, rinse and blue.—Eulalie.

History throbs with them; throbs, I say, because of the wild, exultant thrill propelled through our hearts by these heroes and heroines of the saddle. It is not only the heroism of the rider that stirs the blood; it is also the fine intelligence, the endurance, and the unflinching affection and loyalty to his master of the beautiful animal beneath the saddle. Through the power of a single saddle a nation has been saved; and, again, in spite of the united energies of multiplied ones, nations have been lost.

We read that a Roman, called Pelethronius, was the first to adopt the saddle idea, viz., a square of leather, or cloth, fastened on the horse's back, and that the old German races ridiculed the Roman soldiers for employing such an unmanly contrivance in their cavalry. We cannot begin to enumerate the riders who have been famous in battle—a whole book would scarcely suffice for such a purpose. Kings there are among them—aye, and queens—and many men who, though humble in birth, are kingly in nature. But let us speak of a few:

Was there ever a more famous horsewoman than Jeanne d'Arc? It was she, a simple peasant girl, who donned her suit of white armour, and mounting her black charger, advanced at the head of six thousand men to aid Dunois in the relief of Orleans from the English. Hers was, indeed, a marvellously noble and inspiring nature, and it makes one's blood boil with indignation to think of her being sold to her enemies by those whom she had saved from destruction, and it is a stain on the history of England, that English soldiers burnt her at the stake as a witch.

Queen Elizabeth was an excellent rider, as was Mary, Queen of Scots, who, on one occasion, after her last defeat, rode ninety miles without stopping, except to change horses. And in recent days we read of the unhappy Elizabeth of Austria being very fond of horseback-riding, and during her later years this unfortunate, eccentric woman, Empress though she was, used to go for long, solitary rides in the hours of midnight.

A famous rider with whose name we are all familiar, or should be, is "Little Phil" Sheridan, that gallant Northern General who never lost a battle. At the time he took his famous ride from "Winchester, twenty miles away," his army was encamped along Cedar Creek, in the Shenandoah Valley. He himself had gone to Washington, leaving General Wright in command. During his absence the Confederates attacked his army, routing part of it, and forcing back the rest in confusion. Wright succeeded in making a stand, which checked the Confederates for a time, but they were preparing to attack again, when Sheridan, who had heard of it at Winchester, and had ridden from there, arrived on the scene, placed additional troops on the line, cheered on his men, and defeated the Confederates utterly. Brave, plucky "Little Phil," and brave, plucky horse!

"Hurrah! Hurrah for Sheridan!"

Hurrah! Hurrah for horse and man!

Be it said, in letters both bold and bright,

'Here is the steed that saved the day

By carrying Sheridan into the fight

From Winchester, twenty miles away."

Another famous rider is Paul Revere. He was an American patriot, a goldsmith by trade, and afterwards a copper-plate engraver; he produced prints illustrative of the Repeal of the Stamp Act, and the landing of the British troops at Boston. "At the instance of Gen. Warren he rendered an important service to his country, by secretly leaving Boston at 10 o'clock p.m. April 18, 1775, and riding through Charlestown to Concord, to announce the British expedition of the following day, which expedition was resisted at Lexington and Concord." Of this ride Longfellow writes:

"A hurry of hoofs in a village street,

A shape in the moonlight, a bulk in the dark,

And beneath, from the pebbles in passing, a spark

Struck out by a steed flying fearless and fleet—

That was all! And yet, through the gloom and the light,

The fate of a nation was riding that night."

And this brings to mind another saddle hero—Daniel Periton. His name is not so well known as the foregoing, but it is every bit as deserving of honor, and perhaps more so, as both he and his horse gave their lives to save others. It was on the occasion of the Johnstown flood. Young Daniel Periton, a merchant's son in Johnstown, hearing rumors of the great dam giving way, decided to go and investigate; so mounted his horse, a high-spirited, raw-boned animal, the foal of a racer, and rode up the Conemaugh Valley to the dam. The sight that met his gaze there was appalling.

"Seventy feet the water fell

With a roar like the angry ocean's swell!

Seventy feet from the crumbling crest

To the rock on which the foundations rest!

Seventy feet fell the ceaseless flow

Into the boiling gulf below!"

He knew what it meant. He sat close to the

saddle, turned the bay, touched him with his spurs, then gave him his head. He did not fly to the uplands for his own safety, but followed the long valley straight on to Johnstown, shouting the cry of warning to farmhouse and village as he galloped on in that race with the flood. And the flood won the race.

"His hair felt the touch of the eagle's breath,
The spray on his cheek was the cold kiss of death,
Beneath him the horse 'gan to tremble and droop,
He saw the pale rider who sat on the croup;
But clear over all rang his last warning shout,
'To the hills! To the hills! For the waters are out!"

Were ever a horse and rider more worthy of standing in white marble than these? Tell me, you who let your horses feed around the straw-stack in winter weather, who give their poor, raw shoulders no rest in plowing weather, and who use harsh language, and that cruel lashing whip in all kinds of weather, do you think that Periton's horse felt no measure of his master's spirit? Perhaps yours wouldn't, but Daniel Periton loved his horse.

Then, again, there is that ride from Ghent to Aix. "O, pshaw!" says a boy, "I know all about that. Why, that's in our Fourth Reader, and teacher made me stand in the corner for an hour the other day because I didn't know it off." What! don't you know this part?

"I saw my stout galloper, Roland, at last
With resolute shoulders each butting away
The haze, as some bluff river headland the spray;
And his low head and crest, just one sharp ear bent back

For my voice, the other pricked out on his track;
And one eye's black intelligence—ever the glance
O'er its white edge at me, his own master, askance;
And the thick, heavy spume-flakes that aye and anon
His fierce lips shook upward in galloping on."

Methinks I hear that boy say slyly, "I wonder if she knew that verse herself?"

And our own Strathcona Horse! Our gallant cowboys! Were there ever more brave, noble, dauntless horsemen? They should have headed this list, but we speak of them now, softly, reverently, proudly, thinking of those among their number to whom all earthly fame is now as naught.

"Young Never-Grow-Old with your heart of gold,
And the dear boy's face upon you,
It's hard to tell, though we know it well,
That the grass is growing upon you;
But the trials of earth are a tale that's told,
And your pain is over, Never-Grow-Old,
Peace and long rest for you—maybe it's best for you;
Only remember us, Never-Grow-Old,
One whose love aches for you, one whose heart breaks
for you,
Missing you daily, dear Never-Grow-Old."

CHRYSOLITE.

The Magic Letter.

There was a little maiden once,
In fairy days gone by,
Whose every thought and every word
Always began with "I,"
"I think," "I know," "I wish," "I say,"
"I like," "I want," "I will";
From morn to night, from day to day,
"I" was her burden still.

Her schoolmates would not play with her,
Her parents tried in vain
To teach her better, and one day
Poor "I" cried out in pain.
"Help me, O fairies!" he besought,
"I'm worn to just a threat,
Do save me from this dreadful child,
Or I shall soon be dead!"

The fairies heard, and heeded, too,
They caught poor "I" away,
And nursed him into health again
Through many an anxious day;
And in his place they deftly slipped
A broader, stronger letter.
"The more she uses that," they said,
With roguish smiles, "the better!"

The little maiden wept and sulked
At first, and would not speak,
But she grew tired of being dumb;
And so, within a week,
She used the substitute; and lo!
Her playmates crowded round,
Her parents smiled, and all were pleased
To hear this novel sound.

She grew to use it steadily,
And liked it more and more;
It came to fill a larger place
Than "I" had done before;
And each year found the little maid
More kind and sweet and true.
What was the magic letter's name?
Why, can't you guess? 'Twas "U."

—Indian Epworth Herald.

GOSSIP.

Fifteen miles north-east of the Town of Cobourg lies the farm and home of Mr. Geo. Isaac, one of Canada's largest importers of Scotch Shorthorns. His latest importation consisted of some 95 head, 55 of which are on hand, bred by such noted breeders as Robert Bruce, Heatherwick; Alex. Watson, Auchronie; G. Still, Kinaldie; T. A. Anderson, Ballachraggan; Geo. Green, Collyhill; James McWilliam, Stonytown; W. and J. W. Peterkin, John Cran, Keith; John Lipp, Haddock; Alex. Gilbert, Knockhourn; Wm. Connon, Nether Cullie; G. A. Wilson, Haughs; D. G. Morris, Ainstler; Alex. MacDonald, Dunballock; A. MacPherson, Gibston; A. Birnie, Wellhouse; J. J. and R. Stark, Cantlohill, and Jas. G. Stephens, Conglass, and among them are a number fit to enter any show-ring. All the heifers old enough are in calf, several of them having calves at foot, and a number of others were in calf to Scotch bulls before being shipped. All bred here are in calf to Nonpareil Archer, sired by Prince of Archers; dam Nonpareil Blossom 2nd, by Sittytton Sort. There is only one bull left for sale. He is Royal Archer (imp.), by Prince of Archers; dam Rosalie 5th, by Radical; he is a roan, coming two years old, and a good one. In order to give the readers an idea of the breeding of the fifty-odd imported females, which are one, two and three years old, only some three or four being older, we enumerate a number bred in different lines. Stella, by Blyth Prince, dam Spirea, by Sittytton Yet, belongs to the Mayflowers: Forest Pride, by Goldie's Pride, dam Forest Gem, by Watchword, also a Mayflower. Roseleaf, by Clifton, dam Roberta, by Emancipator. Silver Rose, by Clifton, dam Snowdrop, by Prince Horace. Lady Scott, by Clan Alpine, dam Lady Annie 16th, by Nero. Flora McDonald, by Clan Alpine, dam Flora 5th, by Nero. Fairy Maid, by Clifton, dam Fairy Queen, by Lord Douglas. Rose Lily, by Clifton, dam Rose, by Nero. Roan Beauty, by Clifton, dam Craibstone Beauty, by Craibstone. Rose Flower, by Clifton; dam Rosebud, by Nero. Lady Annie, by Clifton, dam Lady Annie 11th, by Walter Scott. Maude 14th, by King of Hearts, dam Maude 9th, by Walter Scott. Martha 13th, by King of Hearts, dam Martha 2nd, by Red Prince. May 3rd, by Ruler, dam May, by Red Prince. Primrose 8th, by King of Hearts, dam Primrose 3rd, by Red Prince. Coral Gem, by Silver Star, dam Champion Gem, by Champion; she has a daughter, Charming Gem, by Challenger. Twin Countess 5th, by Challenger, dam Countess 4th, by Sennacherib. Bella, by Knight Errant, dam Vanity, by Stanley. Maggie, by Knight Errant, dam Isabella, by Mosstrooper. Julia, by Knight Errant, dam Helen 25th, by Superb. Missie, by Knight Errant, dam Flora, by Mosstrooper. Golden Duchess, by Rover of Sanquhar, dam Golden Queen, by Lancaster. Lady Lorne, by Pride of Lancaster, dam Lady North, by Pride of North. Golden Daisy, by Pride of Lancaster, dam Golden Lady, by Abbot. Lady Ann 14th, by Royal Victor, dam Lady Ann 13th, by Commodore. Merry Maid 10th, by Eclipse, dam Merry Maid 9th, by Red Rover. Lady Bess, by Abbotsford 2nd, dam Bess 4th, by Red Prince. Lady Rose, by Silver Boy, dam Maria 2nd, by Just in Time. Belle 2nd, by Marillo, dam Belle, by Jealous Lad. Golden Lustre, by Morella, dam Chief Lustre 19th, by Musgrove. Tidy Lass, by Morella, dam Thorn 2nd, by Prince of Fashion. Celia, by Sir James D. Nelly Bly, by Ivanhoe. Cloris 4th, by Sir James, dam Cloris 2nd, by Numa. Emmaline 9th, by Marksman, dam Emmaline 6th, by Collingwood. Viola 3rd, by Marksman, dam Viola, by Martin. Lady Hope, by Abbotsford 2nd, dam Rosa Hope 6th, by Strongbow. Alice, by Archer, dam Freida 10th, by Sigmund 2nd. Rose, by Kinsman, dam Cherry Rose, by Landseer. Minnie, by Fortune, dam Minerva 4th, by Jasper. Lady Fanny, by Baron Buttercup, dam Fanny, by Bachelor of Arts. Dainty Countess, by Master Hampton, dam Dainty Marchioness, by John Bull. Auricula, by Duke Lennox, dam Wallflower, by Chamberlain's Orchid. Polly, by Ivanhoe, dam Auricula, by Duke Lennox; this cow is now

UNRESERVED AUCTION SALE.

Having sold my farm, I will sell by auction at my farm, two miles west of Rockwood (G. T. R.) Station and six miles from Guelph, on February 26th, 1903, my entire herd of **24 Head of Registered Scotch-topped Shorthorn Cattle,** and flock of 18 Registered Cotswold Sheep, together with a selection of Shorthorns from the herd of Mr. John Sockett. Catalogues on application to **THOS. INGRAM, Auctioneer, Guelph.** **MRS. THOS. WATERS, or JOHN SOCKETT, Rockwood, Ont.**

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Reliable Seeds

Are popular everywhere. They have made friends far and near. Every farmer, gardener and florist wants the best seeds that grow. Last year we were busy night and day filling the vast number of orders entrusted to us, and at this early date this season we are again busy filling orders and receiving large numbers of inquiries for our Seeds. Every reader of the "Advocate" gets Free Sample of Seeds and our Reliable Seed Annual for asking. Send at once.

NEW SCOTCH WHITE OATS.

This new oat has made many friends the past two years, making the grower money. This we are glad to know, yielding 65 to 100 bushels per acre. Grain beautiful in color, thin hull, kernel long and plump, straw fine and not coarse, no sign of rust, and stands up well. We have had already many inquiries and orders for these oats, and we trust every farmer will sow an acre or two to see just what they will do. We also give 40 pkts. of seeds for \$1, or 20 pkts. for 50c.—your selection from our Seed Annual, which is Free. Address:

HERSEE & BICKELL, Seed Merchants and Growers, Woodstock, Ont.

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Chatham Incubator

makes its bow.

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We have, therefore, **Adopted the best principles. Used the best material. Employed the best workmanship. Added the best finish. Equipped with the best instruments.**

We make three sizes—all hot-air machines, viz:

Size A—5-dozen-egg capacity. Size B—10-dozen-egg capacity. Size C—20-dozen-egg capacity.

All are of similar construction and equipment; built of bone-dry maple and basswood; insulated with mineral wool; regulator and heater guaranteed. We build the

Famous Chatham Fanning Mill

and have a reputation at stake. Our guarantee is simple, sure, absolute. Our prices are right. We pay the freight. We save you the 25% duty. Write for catalogues, prices and order blanks. Agents wanted.

The M. CAMPBELL FANNING MILL CO. OF CHATHAM, Ltd.
DETROIT, MICH. CHATHAM, ONT.

DISPERSION SALE

Shorthorn Cattle.

J. W. HARTMAN & SONS, ELMHEDGE, ONT., having rented their farm, will sell by auction, at their farm, 8 miles from Meaford (G. T. R., Collingwood Division), north of Toronto, on **FEBRUARY 24th, 1903,** their entire herd of registered Scotch and Scotch-topped Shorthorn cattle, headed by the Scottish-bred bull, **Abbotsford =1946=**, proven to be one of the best stock bulls in Canada, both in the show-ring and fat-stock shows. Females of the Minas, Mysies, Urys, Nonpareils, Isabelas, Miss Ramsdens, Matchlesses, Strawberrys, and other favorite families. Three bulls, 13 months old, got by May Duke =21048=, good enough to head any herd. Also a lot of registered Berkshire sows.

SALE TO COMMENCE AT 10 O'CLOCK.

Catalogue will be mailed on application.

Lunch provided.

W. J. SHEPHERDSON, Walter's Falls, Auctioneer. **J. W. HARTMAN & SONS, Elmhedge.**

in calf to the great bull Golden Fame. Daisy 3rd, by Royal Star, dam Daisy 2nd, by Merry Thought. Snowdrop 2nd, by Proud Victor, dam Snowdrop, by Dydrophatic. For further information write Mr. Isaac, to Bomanton P. O., Ont.

We direct attention to the advertisement of Mr. R. D. Dundas, offering for sale a matched pair of registered Clydesdale mares, that for size, form, style, action and harmony of color are hard to duplicate. Maud Lawrence 3531 is a bay mare, three years old, 16 hands high, sired by Imp. Lawrence Again, by Prince Lawrence, a son of Prince of Wales. Hattie McInnes, winner of first prize at Ottawa and Montreal, by Imp. McInnes; grandam Imp. Hatton Fancy by Sir Hilderbrand, g-grandam Hatton

Beauty, by Darnley. The other, Lady McInnes, is a bay two-year-old, a full sister to McKinley, the champion heavy draft stallion at Toronto last fall; sired by Imp. McInnes, shown seven times in Scotland, winning five firsts, one third and once commended; in Canada, was shown twenty-one times, winning sixteen firsts and five seconds; he by McGregor; dam Imp. Maid of Bardraing, winner of first and silver medal at Toronto in 1889, by Sir Hilderbrand; grandam Maggie of Bardraing by Top Gallant. These mares have few equals, being extra well matched, standing on perfect legs and feet, and will make a 3,600-pound pair. Mr. Dundas has sold his farm, and must part with them. Write Mr. Dundas, to Springville P. O. Farm four miles from Fraserville station and seven miles from Peterboro.

GOSSIP.

Springburn Stock Farm lies in the county of Dundas, seven miles north of Morrisburg station, on the main line of the G. T. R., and is the property of H. J. Whittaker & Sons, breeders of up-to-date Ayrshire cattle, Oxford Down sheep and Berkshire hogs. In the Messrs. Whittaker's model stables, which, by the way, are kept scrupulously clean, are housed at present 46 head of typical Ayrshires. With their sleek, shining coats and soft, yellow skins, large, even udders and good big teats, they are a pleasant sight indeed. The stock bull is Sir William of Elm Shade, sired by Imp. Scotland's Glory, dam Imp. Stately of Crosshouse by Robin of Southwick. He is an exceptionally good type of bull, and should have his mark as a sire of producers. In the herd and/or sale are five yearling bulls and several heifers sired by Lord Minto 10133 by Kelso Lad. They are an ideal lot, and should go quick at the prices that are asked. There are also a number of two-year-old heifers, some of them sired by Lord Minto, others by Jack the Lad of Maple Grove 2133, a bull that weighed 1,885 lbs., which are now in calf to the stock bull. Mr. Whittaker has been breeding Ayrshires for ten years, and started out with a model of type in view, and has always been careful in the selection of his breeding animals, so that his herd to-day are a typical lot and are producers of a high order.

The Oxford Downs are from the noted flock of Henry Arkell, of Arkell, Ont. The stock ram won the highest honors at Ottawa last fall in a strong class. The flock generally are a large, well-covered lot.

The Berkshires are of the improved bacon type. The stock boar is North Star 7953 by Spanish Prince, dam Royal Lady 7250 by Maple Cliff. There are two young boars fit for service, ideal animals, for sale, and younger ones coming on.

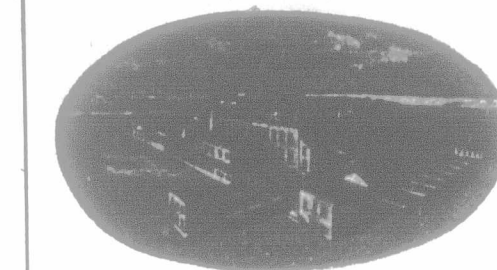
In poultry, nothing but pure-bred Black Javas are kept, and orders are now being booked for spring eggs. See his ad., and write Mr. Whittaker, to North Williamsburg P. O.

NOTICES.

DR. WITHROW'S PAMPHLET.—The Rev. Dr. Withrow's Programme of Personally-conducted Travel in Europe, advertised on another page, is a handsomely illustrated pamphlet. Will be sent on application.

LOUDEN MACHINERY CO.—The attention of our readers is called to the change of address of the Loudon Machinery Co. from Windsor to Guelph. This firm makes a specialty of hay tools, barn-door hangers, feed and litter carriers, and all barn hardware. See their ad. in another column.

FERTILIZERS, HIGH GRADE



SAMUEL M. CULP, Beamsville:—"Have used your Fertilizers the past season. Will say I am well pleased with results for the following reasons: (1) My grapes were harvested a week or ten days earlier, (2) berries larger and sweeter, and ripened more even, (3) vines in better shape for next year's crop; also used on pears with good results, pears smoother and more even in size. Am pleased to place my order for another ton for this season."

Prices, catalogue and information on application. A good, thorough farmer wanted in every section to represent our high-grade Fertilizers in any territory not already taken up.

The W. A. FREEMAN CO., Limited, Hamilton, Ont.

QUICK RUPTURE CURE.

No operation, pain, danger or detention from work. Can be used in privacy of your own home. Radical cures in every case—old or young. A Free trial Treatment sent to all sufferers. Write to-day. Don't wait. om

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TOUR IN EUROPE. For FREE Illustrated Programme of TOUR IN EUROPE, address: **REV. DR. WITHROW, 244 Jarvis St., Toronto, Ont.**

GOSSIP.

R. NESS & SONS' CLYDESDALES AND AYRSHIRES.

A short but pleasant visit was our privilege a few days ago to those beautiful and well-arranged stock farms, Burnside and Woodside, the property of Mr. R. Ness & Sons, of Howick, Quebec, which are easily and handily reached by the G. T. and C. A. Railways, at Howick Jct. Station, the farms being only about one mile distant. For a great many years the Messrs. Ness have been among Quebec's largest and most successful importers of Clydesdale horses and Ayrshire cattle, and their fame as such is pretty well known over the continent. Their latest importation of Clydesdales comprises four Clydesdales, one Percheron and one Hackney. The Clydesdales are: Baron Lang, Vol. 23, bred by Alexander A. Lang, Renfrewshire; sired by Sir Everard; dam Broomfield Lass, by Gartsheer; grandam Bonnie, by Young Robbie Burns. He is a bay, four years old, one of the thick, compact, smooth, stylish quality kind, with grand action. He is four years old, and will weigh about 1,850 pounds. Proud Baron 11477, bred by Wm. Montgomery, Kifcudbright, sired by that great sire of winners, Baron's Pride; dam Jess of Banks, by Young Rose; grandam by Gladstone; is a two-year-old, one of the very stylish, natty, proud actors, with a faultless form and action, and won first at Sherbrooke and St. John's, Que., last fall. Killarney 11382, bred by D. A. Hood, Kirkcudbright; sired by Baron's Pride; dam Nancy Lee, by Flashwood's Best; grandam by Macpherson; is a brown two-year-old, and in every way a very superior colt, combining size with quality, style and action; winner of second place at Ottawa last fall. Then comes the wonderfully perfect colt, Cecil 3152, bred by Lords A. and J. Cecil, Orchard Mains; sired by Macara. Cecil is also two years old, a winner in Scotland and champion at Ottawa. He is wonderfully perfect in his form, with superb action and style. At the Spring Show in Toronto this colt will be in evidence, and watch where the red goes. Then

Japan tea drinkers express a decided and lasting preference for

"SALADA"

CEYLON GREEN TEA because of its purity and delicious flavor, while, from an economical standpoint, it's money in pocket, one pound serving the place of two of Japans. Sold in the same form as famous "SALADA" Blacks, in lead packets only. 25c., 30c., 40c., 50c., 60c., per lb. By all Grocers.

there is a year-old stallion, by Imp. Durward Lily; dam Roseleaf, Imp., by Macbeth; that is the making of something good. Bally Garton 142 is the Hackney, sired by Garton Duke of Connaught; dam Lady Allington, by Danegelt; grandam by Lord Derby. He is a dark chestnut, winner of first and sweepstakes at Ottawa, and first at Toronto last fall, which is all that is necessary to say, as that speaks louder than words of his form and quality. The Percheron is a black four-year-old, a big, clean-cut, stylish horse, with almost Hackney action.

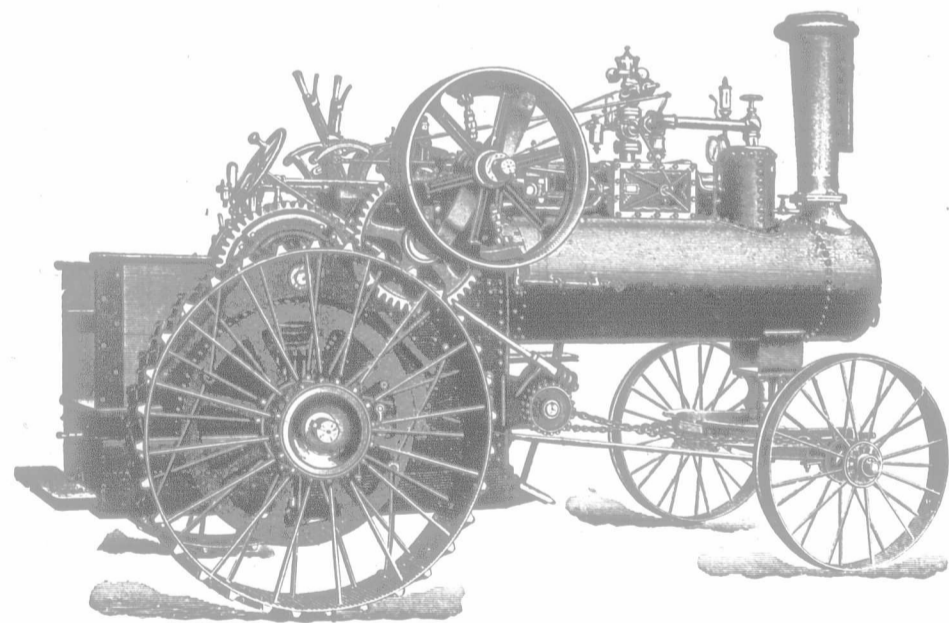
The Ayrshires number 110 head, of as fine a lot of animals as the country produces, at the head of which is the great show bull and sire, Duke of Clarence of Barcheskie (imp.), winner of first and sweepstakes two years at Ottawa and one year at Toronto. Last year at Ottawa, in the strongest class ever seen in Canada, he won second place, and first and sweepstakes at Sherbrooke and St. John's, Que. One of the choice imported cows is Gaiety of Langside, a typical Ayrshire, and one that was never beaten in the show-ring. She has a bull calf, one year old, by the stock bull. He was one of the young herd that won first at Sherbrooke and St. John's and

second at Ottawa last fall. Other winners in the herd are: Gertie of Maple Cliff, Lady Burns, Miss Spotty of Burnside, and Lady Harcourt. This is the quartet that won the second place in the herd competition at Ottawa last fall. Besides these there are a number of younger prizewinners last fall at Ottawa, Sherbrooke and St. John's. As to the quality of milk produced by this herd last year, taking the year through, the butter-fat test at Montreal was never below 3.8, and the highest was 4.2. Late sales were: Seven head to Prince Edward Island Government; four head to C. C. Doe, of New Southbury, Vermont; three head to James Greig, of Hampton, Connecticut; seven head to W. D. Cockburn, of Hamilton, and a number of others to local parties; still there are for sale a number of females of various ages, and a few young bulls. In pure-bred poultry there are: S. G. Dorkings, W. and B. Rocks, W. Wyandottes, B. Minorcas, Pekin ducks, Chinese geese and Bronze turkeys. Poultry winnings at the fall shows at Ottawa, St. John's and Sherbrooke were: Nine firsts, eleven seconds and twelve thirds, and at the late Poultry Show at St. John's, out of ten entries, they won five firsts, four seconds and one third.

