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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE AND SUCCEED
FOUNDED 1866

* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE.*

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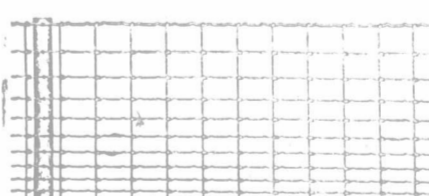
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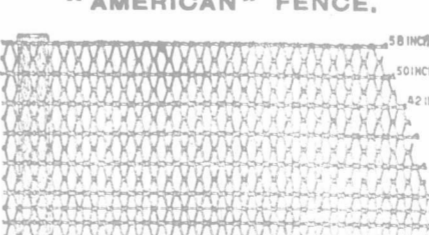


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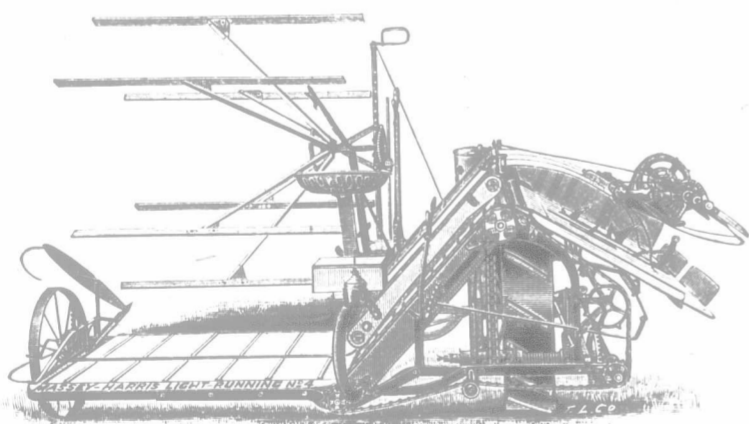


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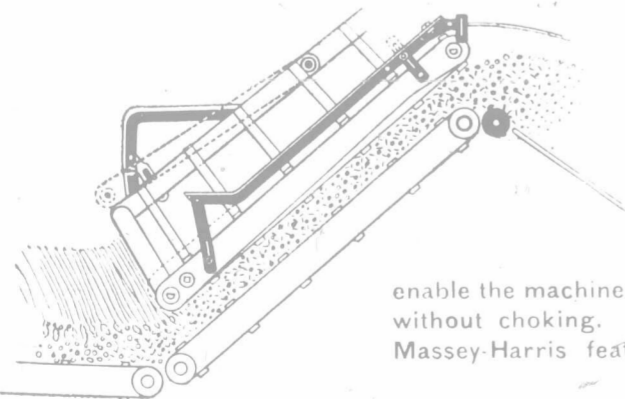
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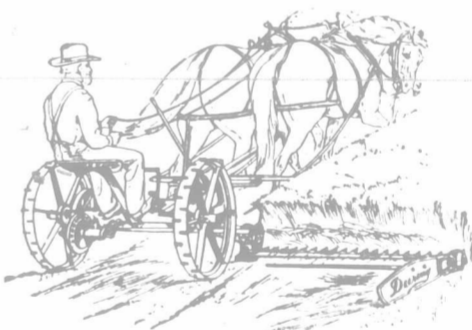
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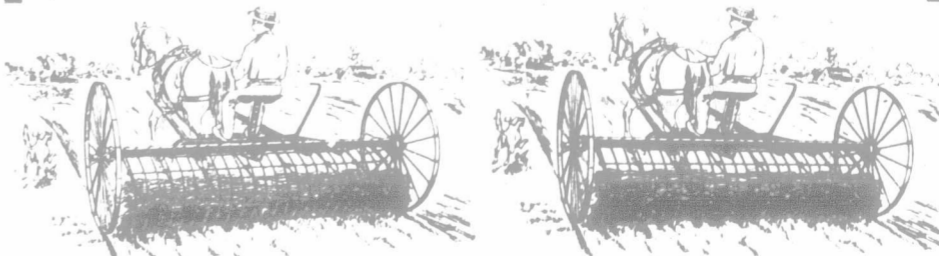
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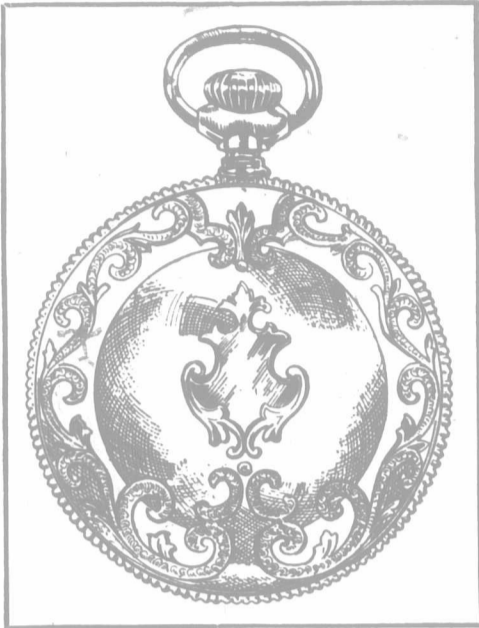
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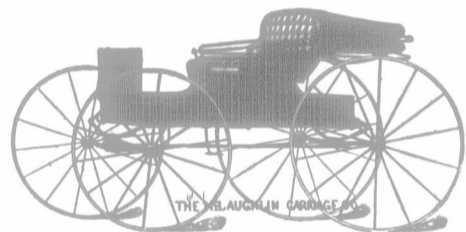
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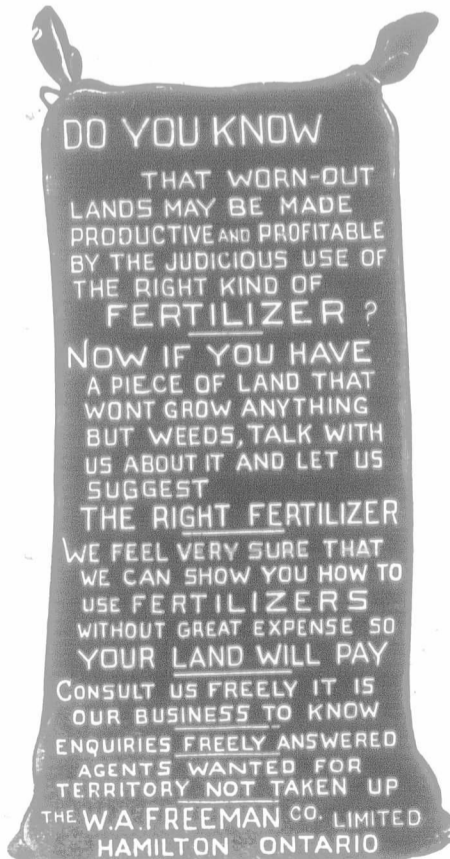
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My remedy does that, even in the most difficult, obstinate cases. No matter how impossible this seems to you, I know it and I take the risk.

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Mild cases, not chronic, are often cured by one or two bottles. At all druggists'.

The "Coming" and the "Gathering" of Butter.

Churn, churn, churn for hours, and the butter will not come, and at last when it does come it will not gather. Oh, the work, and the worry, and the trouble is all in the feed. In June, when nature feeds the cows, things are different. There is no trouble then about slow-coming or slow-gathering butter. The air is full of the aroma of sweet plant life, and the young grass is tender and sweet to the taste. Nature furnished a perfect food that is perfectly assimilated, and with perfect assimilation the animal functions work to perfection, and a perfect milk is the result. We cannot have June grass and sweet-smelling herbs in winter, but we have (for practical purposes) a perfect substitute in Herbageum. When fed regularly every day, Herbageum supplies the pure aromatic qualities of a June pasture, and thus insures the thorough assimilation of the dry, odorless winter food, and with thorough assimilation there is no difficulty about the "coming" or the "gathering" of butter.

This matter has been tested by many, and from among many reports we give the following:
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 "I find that when I feed Herbageum to my milch cows during the winter the cream separates better from the milk, and the butter separates more quickly from the cream, and I can churn in at least one-third of the time." Mrs. Michael Fitzpatrick, Osceola, Ont.

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Farmer's Advocate

"PERSEVERE AND SUCCEED." and Home Magazine.

ESTABLISHED 1866.

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

VOL. XXXVIII.

LONDON, ONT., AND WINNIPEG, MAN., FEBRUARY 16, 1903.

No. 568

EDITORIAL.

Railway Regulation and the Farmer.

[Written for the "Farmer's Advocate."]

The general movement for improved railway regulation, which has led to the organization of the Railway Commission in England, and to the various commissions to be found in the United States, has not, in its outcome, by any means, accomplished all that was anticipated. But while the commissions have not solved all the difficulties which called them into existence, any careful investigation of the evidence will substantiate the conclusion that they have done much to better the conditions. The central question in all matters of regulative policy turns on the matter of railway rates. No hard and fast criterion of the reasonableness of a rate can be referred to. Rate systems based entirely upon the distance principle, or upon the cost principle, fail because they do not take into consideration other essential factors. A rate is essentially a compromise. In dealing with the regulation of the arrangements arising out of such compromises, it is but natural that difficulties should have arisen. Then again, in the work of the commissions, certain difficulties have arisen because of weaknesses and defects in the laws from which they obtained their origin; the question has been further complicated by the lack of any clear line of demarcation in regard to the relationships between the commissions and the judicial bodies which, in the last resort, have to pass upon their decisions. The detail concerned with these matters may be found in my reports to the Department of Railways and Canals. Reference is made to these matters here simply to indicate that some of the admitted defects in the commission system and its working have been attributable to difficulties in the problem itself; others to lack of clear statements in the enacting laws themselves.