Two miles from St. Louis station, on the C. A. R., and four miles from Howick station, on the G. T. R., in the Province of Quebec, lies Stackwood dairy stock farm, the property of Messrs. Watt Bros., breeders of high-class Ayrshire cattle. Their herd now numbers forty head of pure-bred animals and twenty head of highly-bred grades. In this splendid herd are a number with milk records from 40 to 55 lbs. a day. One of the foundation cows was Buttercup of Woodside 4604, with a milk record of 45 lbs. a day. Another was Janet of Georgetown 3848, milk record 55 lbs. a day. Princess of Woodstock 12968 is still another that has to her credit 50 lbs. a day. Her half-sister is Janet 10884, with 40 lbs. a day to her credit. Susanna 5636 is another foundation o'v, milk record 50 lbs. a day. Lady Buttercup 10758 has 45 lbs. to her credit, with a number of others equally as good. The stock bull is Lord Rifton 7985, by Saladin, by Imp. Silver King; dam Persara 5984, by Duke of Park Hill. This bull has a typical dairy conformation, and has proven his ability to transmit to his offspring his superior form. All the young animals in the herd up to two years of age are by him. There are nine heifers from ten to nineteen months old and three bulls, one of which is three months old, the other two being one-year-olds. These, together with several older ones, are for sale; also, a number of grades—grand milkers. Write the Watt Bros., to Allan's Corners P. O., Que.

Canadian and American breeders will be specially interested in the announcement by John Thornton & Co., London, England, on page 135 of this issue, of four important sales: One at the Royal Farms (Shorthorns), another by Mr. Wm. Bell (Shorthorns), a third (Red Polls) the late Mr. P. K. Blofeld's herd, and last, the York Shorthorn bull sale. The outlook for choice breeding stock was never better than to-day on this side the Atlantic, and the above offerings should attract purchasers.

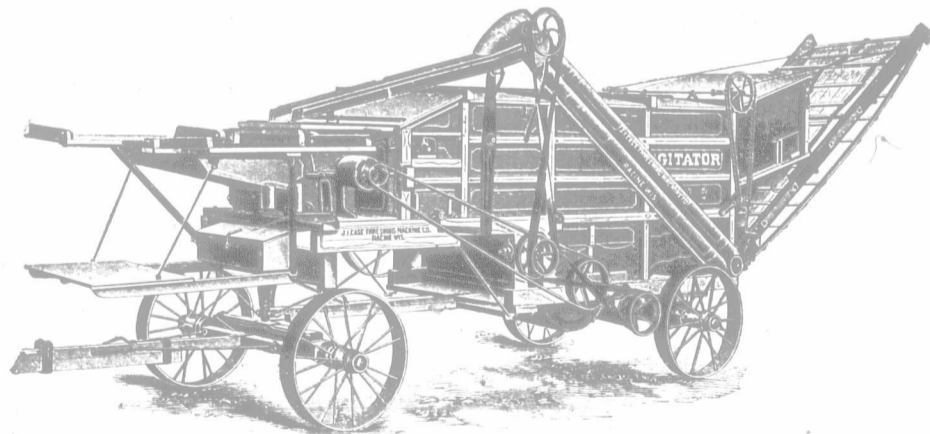
J. I. Case Threshing Machine Co.



PORTABLE AND TRACTION ENGINES

from 6 Horse Power to 30 Horse Power. Simple or Compounded.

Feeders, Horse Powers, Baggers, Weighers, Attached Swinging Stackers, Wind Stackers, and all REQUISITES FOR THRESHERMEN. Annual output: 1,500 Engines and 3,000 Separators.



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FOR CATALOGUE ADDRESS

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Mention "Farmer's Advocate"

Churn, Churn!

Windsor salt lightens the task of churning butter. Every flake of it dissolves quickly—you'll find no gritty particles in the butter, because Windsor Salt is all salt.

Windsor Salt.

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NEVER CLOGS
THINK of Seeding Time! Will your land be trashy? If so you should have a **SUPERIOR Disc Drill**. It saves unnecessary labor. Trash will not bother you. Discs roll over or cut through weeds, grass, matted thistle, pea vines, corn stalks, etc. **One man or boy** can operate the Superior Disc Drill at all times. Has the most reliable Feed. Disk Wheel for changing quantity without change of parts. No removable gears. We guarantee every Drill and make good our guarantee. **Saves Time, Seed and Labor.** Always sows the required amount. Will pay for itself in a few seasons, and last a lifetime with ordinary care.

SUPERIOR DRILLS

are admitted to be the best in the world. We make Disc and Hoe Drills, with and without fertilizer attachment, Disc Harrow on Wheels, etc. Illustrated Catalogue tells all about them. Catalogue is free. Send for one. **THE SUPERIOR DRILL CO.,** Springfield, Ohio.



CONSUMPTION CAN BE CURED.

Consumption uninterrupted means speedy and certain death. The generous offer that is being made by Dr. Slocum, the great lung specialist. Sunshine and hope for stricken families.

Confident of the value of his discoveries, he will send free four sample bottles upon application, to any person suffering from throat, chest, lung and pulmonary affections.

TREATMENT FREE.

To enable despairing sufferers everywhere to obtain speedy help before too late, Dr. Slocum offers

FULL FREE TREATMENT

CONSISTING OF FOUR LARGE SAMPLES to every reader of this paper.

You are invited to test what this system will do for you, if you are sick, by writing for a

FREE TRIAL TREATMENT

and the Four Free Preparations will be forwarded you at once, with complete directions for use. The Slocum System is a positive cure for Consumption, that most insidious disease, and for all Lung Troubles and Disorders, complicated by Loss of Flesh, Coughs, Catarrh, Asthma, Bronchitis and Heart Troubles.

Simply write to the T. A. Slocum Chemical Company, Limited, 179 King Street West, Toronto, giving post office and express address, and the free medicine (the Slocum Cure) will be promptly sent.

Persons in Canada seeing Slocum's free offer in American papers will please send for samples to Toronto. Mention this paper.

PLEASE MENTION FARMER'S ADVOCATE.

GOSSIP.

About five miles from Stirling station and three miles from Hoard's station, on the Bellevue-Peterborough branch of the Grand Trunk, lies the splendid farm of Mr. F. W. Taylor, who for many years has made a specialty of the breeding of Ayrshire cattle. Mr. Taylor, years ago, made up his mind that the Ayrshires could be materially increased in size, and to that end selected his bulls with a view of accomplishing the desired end, and to-day his herd of 30 odd show that he has certainly made considerable progress towards his goal, as his cows are an exceptionally large, smooth, even lot, with big, well-formed udders, and are very heavy milkers. Mr. Taylor just now is offering for sale four yearling bulls—a typical lot, showing true dairy conformation; also, a few young cows. These animals will be sold well worth the money. For quick sale, write Mr. Taylor, to Wellman's Corners P. O., Ont.

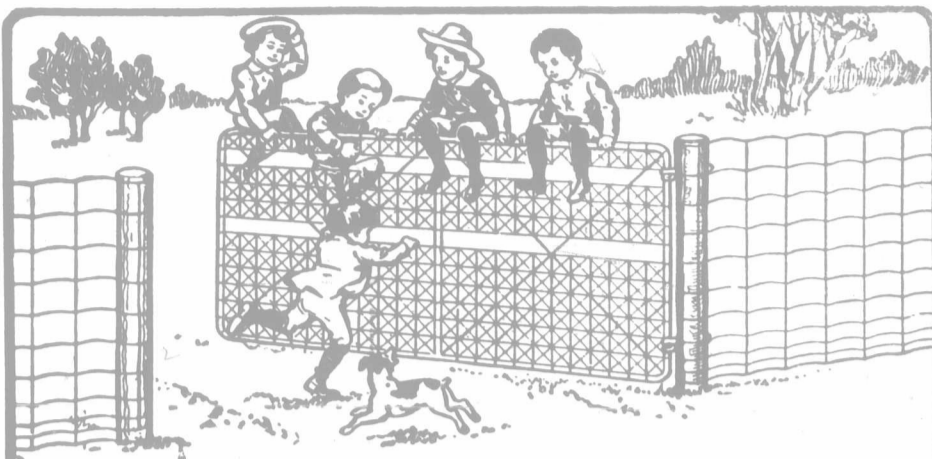
Sunnyside Dairy Stock Farm is another of the noted farms of Quebec, and lies in the county of Chateauguay, 2½ miles from Howick station: the property of Mr. J. W. Logan, breeder of Ayrshire cattle. In the herd at present are 30 head of big, high-class, typical animals, imported and Canadian-bred. The stock bull is Leader of Meadowside 13465, a prizewinner of note, sired by Duke Clarence of Barcheskie (imp.), dam Belle of Howick by Golden Guinea. Individually, this bull is far above the average, and his calves are an exceptionally deep-bodied, straight-lined lot. The heifers up to two years of age are sired by Sir George 10039, winner of the diploma at Sherbrooke two years and second at Ottawa in 1901. Among the many good cows is Kate Wallace of Auchenbrain (imp.), that is now suckling a five-months-old heifer by Goldfinder. Out of the twenty odd milch cows are a number that would be hard to turn down in any show-ring—big, deep, straight animals, with grand udders and teats. Another that deserves special mention is Gem of Burnside 6343 by Golden Guinea, also, Rosie, dam Erena 5309 by Hanlan. In young stock, for sale, there are ten heifers from ten months to two years old, one bull six months old, and about eight young cows—a rare nice lot. Write Mr. Logan, to Allan's Corners P. O., Que.

Grange Park stock farm, the property of E. Jeffs & Son, Bond Head, Ont., lies in the county of Simcoe, five miles west of Bradford and seven miles east of Beeton, G. T. R. Thirty-six years ago, Mr. Jeffs, Sr., established what has been one of the most successful herds of Shorthorns in the country. At present, besides the shorthorns, this firm is somewhat extensively engaged in breeding Leicester sheep and Berkshire hogs. The Shorthorns are represented by the Mayflower, Morlina, Red Rose, Lady Jane and Zora families. Of the latter family, there are two roan heifers, rising two years, that are particularly choice, showing a wealth of flesh, evenly distributed. They are a pair of show heifers from the drop of the hat. They are sired by Prince Arthur 38377. There is also one roan bull, coming two, by the same sire, the making of a big, quality animal. Of younger ones, there are three red yearling heifers, sired by Kinellar Chief 35624, that are rare good ones. Also, by the same sire, there are three bulls, rising a year old—a low, thick, even lot; in fact, they are above the average in type and quality. Other bulls that have been used on the herd, the get of which are among the breeding cows, were: Barrie Doctor 2525, British Statesman (imp.), Sir Richard 2nd (imp.), and Killerby (imp.).

The Lecesters are large, blocky sheep of good type; splendid ewe lambs, two rams and shearlings offered for sale; also, superior bacon type Berkshires of both sexes.

Registered Clydesdale Fillies FOR SALE.

The well-matched fillies, Maud Lawrence 3531, by Imp. Lawrence Again, 3 years old, dam Hattie McInnis; and Lady McInnis, by Imp. McInnis, dam Imp. Maid of Bardraing. She is 2 years old. They are one of the best pairs in Canada. **R. D. DUNDAS,** from Fraserville Station, **SPRINGVILLE P. O.** See Gossip, in this issue.



You Know how much

this kind of thing a wooden gate—even the best—will stand before its a case of carry one end around when you want to open it.

Page Metal Gates

are built to stand any kind of usage for a life time, and priced so low any farmer can afford to have them. Solid round iron frames and cross-bars, all welded together—painted like wire—single or double, open in or out, self-acting latches, solid bolt hinges.

"Page Gates wear best"

The PAGE WIRE FENCE CO., Limited
 Walkerville, Ont. Montreal, P.Q. St. John, N.B. 105

NEW IMPORTATION

Arrived January 21st, 1903.

Thirty-five first-class Stallions just added to our stock gives buyers an unequalled selection.

Clydesdales
 Suffolks
 Percherons
 Shires
 Hackneys



Call early and be convinced of the superior quality of our horses and our very reasonable prices.

OVER TWENTY YEARS AT THE FRONT.

ALEX. GALBRAITH & SON,
 JANESVILLE, WIS., AND BRANDON, MAN.

DISPERSION SALE of PURE-BRED SHORTHORNS

I will sell at my farm, Lot 21, Con. 1, West Zorra, six miles from Embro, on

February 18th, 1903, my entire herd of 23 Head Shorthorn Cattle,

consisting of bulls, cows and heifers, headed this year by the choicely-bred 2-year-old bull **Diamond Liddle 44073**. Sale commence at 1 p. m. Catalogues will be mailed on application after the 7th. Morning trains will be met at St. Mary's.

CAPT. T. E. ROBSON, Auctioneer, **JAS. BAKER,** Proprietor, **Hiderton, Ont. Bennington, Ont.**

UNRESERVED DISPERSION SALE

I will sell by public auction, at my farm, Lot 4, Con 7, Erin, on

WEDNESDAY, MARCH 11th, 1903,

18 HEAD OF REGISTERED

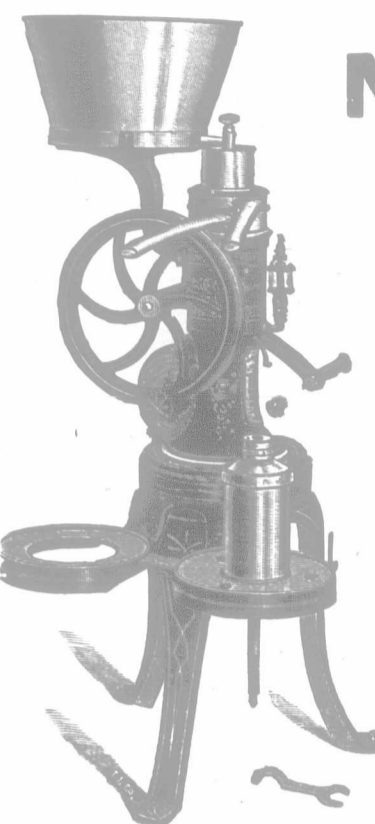
SHORTHORN CATTLE

consisting of 11 females and 7 bulls, of the very choicest breeding. Foundation of herd got by the great imported bull, Baron Camperdown, followed by Duke of Waterloo, War Eagle, Royal Hero, and the present stock bull, Mysie's Sailor, all of them winners or the get and produce of winners. Catalogue mailed on application.

W. HULL, Auctioneer, Erin. **IRA B. VANNATTER,** Ballinafad P. O., Ont.

Parties coming to sale by train in forenoon will be met at either Georgetown (G. T. R.) or Erin (C. P. R.) station, and returned after sale, by sending me card to Ballinafad P. O.

WHAT THE NATIONAL WILL DO.



NATIONAL No. 1A.
Capacity, 450 to 500 lbs. per hour.

NATIONAL No. 1.
Capacity, 330 to 350 lbs. per hour.

NATIONAL B.
Capacity, 250 lbs. per hour.

Give the National a trial. Send for particulars to any of the following general agencies:

The CREAMERY SUPPLY CO., Guelph, for South-western Ontario.
The T. C. ROGERS CO., Guelph, for Ontario North and East.
JOS. A. MERRICK, Winnipeg, Man., for Manitoba and N.-W. T.
JOHN A. ROBERTSON, 108 Union Avenue, Montreal, Quebec.

The Raymond Mfg. Co. of Guelph, GUELPH, ONT. LIMITED.

LOUDEN'S DOUBLE TREAD BARN DOOR HANGER.
PATENTED OCT. 6, 1898
"BEST ON EARTH"



Make Your Business Grow Big

by handling the **LOUDEN HAY TOOLS, BARN-DOOR HANGERS** and **BARN HARDWARE SPECIALTIES.** All the latest improvements. Just what the farmers want—simple, compact, durable. Never fail to work. Splendid sellers and sure to please. We want dealer agents. Write for free catalogue and prices to

LOUDEN MACHINERY CO., Guelph, Ont.
(FORMERLY OF WINDSOR) "NO BARN COMPLETE WITHOUT IT."



LOUDEN'S FEED & LITTER CARRIER
LOUDEN MACHINERY CO. FAIRFIELD, IA.

Please Mention the Farmer's Advocate.

GOSSIP.

Mr. Wm. Teasdale, Dollar, Ont., breeder of Yorkshire pigs, makes an exceptionally favorable offer of young boars and sows, registered, and express prepaid. See the ad. for particulars.

Mr. R. J. Hine, breeder and importer of Oxford Down sheep, Dutton, Ont., writes: "The Linden Oxfords came into winter quarters in fine shape this fall, grass being abundant all summer. We are carrying over a nice bunch of rams that, I think, will make their mark. We have retained all Old Country and home-bred winning ewes, besides having all our imported winners of other years, making up a flock of 40 ewes that I think it would be hard to beat. These ewes are all bred to the first-prize imported yearling ram at Toronto last year, and to Linden's, Champion, the ram that sired the lambs that won at Toronto last year."

In connection with the breeding of high-class Ayrshire cattle, there are few men in the Province of Ontario more favorably known than Donald Cumming, whose farm lies a few miles north of Lancaster station, on the main line of the G. T. R., in the county of Glengarry. Mr. Cumming's stock bull is Sir Donald 12974, by Imp. Scotland's Glory, dam Imp. White Glen of Holehouse, a cow that won first at Toronto and Ottawa in 1899. This bull is now two years old, and will soon be offered for sale. Mr. Cumming's herd contains some extra big, fine cows, a number of them giving 50 lbs. of milk a day when fresh. There are a number of heifers of various ages, any of which are for sale. There are also some half dozen typical young bulls that are for sale, including Glencairn's Prince 13566, calved October 18th, 1900; sire Glencairn of Burnside 8153, grandsire Glencairn of Maple Grove 6973 (imp.); dam Highland Princess, by White Prince 2nd 808 (imp. in dam). Mr. Cumming is also offering for sale his quality Clydesdale stallion, Highland Harry 2545, by MacInnes (imp.), by MacGregor; dam Hatton Fancy (imp.), by Sir Hildebrand; grandam Hatton Beauty, by Darnley. He is four years old, and a smooth, even, stylish, quality horse. There is also for sale, the cross-bred stallion, MacInnes 2nd, by MacInnes (imp.). This horse will weight about 1,300 pounds, and is as pretty as a picture, and both horses are grand actors.

SHORTHORN DISPERSION SALE.
Attention is directed to the advertisement, elsewhere in this issue, of the dispersion sale, by auction, on February 18th, of the entire herd of 23 head of Shorthorn cattle belonging to Mr. Jas. Baker, of Bennington, Ont., comprising bulls, cows and heifers, and headed by the choicely-bred two-year-old bull, Diamond Laddie 44073, son of the imported Scotch-bred bull, Diamond Jubilee, and thus half-brother to the weepstakes female and the first-prize four calves by the same sire at the Western Fair at London last fall. The cattle are nicely bred, being mostly of excellent Bates foundation stock, with Scotch-top crosses. The cows are, as a rule, excellent milkers and are large, fleshy animals of breedy appearance, while the young things are of uniformly good type, thrifty, thick-fleshed, and in good condition. Such stock is needed in nearly every district in the Dominion for the improvement of the cattle of the country. Capt. Robson will conduct the sale. Catalogues will be sent on application to Mr. Baker. The farm is near St. Mary's station, G. T. R., and teams will meet morning train.

NOTICE.


BUSINESS EDUCATION.—The reliable and progressive educational institution is known by its work. In this the Nimmo & Harrison Business and Short-hand College, Toronto, enjoys the rare distinction of giving its students that mental training which stimulates their ambitions and develops their sagacity, together with a knowledge of business affairs which is so much in demand on every hand. Thousands of its students and graduates are winning and have won success in business life.

FARM FOR SALE


The undersigned offers for sale his farm, situated in the north-eastern limits of the Corporation of the Village of Elmira, containing one hundred acres, more or less. A large and conveniently-arranged brick house, spacious barn and all necessary sheds and outhouses are on the premises; also a good orchard, never-failing wells, and running water. The farm, with the exception of about 10 acres of hardwood bush, is cleared, and is in a good state of cultivation, with no waste land. Possession given in March. Apply at once to

CHAS. KLINCK, SR., - - - ELMIRA.

FREE ENAMELLED WATCH for men or boys. Handsome Silver Nickel case on which a Deer is elegantly enameled, the rich brown fur and delicate coloring making the whole design absolutely true to life. A very beautiful and a thoroughly reliable watch that answers every purpose of the most expensive timepiece, given for selling only 1 doz. large packages of **Sweet Pea Seeds at 10c.** each. The packages are beautifully decorated in 12 colors and each one contains 42 of the rarest, prettiest and most fragrant varieties in every imaginable color. Harry Smith, Sydney, C.B. said: "I sold all the seeds in five minutes. They went like wildfire." Write us a **Post Card** today and we will mail the Packages postpaid. Don't delay. Wm. Frankoski, Shoal Lake, Man., says: "I received the Watch and am more than delighted with it. It is a splendid timekeeper and also a handsome watch." Address: **The Dominion Seed Co., Dept. 585 Toronto.**



FREE COMBINATION KNIFE AND TOOL SET Given for selling only 9 large packages of **Sweet Pea Seeds at 10c.** each. The packages are beautifully decorated in 12 colors and each one contains 42 of the rarest and most fragrant varieties of every imaginable color. Harry Smith, Sydney, C.B. said: "I sold all the seeds in 5 minutes. They went like wildfire." Write us a **Post Card** today and we will mail the Knives postpaid. Don't delay. Wm. Frankoski, Shoal Lake, Man., says: "I received the Watch and am more than delighted with it. It is a splendid timekeeper and also a handsome watch." Address: **The Dominion Seed Co., Dept. 585 Toronto.**



Earn This WATCH With polished silver nickel open face case, the back elaborately engraved, fancy milled edges, heavy bevelled crystal and keyless Wind, imported works, by selling only 15 large packages of **Sweet Pea Seeds at 10c.** each. The packages are beautifully decorated in 12 colors and each one contains 42 of the rarest, prettiest and most fragrant varieties in every imaginable color. **Everybody buys.** Percy Bell, Little Rapids, Ont., said: "The seeds sold like wildfire." Write us a **Post Card** today and we will send you the Seeds postpaid. Don't delay. Edward Gilbert, Petrolia, Ont., says: "I received my watch in good condition. It is a dandy and I am very much pleased with it." **THE DOMINION SEED CO., DEPT. 596 TORONTO, Ont.**

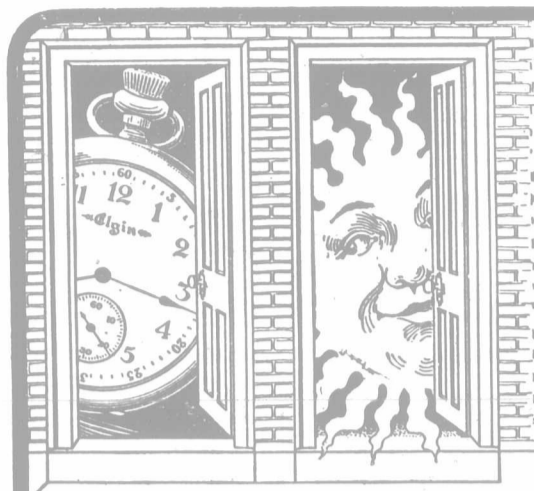


FREE KNIFE We give this beautiful **Pearl-Handled, Four-Bladed Knife** of best quality highly tempered steel, burnished bolsters and brass lining, for selling only 6 packages of **Sweet Pea Seeds at 10c.** each. The packages are beautifully decorated in 12 colors and each one contains 42 of the rarest, prettiest and most fragrant varieties in every imaginable color. **Everybody buys.** Roy Lippin, Rosewood, Man., said: "I sold the seeds in a few minutes. They went like wildfire." Write us a **Post Card** today and we will send you the Seeds postpaid. Raymond Polly, Beland, Man., says: "My Knife is just beautiful, and is a most excellent Premium for the little work I did." **The Dominion Seed Co., Dept. 595 Toronto.**



FREE LANTERN AND ENGINE Splendid Magic Lantern with powerful lenses showing dozens of pictures in colors and Real Steam Engine with brass boiler and steam chest, steel piston rod and fly wheel, and Russian iron burner compartment, given for selling only 1 doz. large packages of **Sweet Pea Seeds at 10c.** each. The packages are beautifully decorated in 12 colors, and each one contains 42 of the rarest, prettiest and most fragrant varieties of every imaginable color. **You can sell 3 and 4 packages in every house.** Write us a **Post Card** today and we will mail the Seeds postpaid. When you return \$1.00 and we will forward immediately both the **Lantern and Engine.** **THE DOMINION SEED CO., DEPT. 582 TORONTO, Ont.**





Next Door to the Sun

The timekeeping qualities of the Elgin Watch are perfect—next door to the sun.

Elgin is the Watch Word

the world around, for accuracy and durability.

Every Elgin Watch has the word ELGIN engraved on the works. Sold by every jeweler in the land. Guaranteed by the world's greatest watch works. Send for illustrated art booklet—free.

Elgin National Watch Company, Elgin, Illinois.

GOSSIP.

Dr. J. Watson, of Howick, Que., is offering for sale in our advertising columns, two imported Suffolk Punch stallions. Sproughton Chief 2935, two years old, chestnut, weighs 1,800 lbs., has been twice a winner in England. Big Ben 2917, another two-year-old chestnut, weighs 1,800 lbs. won, as a year-old, two firsts and one second. As a two-year-old he won three firsts and two seconds in England. It is doubtful if there is a better two-year-old Suffolk Punch horse alive than this one. Duke of Blackford is a two-year-old Hackney, by Garton Duke of Connaught. Last year, in the hottest company in England, he won one first and three thirds. His form is faultless and his action absolutely perfect. Then there is the great champion Hackney, Bell Boy, too well known to need description. Also, the Canadian-bred Clydesdale stallion, Black Lawrence 2nd 3030, by Lawrence Again (imp.), a magnificent type of the fair-sized quality horse, with the action of a Hackney. These horses are for sale. Write the Doctor for particulars.

OFFICIAL RECORDS HOLSTEIN-FRIESIAN COWS.

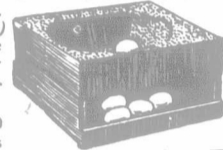
From December 25th, 1902, to January 15th, 1903, records of 62 cows have been approved. Of this number, one has a record for six months, five have records for thirty days, two for forty days, one a record for fourteen days, and sixty have records for seven days. The averages of the seven-day records are as follows:

Nineteen full-age cows, average age 6 years 11 months 19 days; days after calving, 21; milk, 450.6 lbs.; butter-fat, 15.203 lbs.; equivalent butter 80 per cent. fat 19 lbs. 0.1 oz., or 17 lbs. 11 ozs. 85.7 per cent. fat. Nine four-year-olds, average age 2 years 4 months 28 days; days after calving, 16; milk, 402.1 lbs.; butter-fat, 14.027 lbs.; equivalent butter 80 per cent. fat 17 lbs. 8.6 ozs., or 16 lbs. 5.8 ozs. 85.7 per cent. fat. Thirteen three-year-olds, average age 3 years 6 months 18 days; days after calving, 33; milk, 349.6 lbs.; butter-fat, 11.999 lbs.; equivalent butter 80 per cent. fat 15 lbs., or 14 lbs. 85.7 per cent. fat. Twenty two-year-olds, average age 4 years 6 months 15 days; days after calving, 29; milk, 317.7 lbs.; butter-fat, 10.211 lbs.; equivalent butter 80 per cent. fat 12 lbs. 12.2 ozs., or 11 lbs. 14.6 ozs. 85.7 per cent. fat.

Korndyke Queen De Kol completed a six months' record, as follows: Milk, 9,859.4 lbs.; butter-fat, 349.636 lbs.; equivalent to 437 lbs. 0.7 oz. butter 80 per cent. fat, or 407 lbs. 14.5 ozs. 85.7 per cent. fat. The average quality of her milk during this whole period was 3.55. Owner, Henry Stevens & Sons, Lacona, N. Y. In studying this record and all other official records of the Holstein-Friesian Association it must be borne in mind that every milking is watched by the official inspector, and each milking tested separately, so no possible errors either in quantity or quality can occur. S. Hoxie, Supt.

"VIGILANT" NEST

SLIDING-ADJUSTABLE (Patented Can. & U.S.) The only nest in the world which positively prevents hens from eating their eggs. Simple-Effective-Durable. No springs-Eggs cannot break. The inclined nest gathers them safely in lower section. Prevents fleas, or parasites, etc. Everlasting, never failing, comfortable. Thousands now in use. Ask your dealer for it or write to L. P. MORIN & SON, Mfrs., R. Antoine St., St. Hyacinthe, Que. Price 45c. each. Shipped only in crates of 5.



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and family almanac for 1903. Over 200 large pages of best book paper, with fine colored plates true to life. Tells how to raise chickens profitably, their care, diseases and remedies. Diagrams with full descriptions of Poultry houses. All about INCUBATORS, BROODERS, THOROUGHbred FOWLS, with lowest prices. You cannot afford to be without it. Only 15c. C. C. SHOEMAKER, Box 608, Freeport, Ill., U. S. A.

Poultry Paper Free

Your name and address on a postal card mailed to Reliable Poultry Journal, Box V, Quincy, Illinois, will bring you a free sample copy of the biggest and best Poultry Journal published. Over one hundred pages. \$500 CASH PRIZE-Everybody gets paid-Write for full particulars. A Big Thing For Subscription Agents.

The New Regulator

on the Sure Hatch is really automatic and direct acting-greatest improvement of years. Don't pay double price for old style machines. Get our book and free trial offer. SURE HATCH INCUBATOR CO., Clay Center, Neb., or Columbus Ohio.

The Daniels Incubators

Are the latest and most modern invention for artificial hatching of turkeys, chickens and ducks. Do not forget, we guarantee the Daniels incubators to be satisfactory to the purchaser. Our brooders are perfect; at least our customers say so. We carry a full line of poultry supplies. Our new catalogue is out, and is free for the asking. G. J. DANIELS, 198 to 200, TORONTO.

Poultry and Eggs Wanted

CHICKENS } Empty crates forwarded on application. DUCKS } Highest market prices paid. TURKEYS } Correspondence solicited. GESE

Toronto Poultry and Produce Co. OFFICE: 740 YONGE ST., TORONTO.

EGGS FOR HATCHING Barred Rocks (exclusively). From two pens headed by two imported cockerels bred from a \$75 trio of A. C. Hawkin's Royal Blue strain; \$1.00 per setting of 13. A. E. SHERINGTON, Box 100, Walkerton.

Mammoth Bronze Turkeys. A choice lot of young birds sired by imported toms. Pairs and trios mated, not akin Shropshire sheep and Chester White swine. Write for prices. Wm. F. Wright, Glanworth P.O., Ont. "SUNNYSIDE STOCK FARM."

GOSSIP.

Hume's Haw, Stock Farm is situated in the county of Northumberland, about 3 1/2 miles from Hoard's station, and is the property of Mr. A. Hume & Co., breeders of Ayrshire cattle, Yorkshire hogs and Clydesdale horses. The Ayrshires number 45 head, and it is a sight well worth a visit to see the long row of beautiful, sleek animals, with their deep, heavy quarters, large, even udders, showing the perfect type of milking machine which they are, for this last season the whole herd, including the heifers, made the enormous average of 6,000 lbs. of milk each during the cheese factory season, and of the developed cows there is not one with a milk record under 50 lbs. a day. Among them we were particularly struck with the splendid appearance of the cow, Imp. Eva of Barcheskie, who has twice won second place at Toronto; also, a four-year-old daughter, Lady Mitchell, by Dominion Lad. Another three-year-old daughter is Pearl, by White Chief of St. Annes. She won, at Toronto, second as a two-year-old and first as a yearling. Another daughter is the two-year-old Highland Lass, by White Chief. She was fourth at Toronto last fall. Again, the yearling daughter is Eva of Menie, by Imp. Caspian of St. Annes. Her last production is the five-months-old bull calf by Imp. Caspian of St. Annes. There are several other bull calves, some of them by the above bull, others of the present stock bull, Imp. Barcheskie (bred by Andrew Barcheskie, Kirkcudbright), winner of first at Toronto as a yearling last fall, and third at Toronto and first at London last year; also, at Toronto last fall, first, second, third and fourth prize calves were gets of his. We were also shown the first and third prize winners in heifers under a year at Toronto.

Mr. Hume's Yorkshires are second to nothing in the county in point of type, quality and smoothness, and there are some rare good young sows on hand, ready to breed.

In Clydesdales, there is for sale one brown filly, two years old, will weigh about 1,400 lbs—a grand, good mare, out of the 1,800-pound mare, Nellie H. by MacNeilage, the filly being by Sir Wilfred. Write Mr. Hume, to Menie P. O., Ont., for particulars.

IMPORTED BELGIAN STALLIONS.

A few days ago, being at Danville, Que., a member of the "Advocate" staff had the pleasure of a visit to the beautiful home of Baron de Champlouis and a look over his new importation of Belgian stallions, consisting of eight stallions and three mares. In color, the stallions are bays, browns, and roans; the mares are two chestnuts and one roan. In age, the stallions are from two to seven years, the mares are two two-year-olds, the other one is three years old and in foal; all of them registered in the Belgian Government Studbook. In weight, the stallions are from 1,800 to 2,000 lbs.; one of them with a little more flesh will weigh 2,200 lbs. In Belgium, no stallion is allowed to be used for stud purposes without first being inspected, when, if found up to the standard, permits are given, which are graded one, two and three, the former charging a stud fee of fifty dollars, the latter fifteen dollars. These horses are all sired by grade one horses, and consequently are high-priced animals. To see these horses is to immediately fall in love with them. They are built on the English cart-horse form, being an extremely thick, heavy-muscled horse, short-legged, clean, flat bone; smooth, finely-arched necks; very wide, intelligent heads; well-sprung ribs; strong, full-muscled back and loin; the right kind of legs correctly placed, and their action is superb, every foot coming up square and clean; and abundance of style, going with a proud, natty way that is at once pleasing to the eye. In fact, we feel that this is just the kind of horse that is required for general work, and are satisfied that when they once get introduced the demand for them will rapidly increase, for besides their grand individuality, they are as gentle as kittens. For fuller particulars, see the ad., write the Baron, to Danville P. O., Que., and you will find him a perfect gentleman.

THE SAFETY Incubators

are the most perfect hatchers on the market. Fully guaranteed. Built to last a lifetime. Write for circular to J. E. Meyer, - Gourock, NEAR GUELPH. (Instead of Kossuth.)

FOR SALE: 100 Mammoth Bronze Turkeys sired by 43-lb. imported tom. Also a choice lot of White Wyandottes and Black Minorcas. R. G. ROSE, Glanworth, Ont.

EASTERN ONTARIO

Live Stock and Poultry Show, OTTAWA,

FEBRUARY 10th to 13th, 1903.

Liberal prizes for Cattle, Sheep, Swine, Live Poultry and Dressed Poultry.

Practical lectures on live-stock subjects.

Programmes on application.

Single Fare Passenger Rates.

Provincial Auction Sales of Pure-bred Stock,

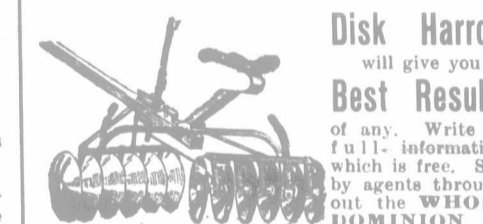
OTTAWA, Wednesday, February 11th, 1903.

Provincial Auction Sale of Pure-bred Stock,

GUELPH, Wednesday, February 25th, 1903.

A. W. SMITH, President, Maple Lodge. A. P. WESTERVELT, Secretary, Toronto.

BISSELL'S



Disk Harrow will give you Best Results of any. Write for full information, which is free. Sold by agents throughout the WHOLE DOMINION.

T. E. BISSELL, Dept. W., Elora, Ont.

PLANT YOUR MONEY where it will bring the largest returns. The NIMMO & HARRISON BUSINESS & SHORTHAND COLLEGE, TORONTO, is a progressive, reliable college. Its tuition rates are moderate. Its record of good results has no equal. It gives just the business education the farmer needs. Get its prospectus—It's free. WRITE FOR IT NOW. Through tuition by mail to those who cannot attend the College.

CENTRAL Business College STAFFORD, ONT.

Trains young men and women for business life, and places many in good paying positions every year. This is the school that possesses a great reputation for first-class work. Write for catalogue. Students admitted at any time. W. J. ELLIOTT, Principal.

THOROUGHbred JERSEY BULL FOR SALE.

Two years old, sire King of Woolwich No. 52200, A. J. C. C. of New York; dam Rose of Erin's Beauty No. 13297, A. J. C. C. of N. Y. Pedigree for this animal can be obtained, if desired. Apply at once to CHAS. KLINCK, SR., - - ELMIRA.

PREMIUMS

THE NAME OF SENDER DOES NOT COUNT ON LISTS OF NEW SUBSCRIBERS.

EXACT SIZE OF KNIFE.



AN A 1 FARMER'S KNIFE

Finest Steel Blades. Strong and Durable.
Beautiful Nickel Handle.

Manufactured by Joseph Rodgers & Sons,
SHEFFIELD, ENGLAND.

CANNOT BE DUPLICATED.

Every Farmer and Farmer's Son Should Have One
of These Knives.

START OUT FOR THE NAMES TO-DAY.

HOW TO SECURE IT.

SEND

New Subscribers **2** New Subscribers

TO THE

FARMER'S ADVOCATE

And we will send you the knife, postpaid.

THE BIG FOUR

"CANADA'S IDEAL"

class modern Shorthorns ever issued in any

THE GREAT PREMIUM PICTURE OFFER, FOR OBTAINING NEW SUBSCRIBERS TO THE "FARMER'S ADVOCATE" AT \$1 A YEAR.

Admitted by judges, breeders and artists to be the most magnificent engraving of high-country. 24 x 36 inches. Twelve animals.

"CANADA'S PRIDE"

Nine celebrated draft horses.

Your choice of any two of these for 1 new subscriber, or all four beautiful pictures for only 2 new subscribers.

"CANADA'S GLORY"

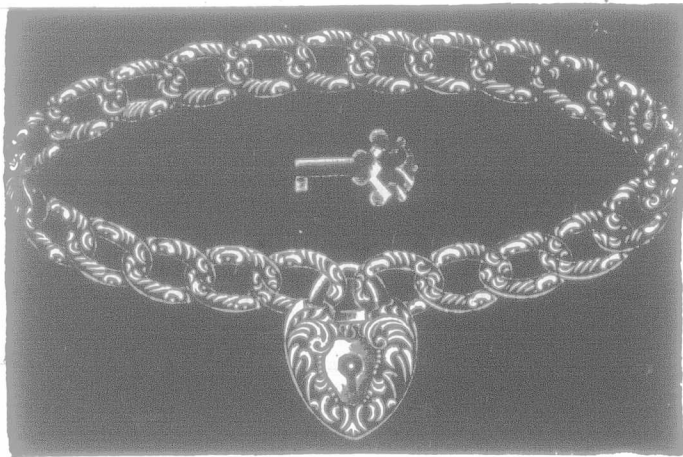
Eleven celebrated light horses.

"CANADA'S COLUMBIAN VICTORS"

Thirteen celebrated Ayrshire cattle.

Handsome
Curb-link
Bracelet:
Silver
Filled

For 2 new subscribers. Sterling silver for 3 new subscribers. For each additional new subscriber, two Sterling Silver Friendship Hearts.



Bagster's NEW COMPREHENSIVE Teacher's Bible,

Containing the Old and New Testaments, according to the authorized version, together with new and revised helps to Bible study—a new Concordance and an Indexed Bible Atlas, with SIXTEEN FULL-PAGE ILLUSTRATIONS, PRINTED IN GOLD AND COLOR.

HOW TO OBTAIN IT—

Would retail at from \$3 to \$4. We will send (carefully packed, post paid) this Bible to anyone sending us the names of THREE NEW SUBSCRIBERS to the FARMER'S ADVOCATE at \$1.00 each.

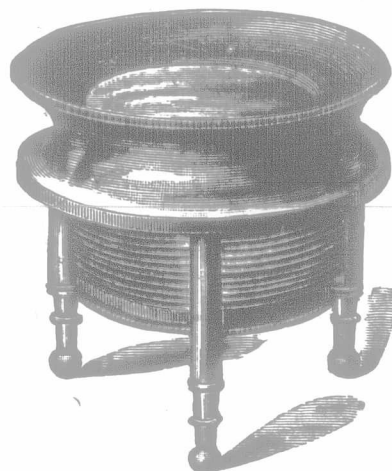
Our Self-Binder

HANDY, DURABLE and ATTRACTIVE. Made to contain the 24 issues of the year. We will forward this Binder, postpaid, to anyone sending us the names of two NEW SUBSCRIBERS and \$2.00.

BEGIN TO CANVASS
AT ONCE

FOR NEW SUBSCRIBERS. The balance of 1902 will be sent FREE, including Christmas number, to all who now subscribe for 1903.
Subscription Price, \$1.00 per Annum.

THE MICROSCOPE



Is a means of great entertainment and instruction in the home and out of doors. To meet the wishes of many subscribers, we have arranged with a first-class firm for a supply of those instruments; which we now offer:

Tripod Microscope, with strong magnifying lens, useful for examining weed and other seeds, insects and other small objects, for obtaining one (1) new subscriber to the FARMER'S ADVOCATE.

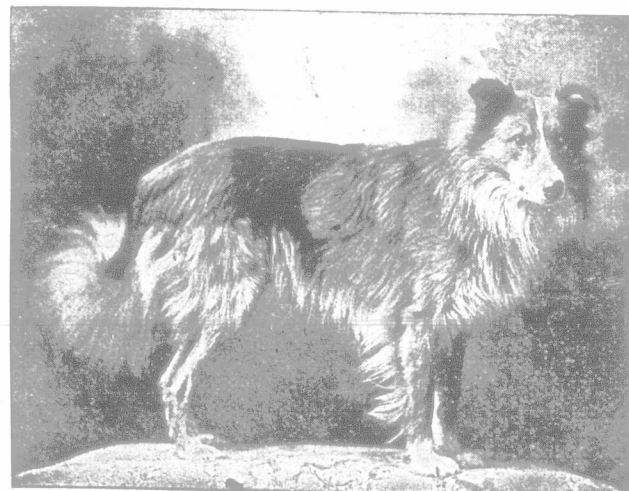
A three-inch Magnifying Reading Glass for one new subscriber.

HOW TO GET A

FIRST-CLASS COLLIE

Twelve New
Subscribers.

TO ANY SUBSCRIBER sending us the names of 12 NEW yearly paid-up Subscribers we offer a young COLLIE, six weeks old or over, eligible for registration, and bred by Mr. R. McEwen, Byron, Ont., whose stock has been so successful in the leading shows in Canada and the United States.



Write for a sample copy of the Farmer's Advocate, and begin to work for these premiums. Cash must accompany new names.

THE WM. WELD COMPANY, LTD., LONDON, ONTARIO.

FARM BOOKS.

The farmer's home without an Agricultural Library is lacking in one of the chief aids to pleasure and success. We have gone over the available first-class works on agricultural subjects, and have selected the best. See below for prices and how to obtain.

SOIL AND CROP.

- THE FERTILITY OF THE LAND.—*Roberts*. 372 pages. \$1.25.
- A BOOK ON SILAGE.—*Woll*. 185 pages. \$1.00.
- SOILING, ENSILAGE, AND BARN CONSTRUCTION.—*F. S. Peer*. 247 pages. \$1.00.
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LIVE STOCK.

- VETERINARY ELEMENTS.—*A. G. Hopkins, B. Agr., D. V. M.* \$1.50. A practical book for stockmen and agricultural students.
- THE STUDY OF BREEDS (CATTLE, SHEEP, AND SWINE).—*Prof. Shaw*. 400 pages; 60 engravings. \$1.50.
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- LIGHT HORSES—BREEDS AND MANAGEMENT. 226 pages. \$1.00.
- HEAVY HORSES—BREEDS AND MANAGEMENT. 219 pages. \$1.00.
- CATTLE—BREEDS AND MANAGEMENT. 270 pages. \$1.00.
- SHEEP—BREEDS AND MANAGEMENT. 232 pages. \$1.00.
- ANIMAL BREEDING.—*Shaw*. 406 pages. \$1.50.
- THE DOMESTIC SHEEP.—*Stewart*. 371 pages. \$1.75.
- THE SHEEP.—*Rushworth*. 496 pages. \$1.50.
- PIGS—BREEDS AND MANAGEMENT.—*Sanders Spencer*. 175 pages. \$1.00.
- FEEDS AND FEEDING.—*Henry*. 600 pages. \$2.00.

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- AGRICULTURE.—*C. C. James*. 200 pages. 30 cents.
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- IRRIGATION FOR THE FARM GARDEN AND ORCHARD.—*Henry Stewart*. \$1.00.
- SUCCESSFUL FARMING.—*Rennie*. 300 pages. \$1.50, postpaid.

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- TESTING MILK AND ITS PRODUCTS.—*Farrington & Woll*. 255 pages. \$1.00.
- DAIRYING FOR PROFIT.—*Mrs. E. M. Jones*. 50 cents.

POULTRY.

- FARM POULTRY.—*Watson*. 341 pages. \$1.25.
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- PRACTICAL POULTRY-KEEPER.—*Wright*. \$2.00.
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- FLOWERS AND HOW TO GROW THEM.—*Rexford*. 175 pages. 50 cents.
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- HORTICULTURIST'S RULE BOOK.—*Bailey*. 312 pages. 75 cents.
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- AMATEUR FRUIT-GROWING.—*Samuel B. Green*. 5x7 inches; 134 pages, with numerous fly-leaves for notes; bound in cloth, and illustrated. 50 cents.

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HOW TO OBTAIN THESE BOOKS:

We will furnish present subscribers any of the above books for cash or as premiums for obtaining new yearly subscribers to the FARMER'S ADVOCATE at \$1.00 each, according to the following scale:

Books valued at 50c. and under for 1 new subscriber.	
Books valued over 50c. and up to \$1.00 for 2 new subscribers.	
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" " " " " \$6.00 " " " 12 " "	

We can furnish any of the above books at the regular retail price, which is given opposite the title of the book. By a careful study of the above list, any farmer can choose a select list of books suited to his needs, and for a small outlay in cash, or effort in obtaining new subscribers for the ADVOCATE, secure the nucleus of a useful library.

Cash to accompany names in every case. Subscriptions credited a year in advance from date received.

The WILLIAM WELD CO., Ltd., London, Ontario.

WANT A GOOD WATCH?

WE have succeeded in procuring from one of the most reliable jewelers in Canada a complete list of Gents' and Ladies' Watches of sufficient variety to suit every one, and have no hesitation in recommending them to our readers as premiums worthy of an effort to secure. These are not by any means trashy goods, but first-class in every particular, and we assure you that you will be pleased with whatever of the above premiums you may obtain. Let us hear from you at an early date with a good list of new subscribers accompanied by the cash, and take your choice.

Gents' Watches.

	New Subscribers.
No. 1. Yankee Nickel Watch.....	2
No. 2. Trump Nickel Watch.....	4
No. 3. Trump Gun Metal Watch.....	5
No. 4. No. 14 Silver Watch.....	8
No. 5. 7 Jeweled Gent's Elgin in 3 oz. Nickel Case.....	10
No. 6. 7 Jeweled Gent's Elgin in Gun Metal Case.....	11
No. 7. 7 Jeweled Gent's Elgin in Sterling Silver Case.....	14
No. 8. 7 Jeweled Gent's Elgin in 20-year Filled Case.....	18
No. 9. 7 Jeweled Gent's Elgin in 25-year Filled Case.....	21
No. 10. 15 Jeweled Gent's Elgin in 3 oz. Nickel Case.....	15
No. 11. 15 Jeweled Gent's Elgin in Gun Metal Case.....	15
No. 12. 15 Jeweled Gent's Elgin in Sterling Silver Case.....	18
No. 13. 15 Jeweled Gent's Elgin in 20-year Filled Case.....	21
No. 14. 15 Jeweled Gent's Elgin in 25-year Filled Case.....	25

Ladies' Watches.

	New Subscribers.
No. 15. Gun Metal Swiss Chatelaine.....	4
No. 16. Sterling Silver Swiss Chatelaine.....	5
No. 17. Nickel American O. F., large size.....	5
No. 18. Gun Metal American O. F., large size.....	5
No. 19. Nickel, small size.....	9
No. 20. Gun Metal, small size.....	10
No. 21. Sterling Silver, small size.....	10
No. 22. 7 Jeweled Elgin in 20-year Filled Hunting Case.....	20
No. 23. 7 Jeweled Elgin in 25-year Filled Hunting Case.....	22
No. 24. 15 Jeweled Elgin in 20-year Filled Hunting Case.....	23
No. 25. 15 Jeweled Elgin in 25-year Filled Hunting Case.....	25

Description of Watches.

The accompanying cuts fairly well represent all the Ladies' and Gents' Watches, and a description of each as numbered is as follows:

No. 1. American Nickel Key-wind Boy's Watch that is absolutely guaranteed to keep good time and give satisfaction.

No. 2. Gent's Nickel American O. F. Watch; stem wind, and push-in stem and turn to set hands. This is a very strong, reliable Watch.

No. 3. Same as No. 2, excepting that it has Gun Metal case instead of Nickel case.

No. 4. Is a smaller-sized Gent's Watch, has sterling silver case, O. F. Screw Back and Bezel; stem wind, and push-in stem and turn to set hands. This is the lowest-priced and most reliable Boy's or small Gent's Silver Watch that is on the market.

No. 5. Is fitted with 7-Jeweled Nickel, first-quality Elgin movement. The case is a 3-oz. O. F. Nickel case; stem wind and set; screw back and bezel case.

No. 6. Same movement in Gun Metal or Black Steel screw back and bezel case.

No. 7. Same movement with Sterling Silver O. F. screw back and bezel case.

No. 8. Same movement in 20-year guaranteed Gold Filled O. F. screw back and bezel case.

No. 9. Same movement in 25-year guaranteed Gold Filled O. F. screw back and bezel case.

Nos. 10, 11, 12, 13 and 14 are fitted in the same style of cases as Nos. 5, 6, 7, 8 and 9; the difference is in the movement, and the movement is 15-Jeweled Nickel, first-quality Elgin movement.

No. 15. Is a small-sized Swiss O. F. Gun Metal Chatelaine Watch.

No. 16. Is the same, only with Sterling Silver case, which can be had nicely engraved.

Nos. 17 and 18 are a good-quality American Watch, O. F. stem wind, and push-in stem and turn to set hands. These are a little larger than the usual Ladies' Watches, and are smaller than the usual Boys' Watches, though can be used for either Boys, Girls or Young Ladies.

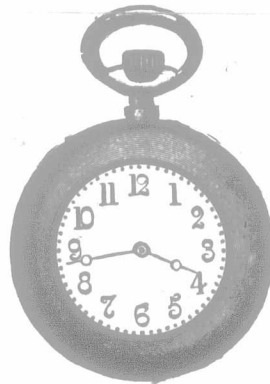
Nos. 19, 20 and 21 are small sized; in fact, are the exact size of cut. These are American Watches, O. F. stem wind, and push-in stem and turn to set hands, and are first-class timekeepers. Will give perfect satisfaction.

If a nice leather wrist case is desired with these watches, send two extra subscribers.

Nos. 22, 23, 24 and 25 are similar to the accompanying cut. These are regular Ladies' Hunting Watches. Nos. 22 and 24 are fitted in 20-year guaranteed Gold Filled cases, nicely ornamented, or to be had in plain or plain engine turned, and the same applies to Nos. 23 and 25, excepting that they are fitted in 25-year guaranteed Gold Filled cases, and 14k Gold Filled; 22 and 23 are fitted with 7-Jeweled Nickel, first-quality Elgin movements. Nos. 24 and 25 are fitted with 15-Jeweled Nickel, first-quality Elgin movements.

When making your choice of Watch as premium, be sure to mention its number as given in premium list, also whether Lady's or Gent's.

The WM. WELD CO., Ltd., London, Ontario.



GOSSIP.

The twentieth annual meeting of the Holstein-Friesian Association of Canada will be held at the Palmer House, Toronto, on February 3rd, at one o'clock.

Messrs. J. Yuill & Sons, Carleton Place, Ont., make a change in their advertisement in which they offer a good selection of Ayrshire cattle, Berkshire pigs, Shropshire sheep and B. P. Rock fowl.

Brown Bros., Lyn, Ont., in their advertisement of Holstein cattle, offer a number of choice heifers and young bulls bred from tested cows. This herd ranks among the very best in Canada for quality, character and performance.

The Battle Estate, of Thorold, Ont., in writing regarding change of advertisement, mention that the cement season for 1903, is opening up well with them. Hundreds of letters from all over Ontario are being received. For much of this they give credit to the "Farmer's Advocate." The Battle firm, in addition to manufacturing the well and widely known "Thorold Cement," which has been before the public for sixty-two years, having been established in the year 1841, are also handling several brands of Portland cement. The "Thorold Cement" will be used in many parts of the Province this year where it has not been largely used in the past.

The London Fence Machine Co., of London, Ont., advertise their fence machine and supplies in this number of the "Advocate." Fencing may appear, at first thought, to be an unseasonable topic just now, but it is well to look ahead and make inquiries and calculations for fencing, which will interest most farmers a few months hence. The London Fence Machine has had a great run of success, and has, we believe, proved by actual use all that is claimed for it, combining the cardinal qualities of strength, endurance, simplicity of construction and cheapness of cost. A postal card addressed to the company will bring you their circular, giving full particulars and description, with price list, etc. See their ad. in this issue.

Attention is directed to the announcement in our advertising columns of two very important English sales of Short-horn cattle, to be conducted by the widely-known auctioneers, John Thornton & Co., of London. The sale of a selection from the Royal Farms herd at Sandringham, on February 25th, includes the champion bull, Royal Duke, and a very attractive offering of Scotch and English animals. The sale on March 18th, is from the noted prize-winning herd of Mr. Wm. Bell, Alnwick, Northumberland, who has been a very successful exhibitor in recent years at the Royal and other leading British shows. A photo of three grand show bulls in this herd appeared in this paper a few months ago. See the advertisement, and send for catalogue.

MR. BEITH'S CLYDESDALES AND HACKNEYS.

As announced in his advertisement in this issue, Mr. Robert Beith, M. P., Bowmanville, Ont., is in the field with a choice selection of Clydesdale and Hackney stallions and Hackney mares. Mr. Beith's well-deserved reputation as a discriminating judge of both heavy and light horses and his integrity and fairness as a business man are a guarantee as to the quality and type of the horses he handles, and will inspire confidence that those he is offering are of no ordinary class, but up to the standard of the best and up-to-date in type and breeding, and when he states, as he does in a letter to this office, that the Clydesdale stallions in this consignment are a specially fine lot, breeders may rest assured that they are all of that. Parties looking for first-class horses should write Mr. Beith for particulars, or meet him at the stallion show in Toronto, February 4, 5 and 6, where these horses will be on exhibition.