The transportation problem is the problem of most urgent interest in Canada to-day. To state this should be but a truism, which should be part of the ready change of current Canadian thought. The transportation problem has its general and its particular aspects. Canada is at present in its empire-building stage. The development desired depends upon a harmonious organization of the transportation system. As trade stands in Canada to-day, only one-half of the total value of exports is attributable to products connected with the farm. The prices of Canada's agricultural products are determined in the world market, and it has to face there the competition of other countries. To put the matter in the shape of a concrete example, much attention is being devoted to the expansion of wheat production in the Northwest; and for years the settlement of the Northwest will be bound up with the exploitation of its grain-producing powers. One of the competitors Canada has to face is the Argentine Republic. The wheat production of that country, while it is not great as compared with that of the United States, shows such signs of increase as warrant the statement it will have a steadily increasing effect upon the world value of wheat. In point of railway transportation, Argentina is well supplied—much better supplied, proportionately, than Canada. With one-third of the land area of Canada, it has sixty per cent. of the railway mileage of Canada. Although the ocean carriage from Argentina to Europe is long, at the same time the greater part of the wheat-producing

area is situated not more than 150 miles from tide water. In consequence, the wheat has the advantage of a short rail haul, and at the same time, while it has the disadvantage of a longer ocean journey than Canadian wheat, it goes forward at low ocean rates.

The discussion with reference to railway regulation in Canada has been occupying the public attention for nearly thirty years. In the period succeeding Confederation, the earliest project for the more effective control of railways is contained in the bill introduced in 1873 by a representative of agricultural interests, Mr. Oliver, of Oxford County, Ontario. This bill provided for equal mileage rates. Its aim was to afford better regulation of traffic on railways. Like the contemporary legislation which Mr. Reagan, the father of the Texas Commission, was urging in the United States, this provided for no special tribunal to enforce the provisions of the proposed law. The subsequent history of the movement toward expansion of regulative policy in Canada; the discussion under the leadership of Mr. Dalton McCarthy, in the period 1880-86; the hosts of petitions which poured in from the counties of Ontario in favor of the law, which he modelled upon the English Railway Commission legislation; the report of the Royal Commission; the increasing of the regulative powers of the Railway Committee of the Privy Council, and the more recent movements for more effective regulation, are a part of the history of the regulative movement with which all should be acquainted.

The investigation which, under the direction of the Department of Railways and Canals, was conducted during the summer of 1901, found that the leading grievances existing were concerned with, (1) classification, (2) distributive rates, (3) car lot and less than car lot shipments, (4) excessive rates and discriminations, (5) competitive versus non-competitive rates, (6) American rates and Canadian rates, (7) minimum weights. Of the matters under these headings, that concerned with the relation existing between American rates and Canadian rates is especially complained of by the farmer. The situation of certain portions of Canada is such that nature makes the Canadian railway system an integral portion of the American railway system in regard to the movement of through traffic. Any policy which would deprive the Canadian railway of the right to participate in this traffic would not be to the general interests of Canada. At the same time there should be taken into consideration, as an essential factor in the export rate for the Canadian farmer, the geographical advantage he possesses as compared with his competitor in the Western States.

The argument for a more specialized method of regulation gathers cogency from the fact that the rate question is a compromise and that railway transportation occupies a position different from that of other enterprises. It is the basic industry on which the expansion of industry and the enhancement of values of the products of all industries depend. In its nature it is much more monopolistic than other businesses. Parliament has recognized the futility of endeavoring to regulate the railways through general regulations. It has given up its witless dependence upon the clause of the earlier years of the railway act which gave it power to regulate rates when dividends exceeding fifteen per cent. were earned. It has contented itself with assisting railway enterprise. The movements which transferred the work of regulation to the smaller body, the Rail-

way Committee of the Privy Council, recognized the necessity of having a small body to deal with the matter of regulation. But although the Railway Committee has been by no means the useless body that some discussion would claim, and although it, and its presiding officer, has been especially active in connection with matters of regulation during the past six years, at the same time the political tenure of its members, and the quality of function possessed by them, places obstacles in the way of their dealing successfully with the matter of regulation. The arguments for regulation are so well established that there is no need for dealing with this phase of the question; it is the matter of how the regulation should take place that is important. The members of the Railway Committee have not the opportunity to obtain the specialized information which is necessary. With the expanding railway system of Canada, a need of regulative policy based on consecutive policy is necessary.

In the older days equity was measured by the length of the Lord Chancellor's foot. In Canada the regulative policy has depended upon the Minister of Railways and Canals for the time being. To cite one example of the importance of specialized information: Is the Canadian farmer subjected to unfair competition because of the way in which the Canadian railway arranges the rates on his product, as compared with the rates given his American competitor? Can this be determined without adequate information with reference to the facts in dispute, which would entail inquiries precluded by the engrossing political duties of the Railway Committee? This question and the many others difficult—some impossible of solution—demand the constant regulative attention of a tribunal whose members shall be fitted by technical equipment and non-political tenure to deal with the matter.

One thing that must be constantly borne in mind is that, though a railway commission, with the proper powers and judiciously manned, will undoubtedly be of benefit, at the same time it is futile to hope that it will create such a condition that everybody will be satisfied. The matter of rate regulation is a matter of compromises, and it is as essential to keep in sight the rights of the railway as it is to pay attention to the rights of the shippers. It was after a searching investigation by the Cullom Committee that the act to regulate commerce was enacted and the Interstate Commerce Commission was appointed. The wise words with which this committee closed its report will bear constant iteration: "That a problem of such magnitude, importance and intricacy can be summarily solved by any master stroke of legislation is beyond the bounds of reasonable belief. That a satisfactory solution of the problem can ever be secured without the aid of wise legislation the committee does not believe."

S. J. McLEAN.

Leland Stanford University, California, January 22nd, 1903.

[Editorial Note.—Prof. McLean, author of the foregoing, was born in Simcoe County, Ont., Canada, in 1871, and graduated from Toronto University in 1894; pursued graduate studies in economics in Toronto, Columbia and Chicago Universities until 1897, when he received the Ph. D. degree from the latter. From 1897 to 1902 he was Professor of Economics and Sociology in Arkansas University. He specialized in transportation, and has contributed articles on this subject to leading reviews and magazines. In 1899

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

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he made a report to the Canadian Minister of Railways and Canals on railway commissions in England and the United States, and in 1901 acted as a Special Commissioner on railway rate grievances. At present he is Associate Professor of Economics, and head of the department of Economics and Social Science in the Leland Stanford (Jr.) University, California.]

The Veterinary Status.

We must assure our friend, Dr. Allen, V.S., who writes in another column, that the "Farmer's Advocate" has no animus against the veterinary profession, but quite the reverse. We have probably said nothing as outspoken as the President of the Veterinary Association felt called upon to do at the recent annual meeting in Toronto, and it does seem to us that the time has come for a consideration of ways and means for a change in the present system of veterinary education in Canada. In this view we believe we concur with, nor is it any reflection upon, the many progressive and thoroughly informed men who adorn the profession to-day, though certainly not by reason of two-year courses and low educational standards. By various means they have risen above such contingencies. Manitoba has no veterinary college to protect, and has set its standard to guard the interests of the Province against being crowded with men not up to their standard, viz., to be the graduate of a three-year school, to pass the examination of the Veterinary Medical Association, and pay a license fee to practice. We understand the British colleges demand a matriculation equal to that required for medicine, and a four years' course. Most of the United States veterinary schools are now organized with three-year courses, three additional institutions there lately having fallen in line, leaving, we understand, but a couple of schools of any importance under the ban of the American Veterinary Medical Association, which we are glad to welcome in annual convention at Ottawa, the Capital of Canada, on the first four days of next September. That the subject of veterinary standards, education and legislative status will loom large in the discussion of that important body is a foregone conclusion, and we believe, with the Canadian members of the profession who are preparing for the event, that it will have a most beneficent influence.

Railway Taxation.

The thanks of the country are due Mr. H. J. Pettypiece, M.P.P., and the Canadian Magazine, for an informing article on the above subject in the February number. The masses of the people in Canada do not realize the present condition of affairs, which is largely the result of weak legislation and prodigality in public aid to railway construction. Mr. Pettypiece first shows that there is no legitimate objection to taxing railways and that, if anything, they should bear the heavier share of the burden, compared with other properties. But what is the fact? The Grand Trunk Railway in the Province of Ontario represents a capital of over \$241,000,000, assessed at \$6,525,504, or 2½ per cent. of the capital, and pays only \$134,624 taxes. Provincial and municipal, or 50 cents on every \$1,000 of capital. The farm wealth of Ontario is represented by \$1,000,000,000 capital, assessed at \$450,000,000, or 45 per cent., and pays \$4,621,803 in taxes, or \$4.62 on every \$1,000 of capital. Therefore, \$1,000 worth of G.T.R. property is assessed at \$27.50, and pays 56 cents in taxes, while \$1,000 worth of farm property is assessed at \$450, and pays \$4.62 in taxes!

It is also shown that the rate of taxation in Canada is far below what is levied in other countries. Take the G.T.R. from Chicago to Portland: The 510 miles in the States pays annually \$200,000 taxes, or \$400 per mile, while the 628 miles in Canada pay only \$31,400, or \$50 per mile. At the same time the rates charged for hauling Canadian products are far higher than the rates on United States products.

The net earnings of United States railways in 1900 was \$1,180 per mile, and of Canadian roads \$1,212, so our roads are able to pay taxes.

The people of Canada have practically built the railways, through the aid given by the Dominion and Provincial Governments and the municipalities as follows:

Cash subsidies and bonuses.....	\$225,000,000
Loans and subscriptions	27,000,000
Land—52,000,000 acres at \$2.00	
per acre	104,000,000
Lines already built	35,000,000
Total	\$391,000,000

Canada has some 18,500 miles of railways. Leaving out the 1,500 miles of Government railways, the subsidies amount to nearly \$19,000 per mile, which in many cases would have built the roads. On top of these immense subsidies the railways are paid annually by the country \$1,350,000 for carrying the mails. The interest charge on subsidies, loans, etc., amounts to \$9,000,000 annually. Why should they not pay their fair share of the taxes?

On top of these immense subsidies the railways are paid annually by the country \$1,350,000 for carrying the mails. Why should they not pay their fair share of the taxes?

WHAT SHOULD BE PAID.