BOYS. LOOK! FREE RIFLE



SURE DEATH TO RATS, CROWS, SQUIRRELS, RABBITS, ETC.

Boys! How would you like to have an All-Steel Long-Distance Air Rifle of the best make and latest model, that shoots B. B. Shot, Slugs and Darts with terrific force and perfect accuracy? We are giving away Absolutely Free these splendid Rifles to anyone who will sell only 1 1/2 doz. large packages of Sweet Pea Seeds at 10c. each. The packages are beautifully decorated in 12 colors, and each one contains 42 of the rarest, prettiest and most fragrant varieties. In every imaginable color. Everybody buys. M. Species, Mono Mills, Ont., said: "I no sooner opened my parcel than I had all the Seeds sold. They went like wildfire." A 50c. certificate free with each package. Write us a post card to-day and we will send the Seeds postpaid. Boys, this is the best Air Gun made. It has all steel barrel and fittings, improved globe sights, pistol grip and walnut stock. It is always ready for Squirrels, Rats, Sparrows, etc. Gen. Allen, Brandon, Man., says: "I received my Rifle yesterday and think it is a beauty. I have shot 5 birds already." Dominion Seed Co., Dept. 597 Toronto.

TOY CANNON FREE



To any bright boy who will sell only 6 large packages of Sweet Pea Seeds at 10c. each. The packages are beautifully decorated in 12 colors and each one contains 42 of the rarest, prettiest and most fragrant varieties in every imaginable color. Everybody buys. Percy De L. Little Rapids, Ont., said: "The Seeds sold like wildfire." A 50c. Certificate free with each package. The Cannon is made of iron, nicely bronzed, and has a spring for shooting buckshot, peas, etc. The ammunition wagon and the artillery Cannon. It is a beautiful toy, and the best value we have ever given for so little work. You can easily earn it in a few minutes. Write us a Post Card to-day and we will send you the Seeds postpaid. The Dominion Seed Co., Dept. 599, Toronto

Our Priced CATALOGUE



is our agent for Reliable nursery stock, in variety. Direct deal will give you satisfaction. We can please customers at all times.

A. G. HULL & SON,
CENTRAL NURSERY,
ST. CATHARINES, ONTARIO.

FOR SALE:
Pure-bred Rough-coated Collies,
from prizewinning stock; dark and light colors; male and female. **J. D. RODDICK, Cobourg, Ont.**

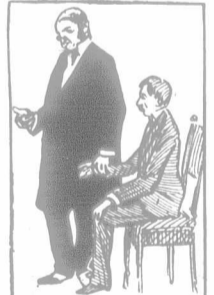
NEW OATS-TARTAR KING
1901, 8 lbs. sown broadcast yielded 20 bus. 8 lbs.
1902, 7 pecks sown per acre gave average per acre of 75 bushels. A strong-strawed, yellow oat, with all-round close-clustered head of fine, plump grain. So far it has proved a very satisfactory new variety. Prices: per bus., 75c., or lot of 5 bus. or more, 60c. per bus. Good cotton bags, 20c.
JOHN CAMPBELL, Fairview Farm, Woodville, Ont.

BOYS! We extend credit and offer the most valuable premiums ever given for a little of your spare time. Illustrated List Free.
O. COBER, Hespeler, Ont.

PERSONAL TO SUBSCRIBERS.

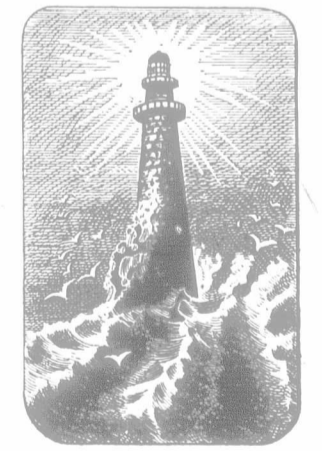
We will send to every subscriber or reader of THE FARMER'S ADVOCATE a full-sized ONE-DOLLAR package of VITÆ-ORE, by mail, POSTPAID, sufficient for one month's treatment, to be paid for within one month's time after receipt, if the receiver can truthfully say that its use has done him or her more good than all the drugs and doses of quacks or good doctors or patent medicines he or she has ever used. Read this over again carefully and understand that we ask our pay only when it has done you good, and not before. We take all the risk; you have nothing to lose. If it does not benefit you, you pay us nothing. VITÆ-ORE is a natural, hard, adamant, rock-like substance—mineral-ORE—mined from the ground like gold and silver and requires about twenty years for oxidation. It contains FREE IRON, FREE SULPHUR and MAGNESIUM, and one package will equal in medicinal strength and curative value 800 gallons of the most powerful, efficacious mineral water drunk fresh at the springs. It is a geological discovery, to which there is nothing added or taken from. It is the marvel of the century for curing such diseases as Rheumatism, Bright's Disease, Dropsy, Blood Poisoning, Heart Trouble, Catarrh and Throat Affections, Liver, Kidney or Bladder Ailments, Stomach and Female Disorders, La Grippe and Malarial Fever, Nervous Prostration and General Debility, as thousands testify, and as no one, answering this, writing for a package, will deny after using. VITÆ-ORE will do the same for you as it has done for hundreds of other readers of this paper who have accepted this offer and MADE NATURE THEIR DOCTOR, if you will give it a trial, which none should hesitate to do on this liberal offer. SEND for a \$1.00 PACKAGE AT OUR RISK. You have nothing to lose if the medicine does not benefit you. WE WANT NO ONE'S MONEY WHOM VITÆ-ORE DOES NOT BENEFIT. Can anything be more fair? One package is usually sufficient to cure ordinary cases; two or three for chronic, obstinate cases. Investigation will bear out our statement that we MEAN JUST WHAT WE SAY in this announcement and will do just as we agree. Write TO-DAY for a package at our risk and expense, giving your age and ailments, so that we may give you special directions for treatment, if same be necessary, and mention this paper, so we may know that you are entitled to this liberal offer.

YOUR DOCTOR
may tell you that your case is incurable, that medical science is unable to help you, that all you can expect is temporary or slight RELIEF. Well, let HIM think so. He is certainly entitled to HIS OPINION. You need not think so unless YOU WISH TO.



Many people whose testimony appears in the books and pamphlets of the THEO. NOEL CO. were told that their cases were hopeless, helpless, impossible, incurable, past all recovery, yet—READ THEIR TESTIMONY. Many were told that they had but a few short years—some but months—to live, yet—READ THEIR TESTIMONY. There are more things in HEAVEN and EARTH than are dreamed of in the Doctor's philosophy, and Vitæ-Ore is one of them.

AS A BEACON LIGHT
VITÆ-ORE points the way for storm-tossed sufferers to a haven of Health and Comfort. If you have been drifting in a sea of sickness and disease, towards the rocks and shoals of Chronic Invalidism, Port your Helm ere it be too late, take heed of the message of hope and safety which it flashes to you; STOP DRIFTING about in a helpless, undecided manner, first of one course and then another, but begin the proper treatment immediately and reach the goal you are seeking by the route SO MANY HAVE TRAVELED WITH SUCCESS.



Every person who has used Vitæ-Ore is willing to act as a PILOT for you. Each knows the way from having followed it; attend their advice, FOLLOW THE LIGHT and be cured with Nature's Remedy as they have been.

CAN YOU AFFORD TO DISREGARD IT?
This offer will challenge the attention and consideration, and afterward the gratitude, of every living person who desires better health or who suffers pains, ills and diseases which have defied the medical world and grown worse with age. We care not for your skepticism, but ask only your investigation and at our expense, regardless of what ills you have, by sending to us for a package on trial. In answer to this, address:

THEO. NOEL, Geologist, Toronto, Ont.
Dept. F. A., 101 York St.

IMPORTANT SALES —OF— Pure-bred Stock in England.

JOHN THORNTON & CO. will SELL by AUCTION the following first-class herds:

THURSDAY, FEBRUARY 26. At the Royal Farms, Windsor, 60 SHORTHORNS, bred by H. M. THE KING, from the celebrated Windsor and Sandringham herds.

WEDNESDAY, MARCH 18.—MR. W. BELL'S SHORTHORNS, about 60 head, including several first-class prize bulls, at Hatcheugh, Alnwick, Northumberland.

THURSDAY, MARCH 26.—The late MR. P. K. BLOFIELD'S herd of RED POLLS, at Quidcunham, Attleborough, Norfolk.

THURSDAY, APRIL 2.—Sale of SHORTHORN bulls at York.

Catalogues may be had of JOHN THORNTON & Co., 7 Princes street, Hanover Square, London, England, who will execute commissions, effect insurance and attend to shipment.

TREES

FRUIT.
ORNAMENTAL.

Actually first hand. Why pay intermediate profits when you can buy direct from the growers?

Send at once for Catalogue and Price List to

WINONA NURSERY CO.,
WINONA, ONT.

WANTED:

Man to work on farm near St. Catharines. Young married man preferred. Apply to
G. B. McALLA, Guelph.

DON'T BURN OR FREEZE YOUR PLANTS
Use Mikkanite in lieu of glass for hotbeds and cold frames. 18c. per yard; 25 yards, \$3.75.
E. M. WOODWORTH, Lacolle, Quebec

Strawberry Plants
Select list of new and standard varieties; first quality; prices right. Catalogue free.
R. H. McDOWELL, Tilsonburg, Ont.

FREE LANTERN AND ENGINE

Splendid Magic Lantern with powerful lenses showing dozens of pictures in colors and Real Steam Engine with brass boiler and steam chest, steel piston rod and fly wheel, and Russian iron burner compartment, given for selling at 10c. each only 1 doz. Glass Pens. These Pens are made entirely of Glass. They never rust, never wear out, and write a page with one dip of ink. They sell easily everywhere. A 50c. certificate free with each Pen. Write us a post card to-day and we will mail the Pens postpaid. When sold return \$1.20 and we will forward immediately to you the Lantern and Engine. **THE PEN CO., Dept. 582 TORONTO, Ont.**



FREE OPAL RING

made of Solid Gold alloy, hand-gemmed and set with three large beautiful Opals that show all the gorgeous colors of the rainbow. A very handsome and stylish Ring, given free for selling at 10c. each only 6 packages of Lemon, Vanilla and Almond Flavoring Powders. One package equals 20c. worth of Liquid Flavoring and is far better. Used by the leading caterers, hotels and restaurateurs. **Every housekeeper buys them.** A 50c. certificate free with every package. Send us a Post Card to-day and we will mail the Flavoring Powders postpaid, along with one of our Rings. Write at once if you wish to take advantage of it. Cora Washington, Auburn, Ont., says: "I am perfectly delighted with my Opal Ring. It is a magnificent premium for a little work." **The Standard Flavoring Co., Dept. 588 Toronto**



FREE **IT WILL MAKE A CAT LAUGH**

Genuine Columbia Phonograph

Given for selling only 2 doz. large packages of Sweet Pea Seeds at 10c. each. The packages are beautifully decorated in 12 colors and each one contains 42 of the rarest, prettiest and most fragrant varieties in every imaginable color. **Everybody Buys.** Y. M. McKel, Pugwash, N. S., said: "I sold all the seeds in 15 minutes." A 50c. certificate free with each package. This wonderful instrument is made by the famous Columbia Phonograph Co., of New York and Paris. With it we send five selections as follows: "Song of Sixpence," "The Mocking Bird," "Imitations of Robins, Tree Toads, Turkeys, Chickens, Ostriches, etc.," and "Cornet Solo." **Dixie Land.** Write us a **post card** to-day and we will send the seeds postpaid. M. Payne, Brimston's Corners, Ont., says: "I think my Graphophone is a splendid premium for so little work." **The Dominion Seed Co., Dept. 598 Toronto, Ont.**



Situation Wanted—By Scotchman, as herdsman—Shorthorns preferred. Can give good references. Write
JAN. W. COBEN, Jerseyville, Ont.

SHORTHORNS FOR SALE:
Waterloo Lad 31071, 3 years old, by Imp. Prime Mini-ter; Duchess of Lanark, 4 years old, by Imp. Scottish Pride; Lily of Gordon 31080, by Sir James; a 3 months hifer calf by Strathmore 26987.
R. E. WHITE, Perth P.O. and Sta., C. P. R.

PLEASE MENTION FARMER'S ADVOCATE.

Holsteins and Improved Yorkshire Pigs

AT ANNANDALE STOCK FARM.

We are now offering for sale several young bulls from 3 to 15 months; also heifers. The dams of these animals were bred by the late E. D. Tillson, and the Annandale herd has more than a provincial notoriety as milk producers. Therefore, if you wish to improve your stock, this is an opportunity. Write us for catalogue, or we will be pleased to have you call and inspect our stock. Our farm is in the corporation, within ten minutes' walk of M. C. R., Wabash, G. T. R., and T., L. E. & P. R. stations. Correspondence solicited.

E. D. TILLSON ESTATE, Limited, - - - TILSONBURG, ONT.

"I'M STRONG ONCE MORE."



Dr. McLaughlin's Electric Belt, With Its Free Electric Suspensory, for Weak Men, Has Restored His Lost Strength.

This is the way they feel, the men who had given up hope, who thought there was no cure for them, until they came upon Dr. McLaughlin's Electric Belt. Now they are full of life, overflowing with joyous spirits, and "care to the winds." Pains are gone, weakness is gone, and full vigor is in every action.

Do you want to feel like that? Then wear this grand life-giving appliance for two months at night. It will charge every nerve with electric life, and you will feel like a two-year-old. It puts steam in your run-down body, drives away pain and renews youth.

Here Are Happy Men:

I have used your Belt for thirty days. The drain upon my system is entirely stopped. I have found that everything you told me in your letter came true, which pleases me very much. Before this I doctored and derived no benefit whatever. They all promised to cure me, but failed. Yours, **WM. WEIS, St. Catharines, Ont.**

I have been wearing your Belt for one month, and I must say that it has done me good. I have gained in weight; am stronger; in fact, stronger and better in every way. The drain has stopped as well as the burning sensation which I complained of. I do not have that tired feeling any more.—**PHILIP W. HITNEY, Hintonburg, Ont.**

I got one of your Belts, and I have never been sorry for doing so. As to the merits of your Belts I cannot speak too highly for the cure of all forms of weakness.—**E. M. CLARK, Atercliffe, Ont.**

If you have pains in your back, if you feel tired and listless, if you are nervous and weak, if you are growing old too soon, if you have lost the vigor and courage of youth, if you have Rheumatism, a Weak Stomach, or any evidence of breaking down, you are wasting time. Get Dr. McLaughlin's Belt with Free Electric Attachment.

GET SOME LIFE INTO YOU!

What's the use of dragging your legs about like a wooden man? Feel like a man of spirit. Away with the pains and aches; off with this wretched feeling as if you were seventy years old and had one foot in the grave. Ginger up! feel young and full of glee. That's the way a man ought to feel. Come and let me put life into your nerves; let me give a new supply of youthful energy. Let me make you feel like throwing your chest out and your head up and saying to yourself "I'M A MAN!" Let me give you back that old feeling of youthful fire, vim and courage. I can do it, so that in two months you will wonder that you ever felt as slow and poky as you do now. Come and see me and I'll explain, and you can see how my system works. If you can't call, cut this ad. out and send it to me and I'll send you a book, beautifully illustrated, that makes a man feel like being young again. Act to-day. Life is sweet, so enjoy every minute.

There are many people to-day who will be only too willing to share their knowledge with you. They will tell you what my Belt has done for them; perhaps some of them your neighbors. Then the terms which I offer you leave nothing to lose. I take all the chances. All I ask—give me evidence of your honesty by offering me reasonable security and you can

PAY WHEN CURED.

CAUTION—Beware of the many cheap imitations which are advertised. They either burn or blister so that they cannot be used. Even if they had virtue those selling them could not give any advice as to the way they should be used.

READ WITH CARE Every patient wearing Dr. McLaughlin's Electric Belt receives free until cured the advice of a physician who understands his case. Agents or drug stores are not allowed to sell these goods

FREE BOOK—If you can't call write for my beautiful descriptive book showing how my Belt is used. It explains how my Belt cures weakness in men and women, and gives prices. Send for it to-day. Address

DR. M. S. McLAUGHLIN, 130 Yonge Street, TORONTO, ONT.

OFFICE HOURS 9 A.M. TO 8.30 P.M.

DE LAVAL

Stands for everything that is of any real value in a Cream Separator, for back of the name is an unapproachable reputation extending over a period of nearly a quarter century and a guarantee that the **DE LAVAL** is the **BEST** in every particular, or no sale.

For proof of this write us or our agents.

THE DE LAVAL SEPARATOR CO.
77 York St., Toronto.



POPULAR TOOLS FOR MARKET GARDENERS

SEE SEED DROP
In Plain Sight



NEW UNIVERSAL
Double Wheel Hoe, Cultivator, Rake, and Plow



NEW UNIVERSAL
Single Wheel Hoe Cultivator, Plow and Rake, for between row cultivation.



NEW UNIVERSAL Drill & Cultivator
The only implement made which can be used as seeder and cultivator. 1 or 2 wheels as desired. Quickly changed.

NEW UNIVERSAL Wheel Plows.
Three styles. For Gardeners and Poultryers.

POPULAR PRICES. 1903 catalogue of latest styles now ready. Free.

AMES PLOW COMPANY, 93 MARKET STREET, BOSTON, MASS.

HAWKEYE GRUB AND STUMP MACHINE

Works on either Standing Timber or Stumps. Pulls an Ordinary Grub in 1 1/2 Minutes, and testimonials. Also full information regarding our **I. X. L. GRUBBER, IRON GIANT GRUB & STUMP MACHINE, 2-HORSE HAWKEYE** and other appliances for clearing timber land.



MILNE MFG. CO., 886 8th St., Monmouth, Ill. Address Milne Bros. for **SHEPHERD PONY** Catalogue.

The Livingston Linseed Oil Co., Ltd.,

BADEN, ONTARIO,

Manufacturers of strictly pure

Old Process Linseed Oil Cake and Meal, also Ground Flax Seed.

Write for prices.

U S U S U S

ANOTHER GREAT VICTORY

FOR

THE U.S. SEPARATOR

At the VERMONT DAIRYMEN'S ASSOCIATION MEETING at Rutland, Jan. 6-8, 1903, there were 150 entries and

The Butter Scoring the Highest--98 1/2 Points,

was made from cream separated by a U. S. Separator, and

Won the Grand Sweepstakes and Gold Medal.

This Butter not only scored the highest at this Meeting, but it received the

Highest Score of any Butter

at any Convention this Season

To make the best Butter, one needs the best apparatus, a U. S. Separator. Buy one and prove it.

Write for Illustrated Catalogues.

Vermont Farm Machine Co., Bellows Falls, Vt.

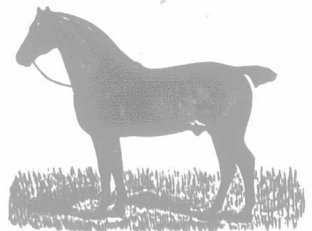
WE HAVE A LARGE STOCK OF SECOND-HAND TYPEWRITERS

Of nearly all makes, including REMINGTONS, JEWETTS, FRANKLINS, UNDERWOODS, CALIGRAPHS, HAMMONDS, BAR-LOCKS, FOXES, OLIVERS and BLICKENSBERGERS, which we are selling at from \$15.00 up. We are sole dealers for the

SMITH PREMIER TYPEWRITER

Which is the business and professional man's typewriter. All the largest railroads, insurance and commercial companies use the Smith Premier almost exclusively, and are satisfied that it is the BEST. Write for illustrated catalogue.

NEWSOME & GILBERT, SOLE DEALERS,
68-72 VICTORIA STREET, TORONTO, ONTARIO.



BAWDEN & McDONELL, EXETER, ONT.

IMPORTERS OF
Clydesdale, Shire and Hackney Horses

are now offering several imp. Clydesdale, Shire and two Hackney stallions, prizewinners in England, Scotland and Canada, and representing the best blood alive; also several choice Canadian-bred ones. These animals are all true to type, and possess substance, quality, style and action.

NOTICES.

THE WINONA NURSERY CO. Winona, Ont., advertise nursery stock in this issue, fruit and ornamental trees, etc. Their catalogue and price list may be had for the asking.

LITTLE'S SHEEP DIP still retains its popularity as an effective preparation for the destruction of ticks on sheep, lice on cattle or pigs, and as a handy disinfectant. Being a fluid, it is easily and quickly prepared, mixes readily with cold water, and is ready for use in a minute. It leaves the skin in a healthy condition, and promotes the growth of wool. It has also been strongly commended as a medicine in the case of scours in calves and lambs. This dip is advertised elsewhere in this paper.

BUILD YOUR OWN FENCE.—The eleventh annual catalogue of the Carter Wire Fence Machine Co., Box B., Mt. Sterling, O., contains some very interesting facts about building wire fence. This company are pioneer wire fence machine makers, whose years of experience has made possible the building of a wire fence that will turn any kind of stock, adapt itself to any kind of weather, occupies very small space, and lasts a lifetime. Write for their free catalogue, it is well worth reading.

BEAVER MANUFACTURING CO.—Beginning with this issue of the "Advocate" a series of short articles on the feeding of stock will appear regularly in the column preceding the editorial page. They are by the Beaver Mfg. Co., and are not only interesting, but they certainly contain much valuable information. These articles are advertisements, but they are well written and clean. They are good reading and well worthy of careful consideration.

THE CREAM SEPARATOR has come to stay, and is rapidly finding a place in the outfit of farms where dairying is carried on, if only on a small scale. It is a great convenience and a genuine labor saver, doing away with the necessity of curdling for milk, and having the milk warm and fresh for the calves. The National Separator, manufactured by the Raymond Mfg. Co., of Guelph, Ont., holds a strong place and ranks high for efficiency, ease of operation, style, finish, and lasting service. See their advertisement in this issue, and send for their circular, price list, etc.

FREE SEEDS.—The first of a series of advertisements deserving particular notice will be found in this issue, over the household name of Hersee & Rickell, seed merchants and growers, Woodstock, Ont. The firm enjoys a well-founded reputation for reliability, and is rapidly widening its already large patronage with each season's trade. Two features of the initial announcement call for special mention. The offer of a free sample of seeds and the company's annual for the mere asking should be immediately taken advantage of, and the merits of the New Scotch White Oats investigated without delay.

BARON DE CHAMPLOUIS
Proprietor.

B O O M

USINESS Y UYING ELGIANS
Importer.
DANVILLE, QUEBEC

GEO. STEWART, Howick, Quebec,

IMPORTER OF

Clydesdale Horses



has now on hand for sale 3 two-year-olds and 1 yearling stallion, carrying the blood of Hiawatha, Darnley, Lord Erskine, Prince of Wales and Time o' Day, combining size, style, quality and action. Also 1 five-year-old mare, with filly foal. The best lot I ever imported. Write quick.

GEO. STEWART, Howick, Quebec.

Clydesdale Stallions for sale:

One imported colt, rising 3 years old, large size and good quality, and one aged horse (imported), sound and all right in every way. For terms and particulars apply to **JAMES PATON, C. P. R., Swinton Park, Ont.**

ENGLISH SHIRE STALLIONS



RIGHT OUT FROM ENGLAND.

FOR SALE

Our stallions are sired by the leading sires of England, such as Prince Herald and others; ages from 2 to 4 years. They both include size and quality. Correspondence solicited.

H. GEORGE & SONS,
Putnam Station, C. P. R., 7 miles from Igersoll, Crampton, Ont.

After a Brush you will find

ABSORBINE

quick to remove the inflammation from any bruise or strain. No blister, ABSORBINE removes any soft bunch in a pleasing manner. \$2.00 per bottle, of regular dealers or delivered.

W. F. YOUNG, P. D. F., Springfield, Mass.
LYMAN, SONS & CO., Montreal,
Agents for Canada.

10 CLYDESDALE STALLIONS

FOR SALE:

OF ALL AGES, IMPORTED AND HOME-BRED.

Sired by such noted sires as Baron's Pride, Mains of Airies, Sir Christopher, Prince Thomas, and others. Among them is Prince Fragrant, the first-prize three-year-old at Toronto Industrial, 1902. Stables half mile from town. Parties desiring to purchase, please write or call upon

R. R. Station:
Mitchell, G. T. R.

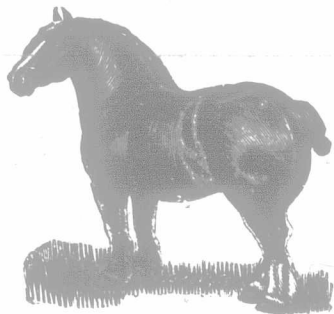
Wm. Colquhoun, Mitchell, Ont.



Clydesdales and Shorthorns

FOR SALE: Seven choice young stallions, and several young mares and fillies. Five young bulls and bull calves, and thirty-five excellent young cows and heifers. Mostly registered in the American Herdbook.

JOHN BRIGHT, MYRTLE, ONTARIO.



Hodgkinson & Tisdale

BEAVERTON, ONT.,

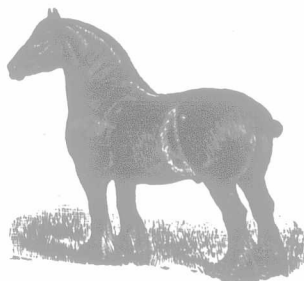
Breeders of

CLYDESDALE AND HACKNEY HORSES
AND SHORTHORN CATTLE.

are now offering a number of choice mares and fillies, and a few young stallions, winners at Toronto; also a few nice harness horses.

Shortorns of both sexes for sale.

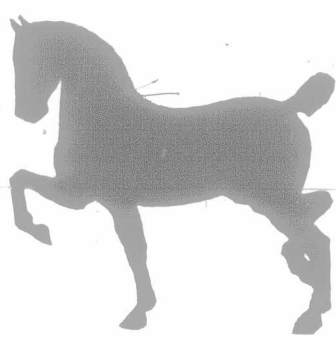
BEAVERTON P. O. AND STATION.



100 PERCHERON, SHIRE AND HACKNEY STALLIONS AND MARES



All good ages, good colors, with lots of size, quality and action, at prices below competition, on easy terms. Every stallion sold on a gilt-edge and responsible guarantee. At the Indiana, Ohio, New York State Fairs, and International at Chicago, on eighteen head won 173 first prizes, grand sweepstakes and gold medals in the last three years. SPECIAL INDUCEMENTS TO CANADIAN BUYERS.



LEW. W. COCHRAN,

607 WEST MAIN ST., CRAWFORDSVILLE, IND., U.S.A.

CAIRNBROGIE'S GREAT STUD.

Graham Bros., Claremont, Ont.,

BREEDERS AND IMPORTERS OF

Clydesdale and Hackney Horses



HANDLING only the best of their representative breeds. We have now on hand more good young stallions and mares than ever before—home-bred and imported—of choicest breeding and ample size, combined with the very best quality and action. Prices in keeping with the quality of our offerings. New importations just arrived.

Claremont is 25 miles east of Toronto, on the C. P. R. Farm one mile from station. Correspondence and an examination of our stock solicited.

PLEASE MENTION FARMER'S ADVOCATE.

GOSSIP.

In the advertisement, in last issue, of imported English Shire horses, by H. George & Sons, Crampton, Ont., the address was wrongly given as Brampton. Readers will note the correction in the ad. in this issue.

Messrs. I. Devitt & Son, Freeman, Ont., advertise in this paper, six Clydesdale stallions, from one to eight years old, some of which have proven excellent sires; also, a few young mares and two young Shorthorn bulls. Freeman is near Burlington Junction, G. T. R., a few miles from the city of Hamilton.

A public dispersal sale, by auction, of 18 head of registered Shorthorn cattle, 11 females and 7 bulls, is advertised in this issue by Mr. Ira B. Vannatter, Ballinacree, Ont., to take place on March 11th, at his farm near Georgetown, G. T. R., and Erin, C. P. R. The herd was founded on cows of the Syme and other good families, sired by the imported bull, Baron Camperdown 1218, of the Cicely tribe, bred by Mr. Amos Cruickshank, and has had the advantage of the services of a list of richly-bred bulls from the start, the present stock bull being Mysie's Sailor 35626, by the prize bull, Spicy Robin 28259, and of the favorite Mysie family, descended from Imp. Mysie 37th, bred by Mr. Cruickshank. Further notes regarding the offer may be looked for in our next issue. In the meantime, it will be well to make application for the catalogue.

Mr. T. E. Bowman, Berlin, Ont., in renewing his advertisement, writes that he offers for sale his red two-year-old Shorthorn bull, Richmond =42590=, bred by J. & W. Russell, Richmond Hill, Ont., sire British Hope =20946=, dam Centennial Isabella 26th =24411=. He is active and sure. A few cows and heifers in calf, young bulls and heifer calves, some got by imported bull, and promising young stock, are also offered. His Berkshire herd is headed by York Lodge Laddie =10776=, sired by Big Tom, first-prize hog at Toronto last fall; dam Lady Hall (imp.). The Chester White boar, Lengthy =2106=, in service at present, won first at Toronto and London last fall. The breeding sows are of the lengthy bacon type, including imported and prizewinners at Toronto and London, and other places; and young stock of both breeds, in pairs not akin, can be supplied. Seed potatoes, seed oats and spelt are also offered. See the ad., and write for prices, etc.

DISPERSION SALE OF SHORTHORNS AND COTSWOLDS.

On February 26th, as announced in the advertisement in this paper, Mrs. Thomas Waters, Rockwood, Ont., will sell, at auction, her entire herd of 24 Shorthorn cattle, consisting of 22 females and two bulls. All females of breeding age have been served by the imported Scotch-bred bull, Merry Hampton. The late Mr. Thomas Waters was a careful and discriminating breeder, a first-class judge, and a liberal and judicious feeder, and the herd, which was founded on selected stock, has been kept up to a high standard of excellence by the use of first-class sires of approved type and breeding. To give variety and add to the attraction, Mr. John Sockett, a neighbor, will contribute a selection from his excellent herd of Shorthorns. The sale, coming the day after the Provincial Live Stock Sale at Guelph, will afford the opportunity of attending both at one expense. The Cotswold flock has long been known as one of the best in the Province, as Mr. Waters was a born shepherd and took special pride in the breeding and care of his sheep. The farm is situated only two miles from Rockwood station on the G. T. R. main line, and six miles from the City of Guelph. Mr. Thos. Ingram, the popular auctioneer, will conduct the sale. Catalogues may be had on application to Mrs. Thos. Waters or John Sockett, Rockwood, Ont.

HORSEMEN! THE ONLY GENUINE IS

GOMBAULT'S CAUSTIC BALSAM.

The genuine without the signature of The Lawrence, Williams Co. Sole Importers & Proprietors for the U.S. & CANADA. CLEVELAND, O.

The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle, SUPERSEDES ALL CAUTERY or FIRING. Impossible to produce scar or bluish. Every bottle is warranted to give satisfaction. Price \$1.50 per bottle. Sold by Druggists, or sent by Express, charges paid, with full directions for use. Send for free descriptive circulars. THE LAWRENCE-WILLIAMS CO., Toronto, Ont.

J. M. GARDHOUSE, WESTON P. O., ONT. SHIRE AND CLYDE HORSES, SHORTHORN CATTLE, LEICESTER SHEEP.

One imp. 4-year-old Clyde stallion, half-brother to the champion Hiawatha, for sale. Also Clyde and Shire stud colts. Newham's Duke, the gold and silver medal Shire stallion, in service. Chief Ruler, bred by W. S. Marr, Uppermill, heads the herd. Imported and home-bred cattle for sale. Farm, 15 miles from Toronto. Weston station, G. T. R. and C. P. R., telephone and telegraph offices.

OAKLAWN FARM.

Greatest Importing and Breeding Establishment in the World.

Famous Prize-Winning Stud of

PERCHERONS and FRENCH COACHERS.

On hand upward of

500 HEAD.

Four Large Importations in 1902, forming, with our home-breds,

The Choicest Collection Ever Assembled, including Four of the Six First-Prize winners at the great annual French Show of the Societe Hippique Percheronne in 1902. At the recent

INTERNATIONAL LIVE-STOCK EXPOSITION at Chicago, the Oaklawn Percherons achieved distinguished honors. The Champion Stallion and every First-Prize winner (except one) in the regular stallion classes were imported by Dunham, Fletcher & Coleman.

Notwithstanding the superior quality of our horses our prices are lower than can be obtained elsewhere in America.

Catalogue sent on application. DUNHAM, FLETCHER & COLEMAN, WAYNE, DU PAGE CO., ILLINOIS.

CLYDESDALES

AYRSHIRES and POULTRY.

R. Ness & Sons, Howick, Que.

Importers of Clyde, Percheron and Hackney stallions, Ayrshire cattle, and poultry, have for sale 5 Clyde stallions, sired by Baron's Pride, Sir Everitt, and Royal Carrick, 1 Percheron, and 1 Hackney, winners. Ayrshires of both sexes, and poultry.

JOHN GARDHOUSE, HIGHFIELD P. O., ONT.,

Breeder of SHIRES, SHORTHORNS and LEICESTERS. Young stock for sale, both sexes. Scotch and Scotch-topped Shorthorns of such noted families as Imp. Rollas, Clarets, Lovelys, Rosebuds, Blossoms, Circos, Roses, and other noted families. The Imp. Lancaster bull, Prince Louis =32082= (77486), heads the herd. Farm 3 1/2 miles from Weston station, G. T. R. and C. P. R., and 14 miles north-west of Toronto.

CLYDESDALES

FOR SALE.

Fifteen Clydesdale stallions, 9 of them imported, 4 of them are by the renowned sire, Baron's Pride. I also have a number of mares and fillies for sale.

O. SORBY, GUELPH, ONTARIO.

The Flow of Milk will be increased.



Why go to all the trouble of keeping cows and get only about half the milk they should produce.

Dick's Blood Purifier

strengthens the digestion and invigorates the whole system so that the nutriment is all drawn from the food. It takes just the same trouble to care for a cow when she gives three quarts as when she gives a pail. Dick's Blood Purifier will pay back its cost with good interest in a few weeks.

50 cents a package.
Leeming, Miles & Co., Agents,
MONTREAL.

\$5,000 Reward.



Anybody can secure that amount who will prove that any letter or endorsement which we publish in any way, relative to the merits of Tuttle's Elixir

is spurious or untruthful. It needs nothing but the truth to support it. It is undoubtedly the best veterinary remedy known to man.
Used and endorsed by Adams Express Company.

Tuttle's American Condition Powders

A specific for impure blood and all diseases arising therefrom.

TUTTLE'S FAMILY ELIXIR cures rheumatism, sprains, bruises, etc. Kills pain instantly. Our 100-page book, "Veterinary Experience," FREE.

Dr. S. A. TUTTLE, 66 Beverly St., Boston, Mass.
Beware of so-called Elixirs—none resemble but Tuttle's. Avoid all blisters; they offer only temporary relief, if any.

LYMAN, KNOX & SON, Agents,
Montreal and Toronto, Canada.

DR. PAGE'S ENGLISH SPAVIN CURE



For the cure of Spavins, Ring bone, Curbs, Splints, Windgalls, Capped Hock, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle, and to remove all unnatural enlargements.

This preparation (unlike others) acts by absorbing rather than blistering. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by DR. FREDRICK A. PAGE & SON, 7 and 9 YORKSHIRE ROAD, LONDON, E. C. Mailed to any address upon receipt of price, \$1.00. Canadian agents: J. A. JOHNSTON & CO., DRUGGISTS, 171 KING STREET, EAST, TORONTO, ONT.

FOR SALE: SEVERAL YOUNG Clydesdale Stallions

Also two aged Clydesdale stallions. Also one very fine young Hackney stallion, winner of first and sweepstakes prizes. At very low prices. Write for particulars and prices to

ROBERT DAVIES,
TODMORDEN, ONTARIO,
OR CITY ADDRESS, ONT.
34 Toronto Street, Toronto, Ontario.

CLYDESDALE STALLIONS.

I am now offering the quality stallion, Highland Harry 2545, by MacInnis (imp.), a perfect model; and the stallion, MacInnis 2nd, by same sire. Also Ayrshire bull, Glencairn's Prince 13566. Write at once, to DONALD CUMMING, Lancaster P. O. and Station.

SUFFOLK PUNCH and HACKNEY STALLIONS

Dr. J. Watson, Howick, Que., is now offering for sale 2 imported Suffolk Punch stallions, winners in England—crackers—and one grand Hackney two-year-old stallion, also a first-prize winner; and one Clydesdale stallion.

FOR SALE: 6 CLYDESDALE STALLIONS

from 1 to 8 years old, good individuals, of most fashionable breeding and good breeders, and a few young mares. Come and see them and their produce. Also 2 young Shorthorn bulls. I. DEVITT & SON, Building in Junction Sta., on G. T. R., 1 mile from farm.

PLEASE MENTION FARMER'S ADVOCATE.

GOSSIP.

I want to thank the "Farmer's Advocate" for the great help it has been to us the last year in many ways, principally in selling Oxfords. It seems to me inquiries for sheep come from all corners of the globe, "from Dan even unto Beersheba," nearly all having seen our ad. in the "Advocate." Am beginning to find out some places where the "Advocate" goes. Could you tell me some place on earth where it does not go? Wishing you every success, I am, M. J. HINE, Dutton, Ont.

The picture on another page in this issue represents the high-class four-year-old Clydesdale stallion, Bondsman [2543], owned by John Hewitson, Allenford. He is of large size, great flat bones, the best of feet and pasterns, and of general excellence, rich in color and markings, with a coat like satin. He is a strikingly elegant and showy horse, with good carriage and fine movement. He comes, too, of great parentage, his sire being the great champion of America, Young Macqueen, and his dam, the large and excellent mare, Imp. Nora of Cairn-hill [2608]. Used in the stud last year, his foals abundantly show his excellence as a stock horse.

Mr. James Gibb, Brookside, Ont., breeder of Shorthorn cattle, writes: "We have a grand crop of calves from Imp. Spicy Marquis, the bull that won the first and championship at Toronto, 1902. There are eight bulls and ten heifers, and a number to calve yet. Some of them are very choice calves. One heifer, nine months old, out of Imp. Rustic Beauty, is a straight, even calf, with plenty of style; one pair heifers, ten months old, are particularly straight, fine animals; one heifer, four months old, is a fine calf—the best we ever had at that age—being low-set, thick and even. Our stock bull, Imp. Prince William, is a great feeder, is doing well, and looks as if he might reach the 3,000-pound mark yet."

The imported Hackney stallion, Dante, whose cut appears on another page, is owned by Dr. A. B. Campbell, Berlin, Ont. Dante is a six-year-old chestnut horse, bred by Mr. Jas. W. Marshall, Kirby, Grindalthe, England; sired by Dagenham (4214), dam Bugthorpe Lilly (3556). He is a horse of high-class type, quality and action, and won second prize at the Canadian Horse Show at Toronto in the spring of 1902. With such good breeding as is back of him, combined with his individual excellence, he should prove an exceptionally good sire, and will doubtless make his mark in the district in which he is owned in the improvement of the class of carriage and saddle stock, as well as of general purpose horses.

ALEX. LOVE'S SHORTHORN SALE.

The dispersion sale of the Shorthorn herd of Mr. Alex. Love, Eagle, Ont., on January 22nd, was a fair success. The day was fine, the attendance was large, and while the bidding was brisk, there were several good bargains secured, particularly in young cows. Capt. Robson wielded the hammer in his usual good form. Every animal put up was sold, and the 38 head made an average of \$135. Following is the list:

- Howard Queen; W. D. Platt, Hamilton \$295.00
- May Queen; John McCallum, Iowa 250.00
- Joan's Star; C. Pool, Glengoe 200.00
- Cleopatra 2nd; P. Mitchell, Komoka 165.00
- Myrtle 7th; W. Duke, Morley 165.00
- Lady Boston; P. Kerrins, Wardsville 140.00
- Lola 2nd; D. Eddie, Glengoe 165.00
- Rosa Duchess; L. Kendall, Iona Station 135.00
- Boston Queen; Isaac Mason, Morpeth 130.00
- Rosy Maid; Nelson Blue, Duart 145.00
- Miss Abbotsford; C. Key, Palmyra 125.00
- Roan Lass; Jas. White, Clearville 175.00
- Queen Bess; W. R. Bonner, Alvinston 125.00
- Lady Nelson; Frank Robertson, Fingal 120.00

Truman's Pioneer Stud Farm BUSHNELL, ILL.

Has for 24 YEARS been headquarters for the CHOICEST SHIRE, PERCHERON, SUFFOLK AND HACKNEY STALLIONS.

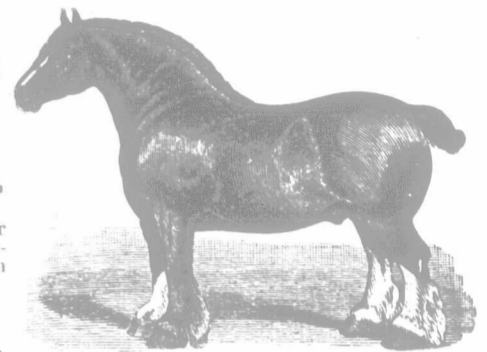
Sixth importation for this season received November 10th. **20 to 30 Good Practical Salesmen Wanted**

Best lot of draft stallions in the United States or Canada. Notwithstanding the superior quality of our horses, it is a fact that our prices are lower than can be obtained elsewhere in America. If there is no first-class stallion in your neighborhood please write us. For our 24th annual catalogue, etc., address

J. G. TRUMAN, MANAGER,
BUSHNELL, ILL.

Dalgety Bros.

LONDON, ONT., Largest Importers of Horses in Canada.



OUR fourth consignment for this season, per SS. "Parthenia," from Glasgow, of Clydesdale and Hackney stallions and fillies, is now on the ocean, and will be for sale at the

Black Horse Hotel, Toronto,

on and after Thursday, January 8th, 1903. This lot will include some extra good heavy horses. A few very high-stepping, well-bred Hackneys, full of substance and quality. Our motto: Small profits and quick returns.

DALGETY BROS., LONDON, ONT.

Imp. Clydesdales and Shorthorns

Messrs. Smith & Richardson, COLUMBUS, ONT.

Importers and breeders of Clydesdale horses and Shorthorn cattle, are now offering 14 stallions, 9 of them imported, including brothers of the world-renowned Baron's Pride, Hiawatha, and Royal Cairnton; also 13 mares bred from imported stock. Short-horns, imported and home-bred, all ages. Stations: Oshawa & Brooklin, G.T.R., Myrtle, C.P.R. Long-distance Telephone, Columbus. Telegraph, Brooklin.

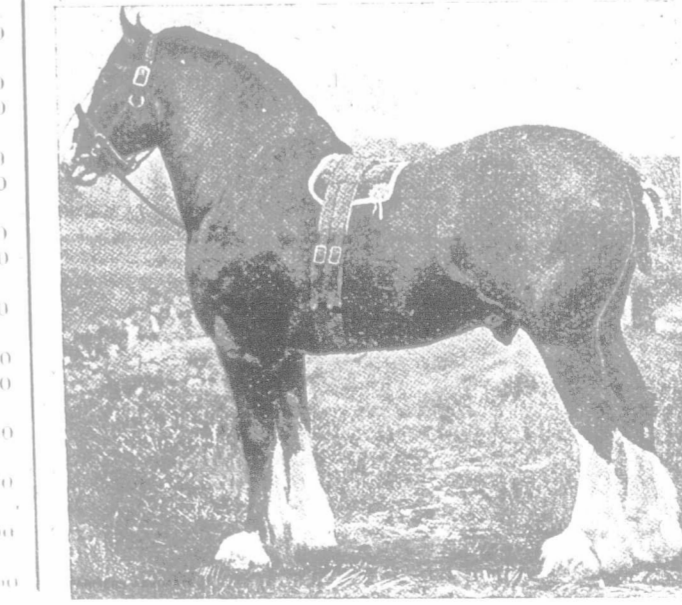
International Importing Barn, Sarnia, Ontario.

J. B. HOGATE, PROPRIETOR.

IMPORTER OF Clydesdale and Shire Stallions, and Spanish Jacks. My third importation within the last fourteen months arrived Sept. 4th.

I select every one myself, and it is conceded both in Europe and America that I do get the best ones that cross the Atlantic to America. My stallions are sired by the leading sires of Scotland; ages from two to four years. The Jacks are direct from Spain, and registered, two to four years old, 14 1/2 to 15 1/2 hands high. I pay cash for my stock. I buy where I can get the best. Write for particulars. Will save you money. Mention this paper when you write.

H. H. CALISTER, Manager and Salesman.



ROBERT BEITH, BOWMANVILLE, ONT.,

IMPORTER AND BREEDER OF

Clydesdale AND Hackney Horses

Is offering for sale a number of choicely-bred Clydesdales and Hackney stallions; also a number of Hackney mares. The Clydesdales are sired by the noted horses, Prince of Albion, King of the Roses, Lord Stewart and The Prior.



Free Rifle

Sure Death to Rats, Crows, Squirrels, Rabbits, etc. Long Range, Terrific force. All steel barrel and fittings, improved sights, walnut stock. The best Air Gun made. Given for selling only 2 1/2 doz. Glass Pens at 20c. each. These wonderful Pens are made entirely of glass. They never rust, never wear out, and write a page with one dip of ink. They sell easily everywhere. A 50c. Certificate free with each Pen. Write us a Post Card to-day and we will send you the Glass Pens postpaid. Sell them, return \$1.00, and we will immediately forward your Rifle. Don't delay. Howard Oliver, Bagat, Man., says: "My Rifle is a dandy. It shoots as well, is well built and I am highly satisfied with it. Address THE PEN CO., Toronto

FREE

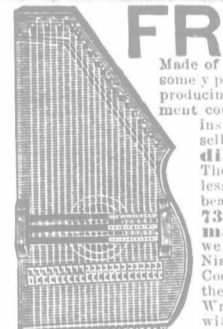


COMBINATION KNIFE AND TOOL SET Given for selling at 10c. each only 5 Glass Pens. These Pens are made entirely of Glass. They never rust, never wear out, and write a page with one dip of ink. They sell easily everywhere. This magnificent Knife is a complete Tool Chest in itself, consisting of 1-Screw Driver, 2-Nut Cracker, 3-Hoof Cleaner, 4-Pinch, 5-Cork Screw, 6-Tweezers, 7-Probe, 8-Big Blade, 9-Little Blade. This is a strong well finished Knife, made in Sheffield, England, of the best quality English Steel with stag handle and some plate. G. Mitchell, Plantagenet, Ont., says: "I must say my knife is a splendid Premium. My friends all say it is a beauty. Write us a Post Card to-day and we will mail the Pens postpaid. Sell them, return 90c., and we will immediately forward your Knife. Address The Pen Co., Dept. 583 Toronto.



FREE PARLOR ACCORDEON

With 8 nickel keys, 2 sets of reeds, mahogany finished case with ornate trimmings and gilt decorations given for selling at 10c. each only 10 Glass Pens. These wonderful Pens are made entirely of Glass. They never rust, never wear out, and write a page with one dip of ink. They sell easily everywhere. A 50c. certificate free with each Pen. S. Wilton, Shant Lake, Man., says: "I received my Accordion and am quite delighted with it. My friends were all surprised to see what a handsome Premium I got for so little trouble." Write us a Post Card to-day and we will mail the Pens postpaid. Sell them, return 90c., and we will immediately forward your Knife. Address THE PEN CO., Dept. 594 TORONTO, Ont.



FREE SWEET TONED AUTOHARP

Made of selected California redwood, handsome polished, 23 silver strings and 3 bars, producing 3 chords. This popular instrument complete with music rack, picks, full instruction and 16 selections, given for selling at 10c. each only 10 Canadian Home Cook Books. These Books were never before sold for less than 25c. They are nicely printed, beautifully bound and each contains 739 choice recipes. Every woman buys one. With each book we give a 50c. certificate for H. P. Fitch, Niagara Falls, Ont., says: "The Cook Books sold well. Everyone thinks they are very fine for the money." Write us a Post Card to-day and we will send you the Cook Books postpaid. H. Proctor, Vancouver, B.C., says: "I received my Autoharp and am more than pleased with it. Write us to-day, Home Specialty Co., Dept. 580 Toronto



FREE GOLD Watch

Handsome Gold finished Double Hunting Case, richly and elaborately engraved in Solid Gold Design, stem wind and set, accurately adjusted. Reliable time kept, jewel movement. The finest looking Hunting Case Watch ever manufactured, given for selling at 20c. each only 2 doz. Lemon, Vanilla and Almond, Non-Alcoholic, Flavoring Powders. One package equals 20c. worth of Liquid Flavor, and is far better. Used by the leading caterers, hotels and restaurants. Every house-keeper buys them. A 50c. certificate free with each package. Miss E. Easton, Shant Lake, Man., says: "I sold all the flavoring powders in half an hour. It is just what I needed." Send us a Post Card to-day and we will mail the Gold Watch and all more than pleased with it. It far exceeds my expectations." THE STANDARD FLAVORING CO., DEPT., 589 TORONTO, ONTARIO.



FREE STEAM FIRE ENGINE

Made entirely of steel, iron and brass, beautifully finished, with driving wheel, shaft and piston polished brass boiler and steam chest, Russian iron furnace compartment, brass steam pump with a suction hose and a long fire hose with a brass nozzle, given for selling at 15c. each only 10 Diamond Collar Buttons, with richly engraved gold finished tops, set with large sparkling Electric Diamonds. Everybody buys. Geo. Sinclair, Inglehart, Alta., says: "I sold the buttons in a few minutes." A 50c. certificate free with each Button. Write us a Post Card to-day and we will send the Collar Buttons postpaid. Gem Novelty Co., Dept. 587 Toronto.

Free to Everyone.

A Priceless Book Sent Free For the Asking.

Piles Cured Without Cutting, Danger or Detention from Work, by a Simple Home Remedy.

Pyramid Pile Cure gives instant relief and never fails to cure every form of this most troublesome disease. For sale by all druggists at 50c. a package. Thousands have been quickly cured. Ask your druggist for a package of Pyramid Pile Cure, or write for our little book which tells all about the cause and cure of piles. Write your name and address plainly on a postal card, mail to the Pyramid Drug Co., Marshall, Mich., and you will receive the book by return mail.

Family Knitter

Cheapest, Simplest, Best. Price \$8.00. Write for circular.

Dundas Knitting Machine Company, DUNDAS, ONTARIO.

EVERGREENS Hardy sorts, Nursery grown, for wind-breaks, ornament and hedges. Prepared, \$1 to \$10 per 100-50 Great Bargains to select from. Write at once for free Catalogue and Bargain Sheet. Local Agents wanted. D. Hill, Evergreen Dundee, Ill., Specialist.

Day's Stock Food

PREPARED FROM AROMATIC HERBS No duty—purely Canadian. Increases the production of milk, flesh and eggs. As an aromatic for horses, it is perfection.

Sample 3-lb. package, 30 cents. 50 lbs., \$3.00; 100 lbs., \$5.00

The Day's Stock Food Co., Toronto, Can.

A QUICK, SHARP CUT DEHORNING KESTONE KNIFE is the safest, quick, sharp cut. Cuts from four sides at once. Cannot crush, bruise or tear. Most humane method of dehorning known. Took highest award World's Fair. Write for free circulars before buying. Owned and Manufactured by R. A. McEINNA, V.S. Pictou, Ont.

THE ONTARIO VETERINARY COLLEGE (LIMITED), TEMPERANCE ST., TORONTO, CANADA. Affiliated with the University of Toronto.

Patrons: Governor-General of Canada, and Lieut. Governor of Ontario. Fee \$65.00 per session. Apply to ANDREW SMITH, F.R.C.V.S., Principal. 18-2-y-om

We are offering some young Durham bulls, cows and heifers, and 20 Berkshires and 10 Yorkshires, of both sexes. Prices reasonable. Could supply a carload of 2-year-old stock steers. Correspondence solicited, or come and see our stock. No sale, no harm. Visitors welcome to

CAMDEN VIEW FARM, A. J. C. SHAW & SONS, Thamesville, Ont.

ELM PARK STOCK FARM Fresh Importations of High-class ABERDEEN-ANGUS CATTLE AND SUFFOLK SHEEP.

We have for sale the 1st, 2nd and 3rd prize bull calves at Toronto and London, and 1st prize bull calf at Guelph; and the same in heifers. Our calves were all fitted by their own dams; we had no nurse cows. The dam of 1st prize bull calf was 1st prize three-year-old cow at Toronto. Our cows are all good milkers. Barred Rock Cockerels from \$1 to \$2 each.

JAS. BOWMAN, GUELPH, ONTARIO.

GOSSIP.

At an auction sale of Hereford cattle, held at Chicago, Ill., January 8th, the imported bull, Britisher, winner of the male championship of the breed at the late International Show, was sold for \$3,800. He was imported last year by Mr. Geo. Leigh, Aurora, Ill., and was purchased at the sale by Gilliner Bros., Eminence, Kentucky.

Mr. Thos. Irwin, Winchester, Ont., write under date, January 7th: "I have just arrived from England with a new importation of stallions. Among the lot are two Hackney stallions of fine quality and action; one, a bay, named Kitchener 7143, five years old, stands 15.2 1/2 hands high—a wonderful all-round actor; the second, a chestnut named W. P. K.'s Sir Joseph 8044, a wonderful power, with all-round action, and considerably after the type of a Coach horse, with lots of size, substance and quality."

The average price for 38 head of Shorthorns sold at Chicago, January 6th and 7th, by Geo. Harding & Son, Waukesha, Wis., was \$388. The highest price for a female was \$1,150 for Imp. Missie 163rd, a roan four-year-old cow, bought by Robt. Miller, Stouffville, Ont. The good prices for bulls was a notable feature of the sale, fourteen bulls averaging \$489. The highest price of the sale was \$1,605 for Imp. Best of Archers, six years old, bought by C. Journell & Son, Urbana, Ohio. The show bull, Golden Victor, sold for \$525 to A. G. Leonard, Thornton, Ill. Vanguard, a roan two-year-old, bred by Harry Smith, Exeter, Ont., purchased by Messrs. Harding from Capt. T. E. Robson, Iderton, Ont., and sired by Imp. Knuckle Duster, sold for \$425.