The total railway wealth of Canada represents a capital of \$1,043,000,000, and pays less than \$500,000 in taxes, or less than one-half of one mill on the dollar. If the railways merely paid a fair share of taxation on the capital donated to them by the people, the revenue from that source would amount to over \$6,000,000 annually.

If the Indiana law were in force in Canada, the railways would pay in taxes at least \$7,600,000 annually.

If the Connecticut law were placed in operation in Canada, the annual tax on the railways would be over \$10,000,000.

If the Wisconsin act were applied here, the amount would be \$2,920,000.

If the railways here paid the average U. S. rate of \$255 per mile, the total would be \$4,845,000.

If the G.T.R. paid the same rate in taxes in Ontario as it did last year in Michigan, \$507 per mile, the total would be \$1,345,071, instead of the comparatively insignificant sum of \$134,624, which is now paid by that corporation. And, besides, both passenger and freight rates are lower in Michigan than in Ontario.

OTHER DISCRIMINATIONS.

But even this does not complete the list of discriminating inequalities which exist between Ontario and Michigan. In Michigan the railways are operated under the control of a State Commissioner, and have to provide suitable cattle-guards at all crossings, maintain watchmen at town and village crossings, keep farm crossings in repair, construct culverts across their tracks for public and private drains, and in other ways give due consideration to the welfare of the general public. In Ontario the public welfare is the last consideration—or rather, it is not taken into consideration at all. Level and dangerous crossings are left without cattle-guards or watchmen; drainage laws are a dead letter, and a railway can, and often does, block the drainage system of a whole township, while farmers have no rights in the matter; there are no regulations regarding speed and time of trains; cars are sometimes sup-

plied when they are needed, and sometimes they are not; and the excessive rates are a burden on many lines of business.

The respective conditions which obtain in Ontario and Michigan will be found to exist generally in Canada and the United States, and the question may well be asked in respect to Canada: "Does the country own the railways, or do the railways own the country?"

The Live Stock Outlook.

That a steadily-increasing interest is being taken by Canadian farmers in the improvement of live stock is shown by the unusually large attendance at the annual meetings of the Breeders' Associations recently held, reports of which appear on other pages in this issue. Nearly all of these societies are in a flourishing condition financially, and all show a rapidly increasing number of registrations of animals in their records, with an active demand from buyers of the better class for both the home trade and for export.

The horse business is especially active, owing to the scarcity of good animals and the strong demand which is not likely to be soon supplied. Heavy draft horses are being sought after for the British market, for city work, lumber camps, and for the farms of the Northwest, which will require a very large number to supply the great number of settlers coming from Europe and the States, and all indications point to a continued keen demand and strong prices. The sale of stallions, stimulated by the known scarcity of young stock in the country, has been, and promises to be, extraordinarily active. Importations are still being made in considerable numbers, and generally of a very good class of horses. That they cannot be too good, goes without saying, and the fact that our farmers are more generally than ever becoming fair judges of horses, serves to remind importers that only really good stallions will meet with sale or patronage at paying prices. Not only are draft and work horses wanted, but the best class of animals suitable for the saddle and carriage are bringing exceptionally high prices and are scarce.

Cattle of all breeds are finding ready sale at good prices. The recent sales of pure-breds of the beef breeds show a strong demand at well sustained prices, while the dairy breeds are being sold privately at good figures, and most of the breeders have sold short, especially of females, though in both beef and dairy breeds there are many useful young bulls available at moderate prices, and these should be secured by the farmers for the improvement of their herds. Good dairy cows of all classes will be in keen demand this spring at high prices.

The steady demand throughout the past year for hogs, and the well-sustained paying prices, has kept up the demand for breeding stock. In almost all the breeds there has been a good business done. The large attendance at the Swine Breeders' meeting at Toronto last month, of representatives of the various breeds, showed clearly that no one breed has anything like a monopoly of the trade, and that it is more a question of type with the farmers than of breed, the old standard breeds being improved to meet the requirements of the markets, and being yet popular with well-informed people who do their own thinking and follow no fads.

The sheep trade, the only one of the classes of farm stock that has been suffering from slow demand for the last year or two, has a brighter outlook for the future, and will doubtless soon see better days. The sheepmen had their innings when cattle and horses were low, and their turn will come again, perhaps sooner than they think, and now is their opportunity for selection and improvement, so as to be ready for the upward turn of the tide when it comes. No class of stock is more readily improved than sheep, none more cheaply raised, and none more profitable in the course of years, considering the cost of production and keeping.

In the march of live-stock improvement on the farm, poultry should not be overlooked at this season. Generally speaking, probably no stock has been as much neglected as poultry, and yet for the labor and outlay involved none give greater returns under proper conditions. One of the first requisites in thousands of flocks is an infusion of fresh, pure blood, which can readily be obtained nowadays.

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.]

(Third article.)

COURSE OF STUDY

This article will not discuss the place and share in the school course which should be accorded to instruction in religion, morality and civics, but I would not think of suggesting a programme of studies with these left out. If a particular text-book for the children may be indicated as the best, the Bible is, for those subjects, matchless in matter, beauty and strength.

Every child begins life helpless, ignorant and selfish. All experiences which help it out of that state are educational in the right direction. Only subjects, lessons and exercises which lead out the powers of body, mind and spirit towards ability, intelligence and unselfish service are worthy of a place in an educational course.

The methods of instruction should arouse the children to acquire information and power, and as these are gained, should direct them to pursue further studies in science, literature and history. The immediate aim of the course should be to increase the ability of the pupils to think, to observe, to investigate, to understand and to do, all as means towards the formation of good characters and right habits.

It is the duty and privilege of the teachers to guide and train the pupils to apply their new knowledge (very little, it may be, from day to day) to the doing of something which the pupils know to be useful and beautiful. The so-called practical work is what makes the other work, with books and symbols, vital to the children and so ministers to the growth of the one-and-indivisible in their bodies, minds and spirits.

All work in the course should be arranged in such a manner that the difficulties of each part of it may be presented, graduated to suit the ever-growing capacity, intelligence and strength of the learners. Thus progress would be indicated and measured, not so much by quickness of perception and a good memory for names, facts and rules as by habits of thoroughness, truthfulness, accuracy and self-reliance.

All this would not imply that the school course, or curriculum should be burdened with more studies or subjects. On the contrary, by getting rid of some of the formal informational studies from books, in so far as they have been separated from the activities and curiosities natural to children, and judiciously correlating all subjects with practical work, there would be a fair chance for ordinary children to get a really helpful education. All subjects of the school course would have a definite meaning and real value to the children, when taught and studied in constant relation to what they knew and understood to be real in their own lives, their doings and their surroundings. I wish there were a shorter, simpler word than "environment," and then I would use it in saying that such a course of study would lead to ability in overcoming obstacles and in controlling self and environment.

THE READJUSTMENTS.

To what essential part or parts of the present course of study should any new subjects or new methods be adjusted? The notion has been spread by the catchy sounds of "the three R's (reading, 'riting and 'rithmetic)" that these are still the most important parts of an elementary school course. That has done our schools and children much harm. Most errors are done up in catchy or sonorous phrases.

NATURE STUDY SHOULD BE CENTRAL, WITH MANUAL TRAINING AND DOMESTIC ECONOMY ON EITHER SIDE OF IT. These provide for the "three H's in education,"—the training of the Head, the Hands and the Heart into intelligence, ability and unselfish service. These three, Nature Study, Manual Training, and Domestic Economy, are not fads in any sense. They are fundamental to the maintenance of civilization and the upward progress of the individual and the race. We are part of Nature; life itself is sustained by natural processes; therefore, a study of Nature is necessary. We are the tool-using, weapon-using, instrument-using creatures on earth, and Manual Training makes for mental power through those agencies. We seek to make comfortable, happy homes, and science and art in Domestic Economy enlarge our ability to gain and enjoy that chiefest earthly goal.

NATURE STUDY.

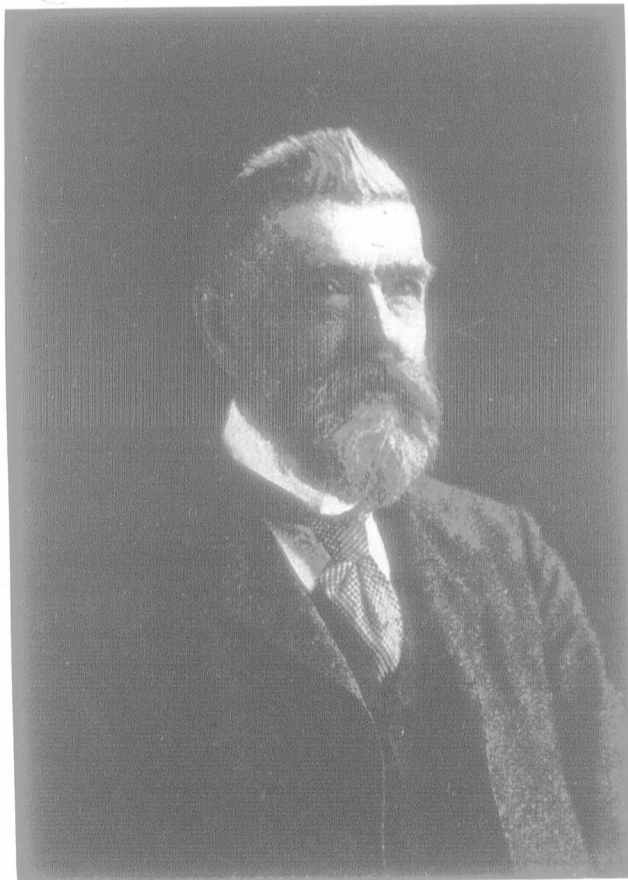
In a recent address in London, Sir George Kekewich, Secretary of the English Education Department, is reported as having said: "The study of Nature is the essence of all true education, and it is somewhat remarkable and not perhaps creditable to our common-sense that we should have failed to fully realize it until the twentieth century."