W. G. Pettit & Sons, of Freeman, Ont., report the following recent sales: To Mr. John Donely, of Grafton, North Dakota—Imp. Juliet, 3 years old, with bull calf at foot. This young cow is bred in the purple, being by the noted stock bull, Reveller (71350), of the Uppermill Roan Lady tribe, and her dam by the Cruickshank bull, Royal James. He also took Circella, of the Syme tribe, half-sister to Coral, winner of sweepstakes in Toronto and Ottawa in 1896 and first in her class at Omaha in 1897. It was only a very tempting offer that induced us to part with these two grand young cows. He also secured a good two-year-old in Red Strawberry 4th. To Mr. John Barr, Blyth, Ont.—Yearling bull, Silver Plate, got by Imp. Pure Gold, out of Imp. Fortuna 3rd, by Royal Mail. To Mr. Alex. Giffen, Snelgrove, Ont.—One yearling bull, by Imp. Clan Fleming, dam Imp. Fortuna 5th, by Royal Mail. To Mr. W. E. Alton, Nelsan, Ont.—The grand-bred young bull, Gold Coin, of the Campbell Claret family, got by Imp. Pure Gold, with the noted Cruickshank bulls, Clan Alpine, Gravesend and Vermont, following in his pedigree. To James H. Johnston, Hillsdale, Ont., the fourteen-months-old calf, First Choice, of the Syme family, got by Imp. Prince Louis, and out of Circella, by Imp. Prime Minister. A great many of our best show cattle belong to this old Syme family.

JERSEY BUTTER TESTS Accepted for Publication by the American Jersey Cattle Club, for the Week Ending January 6th, 1903.

Harry's Duchess 3rd 123282—Age, 5 years 11 months; butter, 15 lbs.; milk, 223 lbs. Property of S. A. Appleby, Lewisburg, Tenn. St. L.'s May of Park Farm 125682—Age, 6 years; butter, 18 lbs. 3 ozs.; milk, 259 lbs., 4 ozs. Property of Everett G. Campbell, Koister's, Pa. Oonan 14th of Hood Farm 147794—Age, 4 years; butter, 15 lbs. 3 ozs., confirmed; estimated butter on basis of 85 per cent. fat, 15 lbs.; milk, 287 lbs. 9 ozs. Property of C. I. Hood, Lowell, Mass. Analysis of butter: Fat, 81.39; water, 15.09; salt, 2.81; casein, 0.69.

J. Richards, Bideford, P. E. Island, Importer and breeder of Aberdeen-Angus Cattle, Clydesdale Horses, Shropshire Sheep, and Shetland Ponies, Stock always for sale, om



ABERDEEN - ANGUS. For Sale: Laird of Tweedhill 29486. A prizewinner, 4 years old; 1-year-old bull and two bull calves, sired by him and out of winners. W. HALL, Washington P. O. Drumbo Station.

High Park Stock Farm Galloway Cattle, A few choice young heifers and bulls for sale. Inspection invited. om SHAW & MARSTON (Late A.M. & R. Shaw), P. O. Box 294, BRANTFORD, ONT.

The Sunny Side Herefords.



Imp. Sunny Slope Tom 1st at head. We have the best of blood lines, also individual merit. For sale: 8 cows, from 3 to 7 years old; 10 heifers, bred and safe in calf or ready to breed; 1 bull, 2 yrs.; 1 bull, 1 yr., and 12 young bulls ready for service, by our stock bull. Visitors always welcome. O'NEIL BROS., Southgate, Ont. Iderton station, L. H. & B. Lucan station, G. T. R.

SALE! INGLESIDE HEREFORDS.



Young bulls, cows and heifers of most up-to-date type and breeding. If you want good Herefords at good-value prices, send for illustrated catalogue, and state requirements also 3 and 4 bred Hereford cows and heifers. om H. D. SMITH, Compton, Que.

HEREFORDS, HEREFORDS

Am offering for sale Herefords of up-to-date breeding, either sex, and all ages; also a good 24-months-old bull; grand stock-getter. Write or call on

WALTER BENNETT, CHATHAM, ONTARIO.

CHOICE HEREFORDS

A. S. HUNTER, DURHAM, ONT., has for sale the following high-bred Herefords: 25 Young Registered Bulls, 30 Young Registered Heifers, 10 Young Registered Cows. The above stock are in good condition, and are bred from imported and American-bred sires. Ranchers will do well to inspect this offering. om

HOLWELL MANOR FARM SPECIAL BARGAIN

Fifty head steers, 2 and 3 years old; average weight about 1,100 lbs.; short feeders. For sale immediately, to make room.

D. G. GANTON, ELMVALE, ONT. om

Shorthorns, Clydesdales, YORKSHIRES.

Am offering a few young bulls, heifers and young cows in calf; also two registered fillies.

W. Ormiston, Jr., Columbus P. O., Ont. Myrtle, C. P. R.; Brooklin, G. T. R. om

Shorthorns and Yorkshires. We are offering 4 heifers, 3 of them in calf; to Greater Danley, and one bull calf, 8 months old, by Imp. Cesar, Yorkshires, both sexes. om W. J. Walker, Eady P. O., Colwater Sta.

Shorthorns, Clydesdales, Yorkshires

I am now offering the bull, Count Amaranth, imp. in dam, 2 years old, and young bulls 10 months old; heifers, various ages; Clydesdales, American and Canadian registered; and Yorkshires, both sexes and all ages. om

A. E. HOSKIN, SPRINGVALE FARM, COBOURG STA. & P.O.

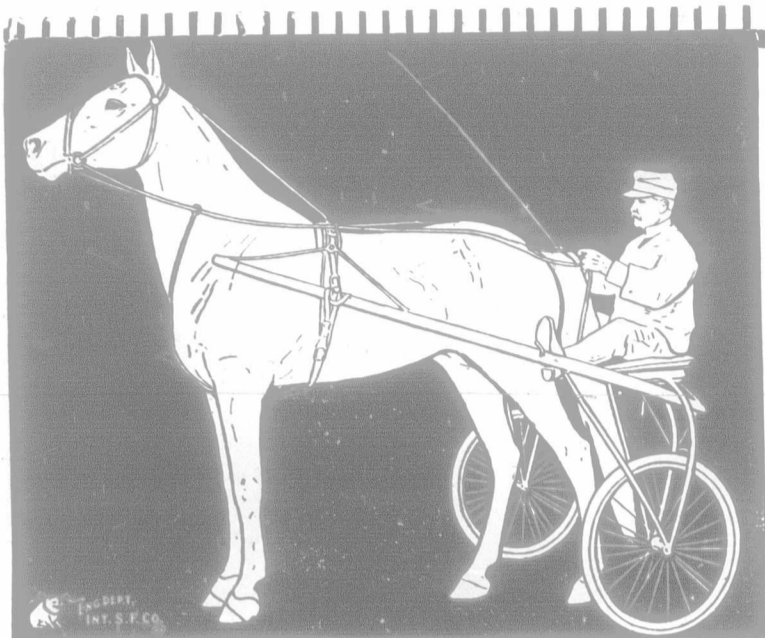
Beechgrove Shorthorns. Present offering: 3 years old, heavy milking strain; also one roan bull calf 8 months old. Prizewinners; a thick, beefy lot. om G. McNULTY, Rathburn P. O. Orillia and Arthly stations.

ASHTON FRONT VIEW STOCK FARM.

Six Shorthorn Bulls for sale, from 8 to 15 months old; all of choice breeding. Also Cotswolds of all ages for sale at all times. Visitors welcome. A. J. WATSON, Castlederg, Ont. C. P. R. Station and Telegraph Office, Bolton; or G. T. R., Paigrave. om

SPRINGBANK FARM.

Shorthorn Cattle, Oxford Sheep, and Bronze Turkeys. Young bulls for sale. om JAS. TOLTON, WALKERTON, ONT.



DAN PATCH
Officially Timed at Readville, Mass., Sept. 23, in 1:59 1/2
Champion Harness Horse of the world.
This Engraving was made from a Photograph taken when ready to race.

THE \$60,000 PACING STALLION

Just purchased by M. W. Savage, Minneapolis, Minn., as one of the leading stallions for his "International Stock Food Farm." The purchase of Dan Patch was a tremendous sensation in horse circles, and was taken up and given columns of notices in all of the leading dailies throughout the entire country. The price was over Three times as much as was ever paid for a pacer, and by far the largest price paid for a harness horse for a long term of years. This farm is now one of the most famous horse-breeding farms in the world, as Mr. Savage owns the Three Fastest Stallions ever owned by one man or by one farm, Dan Patch 1:59 1/2—Directum 2:05 1/2—Roy Wilkes 2:06 1/2. The establishing of this farm in Minnesota, 12 miles from Minneapolis, means a great deal for the live stock interest of the Northwest as well as for the entire world. It will add thousands of dollars every year to the live stock interests of Minnesota alone, and Mr. Savage expects to prove to the world that high-class harness horses can be raised in the Northwest as well as in other parts of the United States. You are cordially invited to visit "International Stock Food Farm" whenever you are in this vicinity. You will find the celebrated "International Stock Food" 3 FEEDS FOR ONE CENT fed every day to our Stallions, Brood Mares, Colts, Race Horses and other stock. "International Stock Food" has the largest sale in the world for Horses, Cattle, Sheep, Hogs, Colts, Calves, Lambs and Pigs. Over 50,000 dealers sell it on a "Spot Cash Guarantee" to Refund Your Money if the results of feeding it are not perfectly satisfactory to you. It will cause your colts and other young stock to grow rapidly even during the winter. Keeps them free from worms and tones up and strengthens the entire system. **It Will Pay You To Test It At Our Risk On Your Stock.**



T. DOUGLAS & SONS, STRATHROY, ONT.

BREEDERS OF Shorthorns & Clydesdales

100 SHORTHORNS TO SELECT FROM.
Herd bulls (imp.) Diamond Jubilee = 28861 = and Double Gold = 37552 =. We offer for sale a choice lot of young bulls, cows and heifers of all ages. Also one 3-year-old stallion, and one 4-year-old brood mare. Farm one mile north of town.

S. DYMENT, BARRIE, ONT.

Breeder of Scotch Shorthorns

Imported Morning Star at head of herd.

Shorthorns and Shropshires. Scotch and Scotch-topped families of Shorthorns. Young bulls and heifers for sale. Shropshires, bred direct from imported stock: Mansell and Cooper strains. **BRUCE BROS.** Stouffville Station, G. T. R. o Gormley, Ont.

HIGH-CLASS SHORTHORNS.

Heifers and bulls of various ages. Price reasonable.

MAC CAMPBELL, Northwood, Ont.

Maple Grange Shorthorns

CLARETS, LAVINIAS AND BEAUTYS.
Sired by such Scotch bulls as Commodore 31025, Scottish Bard, imp. Baron's Heir. 18 heifers, 12 bulls, a number of cows (heavy milkers), to be sold well worth the money.

R. J. DOYLE,
Owen Sound F. O. and Station and Port.

SHORTHORNS.

A number of choice young bulls, heifers and cows, for sale.

A. M. Shaver, HAMILTON Sta. Ancaster P. O., Ont.

SCOTCH SHORTHORNS AND SHROPSHIRE.

Present offering:—Five young bulls and 4 yearling heifers, and a few cows. Shropshires of both sexes and all ages.

BELL BROS., Bradford P. O. and Station.

SCOTCH SHORTHORNS.

Three bulls, 7 to 13 months old, and several choice heifers of popular strains; also S. G. Dorkings. cm

HARRY SHORE, The Firs, White Oak, Ont.

SHORTHORNS.

Lady Fannys and Beautys for sale 5 bulls, from 6 to 14 months old; 7 heifers, from 1 to 3 years old, some of them in calf to Prince Eclipse 33949.

James Caskey, Tiverton P. O., Kincardine Sta.

SHORTHORNS and CLYDESDALES.

We have for sale five bull calves, from 8 to 24 months, from imp. sire and dams; also six extra good stallions, from two to six years old.

JOHN MILLER & SONS, BROUGHAM, ONT.

CLAREMONT STATION, C. P. R. om

Bulls! Shorthorns Bulls!

IMPORTED and CANADIAN-BRED

ORDERS TAKEN FOR BULLS AND HEIFERS, COTSWOLD AND LEICESTER SHEEP, YORKSHIRE AND BERKSHIRE PIGS, AND DELIVERED TO ANY PART OF MANITOBA OR THE NORTHWEST.

Write for prices. Satisfaction guaranteed.

Goodfellow Bros., Macville, Ont.

Spring Grove Stock Farm

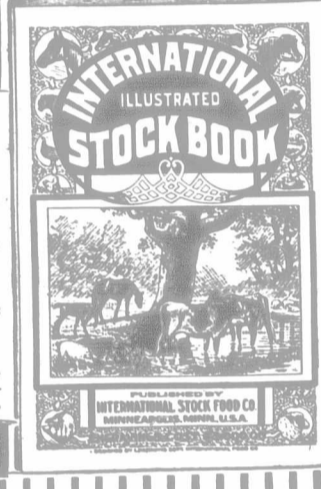
Shorthorn Cattle and Lincoln Sheep.

HERD prize and sweepstake at Toronto Industrial Exhibition, 1897 and 1898. Herd headed by the Marr Missie bull, imp. Wanderer's Last, last of the get of the great sire, Wanderer, of the Cruickshank Bra with Bud tribe. High-class Shorthorns of all ages for sale. Also prizewinning Lincolns, Apply om

T. E. ROBSON, ILBERTON, ONT.

A \$3000.00 STOCK BOOK FREE

IT CONTAINS 183 LARGE ENGRAVINGS OF HORSES, CATTLE, SHEEP, POULTRY, ETC.
The Cover of this Book is a Beautiful Live Stock Picture—Printed in Six Brilliant Colors. Book is 6 1/2 by 9 1/2. See engraving for greatly reduced design of cover. It cost as \$3000 to have our Artists and Engravers make these life Engravings. This Book contains a Finely Illustrated Veterinary Department that will Save You Hundreds of Dollars. It describes common Diseases, and tells how to treat them. It also gives Description, History and Illustrations of the Different Breeds of Horses, Cattle, Sheep, Goats, Hogs and Poultry. It contains testimonials, and Life Engravings of many very noted Animals. The Editor of This Paper Will Tell You That You Ought to Have This Book in Your Library For Reference.
\$10.00 CASH, we will send you, **IF BOOK IS NOT AS STATED.**
This Book Mailed Free, Postage Prepaid, if You Write Us (letter or postal) and Answer These 2 Questions: 1st.—Name This Paper. 2d.—How Much Stock Have You?
Write us today for book.



Largest Stock Food Factory in the World. Capital Paid in, \$1,000,000. We Occupy 62,000 Feet of Floor Space.

TEST 3 FEEDS FOR ONE CENT ENTIRELY AT OUR RISK.

CHOICE SCOTCH SHORTHORNS.

FOR SALE—Four bulls, from 8 to 15 months old, by Golden Robe (got in quarantine); also a few heifers, a choice lot, and prices right. Address,
W. G. HOWDEN, Columbus P. O., Myrtle, C. P. R. and G. T. R. om

SPRUCE HEDGE SHORTHORNS.

We are offering females of all ages. Among them are prizewinners and youngsters that are sure to win.
JOHN MCKENZIE, Keward P. O. and Chatsworth Station, C. P. R.

SHORTHORNS.

Dark red bull calf, Blue Ribbon 2nd, 13 months old, sired by Blue Ribbon (imp.) 17095 (63703), dam by Royal George (imp.) (64728). Bull calf, 7 months old, dark red; also yearling and two-year-old heifers. om
JOHN McFARLANE, DUTTON, ONT.

SHORTHORNS FOR SALE.

Five young bulls of choicest breeding and quality; also forty cows and heifers, a very choice lot. Herd headed by Bandoleer = 40106 =.
F. MARTINDALE & SON, Caledonia Station, York, Ont.

SHORTHORNS FOR SALE.

10 choice Shorthorn heifers and 10 young bulls, of choicest quality and breeding, at reasonable prices.
G. A. BRODIE, Stouffville Sta. o Bethesda, Ont.

ARTHUR JOHNSTON,

GREENWOOD, ONTARIO, CANADA,

Offers at private sale young

SHORTHORN BULLS AND HEIFERS

of the choicest Scotch breeding. Quality unsurpassed. om

J. & W. B. WATT

BREEDERS AND IMPORTERS OF

Shorthorns, Clydesdales and Berkshires

We breed our show cattle and show our breeding cattle. The imported bulls, Viceroy and Scottish Peer, head the herd. Imported and home-bred cows and heifers for sale. A few choice young bulls on hand. Our herd at Toronto won three firsts, a second and third out of five herd classes.

om
R. J. DOYLE, Owen Sound F. O. and Station and Port.

GOSSIP.

Mr. H. Frank Whetter, Westminster, Ont., writes: "I sold my yearling Shorthorn bull that I advertised in the 'Advocate' to Mr. J. W. W. Fraser, Calgary, Alta., and, from my experience, I can recommend your paper as an advertising medium that brings business."

W. G. PETTIT & SONS

FREEMAN, ONT., CAN.
Importers and breeders of

Scotch Shorthorns and SHROPSHIRE SHEEP,

make special offering for January and February.

2 imported bulls coming 2 years old, 4 bull calves, from 8 to 12 months old, from imported sire and dam.

6 bulls, 10 mos to 2 yrs., by imp. sire. Imp. and home bred cows and heifers of all ages.

Our entire flock of Shropshire sheep, 75 head.

R. & S. NICHOLSON

Sylvan P. O. Parkhill Station, Ont. Importers and breeders of

SHORTHORNS

Have for sale:

13 IMPORTED HEIFERS, 2 IMPORTED BULLS, 7 YEARLING BULLS, 20 HEIFERS (choice).

Home-bred herd composed of Nonpareils, Minas, Clementinas, Cruickshank Lovelys, Shethin Rosemarys, A. M. Gordon's Estelles, Miss Symes, etc.

Mercer's Scotch Shorthorns

I am now offering four nice red bulls, from 13 to 10 months old; a number of young cows and heifers, in calf and calves at foot. For breeding, refer to Christmas number. Prices right. Visitors met on shortest notice. Drop a card or wire before coming. Farm one and a half miles from C. P. R. station, Markdale, Ont. om **THOS. MERCER,** Proprietor.

Choice Shorthorns and Shropshire Sheep.

I am now offering bulls from 8 to 16 months old. Heifers of all ages, some in calf. Present stock bull, Roan McKay = 37867 =.

CHAS. CALDER, Brooklin.

Shorthorns, Cotswolds & Berkshires

FOR SALE: Bull calves, 2 to 6 months old. A few young cows and heifer calves. Few lambs and yearling ewes. Young pigs of the long bacon type, from 2 to 6 months.

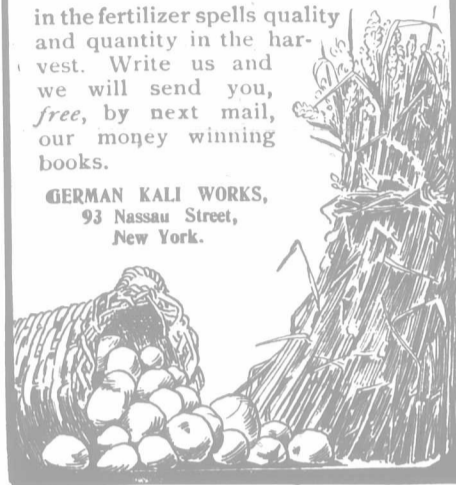
F. BONNYCASTLE & SON, Campbellford, Ont.

A Golden Rule of Agriculture:
Be good to your land and your crop will be good. Plenty of

Potash

in the fertilizer spells quality and quantity in the harvest. Write us and we will send you, free, by next mail, our money winning books.


GERMAN KALI WORKS,
93 Nassau Street,
New York.



SHORTHORNS (IMP.)

Cows and heifers, imp. and home-bred. Bulls, imp. and home-bred—all ages. Representing the fashionable blood of Scotland.

EDWARD ROBINSON,
MARKHAM P. O. & STN.



RIVER FARM SHORTHORNS

I am now offering 6 choice young bulls, from 8 to 16 months old, sired by Lord Lavender 26855. They are rare good ones. Price right.

H. PARKER, DURHAM P. O. and STATION.

CHARLES RANKIN, WYEBRIDGE, ONT.
Importer and breeder of
Shorthorns, Oxford Downs and Berkshire Pigs
Young stock always on hand.

SHORTHORNS. Imported and Canadian-bred I have for sale eight young bulls from 8 to 12 months old; also a few choice heifers, all got by Captain Mayfly (Imp.), first-prize aged bull at Toronto and London in 1902.

JAS. A. CRERAE, Shakespeare, Ont. om

SHORTHORN BULLS FOR SALE: A choice lot of Shorthorn bulls from 10 to 16 months old, sired by Imp. British Statesman (33720) = 20833 =; and cows of the Marx family. They must be sold at once. Prices away down to suit customers. FITZGERALD BROS., Elmvale Station, G.T.R. Mount St. Louis P.O.

QUEENSTON HEIGHTS SHORTHORNS
SCOTCH AND SCOTCH TOPPED

In service: Derby (Imp.) = 32057 =; Lord Montalis, by Collynie Archer (Imp.) = 28860 =. Some choice heifers and young cows with calf at foot or in calf to imported bull at moderate prices.

HUDSON USHER,
QUEENSTON, ONT. om

FARM 3 MILES NORTH NIAGARA FALLS

STOCK BULL FOR SALE.

Have decided to offer for sale my noted stock bull, Spicy Robin = 28259 =, winner of second prize at Toronto and London exhibitions, 1902. Also a number of cows and heifers for sale.

GEO. D. FLETCHER, Binkham P. O., Ont.
Erin shipping station, C. P. R.

JOHN DRYDEN & SON,
BROOKLIN, ONTARIO,
BREEDERS OF
ORUICKSHANK SHORTHORNS AND CHOICE SHROPSHIRE SHEEP.

40 shearing rams and 30 shearing ewes of extra size, substance and quality now for sale. Prices are interesting. Visitors welcome.


BELLEVUE SHORTHORNS.
Both sexes, Imported and home-bred. All ages. Prizewinners at home and abroad.

EDWIN BATTYE, Gore Bay P. O. and Port. MANITOULIN ISLAND.

CHOICE SHORTHORNS.

We are now offering 12 heifers from 6 months to 2 years of age, and 7 bulls from 6 to 10 months old, some of them extra choice and prizewinners—a low down, thick lot Also, Yorkshires.

WM. McDERMOTT,
Living Springs P. O.,
Fergus Station.



GOSSIP.

At the combination sale of Hereford cattle at Chicago, January 7th and 8th, where the imported bull, Britisher, the champion at the late International Show, was sold for \$3,800, a number of animals were purchased by Messrs. Benallech & Lafrance, who are founding a herd of Whitefaces near Winnipeg, Manitoba. The average for 80 head sold at this sale was \$265. The yearling bull, Perfection Lad, sold to Thos. Clark, Beecher, Ill., for \$1,525. The highest price for a female was \$550 for Imp. Peggy Primrose, a three-year-old cow.

ADAM DAWSON'S SHORTHORN SALE.

On January 14th, as previously announced in the advertisement in the "Farmer's Advocate," the dispersion sale of the small herd of Shorthorns belonging to Mr. Adam Dawson, of Cannington, Ont., came off. The day was fine, and a very large attendance of farmers and breeders of the county and from a distance were present. The sale was conducted by Mr. George Jackson, the eloquent and popular auctioneer from Port Perry, who won golden opinions by his tact and courtesy in keeping up the interest of the sale from start to finish. The prices realized were not high when compared with those of widely known breeders, but were a surprise to the people of the locality, and considering that most of the cattle were dehorned, which invariably discounts the selling price of pure-bred cattle, the result was a pronounced success, and Mr. Dawson, who was delighted with the outcome, writes us: "I never spent money in my life that made me as good returns as that paid for the advertisement of my sale in the 'Farmer's Advocate'; in fact, I do not think I am exaggerating when I say the 'Advocate' made me \$600 to \$800 more than I would have realized otherwise. It is the only medium to get the good stock and the good buyers together. In short, my sale was a decided success, realizing me in the neighborhood of \$1,000 more than I had estimated it at. Among the principal purchasers were John Bright, of Myrtle, who secured the Miss Ramsden cow, Queen of York 5th, and her three-months heifer calf at \$225, the highest price of the day, and Queen of York 4th, of the same family, at \$155. C. Whitter, Lorneville, Ont., who bought Princess Blackwell 6th and her three-months-old heifer calf at \$160; and Col. J. A. McGillivray, of Uxbridge, who claimed the yearling heifer, Miss Ramsden 9th, at \$155. Donald Jackson, Woodville, took the two-year-old stock bull, Sittytton Hero 4th, at \$141. The nine-year-old draft stallion, John Anderson 2nd, was taken by John Purvis, Cannington, at \$200. The four-year-old Clydesdale mare, Ionia Queen, sold for \$250 to Messrs. Hodgkinson & Tisdale, Beaverton, and the three-year-old Clyde mare, Bonnie Bess, to Phillip Dawson, Cannington, for \$205. Following is the list of Shorthorns sold:

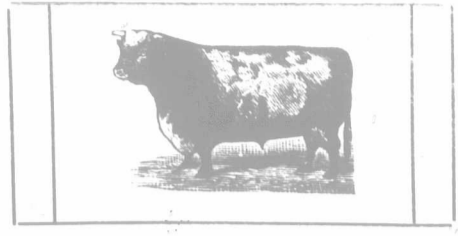
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|----------------------------------|---|-------|
| Queen of York 5th and c. c. | John Bright, Myrtle | \$225 |
| Princess Blackwell 6th and c. c. | C. Whitter, Lorneville | 160 |
| Miss Ramsden 9th | J. A. McGillivray, Uxbridge | 155 |
| Queen of York 4th | John Bright | 155 |
| Roan Topsy | McDougal, Brandon & Austin, Fenelon Falls | 125 |
| Kitty Snell 2nd | John Paget, Sundridge | 114 |
| Kitty Snell 3rd | Hodgskin & Tisdale, Beaverton | 100 |
| Princess Blackwell 2nd | R. C. Brandon, Cannington | 94 |
| Princess Blackwell 4th | John A. Turnbull, Atwood | 75 |
| Miss Brock 3rd | R. C. Brandon | 40 |
- Bulls.**
- | | | |
|---------------------|-----------------------------|-----|
| Sittytton Hero 4th | Donald Jackson, Woodville | 141 |
| Hillsdale Pride 2nd | Wilson & Wilson, Cannington | 75 |
| Sir Premier | D. Ross, Woodville | 75 |
| Premier John | Angus Ross, Beaverton | 71 |
| Ethel | Thos. Nugent, Cannington | 60 |
| Premier Hero | C. Whitter | 43 |

GEO. ISAAC, BOMANTON, ONT.
IMPORTER AND BREEDER OF

Scotch Shorthorn Cattle

Have imported, this year, 68 head of Shorthorns—6 bulls and 62 females. Twenty-seven head left quarantine 11th Sept., 1902. Intending purchasers should see this stock or correspond.

BOMANTON P. O., COBOURG STATION, G. T. R.

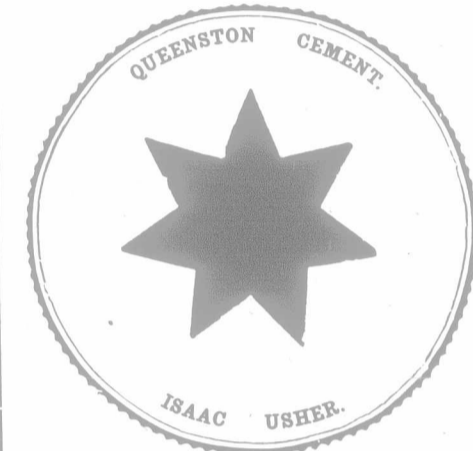


FOR SALE. 9 Straight Scotch Shorthorn Bulls

from 9 to 18 months Herd-headers at common prices. Also females of all ages.
Station, Telegraph and Telephone office adjoin the farm.
D. Milne & Son, Ethel, Ont.

Going to Build?