In the English schools, Nature Study goes under

the name of "Object Lessons on Science" or "General Elementary Science." I hope, however, that it will not be mistaken, in the rural schools of Canada, for the study of elementary science as classified into text-books on Botany, Geology, Physics, Biology or Hygiene.

Nature Study is not for the purpose of acquiring information about soils, plants, animals and inorganic things; it is rather a means of training the personal power of the pupil into a condition of symmetry and maturity, through a knowledge of and sympathy with those things acquired by doing something with them.

Nature Study would not crowd out any essential branch of learning from the common schools, but, on the other hand, it would stimulate an interest in all subjects as the pupil discovered their relationships to his daily life and the world about him. The improvement in the school course is to be made not so much by a change of curriculum as by a change in the methods of treating the various subjects. For instance, let a pupil plant ten grains of wheat in a row, ten grains of Indian corn in another row, ten seeds of potatoes in another row, and ten seeds of clover in another row. Let him pull up one plant of each row every week and find out for himself, under the guidance of a competent teacher, what had happened in the meantime. Further, as far as he was able, let him make drawings of the plot of ground and of the plants, and a written statement of the progress and growth as he was able to observe it from week to week. If then his lessons in reading and in arithmetic should have a direct bearing upon this Nature Study work, would not such a course give an intelligent boy or girl a great amount of exceedingly valuable education?



MR. WILLIAM LINTON.
President-elect of the Dominion Shorthorn Cattle Breeders' Association.

Instances might be multiplied, sufficient to fill the time-table for the whole of the school year. A little reflection would bring these to the mind of every teacher of experience.

Nature Study lessons should follow the seasons of the year. The out-of-doors part of them is not the least valuable. Only in advanced work do chemical or physical apparatus become necessary. A circular issued by the English Board of Education in April, 1900, has the following recommendation: "The teacher should, as occasion offers, take the children out of doors for school walks at the various seasons of the year, and give simple lessons on the spot about animals in the fields and farmyards, about plowing and sowing, about fruit trees and forest trees, about birds, insects and flowers, and other objects of interest. The lessons thus learnt out of doors can be afterwards carried forward in the school-room by reading, composition, pictures and drawing."

In a most excellent paper on "THE VALUE OF NATURE STUDY IN EDUCATION," read by James Fletcher, LL. D., before the Royal Society of Canada in May, 1901, he stated:

"Objects for study abound without stint in all places and at all seasons of the year—spring, summer, autumn or winter, it is all the same—for Nature itself is the book, and every commonest object inside the school and out is a text for a sermon—the very wood of the school-room floor, of the desks or the furniture, the chalk used on the blackboard, even the speck of dust floating in the sunbeam, the light itself; outside, the drop of rain, the flake of snow, a stick, a straw, a stone, a fallen leaf, a twig of any tree, a winter bud or a piece of bark, a bird, a beetle or a butterfly, a frog, a snake, or even a toad. Every-

thing is worthy of study from many points of view, and has a multitude of mental uses and direct lessons to teach."

"The scope of Nature Study should as much as possible be confined to the simple elements of knowledge. It should not be taught to the scholar by the teacher, but studied by the teacher with the scholar; the teacher merely using his or her superior knowledge and experience in directing and encouraging the scholars to strive to learn for themselves from and of all things which come before them; in a word, to be self-dependent and not to trust too much to what they find in books written by others, but to examine and consider everything for themselves."

(To be continued.)

Our Scottish Letter.

BRITISH-CANADIAN UNITY.

Since my return from Canada on 1st Jan., I have been kept exceedingly busy, and have had little leisure to devote to correspondence. I am, however, in arrears to your readers, and send this off somewhat hurriedly, so that you may not think I have altogether forgotten you.

Canada has a great future, and the impression on my mind is that Great Britain will need to realize this more than she hitherto has done. The intense loyalty of the Canadians to the British flag is a national asset of which the most should be made. Two reasons appear to me to demand closer attention to Canada on this side of the ocean. The necessity for maintaining an all-British road to the East is the first, and the necessity of maintaining an all-British source of food supply is the second. In times of peace the world jogs along all right, and everybody wants to sell to Great Britain. But in a time of war it might be the highest form of strategy to starve out the people of this tight little island. Doubtless the British navy could keep the seas clear for the transit of British food, but it might pay Britain's enemies not to send their surplus goods this way. Canada can feed Great Britain's millions for many a year to come. She should be encouraged to do so, and it will pay British statesmen to foster the Canadian sentiment of loyalty and forward this great cause in every way. At present you have a big handicap in the monopoly of one line to the Northwest. I heard some extraordinary stories about the charges for interior traffic on the C.P.R. If they be true, or half true, the sooner you have another trans-continental competing route the better.

The situation regarding the food supply of Great Britain is quite intelligible. The population of this country is so great that even were its agricultural possibilities developed to the fullest degree there would still be abundant room for Canadian produce. Under no conditions could we feed our population. Consequently, the British farmer, being at the door of the best market in the world, ought always to be able to hold his own and have the best price for his produce. It is true that he cannot profess to have this at present. To the average mortal it is an astonishing fact that there are square miles of derelict land within thirty miles of the City of London. But this is due to a variety of causes, quite apart from the question of proximity to market. If there was not a superabundance of food coming from abroad, that land would soon be under cultivation. It would be under cultivation now were the conditions of land and tithe-tenure here such as admitted of its free cultivation. Again, it must be remembered that here we have a demand for land for other than agricultural purposes. The trend of things at present creates the impression that the Highlands of Scotland are to be converted into one huge sporting run. There is no way of hindering this transformation while conditions remain as at present. But in a time of national stress and difficulty many things would be altered and the end would be a vast upheaval in the conditions upon which land is here held. If the British farmer keeps in the front so far as quality is concerned, he does not need to fear any foreign competitor. He is at the door of the market, if only his stuff be the finest. After he has done his level best there is abundant room left in this big market for Canada and Britain's other dependencies. It is right to encourage these and not the strangers to feed us, and in the development of Canada Great Britain has a splendid opportunity for keeping the world at bay and riveting her hold on the Greater Britain across the seas. This she can do by the most enduring bond of mutual economical interest.

SCOTLAND YET.

A great deal is being said about the need of more help on the farm, but what about the kitchen? Has the farmer's wife anything to do? If you don't believe she has, just try to follow in her footsteps some day next summer, and report your conclusions. The fact is, there is not enough effort being made to lighten the work which becomes the duty of the ordinary housewife.

STOCK.

Canada's Beef in Great Britain.

To the Editor "Farmer's Advocate":

After seeing our beef cattle at the ranch, the wharf and the lairages, the market is the court of last resort. Smithfield is the great dead-meat market of London. To see it at its best necessitates an early morning visit, the bulk of the business being done between six and eight a.m. Canadian is neither a common nor popular name with which to brand beef in this market. Opportunity is afforded to make comparisons between British, Canadian and States carcasses, in which Canadians take third place. Hung up, it requires no trained expert to see glaring faults. The side from the Canadian bullock is thin over the loin and over the foreribs, and tapers off at the haunch or ham. The flesh of the Canadian is paler and lacks the brightness in color possessed by its rivals. This paleness is a constant feature, so I was informed by the dealers, who also state that the Canadian carcass does not cut up as well as the American. At one stall the salesmen state that occasionally they get a Canadian carcass as good as any, which goes to show that it is quite possible for the Canadian beef-grower to put just as good an article on the market as anybody else.

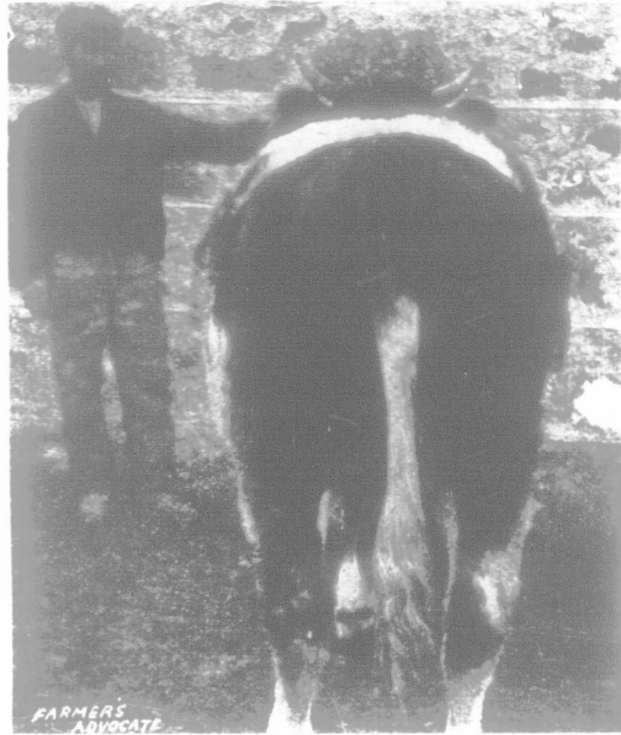
The editor of the Meat Trades Journal, a man thoroughly in touch with the meat markets of Great Britain, says: "London is the best market in the world for the best stuff. Housekeepers find that good beef is more economical to buy than inferior quality stuff; there is less waste!" The merits and demerits of Canadian beef came up for discussion and elicited from him the opinion that Canadian bullocks had three main faults, lack of finish, poorly bred and were too old; fortunately, all faults that the beef-grower at home can remedy. He expects beef to go higher, and drew attention to the price of rumps and loins to the trade, 7s. to 7s. 4d. per stone (8 lbs.), or 21 to 22 cents a pound wholesale. In the Smithfield market Canadian beef is hard to find; lots of American and Danish beef was to be seen, carrying the labels of the meat inspectors of those countries. Armour and Swift are the hieroglyphics stencilled on innumerable boxes, and those names speak volumes as to the trend of the beef trade. Canadian beef, being inferior, is consumed at other British markets where the highest quality meat is not called for. The Meat Trades man tells me it is impossible to make a \$1.00 out of Irish stores, and a Glasgow commission man attributes that to the prevalence of Galloway blood in those stores, which he says accounts for the slow maturing tendency and lack of quality in the Hibernian.

At Islington is London's big live cattle market, called the Metropolitan Cattle Market, yet one does not find the best stuff there. The north countrymen ship carcasses now, beef trains being run every night on the trunk lines, the L. & N. W., the Midland and Great Northern.

At Islington one may meet with men up in all phases of the meat trade, and in conversation with a leading commission man I got the same verdict pronounced against the Canadian bullock—lack of finish! Those three words have been quoted so often as to be rapidly becoming tiresome to both reader and writer, and yet, in heart-to-heart talks, only cold facts and the unvarnished truth are of any value. We have no cause in Canada to pat ourselves on the back over our beef production. The commission man just mentioned, does not consider it possible to land grass-fed stuff, after the long journey by rail and boat, in anything like the finish that grain-fed stuff is, and the sooner grass-fed stuff stops coming, the better for the Canadian reputation. In order to retain what finish the grass-fed animal has, it should be tightened up with grain, before shipping. As every cattleman knows, grass is a very loosening diet; in England bullocks finishing on the grass are fed cotton cake to tighten them up and prevent them losing ground. The solely grass-fed carcass is watery, and does not weigh out with the grain-fed carcass of the same size. I am informed that taking two average sides of Canadian and States bullocks, appearing to be equal in size, the latter will outweigh the former, often two stones (16 lbs.). One reason for the butchers' preference, and the cause, the States bullock is grain finished.

Compared with the United States, our beef trade is a one-horse concern, with neither credit nor profit to producer, dealer nor consumer. A complaint made against some Canadian carcasses is the yellowness of the flesh, which may be due to the dairy ancestry of some of these cattle. This idea is borne out by the fact that such carcasses are from brindle cattle, or others bearing the hall-marking of dairy sires. The Canadian grain-fed steer, if a good one, is often prepared during June, July, August; to the States beast, the Caruck's carcass is less oily, keeps better in muggy (close, damp, hot) weather. The variety of grains fed, as compared with the corn diet of the Yankee, may account for this. A complaint once soundly heard is that cows and heifers arrive

at the lairages in calf, some calving on arrival; such means total loss of the dam and calf, because all cattle have to be slaughtered at the lairages within ten days after arrival there. If cows are far advanced in pregnancy, they are condemned, and rightly so, by the meat inspectors. Volumes might be written on the beef trade, yet only a few important things need to be ob-



A STRONG BACK.

The kind the Britisher wants. Fed for Smithfield by Jno. Turner, Cairnton, England.

served to give us a large share of the Briton's cash meat bill:

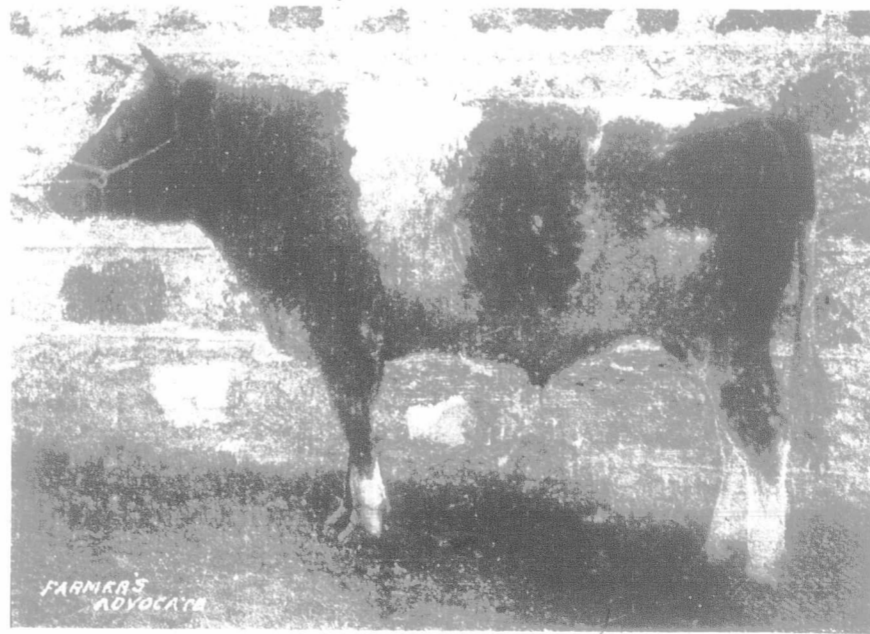
1st. The use of pure-bred bulls of the beef breeds only, and those bulls to be of the early maturing, heavy fleshing sort, with short faces, prominent eyes, well-filled neck veins, plump briskets, broad chests, and a spring of forerib that makes a back of equal width all through, thickly covered, straight back and loins, square rumps, carrying the meat to the hocks.

2nd. The growth of the bullock must suffer no hindrance from calthood to maturity.

3rd. The bullock must be finished, not marketed half fat; "bacon hog standards do not apply to beef cattle!"

4th. The paying bullock will be the table-backed sort, well filled in the twist and breeches, and with a thick, even covering of mellow flesh, quite half way down the ribs. NOMAD.

During the present coal famine, those are indeed well-off who have the satisfaction of burning fuel that was deeply-rooted on their own property not long ago, and better still will be their feeling, provided a fair supply yet remains to bud in the spring and later on have the sporting winds of summer play with the leaves while storing up additional heat-producing matter or some future cold spell.



A USEFUL TYPE.

A Smithfield competitor that will dress a high percentage of valuable meat.

It is often necessary to economize while feeding stock in order to make the returns profitable, yet this does not apply to underfeeding, but rather to feeding without waste and having the animals comfortable, so that the largest gains can be realized at a minimum of cost.

A Veterinary Breeze.

To the Editor "Farmer's Advocate":

Sir,—On looking over old numbers of your much appreciated journal, I find in July 15th (1901) number an article entitled "Veterinary Education and Meat Inspection." Whilst I appreciate the many good qualities of the "Farmer's Advocate," I do most emphatically object to your everlasting digs at veterinarians. What have they been doing to you?

In the article referred to, you write of the great work that is being done in the United States by the Bureau of Animal Industry, especially in re meat inspection, and it is certainly a great work. You then go on and state that "Meat inspection cannot be introduced in Canada owing to the deficient education imparted to veterinary students in our colleges." You further state, "Canadian graduates, in order to be allowed to practice in Manitoba or in the better States of the United States, are obliged to go to some veterinary college to receive finishing touches." In the first place, Ontario graduates are prevented from practicing in Manitoba on, I believe, the same ground that M. D. graduates are objected to. It is merely "home protection," in favor of their own colleges. In regard to going to the United States, I am proud to be able to inform you that many of the leading practitioners in that great country are graduates from Canadian colleges. Yes, and many of them are professors in their best schools. Still further, a large number of their meat inspectors are Canadian graduates, and especially of the O.V.C. I could mention the names of scores of them. It is also a fact that in the list of names mentioned for promotion from time to time, the Canadian graduates stand well up in the lists, and as a consequence are now receiving the highest remunerations. Even "Poor old Prof. Dick's boys" are enjoying similar success in the same work.

You object to a two years' course. So do I. You might also advocate a higher matriculation. Notwithstanding this, I maintain that for good sound, practical training, our colleges are not surpassed by any others. Why is the Ontario Veterinary College patronized by such a large number of fine young men from the United States? Young men of wealth and refinement. How many M.D.'s know anything worth mentioning about microscopical work or bacteriology? Many do not know the post of a microscope from the pillar. These subjects are principally obtained by postgraduate courses.

The general staff of the United States Meat Inspectors are not called upon to do microscopical work. Such work is performed by a separate staff of specialists.

You also give the veterinarians hard knocks in regard to the tuberculin test. Some of the remarks in editorials and communications in the "Farmer's Advocate" do not, to say the least, show good taste. The long, wrathful communications from breeders, speak plainly and tell us that there are many pure-bred herds that are affected with tuberculosis. Breeders who have not the disease in their herds, as a general thing, do not become wrathful and foam about the test; they simply look on and smile at those who are less fortunate, and say that it is not their fight.

Since writing the above I have received the last number of the "Farmer's Advocate," in which I find an editorial headed, "Raise the Veterinary Standard." Now, whilst I am fully in accord with the greater portion of the article, I, and I am sure many veterinarians in Ontario who are striving earnestly to keep up with the times, reading the latest and best literature on veterinary science, even the "Farmer's Advocate," feel deeply the uncalculated slurs that you fire at us—poor little Vets.—with your big pompom.

After referring to the outbreak of foot-and-mouth disease in the New England States, you go on and state, "We see how our whole export live stock industry might be imperilled, and perhaps for years lost without an efficient veterinary staff in Canada," and further on you write, "Who will occupy the places that are soon to be filled?" Surely you will admit, on second thought, that such statements are uncalculated for. Imagine, if you can, the vast amount of injury such statements may be the means of working against the "live-stock export trade," not only in England, but also in the United States. If Canada has in the past sent so many Vets. to the United States to fill so many important positions, so surely will a sufficient number of qualified men be found here

to meet any and all emergencies, including meat inspection. Do not class all with the lowest. How would you like if I should class you with very many editors that I have met in the past? I would be very sorry to do so, as I consider that the "Farmer's Advocate" is one of the best if not the best of its kind on this continent.

THOS. A. ALLEN, V.S.

Brockville Co., Ont.

Six Bushels a Day.