A new house, barn, silo, concrete floor, or any other such work? If so, use
Queenston Cement



THE old brand made by a new process. No better cement made. All who contemplate using cement should first inspect the different structures built of the different kinds of cement, and then they would know which is best and cheapest. We especially request those interested to ask our many patrons about the new process Queenston Cement used during the latter part of last season. Do not be misled by statements from those who sell the goods most profitable to themselves. Write for prices, estimates and full particulars. We can save money for you when building.

ISAAC USHER,
QUEENSTON, ONTARIO.

FREE Watch and Chain and Rifle

Boys! Earn a handsome Silver Nickel Watch, elaborately engraved, with keyless wind imported works, a Chain and Charm and an All-steel Long-distance Air Rifle of the best make and latest model that shoots B.B. shot, slugs or darts with terrific force and perfect accuracy, by selling at 15c. each only 20 Canadian Home Cook Books. These books were never before sold for less than 25c. They are nicely printed, beautifully bound and each contains 739 choice recipes. Every housekeeper buys one. J. Baxter, Sherbrooke, Que., says: "I never saw any thing sell so quickly as your Cook Books." With every book we give a 50c. certificate free. Send us a Post Card to-day and we will mail the Cook Books postpaid. When sold return us \$3.00 and we will forward at once the Rifle, Watch and Watch Chain. This is the biggest chance you ever had in your life. Write to-day. **THE HOME SPECIALTY CO., Toronto.**



GIRLS' THIS DOLL IS FOR YOU

Not a single cent to pay for her. As pretty as a picture. You will fall in love with her the minute you see her. Golden ringlets, laughing blue eyes, rosy cheeks, stylishly dressed in silk and satin, with velvet and lace trimmings. Lovely trimmed hat, dainty little slippers, real stockings, lace-trimmed underwear. She can be dressed and undressed like any live baby. Her head, arms and legs are movable. She can stand alone or sit in a chair or on the floor. When you get her you will say she is the prettiest doll you have ever seen. We give her free, for selling at 15c. each only 8 Canadian Home Cook Books. These books are nicely printed, beautifully bound, and each contains 739 choice recipes. Write us a Post Card to-day and we will send you the Cook Books postpaid. You can easily sell them in a few minutes. Every housekeeper buys one. 30,000 sold already. With every Cook Book we give a 50c. Certificate Free. JESSIE BAXTER, SHERBROOKE, QUE., says: "I never saw anything sell so quickly as your Cook Books." Don't miss this grand chance but write at once. LIZZIE SPURTE, NEWDALE, MAN., says: "I received the Doll and think it is a fine Premium. It is the loveliest Doll I have ever had." Address **THE HOME SPECIALTY CO., Dept. 579 Toronto.**



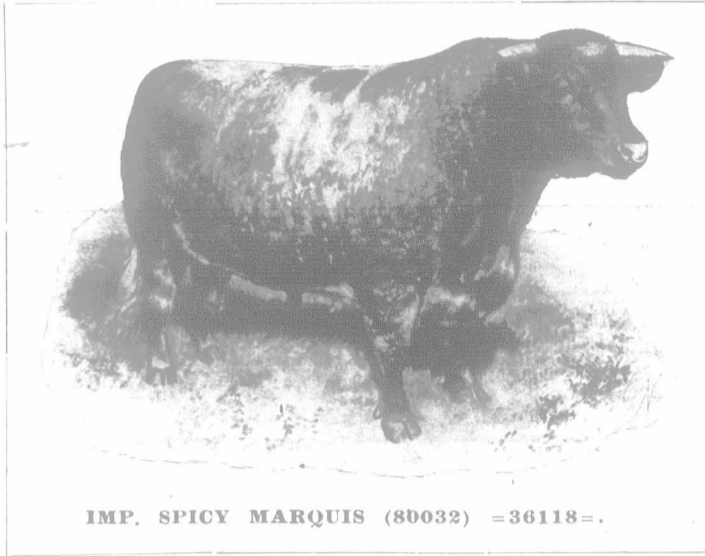
\$1.95 FIELD GLASS REGULAR PRICE \$5.00

Enormous Range Power Objects miles away brought to view with astonishing clearness. Fitted with Achromatic lenses of highest quality and finest finish. (Best Parisian Make), smooth working focusing bar, telescope action, fine porocco covered body with satin lined porocco carrying case and leather strap. Every part made of best material, finished and fitted with scientific exactness. Send No Money. Simply write us giving the name of your nearest Express Office and we will send the Glasses for examination. Examine them carefully, test them thoroughly and having satisfied yourself that they are worth many times what we ask, and the greatest bargain you have ever seen, pay the Express Agent \$1.95 and Express charges and they are yours. This is the chance of a lifetime. You cannot afford to be without a pair. They are almost invaluable to Kitchmen, Hunters, Sailors, etc. The greatest bargain in a high grade long distance Field Glass ever heard of. We bought these Glasses at a fraction of what it costs to make them. When they are gone it will be impossible to get a glass of this quality for less than \$5.00. Don't delay. Order today. **JOHNSTON & CO., BOX 550 TORONTO.**



PLEASE MENTION THE FARMER'S ADVOCATE.

TROUT CREEK HERD OF
SHORTHORNS



IMP. SPICY MARQUIS (80032) = 36118.

Spicy Marquis (imp.), bred by W. S. Marr, first at London, 1901, first and champion at Toronto, 1902, at head of herd, assisted by Baron Beaufort, bred by Lord Lovat, of his famous Broadhooks family. This is the highest-priced Scotch Shorthorn bull imported to Canada. This herd in 1901 was awarded ten championship prizes out of a possible fourteen. They were exhibited at Toronto, Ont.; Pan-American, Buffalo; New York State Fair, Syracuse, and Illinois State Fair, Springfield, and gained first prize at each place. They were only exhibited at Toronto in 1902, and were awarded first prize, also championship for senior bull and female. Seventeen of the awards given to Shorthorns at the great International at Chicago, 1901, were on cattle formerly owned at Trout Creek Stock Farm. Three of the leading show bulls in United States circuit for 1902 were imported by me, including the senior champion. And the senior champion female at the Chicago International Exposition, as well as about 15 other prizewinners at that show, also supplied by us.

We keep a choice lot of both imported and Canadian-bred cattle. Personal inspection invited.

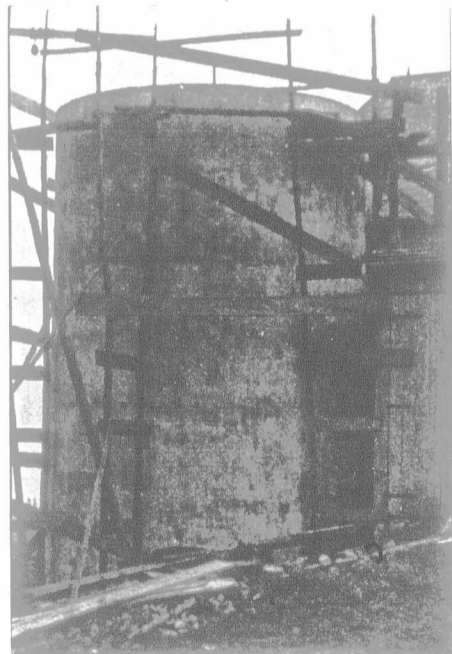
Parties desiring to see the herd will be met on arrival of trains, if notice is given. Visitors always welcome. Address,

JAS. SMITH, W. D. FLATT,
Manager, 378 Hess St. S.,
MILLGROVE, ONT. HAMILTON, ONT.

A Splendid Round Cement Silo

BUILT BY OUR MR. FRED MISENER FOR WILLIAM MCGHEE, OF BEACHVILLE, ONT., WITH

BATTLE'S "THOROLD" CEMENT



SIZE OF SILO:

Walls, 16 inches at bottom, 9 inches at top; 30 feet high; 16 feet in diameter.

COST AS FOLLOWS:

Thorold Cement, 75 barrels at \$1.15	\$ 86 25
Gravel, 56 yards at 10c	5 60
Stone, 10 yards at 10c	1 00
7 men, 7 days at \$1.25	61 25
Superintending, 7 days at \$2.00	14 00
Rent of moulds	7 00
Plastering, 2 men 3 days	7 50
Plastering, 1 man 3 days	6 00
Total cost	\$188 60

Estate John Battle, Manufacturers of "Thorold" Cement
THOROLD, ONT.

GOSSIP.

Being in the vicinity of Cobourg, Ont., recently, we had the pleasure of a look through the splendidly-arranged stables of Lake View stock farm, the property of C. & J. Carruthers, breeders of Shorthorn cattle, Berkshire and Yorkshire hogs. The Shorthorns are all of the heavy-milking Lady Eden family, on which have been used such well-bred Scotch bulls as the Nonpareil bull, Bomanton Boy 23514, by Imp. Baron Lenton; General Booth (imp.), Village Boy 5th 16352, Lawrence 26271, Indian Wave 23000, a son of Indian Chief (imp.). The yearlings and calves in the herd, including three ten-months-old bull calves, sired by British Hope 30946 by Salisbury 27135, dam Maid of Promise 8th (imp.) by Lord Stanley, show him to be the right bull in the right place, as his get are a grand type, low, thick and even, especially the three young bulls—they are good ones indeed. At present, the cows are all in calf to this bull and Count Amaranth (imp. in dam). All the young animals, both males and females, are for sale. The Berkshires are of Snell foundation, of which there are a number ready to breed, and several younger ones—a grand, even lot, and wonderfully true to type. The Yorkshires belong to the Hollywell family. The stock boar is Latest Model 7031, sired by Summerhill Wonder 2nd 4672, dam Lakeview Lady 6188, by Legacy 2nd. He is a grand type of hog. One of the sows is Hollywell Queen 8418, by Duke of York 3027, dam Isabella 2716 by Prince Albert 766. A full sister of hers is Hollywell Princess 8419. There are a number of Yorkshires that are fit to breed—a rare good lot, with length, depth, evenness and smoothness; also, a few males fit or service. In poultry, the B. P. R. are the only kind on the farm. They are of Thompson and Cosh strains. The cockerel for spring is one of Hawkins' breeding. Settings may be ordered now.

STEWART'S IMPORTED CLYDESDALES.

A few days ago, being in the neighborhood of Howick, Que., we called on Mr. Geo. Stewart, of Howick, importer of Clydesdale horses, and had a look over his new importation, and are bound to say we were delighted with the really superior quality of the animals shown us, being, in our opinion, the class of horses badly wanted in this country. They were: Honer 11374, bred by G. & J. Wilson, Liberton, sired by Good Gift, dam Liberta by Ethiopian, grandam Heir Jean Darnley by Darnley. He is a brown, two years old, a massive, big, model colt, and will make a horse over a ton, full of quality. Canbuslang, Vol. 25, bred by J. Wilson, Westburn; sired by the champion Hiawatha, dam Young Jess by Flashwood, grandam by Time o' Day. He is also two years old, bay, a compact, smooth, stylish, quality horse; one of the cart-horse kind; will make a ton horse, and, all round, is a cracker. Fair City, Vol. 25, bred by Scott Wylie; sired by Sir Archie, dam Montrave Rona by Brooklin, grandam by Prince Lawrence, g-grandam by Lord Erskine, g-g-grandam by Prince of Wales. He is a brown two-year-old; will make a 2,200-pound horse, one of the hard-to-get kind that combines size, style, smoothness, action and quality to a marked degree. Fidelity, Vol. 25, is a one-year-old, bay, bred by Wm. Muirhead, Little Demy; sired by Rosedale, dam by Boy in Blue, grandam by King William. He is the making of a big, smooth, good-acting, dray-horse kind. Twilight, Vol. 23, is a five-year-old mare, bred by George Liddle, Kirkbrampton; sired by Gallant Sunrise, dam Sally by Charmer. She is a black mare, a big, fine animal, and has a black filly colt by Lord Gartley. Parties requiring such horses will do well to see or write about them soon, as they will soon go at the prices asked.

FOR SALE
6 SHORTHORN BULLS.

14 months old; also heifers and cows. Would sell a carload. Imp. Prince William at head of herd. on Jas. Gibb, Brooksdale, Ont.

SCOTCH COWS and HEIFERS

of good quality, in calf to one of the great Scotch sires of the period, and a few young bulls, for sale at prices you can stand. Shropshire rams and ewes of greatest individual merit and breeding, for sale as usual. Ask for catalogue. Representative in America of Alfred Mansell & Co., College Hill, Shrewsbury, Eng., on

ROBERT MILLER, - STOUFFVILLE, ONT.

SHORTHORNS

Bull, 2 years old. Cows and heifers in calf. Also bull and heifer calves, some sired by imported bull. English Berkshire and Improved Chester White sows, 6 weeks to 4 months old, both breeds, in pairs not akin. Also seed oats, speltz and seed potatoes. Prices reasonable.

TILMAN E. BOWMAN, Berlin, Ont.

SHORTHORNS.

FOR SALE: 4 females, from 1 year to 4 years. These are served by Imp. Golden Conqueror, Vol. 17. Also two bulls out of Royal Ury = 23630 =.

AMOS SMITH, Trowbridge P. O.

RARE YOUNG BULLS

of serviceable age for sale; also females of all ages. Roans and reds. Prices right.

E. & C. Parkinson, Thornbury P. O. & Stn., G.T.R.

Shorthorns and Yorkshires In Shorthorns we are offering four young bulls from 7 to 9 months, also a few heifers. In Yorkshires we can supply either sex of various ages. All at o J. R. McCallum & Son, living prices. Iona Sta. and P. O., Elgin Co.

Imp. Shorthorns and Lincolns

A. D. MCGUGAN, RODNEY, ONT., P. O. AND STA.,

Imported Aberdeen Hero at the head of the herd, which is composed of the best Scotch families. Ten grand shearing and two-year old ewes for sale, in lamb to a Royal winner. Also ewe lambs from imported Dudding ewes at reasonable prices.

R. MITCHELL & SONS, NELSON P. O., ONT.

Scotch Shorthorns. The Marr Princess Royal bull, imp. Greengill Victor, heads herd. We have for sale 4 imported bulls, 12 imported heifers, and a large number of home-bred bulls, cows and heifers belonging to the most popular Aberdeenshire families.

Burlington Jct. Station and Tele. Office.

HIGH-CLASS SHORTHORNS

Now offering 12 bulls, reds and roans, from 6 to 24 months old—the thick, fleshy kind—and a few heifers. Also Clydesdale horses.

JAS. McARTHUR, - Goble's, Ontario.

Shorthorns and Leicesters.

Herd Established 1855. A number of young bulls, cows and heifers for sale. Imported Christopher = 28350 = heads the herd of large cows of grand milking qualities. Also a number of Leicesters of both sexes, from imported foundation.

JAMES DOUGLAS, CALEDONIA, ONT.

SHORTHORNS AND LINCOLNS.

J. K. HUX, Rodney, Elgin Co., Ont., P. O. and Station. now offers 7 young bulls, cows and heifers. Abbotford 19446 now at head of herd. Also ram lambs out of imp. Dudding ewes.

SHORTHORNS:

JILTS and MARAS: 6 heifers from 1 to 3 years old; 5 with calves at foot and in calf again to imp. British Statesman. Also two young bulls (roan).

LOUIS ELLARD, Loretta P. O., Beeton Sta.

SHORTHORNS:

We are offering 3 extra choice yearling bulls, all from imported sires, straight Cruickshank, with Lavendar and Miss Ramsden dams. **THOS. ALLIN & BROS., Oshawa, Ont.**

Shorthorns, Berkshires and Leicesters.

FOR SALE: Choice two-year-old heifers, well gone in calf; also yearling heifers, bull calves. Boars and sows fit for breeding, and young pigs.

ISRAEL GROFF, ALMA, ONTARIO.

HAWTHORN HERD

of deep-milking Shorthorns for sale. Six young bulls of first-class quality and breeding and from Al dairy cows. **WM. GRAINGER & SON, London, Ont.**

Lakeview Shorthorns.

Herd represented by such noted families as Stamfords, Minas, Marr Floras, Crimson Flowers, Village Girls, Bucan Lassies, and Lavinias. Stock of both sexes and all ages for sale. on **James Bowes, Strathairn P. O., Meaford Sta.**

GREEN GROVE SHORTHORNS:

I am now offering a few heifers, Claretas, Floras, and one Missie; also a choice year-old bull, by Aberdeen of Markham. on **W. G. MILSON, GORING P. O. and MAREDALE STATION.**



BABY'S OWN SOAP

Pure, Fragrant and Cleansing.


BABY'S OWN SOAP

IS UNRIVALLED FOR NURSERY AND TOILET USE.

Don't risk imitations on Baby's delicate skin.

ALBERT TOILET SOAP CO., MFRS. MONTREAL. 6-2

ROYAL DRY HOP YEAST CAKES



ROYAL DRY HOP YEAST CAKES

BEST YEAST IN THE WORLD

E. W. GILLETT COMPANY LIMITED
TORONTO, ONT.

Shorthorn Cattle, Lincoln Sheep

Imp. Prime Minister at head of herd. Imp. Clippers, Miss Ramsdens, and other Scotch families. Lincolns won more than half the money and first for stock at the Pan-American; International, Chicago, 1901 and 1902.

J. T. GIBSON, om DENFIELD, ONT.

SHORTHORNS (imported)

One imported and one Canadian-bred bull. A few cows and heifers.

THOS. RUSSELL, EXETER, ONT.

Orchard Hill Shorthorns. I am now offering 13 heifers from six months to two years, 4 bulls from 10 to 13 months old, and 7 very heavy milking cows. Here is a rare chance to get stocked with pure-bred cattle at reasonable terms.

A. Johnston, Vandeleur P. O., Markdale Sta. om

SHORTHORNS.

THORNHILL HERD. ESTABLISHED 27 YEARS.

Imp. Royal Member and Sailor Champion now at head of herd, which are all bred on straight Scotch lines, and are of the up-to-date kind. Present offering: some choice young bulls.

REDMOND BROS., Millbrook Sta. and P. O. om

LEONARD BURNETT, GREENBANK, ONT.,

BREEDER OF om

Shorthorn cattle and Shropshire sheep.

BONNIE BURN STOK FARM, 40 rods north of Stouffville station, offers Scotch Shorthorns; choice Shropshires and Berkshires from imported and Canadian-bred sows. All at farmers' prices. Inspection invited.

D. H. RUSSELL, STOUFFVILLE, ONT. om

SCOTCH SHORTHORNS.

Urys, Stamfords and Matchless. Young, vigorous females, all ages, for sale. Shropshire sheep and Yorkshire pigs.

ROBT. BATTY, Meaford P. O. & Sta. om

For Sale

Some choice young YORKSHIRES (Holywell strain) of both sexes and different ages; also young Shorthorn bulls, sired by British Hope (30916). Price moderate.

Write: **C. & J. CARRUTHERS, Cobourg Station and P. O., Ont. om**

GOSSIP.

Clydesdales are advertised in this issue by James Paton, Swinton Park, County of Grey, Ont., near Dundalk station on the Owen Sound branch of the C.P.R. An aged imported horse and an imported colt rising three are offered. See their ad. and write for particulars.

John Campbell, Fairview Farm, Woodville, Ont., writes: "I have to again ask for a change of ad., as Mrs. Campbell's B. P. Rocks found very ready sale by the 'Advocate' notice, the only paper used for advertising. Every customer who reported, and nearly all did, were highly pleased with the birds sent. I now wish to introduce to your readers a new variety of oats, which I was asked, by Prof. Saunders, of the Ottawa Ex. Station, to test two years ago. The first sowing was done by hand, but thinly, cultivated, and harrowed in a very ordinary manner, yet the remarkable yield of 86 pounds for every pound sown was obtained. The Shropshire ewes, recently advertised, are all ordered, thanks largely to the 'Advocate.'"

The excellent engraving, appearing on another page, of the champion pen of wethers at the late Smithfield Fat Stock Show, in London, England, serves to illustrate the superior excellence of the breed of long-wooled Lincoln sheep, and the character of the Riby flock of Mr. Henry Dudding, whose reputation as a breeder of the best is world-wide. It was a splendid compliment to the breed and breeder, and a well-deserved acknowledgment of his skill and judgment when the Smithfield champion trophy was awarded to his pen of Lincolns in competition with all breeds, by Mr. Bowen Jones, the judge, a breeder of Shropshires. Besides the largest flock of Lincolns in Great Britain, Mr. Dudding maintains a very large herd of Shorthorn cattle of up-to-date breeding and type, as set forth in his advertisement running in this paper.

Mr. N. Dymont, Vice-President for Ontario of the Canadian Ayrshire Breeders' Association, writes, ordering a change in his advertisement, in which he makes a special offering of three Ayrshire bulls, five to fifteen months old, the latter a bull of true dairy type, a grandson of the grand old cow, Nellie Gray, a noted winner in Provincial dairy tests, winning, in the fall of 1898, \$135 in cash prizes and silver medal as best dairy cow, any age or breed. The younger bulls are also bred for utility, being out of tested cows and by the prize bull, Drummond. Two good cows are also offered, namely, Highland Mary of Hickory Hill, by Royal Chief, and Briary Banks Susie, by Altron Chief, both good cows, and in calf to Dairyman of Glenora; one due soon, the other later. Parties requiring such will do well to write to Mr. Dymont for particulars and prices.

Mr. Robert Miller, Stouffville, Ont., writes: I am sending you change of advertisement to draw the attention of your readers more particularly to some young Shorthorn cows in calf or with calves by their side. I have had great success in using the Willis Spicy bull, Bapton Fancy (80388), and he promises to be one of the greatest sires of the age. His sire is Silver Plate (75633) used by Mr. Duthie and Mr. Willis and now in use in His Majesty's herd. The dam of Bapton Fancy was sired by Count Lavender (60545), winner of over 50 first prizes and championships in Great Britain. Perhaps no bull has had two such sires and prizewinners at the top of his pedigree. His grandam was also the grandam of Spicy Robin (69638) that was such a wonderful sire in the herd of W. S. Marr. I have never had a bull with such a good back, smooth and level, with such a covering of lean meat. His calves are the most promising and uniform lot I have had. Have a few good young bulls left, and will sell anything I have to spare at a moderate price.

Fleming's 3 are free if they fail.
Lump Jaw Cured With Ease.

FLEMING'S LUMP JAW CURE has been on the market for years. It has been used by nearly every prominent stockman on the continent. A careful record shows that it does not fail once in a hundred times in the severest cases.

We Have a Thousand Such Reports:

Kinsley, Neb., May 24, 1901.—We sent to you some time ago for your Lump Jaw Cure. One application made a complete cure. The lump had been on over a year.

G. W. SMITH.

Don't risk loss or endanger your herds or pasture. Let us Send You our Valuable Book.

FISTULA and POLL EVIL CURED In 15 to 30 Days



SPAVINS Cured Quickly Or There's NO COST

Continuous tests for two years prove that Fleming's Fistula and Poll Evil Cure cannot fail. Easy to use, prompt in results; cures in half the ordinary time. Simple, humane, scientific; guaranteed.

One 45-minute application of Fleming's Spavin Cure will remove any ordinary spavin, curb, ringbone, etc.

Cerro Gordo, Ill., Feb. 15, 1901.—I applied the liquid as directed, and one application has removed the spavin. It is wonderful how it takes hold so soon.

L. Mellinger.

We have some important information for you—FREE.

It is worth while to write us today for circulars describing the above remedies. Mention this paper.

FLEMING BROS., Chemists, 36 Front St., Toronto, Ont.

CHOICE SCOTCH SHORTHORNS.

An excellent lot of young bulls of the Cruickshank Village Blossom, Lovely and Mysie families; also Marr Missies and Kinellar Clarets. A few choice young females for sale as well.

H. SMITH, Exeter, Ont.
Farm adjoins Exeter Station, on the G. T. R., 30 miles north of London. om

Scotch Shorthorns

BREEDING FEMALES ALL IMPORTED.

Imp. Golden Drop Victor our present stock bull. Eleven young bulls and some young cows for sale at reasonable prices.

H. CARGILL & SON,

Cargill Station, G. T. R. CATALOGUE FREE. om Cargill, Ontario.

H. J. Davis, Woodstock, Ont.

40 HEAD IMPORTED and CANADIAN-BRED SHORTHORNS.

22 head just home from quarantine, including a choice lot of heifers and young bulls of the best breeding. Herd headed by the Willis Cruickshank-bred bull, Bapton Chancellor (imp.), and the Lovat bull, Viceroy. Woodstock: Main line G. T. R. and C. P. R. om

MAPLE LODGE STOCK FARM.

ESTABLISHED 1854.

SHORTHORNS.—First-prize milking strains, best Scotch breeding. Young bulls and heifers for sale.

LEICESTERS.—A grand lot of ewes, bred to our imported rams, and a few choice rams now for sale.

A. W. SMITH,

Alls Craig Station, G. T. R., 3 1/2 miles. om MAPLE LODGE P. O., ONT.

PINE GROVE SHORTHORNS AND SHROPSHIRE.

Our herd comprises over 150 females, including our last importation of 30 head, all of the most esteemed strains. Of Shropshires, we offer a few choice rams, also high-class ewes bred to first-class rams. Address om

W. C. EDWARDS & CO.,

Rockland, Ontario.

VALLEY HOME STOCK FARM

SCOTCH SHORTHORNS Choice young bulls and heifers for sale from imported and home-bred cows.

BERKSHIRE SWINE. Also some young Berkshires. om

S. J. PEARSON & SON, MEADOWVALE P. O. om

C. P. R. Station and Telegraph Office.



How to Grow Fat Cattle from Stringy Calves

Where Dr. Hess' Stock Food is fed to delicate, stringy calves, they will be found in the heavy-weight class at shipping time. For indigestion, flatulence, diarrhoea—or any other incident disorder, Dr. Hess' Stock Food is the best remedy. It not only corrects all disorders, but establishes a high standard of health, giving flesh and rapid, sturdy growth. Dr. Hess' Stock Food is both a frame and flesh builder. It compels the conversion of food into fat and solid flesh, by affording appetite and means of perfect digestion and thorough assimilation. Dr. Hess' Stock Food rapidly forces a yearling; gives greater milking capacity to a cow; gives great vigor to bulls; keeps market cattle up to their feed to the last day.

DR. HESS' Stock Food

is a scientific compound for horses, cattle, hogs and sheep; endorsed by medical and veterinary colleges and prescribed by leading veterinarians everywhere. If the medical and veterinary colleges know of nothing better, it must be good. Dr. Hess is a graduate of both; no unprofessional manufacturer can equal his products. In every package of Dr. Hess' Stock Food is a little yellow card entitling the purchaser to free prescription for his stock by Dr. Hess. Dr. Hess' Great Stock Book on diseases of animals and poultry, the only complete treatise for popular use, consulted and recommended by prominent veterinarians, will be sent free, postpaid, if you write what stock you have; what stockfood you have used; and mention this paper. For this information you will also be entitled to the following: During February Dr. Hess will send prescriptions and letters of advice FREE to any reader of this paper who has an ailing animal and who will send him description of symptoms and conditions. You must write before March 1st. If you have a sick or injured animal, write now. It may save you hundreds of dollars.

Dr. Hess' Stock Food is sold on a written guarantee, in 100 pound sacks, \$5.00; smaller packages at a slight advance. Fed in a small dose.

We also make Dr. Hess' Poultry Panacea, Dr. Hess' Healing Powder and Instant Louse Killer. Address

DR. HESS & CLARK, Ashland, Ohio, U. S. A.