Prof. F. R. Marshall, in the Chicago Live Stock Report, writing of a recent visit to Canadian breeders, recites the following account of an incident related to him by Lt.-Col. McCrae, of Guelph, as occurring at a New Brunswick farmers' meeting he attended as a speaker not long ago:

In New Brunswick the audiences insist on speaking of turnips by the barrel, and it was very difficult to make them believe that turnips could be grown and fed in large quantities, until, in an upper county, in the far-off spruce woods, there was a meeting convened in a settlement of Scotch emigrants, who understood and appreciated the cultivation and feeding of turnips. In a crowded hall, the speaker told a story of turnip-feeding, which he had heard from Arthur Johnston, of Greenwood, Ont. Mr. Johnston had visited Aberdeenshire, purchasing Scotch Shorthorns, and at the home of Mr. Campbell, Kinellar, he mentioned to Mr. Campbell that he thought his aged bull, Vermont, was in higher condition than they cared to see useful sires in Canada. Mr. Johnston said, "I think him much too fat." "Fat!" said Mr. Campbell, "Fat! he has had naething all winter, naething but a pickle oat straw, and six bushels neeps (turnips) a day." "Six bushels!" says Mr. Johnston, "Could he eat that?" "Yes," answered Mr. Campbell, "every day." Mr. Johnston took the trouble to visit the byre at feeding time, and saw Vermont get his two bushels three times a day. When this story was told to the New Brunswick audience, a man in the back part of the crowded hall called out, "I think you are wrong, there, sir." "Well," answered the speaker, "I am telling you the story as Mr. Johnston told it to me." "I worked for Mr. Campbell," said the man. "Oh, did you? Did you feed the cattle?" "Yes, but I didn't give them six bushels a day." "How much did you give them?" "Just a barrowful to two." "What were you feeding?" "The steers and heifers fattening for the London market." "How much would they weigh?" "I do not know, perhaps 1,100 or 1,200 pounds." "How old were they?" "About thirty months." "How often did you feed a barrowful?" "Three times a day." "How much was in the barrow?" "I do not know. I think about three bushels." The audience, which had listened to the dialogue with intense interest, now saw the joke, and burst into roars of laughter, for four and a half bushels per head per day to young feeding steers was quite as much in proportion as the six bushels to the 2,500-pound bull.

When Pigs Should be Marketed.

Generally speaking, our hogs are marketed just when the hogs are fit and the prices right. Unfortunately these two conditions do not always exist at the same time, and whether it will pay to keep the hogs for a better market, or let them go at existing prices, is often a "knotty" problem. In this connection a study of the cost of producing a pound of gain in a hog over 200 pounds, as compared with the cost of a pound in a lighter hog, will be of interest.

In Denmark extensive comparative experiments were carried on to determine this point. The results are summarized in the following table from Prof. Henry's work:

	Weight of pigs in lots.		
	1.	2.	3.
Average feed required to produce 100 lbs. gain	75-115 lbs. 437	115-155 lbs. 465	155-195 lbs. 499
Average food required to produce 100 lbs. gain	195-235 lbs. 543	235-275 lbs. 624	275-315 lbs. 639

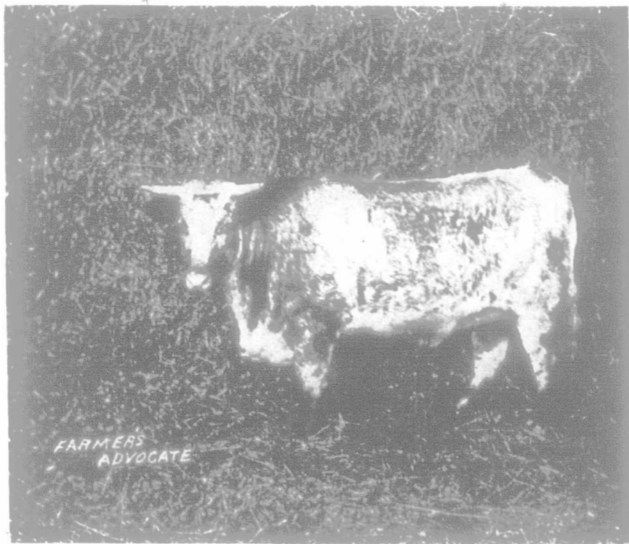
There is noticed throughout a steady increase in the food required to produce a pound of gain, with the increasing weight of the animals. The conclusion we would draw is that where the feed can be fed to light hogs it will in most cases pay to sell the heavier ones as soon as they are fit, or at about 200 pounds, provided the markets did not promise an immediate substantial rise.

As land goes up in value, it is up to the farmers to make a better use of each acre than was heretofore necessary. See to it at springtime that a little better preparation is given when preparing the seed-bed.

Substitute for Milk in Feeding Calves.

To the Editor "Farmer's Advocate":

Doubtless some of your English readers will recollect that about the year 1864 or 1865, a terrible plague, or rinderpest, broke out amongst the cattle in England, which was of such a virulent and deadly nature that treatment was quite



VICTORIA.

Shorthorn heifer as seen at Hillside Farm, property of Mr. L. Burnett, Greenbank, Ont., the home of Imp. Count Sarcasm. Bred by Mr. Duthie.

useless once a beast was attacked, the consequence being that very few cattle were left alive in the country, but in the Sister Isle (Ireland) there was fortunately no outbreak, and Irish cattle took a jump to more than double their former price.

Before this calve, especially males of common stock, were not considered valuable enough to justify the trouble of rearing them, and thousands of new-born calves were knocked on the head at birth, but when, owing to scarcity, cattle took a rise in price, people who before destroyed their calves turned their attention to rearing them, and to discovering a substitute for milk, so that they could sell their milk and rear the calf at the same time. I am aware of several substances being tried, amongst them being clover hay boiled, and the liquor given to the calves. This did fairly well, but the best results were had by using cocoa. Cocoa shells were selling at the time from three to four cents per pound, and many people used it instead of tea or coffee. The treatment of cocoa-shells is alike, whether intended as a human beverage or calf feeding. The process is to put about a quarter of a pound of the shells into a kettle holding about two gallons of water; fill the kettle with water, bring it to a boil, then place it on the back of the stove, where it can simmer for about two hours or longer, then pour off enough for one meal, sweeten with sugar until it is about the same as new milk, then add about

one pint of skimmed milk, or less will do if that much is not to spare. The kettle need not be emptied, indeed it is better not, but put a little more shells into it, and fill the kettle with boiling water, and let it boil and simmer as before, and by this means the calf's feed is always ready.

I experimented with this substance myself a couple of years ago, and I intend to do the same this season. The calf I experimented with was from a good grade Shorthorn cow and a pure-bred Shorthorn bull. It was not on account of the scarcity of milk, but for the purpose of demonstrating to some of my neighbors the benefit of the cocoa. I first procured twenty pounds of shells from the T. Eaton Co., of Toronto, at three cents per pound, and put two large fistfuls into a number nine tin kettle full of water, and treated as above (I may say that I fed the calf on full milk for two weeks), I then drew off enough liquor for one meal, made it as sweet as new milk, and then added one pint of skimmed milk, and when cooled to blood heat fed it to the calf. I continued with this until she began to eat coarse feed and chew her cud, when I began to add a little well-boiled linseed meal. She was never troubled with scours, was always hearty, and was admired by all who saw her, and some people, who did not know how she was fed, thought she was let run with the cow. A neighbor bought her, and some time after, she having her first calf, he decided to go to Manitoba I offered him a good price for the heifer, but he would not sell her.

Mr. F. T. Shutt, the Chemist of the Central Experimental Farm, in his annual report for 1898, in dealing with the subject of cocoa shells, says [For the benefit of those who may not have seen the 1898 report of Experimental Farms, I give Mr. Shutt's report in full]:

COMPOSITION OF COCOA SHELLS.

"This is a waste or by-product from the cocoa and chocolate factory. A sample received from Halifax, N.S., with a request for a report on its feeding value, furnished the following data:

	Per cent.
Moisture	5.12
Albuminoids (flesh-formers)	16.42
Fat	12.92
Carbohydrates, sugar, etc.	45.43
Fiber	13.17
Ash or mineral matter	6.92
Fertilizing constituents—	
Nitrogen	2.63
Phosphoric acid	.98
Potash	2.59

"The analysis makes clear that it contains a high percentage of albuminoids, and is also rich in fat—two of the most important constituents of a feeding stuff, providing it is fairly digestible, a point upon which we have no information, save that cocoa butter or fat is readily assimilated—this refuse material is a concentrated feed of high order. If ground to the condition of fine meal, I am of the opinion that its digestibility would be much increased, and that it would prove serviceable as furnishing a part of the concentrated portion of the ration. The quantity that could safely or profitably be fed per diem would have to be ascertained by actual experiment; probably about two pounds per day, with other meal, would be the limit. Again, it is not known whether it would impart any flavor to the milk or butter produced, but we would not expect to find any, if used in the amount already indicated.

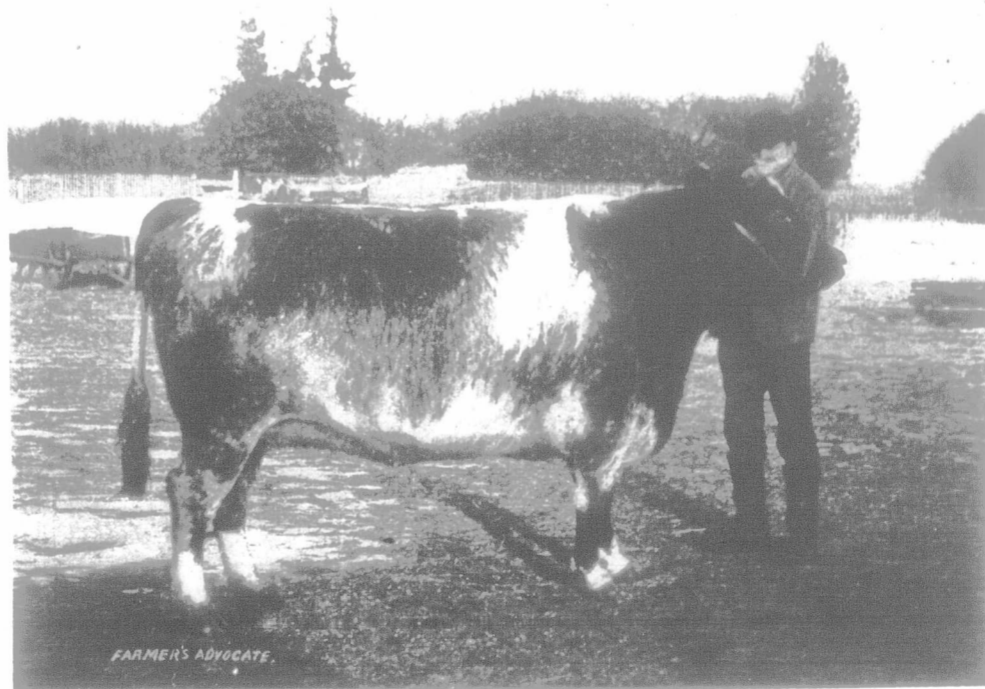
"Attention is directed to the richness of this material in fertilizing constituents, more especially nitrogen and potash. These, for the most part, would be recovered in the solid and liquid excreta of the animals to which it is fed."