I GUARANTEE A \$5.00 PACKAGE OF **BARREN KOW CURE** postpaid, to make any cow under 10 years old breed, or refund money. No trouble, no risk. Given in feed twice a day. —om
L. F. Selleck, Druggist, Morrisburg, Ont.

JERSEY BULL

The richly-bred two-year-old Jersey bull, "Pride of Norval," solid color, black points, tongue and switch, quiet and well broken to tread-power, and sure stock-getter. Dam tested 17 lbs. 5 oz., butter in 7 days. For prices write

W. C. SHEARER, BRIGHT, ONT.

JERSEYS:

Present offering: Two bulls, 8 months old; solid color; choice animals; sired by Nero of Glen Rouge, and out of deep-milking dams.

E. B. HINMAN & SONS, GRAFTON, ONT.

DO YOU WANT A SNAP?

Jersey cows and heifers, also two young bulls, at low prices, from prizewinning stock. Write for prices. —om
W. W. EVERITT, Dunedin Park Farm, CHEATHAM, ONT.

Best Jersey Bulls AT LOWEST PRICES.

Owing to the large sale of registered Jersey cows, all in milk (18 head), that I have just made, I offer several bull calves, of unsurpassed breeding and from tested dams, at prices that will surprise purchasers. This, because the sale of so many cows in profit leaves me short of milk for the present. Also some choice heifers in calf.

Mrs. E. M. Jones, Brockville, Ont.
Box 324. —om

St. Lambert Bull, 15 months old; solid color.

Strong and vigorous. His dam, sire's dam and her dam and grandam are all tested cows. This bull is a snap for a St. Lambert fancier. Also young bulls sired by Brampton Monarch (imp.) and out of tested show cows, and cows and heifers in calf to him. For prices, etc., address

B. H. BULL & SON, BRAMPTON, ONT.
G. T. R. and C. P. R. stations.

JERSEYS, COTSWOLDS, YORKSHIRES. Registered Jersey cattle, Cotswold sheep and Yorkshire pigs for sale. A few nice heifers, 6 mos. to 2 years, and 1 yearling bull, by Count of Pine Ridge, grandson of Adelaide of St. Lambert, record 84 lbs. milk daily, om W. M. WILLIS, NEWMARKET, ONT.

4 HOLSTEIN BULLS 4 FOR SALE: From 4 to 7 months old, having sires in their pedigrees from such strains as Inka, Netherland, Royal Aggie, and Tritonia Prince, and out of imported females that have proven their worth at the fair. **THOS. B. CARLAW & SON,** Warkworth, Ont.

Brown's Holsteins

We are offering for sale: 2 three-year-olds, 1 two-year-old and several younger heifers. Also a few young bulls, out of record cows and by our grand stock bulls; in fact, we will sell anything in the herd.

BROWN BROS., Ltd., P. O. and Station.

GOSSIP.

Mr. John Richards, Bideford, P. E. I., in remitting for his advertisement of Aberdeen-Angus cattle, writes: "I am glad to say that my herd is wintering well so far, and the calves by the young bull, Pradamere, sold to Mr. Jas. McLeod, of Plainville, Ont., at Toronto Exhibition last fall, are very promising. You are certainly to be congratulated on the Christmas number of the 'Advocate.' It is a gem in every respect."

In the county of Northumberland, two miles north of Hoard's station, lies Menie stock farm, the property of Mr. Wm. Stewart & Son, breeders of Ayrshire cattle and pure-bred poultry. Menie Farm Ayrshires have long ago made a very enviable name for themselves. Their brilliant ring record, their heavy milking records, their superior individuality, all are well known on both sides of the line. In the stables, at present, are about forty head, including such noted show cows as Imp. Sprightly, Imp. Primrose of Harperland, Jean Armour, a cow that has won sweepstakes galore and has a milk record of 66 lbs. a day, testing 4 per cent. of butterfat; Lady Ottawa, whose milk record is 60 lbs. a day, and has prizes enough to her credit to cover her with silk.

May Mitchell, whose milk record is 50 lbs. a day, testing 4.3, was never beaten as a three-year-old. Annie Laurie, as a three-year-old, gives 40 lbs. a day, and last fall won four firsts, two seconds and one third prize. There are also five other three-year-olds and three two-year-olds, while of yearlings there are about a dozen, the bulk of which are sired by White Prince (imp.), the rest by that noted show bull, Hoyer-a-Blink, by Dainty Lad of Elm Shade. In males, there is a nine-month-old bull out of Imp. Sprightly by Imp. White Prince, that is the making of something good. Another five-month-old bull calf, out of Lady Ottawa, by Imp. White Prince, will make a show bull sure. Then there is the yearling bull, Kitchener, a grandson of the great cow, Minnie of Levenssock (imp.), winner of first prize and sweepstakes at Toronto, '02. Again, there are the twin one-year-olds, out of Jean Armour, by Imp. White Prince. The Messrs. Stewart have lately sold one bull to Shannon Bros., of Cloverdale, B. C.; one bull to Geo. Hill, Delaware, Ont., and one bull to W. Rathwell, Ottawa, besides a number of heifers. In poultry, there are also a few fine and excellent birds. Write the Messrs. Stewart, to Menie P. O., Ont.

Brookbank Holsteins

16 to 25 lbs. of butter in 7 days' official test are the records of this herd of Holstein cows. Heifers of equivalent records. Bulls for sale whose sires and dams are in the Advanced Registry, with large official butter records.

GEO. RICE, Currie's Crossing, Ontario, OXFORD COUNTY.

HOLSTEINS, TAMWORTHS, COTSWOLDS.

Present offering: Young boars and sows fit to breed, and younger ones. Choice animals. Ram and ewe lambs and two 2-shear rams. Perfect covering. **E. O. MORROW, HILTON P. O., Brighton Stn.**

Maple Park Farm Holsteins.

Netherland De Kol (imp.) stock bull. Stock of all ages for sale from the great De Kol Pietertje Clothilde and Barington strains. Home of the great cows, Edgeley Mol, milk record 104 lbs. in 24 hours; Emery Beauty, the great public test winner, and many others with heavy records. **SIDNEY MACKLIN, om Streetsville P. O. and station, C. P. R.**

Ridgedale Farm Holstein-Friesians for Sale.

2 yearling bulls; also bull and heifer calves; all of choice breeding. Prices always reasonable. Write, or come and see them. **R. W. WALKER, Utica P. O.** Shipping stations: Port Perry, G. T. R.; Myrtle, C.P.R. om

SPRING BROOK STOCK FARM

Am offering a 12-months, richly-bred DeKol bull; 2 heifers (9 months), and 3 cows. Also a choice lot of Tamworths of different ages. Write at once for prices.

A. C. HALLMAN, BRESLAU, ONT.
Waterloo Co.

Riverside Holsteins

8-BULLS FOR SALE 8 from 3 to 10 months old, sired by Victor DeKol Pietertje and Johanna Rue 4th Lad. These young bulls are from Advanced Record of Merit stock. **MATT. RICHARDSON & SON, Baldimand Co., Caledonia, Ont.**

FOR SALE: HIGH-CLASSED

Ayrshires and Poultry

Eleven pair of grand large Toulouse geese at \$1.00 per pair; B. P. Rocks, Houlans, White Rocks, B. Minors, White and Black Cochins at \$1.50 each. Also Ayrshire cattle all ages. For particulars write:

WILLIAM THORN, LYNEDOC, ONT.
Trout Run Stock Farm, Norfolk Co.

\$3 a Day Sure

Send us your address and we will show you how to make \$3 a day absolutely sure; we furnish the work and teach you free; you work in the locality where you live. Send us your address, and we will explain the business fully, remember we guarantee a clear profit of \$3 for every day's work, absolutely sure, write at once: **IMPERIAL SILVERWARE CO., Box 508, WINDSOR, ONT.**

PLEASE MENTION FARMER'S ADVOCATE

Equalizing Prices of Chickens.

(By F. C. Hare, Chief Poultry Division, Department of Agriculture, Ottawa.)

The following table shows the result of an experiment conducted by the Dominion Department of Agriculture to ascertain the loss in weight of fatted chickens (1) when starved 36 hours and ready to kill, (2) when killed by dislocating or breaking the neck, dry plucked and cooled 20 hours, (3) when drawn and prepared for roasting.

In order to secure an accurate live weight of the chickens before the experiment was commenced, the chickens were weighed two hours after their last feed, and this weight is given in the first column.

No. of Chickens.	Live Weight.		When starved 36 hours.		When killed, plucked, and cooled 20 hrs.		When drawn and prepared for roasting.	
	lb. oz.	lb. oz.	lb. oz.	lb. oz.	lb. oz.	lb. oz.	lb. oz.	
1	5	8	4	12	4	7	2	15
2	4	12	4	12	3	13	2	6
3	5	7	4	12	4	7	3	6
4	6	3	5	7	5	2	3	8
5	4	12	4	12	3	12	2	8
6	5	8	4	13	4	8	3	2
7	5	3	4	8	4	3	2	14
8	5	10	4	14	4	8	2	15
9	6	3	5	5	5	1	3	7
10	5	4	3	3	3	13	2	7
11	6	8	5	14	5	8	3	12
12	5	14	5	3	4	14	3	6
Total	66	08	57	11	54	—	36	4

Results of the Experiment.—(1) As a result of the 36 hours' starving, there was an average loss of three-quarters of a pound in the live weight of each chicken. (2) There was a loss in weight of five ounces due to the killing, plucking and cooling of the chicken. This small loss would represent the weight of the feathers. There is no appreciable loss in weight owing to the 20 hours' cooling.

Combined Results of (1) and (2).—The total loss in weight of chickens when they are prepared for market by having their necks broken, dry-plucked, and not bled or drawn, averages one pound from the live weight. All chickens that are exported to Great Britain are sold by this plucked weight. In a large number of Canadian cities and on the smaller markets where undrawn fatted chickens have been tested and their improved quality recognized, a plucked chicken is more readily bought than one that has been drawn. A chicken that is not drawn until required for the oven is more juicy in flesh than one that has been drawn as soon as killed and subjected to the atmosphere.

(3) In order to complete this experiment and to ascertain the loss in weight of chickens when prepared for the oven, the twelve chickens were drawn, and their heads, legs and outer joints of the wings were removed. There was an average loss in weight of one pound and one-half on each chicken.

(4) To ascertain the prices per pound at which the chickens could have been sold by drawn weight, plucked weight or live weight, and realize the same amount of money, the chickens were sold in the regular way on the Charlottetown, P. E. I., market. The selling price was \$5.95, and the price per pound was 16½ cents. This price per pound was for drawn chickens. If the chickens had been sold for 11 cents a pound after being killed, plucked and cooling, or by plucked weight, they would have realized \$5.95 also. Or, if the chickens had been sold for 9 cents a pound live weight they would have realized \$5.95. So that a selling price per pound of 9 cents live weight equals 11 cents plucked weight and equals 16½ cents drawn weight. These figures are equivalent to the weights of the chickens. A value has not been placed on the time necessary to kill, pluck or draw the chickens.

By estimating equivalent values for the different selling prices, the following table has been calculated.

Equal prices in cents per pound for selling chickens by live weight, plucked weight, or drawn weight:	
Live weight	5. 5.5 6. 6.5 7.
Plucked weight	6.2 6.8 7.4 8. 8.6
Drawn weight	9.2 10. 11. 11.9 12.8
Live weight	7.5 8. 8.5 9.
Plucked weight	9.3 9.9 10.5 11.
Drawn weight	13.7 14.7 15.6 16.5

PRIZEWINNING COTSWOLDS.

Imported and home-bred stock, prizewinners at all the leading fairs. EGIN F. PARK, on Box 21, Burgessville, Ontario, Canada.

IMP. COTSWOLD SHEEP

Five rams (year-olds), both sires and dams imp.; 10 ewes (year-olds), sire imp. Also this year's lambs, both sexes; Yorkshire and Tamworth hogs. om
BROOKS & LANGMAID, COURTYCE P. O.

LEICESTER SHEEP.

Quality, with good size and wool. Address: C. & E. WOOD, FREEMAN P. O. BURLINGTON ST., ONT.

American Leicester Breeders' ASSOCIATION.

A. W. Smith, Pres., Maple Lodge, Ont. Pedigrees now being received for Vol. 4. For information, blanks, etc., address:

A. J. TEMPLER, Sec., CAMERON, ILL. U.S.A.

W. S. CARPENTER, "MODEL FARM," SIMCOE, ONT.,

Importer and breeder of Shropshire sheep. My flock was represented at Toronto, and won first on shearing ram, first and second on aged ewes, and second on the pen. First time exhibiting. If in need of a first-class yearling ram, imported or home-bred, write! Your wants can be supplied, and at prices consistent with quality. Have a choice lot to choose from, and can guarantee satisfaction. Come and see them, or a card will bring them. om
Station One-half Mile from Farm, Wabash and G. T. R.

SHROPSHIRE FOR SALE.—Shearing rams, ram lambs, ewe lambs, also shearing and older ewes, about 50 head all told. All registered or eligible. Low set, well covered, in fine condition and form. Sires from Campbell and Dryden flocks. **MALCOLM McDUGALL**, om Tiverton, Ont.

SHROPSHIRE.

One well-covered yearling ram, with good bone, from imported Mansell ram, and four home-bred ram lambs. Write for prices. om
ROWAT BROS., HILLSDALE, ONT.

This season I am offering for sale **SHROPSHIRE** lambs of both sexes. Also shearing ewes and 2 shearing rams. Prices right and quality guaranteed. o **GEO. HINDMARSH, Ailsa Craig, Ont.**

LINDEN OXFORDS at Toronto, 1902, won 1st open pen, 1st and 2nd Canadian pen; 1st and 2nd aged, yearling and ram lambs; 1st, 2nd and 3rd yearling ewes and ewe lambs. All these ewes retained in flock and the best rams. om
R. J. HINE, Dutton, Ont.

Oxford Down Sheep at a bargain. Having decided to give up farming in the spring, I will sell for the next 30 days, at reduced prices, 4 imported ewes and 1 imp. ram; also ram and ewe lambs, and a few ewes from 1 to 6 years old. om
SMITH EVANS, Gourock, Ont.

40 Superior Oxford Ewes for Sale:

From one to three years. Bred to "Bryan 125" and "Hampton Hero," both imported. One hundred strong and hearty ram and ewe lambs. Prices reasonable. Also, Shorthorn bull calf and two heifer calves. Good animals. om

HENRY ARKELL, om Guelph G. T. R. "Farnham Farm," Arkell P. O., Ont.

BROAD LEA OXFORDS.

An offering at present 30 superior shearing ewes, bred to a good ram, and a number of ewe and ram lambs for sale at reasonable prices. Always pleased to hear from or see sheepmen, whether they buy or not. om

W. H. ARKELL, TEESWATER, ONT. Broad Lea Farm.

MILDMAY, G. T. R. TEESWATER, C. P. R. 7 miles from farm. 3½ miles from farm.

SUMMERHILL OXFORDS.

Present offering: A choice lot of ram lambs and ewe lambs. Also 50 extra nice yearling ewes. om
PETER ARKELL & SONS, Teeswater P. O. and Station.

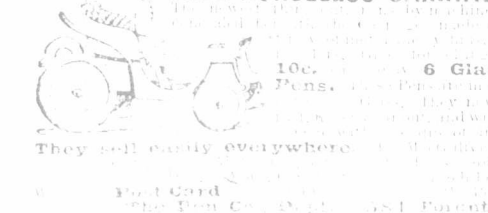
Newcastle Herd of Tamworth Swine

Have for a number of years taken a share of the best prizes offered at Toronto Exhibition, but this year has excelled all past records, having taken the sweepstakes for the best herd; also both silver and gold for best Tamworth bear and best Tamworth sow, and several other prizes in the various classes. Our present offerings are: Several young sows, bred and just ready to breed; also a lot of beautiful young pigs of both sexes, 2 to 4 months old, all descended of our sweepstakes stock. Pairs supplied not akin. Also sow 15 months old, in pig. Enquiries promptly answered. om
COLWILL BROS., NEWCASTLE, ONT.

TAMWORTHS.

Young pigs for sale, from medal winning sow, O. A. C. 110, and other good ones, sired by Big Star light, Pan-American First, and Bold Boy, Toronto winner. **JOHN BORD & SON,** om Parkhill P. O. and Station.

FREE HORSELESS CARRIAGE



They sell nearly everywhere. om

GOSSIP.

Very prominent among the noted Ayrshire stock farms of Quebec is Elm Shade, the property of Mr. Wm. Wyllie, of Montreal. This beautiful farm lies about one mile from Howick station, on the G. T., and is the home of one of the choicest herds of imported Ayrshire cattle in the country, at the head of which is that noted prizewinning bull, Uncle Sam of Trout Creek, a son of the Chicago sweepstakes cow, Nellie Osborne (imp.). In the herd at present is to be seen such grand cows as Nellie Osborne 1st, a daughter of the above named great Nellie Osborne; White Glen (imp.), and a daughter of hers, one year old, by the stock bull, also a bull calf by the same sire. Polly (imp.), who also has a three-months-old heifer calf by the S. B. Queen (imp.) has a bull calf, three months old, by S. B. Stately (imp.), Nellie Osborne 2nd. There are also three yearling heifers, imported in dam. In this herd are a number of winners at Toronto, London, Ottawa and Sherbrooke. In younger animals, there are several heifers, and anything in the herd is for sale. The animals are in the pink of condition, as there are few men that understand the care of Ayrshires better than the manager, Mr. A. M. Watt.

Spring Brook Dairy Stock Farm is one of the noted farms of the Province of Quebec, and is situated one mile from Carr's station, on the Montreal & Massena Springs branch of the G. T. R., five miles from Huntingdon station on the N. Y. C. R., and is the property of Mr. W. H. Stephen, breeder of typical Ayrshire cattle. Mr. Stephen's herd at the present time numbers twenty head. The stock bull is the prizewinner, Comrade's Last of Comrade of Glenora, by Imp. Comrade of Garlaff, dam Imp. Faultless Beauty of Wynholm. This bull was only shown as a yearling, when he won second at Toronto and fourth at Buffalo in 1901. The calves are sired by him. A number of the older ones are by Uncle Sam of Trout River, by Imp. Baron Renfrew of Mansuraes; dam Imp. Nellie Osborne, sweepstakes winner at Chicago in 1893. Again, the one and two year old heifers are sired by Klondyke of Ste Anne's, by Imp. Glencairn 3rd. A few of the females of the herd are: Trona 2nd 11132, by U. S. of T. R., milk record 35 lbs. a day, testing 3.90; Miss Violet 8881, also by U. S. of T. R., milk record 42 lbs. per day, testing 3.80; Diana 11119, by same sire, milk record 33 lbs. a day, testing 4.5. Lady Smith 11126 is a three-year-old, by same sire, milking 34 lbs. a day, testing 4; and a number of others as good. The cows are a big, typically-formed lot, with nice, even udders and good-sized teats. There are three two-year-old heifers and three one-year-olds, besides a number of younger ones. Also, there are three bull calves, a few months old, sired by Klondyke, nice, even youngsters. During the last year, Mr. Stephen has sold a large number that went to different parts in Ontario, Quebec and New Brunswick, and now, having the stock bull, anything in the herd is for sale. Write Mr. Stephen, to Trout River P. O., Quebec.

ST. LOUIS FAIR MANAGER.

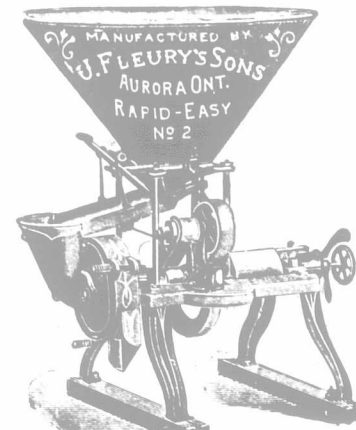
The appointment of Mr. F. D. Coburn, of Kansas, as manager of the live-stock section of the St. Louis Exposition, to be held in 1904, has been announced. Mr. Coburn has been for several years the efficient secretary of the Kansas State Board of Agriculture. He is said to have excellent executive ability, has a thorough knowledge of the needs of stockmen, and will doubtless do good work in his new position. om

NOTICE.

From the Pacific Coast. City of Montreal, Oct. 1, 1897. om

Dear Sir:—I had occasion to use Absolut's... om

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For everyone Farmer, Thresher, Millman, LARGE or SMALL; for ANY POWER, Do MORE work with SAME POWER than any other. om
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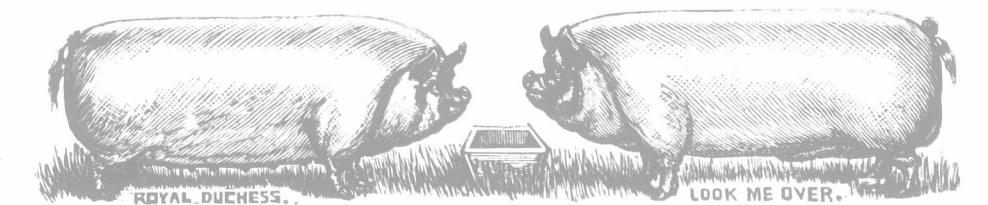
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Our winnings at the large shows, for 1901, are as follows: At Toronto every possible first prize and five seconds, two silver medals, and first for pen of pure bred bacon hogs, also sweepstakes on bacon hogs over all breeds; at London every possible first but two; while at the Pan-American, where our herd was divided, half going to Toronto, we won six out of ten possible firsts, also sweepstakes on bacon yearlings. At the Pan-American (Buffalo), Toronto and London there were thirty-six first premiums and medals given; all the medals and every first prize but six won by the Summer Hill Yorkshires. When in need of the best write **D. C. FLATT & SON, MILLGROVE, ONT.** Telephone: Millgrove, Ont.

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My brood sows are imported or show animals, and the sires are big, long fellows of the bacon type. For sale: An excellent lot of young pigs, and a few young sows recently bred. Can supply pairs not akin. Enquiries promptly answered. Vine station, G. T. R.—near Barrie. **Jno. Lahmer, Vine, Ont.**

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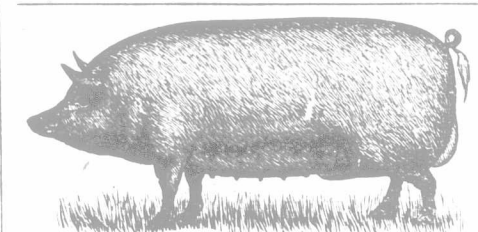
Two-year-old Berkshire boar and several spring boars at special prices. Choice young sows, bred to farrow in April; also Short-horn calves, Shropshires, and Barred Rocks. om
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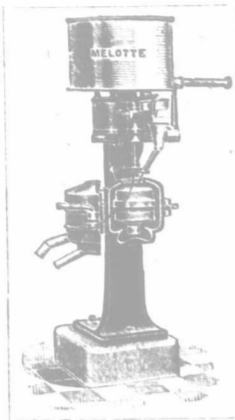
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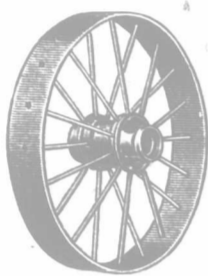


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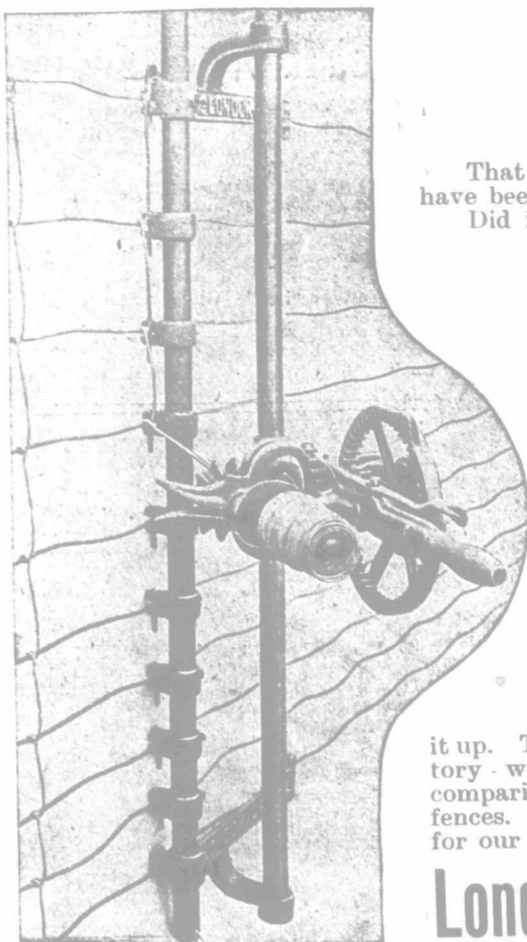
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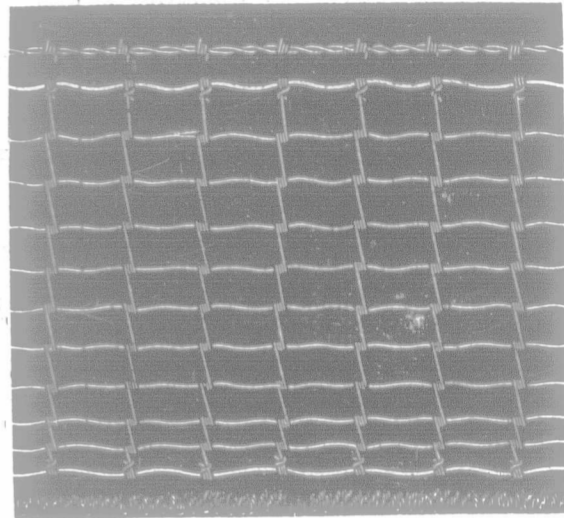


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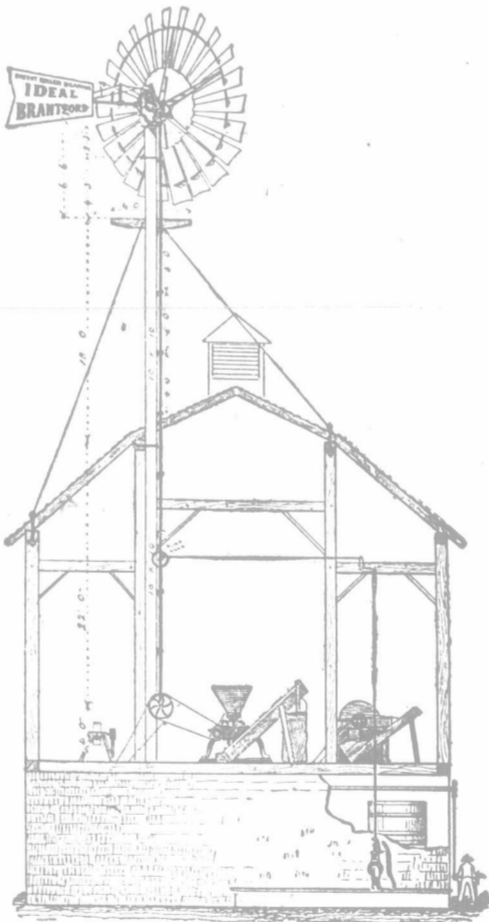
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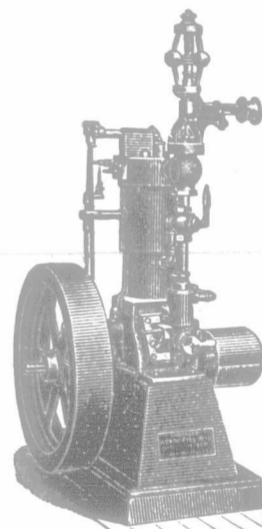
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