The above report, just quoted, will go a long way in proving my contention that a decoction of cocoa is the best substitute for milk to feed to calves. Since Mr. Shutt made the above report I had correspondence with him on this same subject, and I am certain that any one interested writing him will receive more information on the subject. I may say in conclusion, that the 20 pounds of cocoa shells sufficed

to feed the calf until weaning time, with the addition of five pounds linseed meal—or an outlay of eighty five cents.

J. J. SHAIL.

It rains alike on the just and the unjust. But for this blessing we no doubt would have a very dry spell.



NONPAREIL 57TH = 37124=.

Shorthorn cow, sired by Lord Stanley = 17819 =, junior champion, World's Fair, Chicago. BRED AND OWNED BY J. & W. RUSSELL, RICHMOND HILL, ONT. (See Gossip, page 181)

one pint of skimmed milk, or less will do if that much is not to spare. The kettle need not be emptied, indeed it is better not, but put a little more shells into it, and fill the kettle with boiling water, and let it boil and simmer as before, and by this means the calf's feed is always ready. I experimented with this substance myself a couple

Care for the Ewes.

The ewes in the sheep flock which will be due to produce early lambs need a little extra care and feed as the lambing time approaches. If they have not been receiving roots, a moderate supply of these will help to keep up their vigor and health, while a light ration of oats and bran will provide the necessary milk supply, as well as give strength to both the ewe and her lamb. If the most of the ewe flock are not likely to lamb near the same time, it may be well to divide the flock and feed more liberally those that are more forward in pregnancy, as those due later may become over-fat if they share in the better feeding. See that all cracks or openings in the walls of the pen which let in cold drafts are closed as the lambing season approaches, and have provision for closing all outer doors at night. A supply of light, low hurdles, about six feet in length, should be provided for making pens in which to confine for a day or two the ewe and her newborn lamb or lambs, so that they may become acquainted. This may not be necessary if the lambs come strong and able to help themselves, but any that are weak or that are neglected by the dam will need some such provision, and especially in the case of twins, which are liable to get separated and one to be disowned by the mother. Confinement in such close quarters, however, should not be continued many days, for exercise is good for both the ewe and the lambs, and the former will feed more contentedly and with less danger of over-eating if faring with the other members of the flock.

The Range Steer.

To the Editor "Farmer's Advocate":

In a recent article your special correspondent in England says: "It should not be forgotten that the Canadian ranger is a grass-fed animal; that he is wild, and that he has a long, rough, harassing railway journey before reaching ship-board." Seeing I was a stockman in the Old Country before I came to Canada, I have concluded that the range animals in Canada's West are reared very similar to the cattle on the hills at home, they only being fed when severe weather or a storm makes it absolutely necessary. At all other times they find their own food, until sold in the fall at two and a half to three years old, to be finished by the grain farmer. I cannot see why Ontario feeders' cannot do the same with our Western stock.

It is, perhaps, worthy of mention in this connection, that a bullock from the old place at home, finished by a grain farmer, took the premium prize at Smithfield some twenty-five years ago. He was a Shorthorn-Galloway grade, and weighed over 3,000 pounds. MITFORD, Cochrane, Alta.

HORSES.

The Spring Stallion Show.

Although projected with considerable timidity, without special building accommodation, and with no precedent for guidance, the Spring Stallion Show was a most successful experiment. Undoubtedly it was the best exhibition of heavy draft stallions ever seen in Canada, and its success is the surest guarantee of greater achievements in the future. The show was held on the



MR. W. E. WELLINGTON, TORONTO.
President Canadian Shire Horse Breeders' Association.

4th, 5th and 6th feet, in Grand's Repository, corner of Simcoe and Nelson streets, Toronto. The stables, offices and judging ring were gratuitously placed at the horsemen's service by the proprietor, Mr. Walter Harland Smith, and to Mr. Smith, more than to any other one man, belongs the credit of the success of the show. For nearly a whole week his business was suspended, and his time and every other consideration devoted to the interests of the exhibitors and spectators. Only by having the use of Grand's Repository could the show have been made so great a success, as no other building in Toronto was available for the purpose.

Speaking for the "Advocate," the judge in all classes, Mr. Joseph Watson, of Lincoln, Nebraska,

said: "For a combination of size and quality, I have never seen this show excelled," and this was the outstanding feature of the show. Although the compact, useful little horse, and the big, rangy fellow were both there, the types were not so strongly marked as at most of the recent shows, and it is evident that the exhibitors, at least, have a proper ideal in mind. In all there were about eighty entries present, the principal exhibitors being: Graham Bros., Morris & Wellington, Toronto; J. B. Hogate, Sarnia; R. Ness, Howick, Que.; Robt. Davies, Toronto; Robt. Beith, M.P., Bowmanville; O. Sorby, Guelph; and Smith & Richardson, Columbus. The judging in all classes was fairly satisfactory, although in many cases the placing was not a fair criterion of value.

In the section for Clydesdale stallions foaled previous to January 1st, 1900, the entries were so numerous that two sections were made of it, the four-year-olds competing alone, and the aged stallions making up a select company of their own. The prize money for this additional class was made up from the unused money in some of the unfilled classes. In the class for aged Clydesdale stallions, Graham Bros. won the red, with Stately City (imp.), by Prince Romeo. He is a very solid horse, with clean, strong legs and good pasterns, and was afterwards awarded sweepstakes over all the Clydes. King's Cross, imp. and shown by Smith & Richardson, sired by Sir Everard, another strong-fronted, clean-limbed horse, with good shoulders and true action, was second. The third place was given to Duke of Cornhill (imp.), sired by Duke of Rothesay, a deep, well-limbed horse, also owned by Smith & Richardson. Mr. Robt. Beith with Prince Priam (imp.), by Prince of Albion, a strong horse, with legs well placed and long pasterns, won next place. J. B. Hogate took fifth with Sir Reginald (imp.), a very active horse, and sixth place went to Laird of Craigie (imp.), a well-put-up horse, solid and not too rangy, with strong legs and good feet, the property of Smith & Richardson. W. J. Squires secured next position, with Sir Oswald, sired by Prince of Scotia.

The four-year-olds were also a large class, very uniform in size and quality. The first place went to Pioneer, by Sir Arthur, a nicely topped horse, well turned and a good mover, owned by Smith & Richardson. In the next two places Mr. Beith was the lucky man. Peveril, sired by The Prior, a good mover, with fine flinty legs, strong pasterns and good feet, was second, and Star of Roses, by King of the Roses, also a horse of great quality and nicely turned, was third. Border Sentinel, by Montrave Sentinel, exhibited by Graham Bros., was fourth. Coynachie, son of Blacon Macgregor, a horse with a good top, well limbed, of the right type and a good actor, took fifth place for Wm. Colquhoun, of Mitchell, and H. Boag, of Churchill, took sixth with Primrose Pride, by the great Baron's Pride, a close coupled, solid horse, combining well scale and quality.

When the three-year-olds were called, fourteen faced the judge, and made up a very good class, although some were small and others too high and narrow, evidently a miss in the effort to secure great size at one master-stroke of breeding. In this class Graham Bros.' newly-imported Cairn-hill, sire Ethiopia, had to go up head. He is a large, rangy black, but well coupled and nicely turned, despite his size, and considering that he just arrived from Scotland four hours before he was shown, his success was the more remarkable. His beautiful combination of size and quality are hard to beat, and he is a model of the best type of the breed he represents. Though not as rangy as Cairn-hill, Cecil, by Macara, shown by Mr. Ness, has fully as much quality, and moves splendidly, and only took second place on account of his lesser size, and he is by no means small. He is certainly a horse of excellent type, and would stand well in high-class company in any country. Lavender, by Glenzier, exhibited by Smith & Richardson, a beautiful actor and nicely put up, with a fair complement of quality, took third station. Fourth place went to Craig Stamp, a sprightly acting, well-limbed horse, of the selling type, shown by Graham Bros. Sorby's Florist took fifth place, and Hugh Semple won sixth with Silver Prince.

Clydesdale stallions foaled in 1901 were a smaller class, only four coming out. The first place was taken by Royal Park (imp.), sire Montrave Mac, a rather solid horse and a good mover, with splendid feet and legs; J. B. Hogate exhibitor. The next three positions were taken by sons of Macqueen [162] (5200). Glenevis, a rangy, neat fellow, with good bone, won second for John A. Turner, of Calgary. Alexander Macqueen, J. W. Cowie's horse, had to take third place, although he had lots of bone and quality, with nice quarters and a very sweet head. Lyon Macqueen, J. H. Millard, Altona, exhibitor, was fourth.

In the class for Canadian-bred Clydesdale and Shire stallions over three years old, eight came out. J. G. Clark's Woodroffe Plowboy, a 2100-pound horse, and a fair mover, went first. Lord Aberdeen, bred and exhibited by Francis Russell, Cedarville, took second. Merriment 2nd, bred by



COFONATION, IMP., [351].

Two-year-old Shire stallion. Winner of first prize and championship, Canadian Spring Stallion Show, Toronto, 1903. IMPORTED AND EXHIBITED BY MORRIS & WELLINGTON, PONTIAC, ONT.

S. C. Bunker, Pickering, a nicely turned, solid horse, third, and Granite Lad, bred by D. Duncan, Hagerman's Corners, and exhibited by W. F. Broad, V.S., Lindsay, was fourth.

In the three-year-old section six competed, and the general excellence was not so pronounced as in some other classes. Pride of Eastfield, bred by A. W. Clemens, and exhibited by Graham Bros., a low horse, but a good mover, with a nicely turned body and quarters, and with good bone, was first choice. Lord Donald, bred by Wm. Rae, St. Paul's, Ont., has heavy quarters, well rounded body, and considerable quality, but is a little short in the pasterns; he took second place. Andrew Annan bred, and Smith & Richardson exhibited, General Gordon, by Baron Gordon, a close coupled horse, with good bone, but might improve a little behind; Mr. Watson placed him third; General Macqueen, by Macqueen, fourth, and Perfection, bred and exhibited by Delly Bennett, Russelton, fifth.

One of the strongest and best classes of the show was the two-year-old Canadian-bred Clydesdale or Shire stallions. It so happened that they were all Clydesdales, and for size and quality few rings could equal them. Robt. Whitson, Atha, bred the winner, Macqueen 2nd, and J. W. Cowie showed him. He is a snug, solid fellow, with thick, neat body and plenty of size and quality. Charming Prince, bred by Hector McCaig, Aberfoyle, and exhibited by O. Sorby, took second place. He has splendid quarters and good quality of bone, moves well and is particularly good to follow. The third prize was captured by Royal Sensation, bred by Jos. Barnett, Victoria Square, and exhibited by Robert Davies. This fellow was the biggest little horse in his class; he is very clean and fine, with a good top and a good movement. MacCarra, sire Macqueen, bred and exhibited by Geo. Davidson & Sons, came fourth; he has very nice limbs and top, with quality galore. D. Carstairs' Prince Pearl was fifth, and J. G. Clark's Arbitrator again got sixth.

The call for the yearlings brought out only three. The first prize went to J. W. Cowie's Macqueen's Best, second to H. Boag on Proud Gordon, and third to Jas. Gostlin on Simon Macgregor.

In the Shire classes the entries were not as numerous as in the Clydesdale sections, but the quality was not lacking. In the class for stallions over three years old, Flagship (imp.), sire Timon, won the red. He is a very gay horse that moves with the style and spirit of a Hackney; he is strong and solid throughout, well muscled and nicely turned. J. J. Anderson, Dominionville, Ont., was the exhibitor. Nateby Monarch 2nd (imp.), sire Tartan 2nd, imported and exhibited by J. B. Hogate, got second money. He is a rangy black, with good limbs and shoulders, and nicely topped. Morris & Wellington won third on George Lennox, by Lennox (imp.), a low, solid horse, with clean limbs, but not of the best market type.

Two entered the ring in the three-year-old class, Bank Statesman winning first for Morris & Wellington, and Vulcan 2nd second, by the same exhibitors.

The honors in the two-year-old class were divided between Morris & Wellington's two newly imported colts, for which they paid the long prices last summer. General Favorite, the first in his class at the Royal and reserve for championship honors, did not appeal so forcibly to Mr. Watson, and his stable companion, Coronation, being a little thicker, was given first place. Both these colts are black with a white stripe and one white hind foot; they are a very valuable addition to the Shire studs of Canada. Coronation was afterwards awarded the sweepstakes of all the Shire classes.

New Book for Horsemen.

Canadian horsemen will remember with pleasure a couple of instructive and entertaining articles published in the "Farmer's Advocate" from the pen of that well-known author of equine literature, Capt. M. H. Hayes, F.R.C.V.S., of England. From his publishers, Messrs. Hurst & Blackett, we have just received a copy of the sixth edition, revised, enlarged, and otherwise improved, of his standard work "Veterinary Notes for Horse Owners." In brief, it is a manual of horse medicine and surgery, written in popular language, a volume of 828 pages, with no less than 267 illustrations. In consequence of the excellence of the paper and typography, it is by no means a cumbersome volume, and it is a fair indication of its practical and popular character, especially in the treatment of ailments, that each successive edition has had an increasing sale, the total number of copies now reaching nearly 19,000. As a horseowner, trainer, rider, traveller, military officer and veterinarian, of good general scholarship, Capt. Hayes was peculiarly well qualified to write this book, which is designed to be of equal benefit to the horseman of ordinary education and to the veterinary surgeon. The work of revision has occupied three years, and in it Capt. Hayes acknowledges many valuable hints and kindly

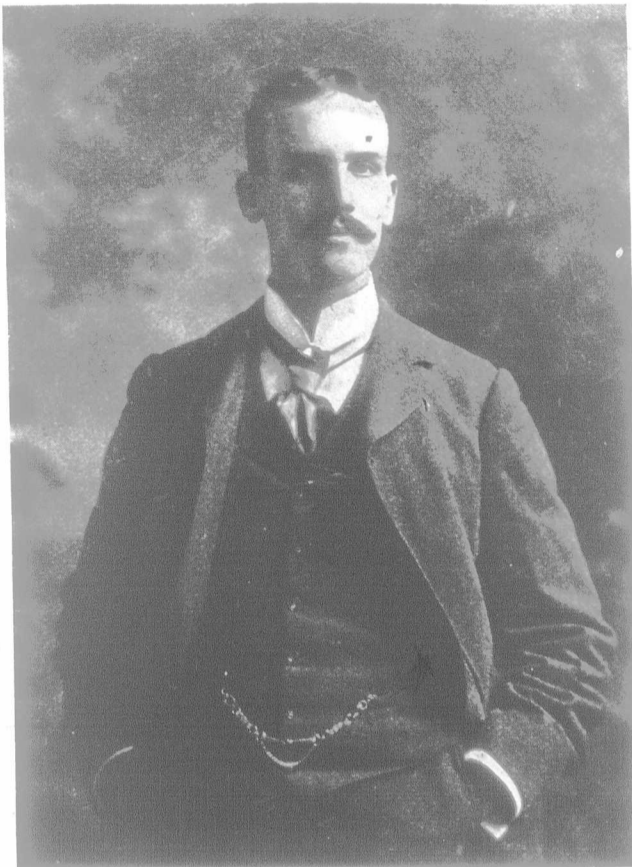
criticism from a number of other eminent authorities. An examination of the book will show that he has succeeded well in the undertaking. The more technical paragraphs for professional readers are given in smaller type. The table of contents and lists of illustrations are alike complete, and will be appreciated by the reader. The closing chapters on soundness and unsoundness, examination for age, dentition and shoeing, ac-

Bone Diseases of Horses' Legs.

The bones of the limbs of horses are subject to a variety of diseases, some of which are liable to cause permanent and in some cases incurable lameness, hence must always be considered an unsoundness, while others are not so serious, seldom or never cause permanent lameness, and in many cases are not considered as constituting unsoundness.

While it is seldom wise for an unprofessional man to attempt treatment in a case of lameness caused by disease of bone, especially where a joint is involved, it is well that all horsemen should understand the nature of such diseases and be able to recognize them when present. In order to be able to appreciate them and understand their nature, a slight knowledge of the structure of bone and its fibrous covering is necessary.

Bone is composed of two modifications of tissue; the external portion, varying in thickness in different parts of the bone, appears hard and compact, and is called the compact tissue; internal to this is a much less dense, somewhat friable tissue, composed of plate-like structure with small spaces, called cancellated tissue. In the long bones of the limbs this tissue surrounds a space called the medullary canal, which contains the marrow. Bones that are known as flat or irregular bones do not contain a medullary canal. All bones are covered with a tough, fibrous membrane, called the periosteum. This membrane does not exist over that portion of a bone that helps to form a joint; at the same time, the surface of one bone does not come in direct contact with that of another in a healthy joint. In order to avoid the friction that this would produce, the opposing surfaces of all bones concerned in joints are clothed with a special covering, called articular cartilage. Each joint is enclosed by sac-like ligament, called the capsular ligament, the internal surface of which is supplied with cells which secrete and supply to the joint for lubrication, a fluid called synovia or joint oil. In the majority of bone diseases, especially those of the joints, inflammation is set up, by concussion or direct injury, in the cancellated tissue of the bone; this extends and involves the compact tissue and the articular cartilage, the latter is destroyed. As a result of the inflammatory process, a soft material, called an exudate, is thrown out; the articular cartilage being destroyed, the bones come in actual contact with each other, and this, with the inflammation present, causes lameness. When this cartilage is destroyed it will never be reproduced. Lameness will continue so long as this condition exists. The exudate spoken of has a tendency to become ossified (converted into bone), thus uniting all the bones involved into one. This process is called ankylosis. When this process is completed inflammation ceases, hence pain is no longer present, and if the joint or part of the



MR. THOMAS A. GRAHAM, CLAREMONT.
President Canadian Hackney Horse Breeders' Association.

companied by so many clear engravings, are not the least valuable of the work; which we can cordially recommend as an addition to the libraries of our horsemen where it may not already have found a place. The price of the volume is \$4.00, and may be ordered through this office.

Mr. A. F. Maclaren, M. P. for North Perth, Ont., comes out in favor of a barn-painting crusade, which in a few years would transform and beautify the appearance of rural Canada.



STATELY CITY [1362] (10466).
Clydesdale stallion. Winner of first prize and championship, Canadian Spring Stallion Show, Toronto, 1903.
IMPORTED AND OWNED BY GRAHAM BROS., CLAREMONT, ONT.

joint affected be not one of extensive motion, lameness disappears, and even a stiffness is not noticed. Nature will, in many cases, effect a cure in this way, but the process is materially assisted by what is called counter-irritation, or producing a superficial irritation by applying blisters or the hot iron (which is called the actual cautery), followed by blistering. This counter-irritation increases the internal inflammation, hastens anchylosis, and, as a consequence, the subsidence of inflammation, and in the majority of cases lameness ceases. Having briefly described the anatomy of the parts and the nature of the disease, without using more technicology than necessary, we will now speak of some of the diseases.

ANCHYLOSIS OF THE KNEE.—This is not of common occurrence, but occasionally met with. Inflammation is set up in some of the bones of the knee; there is, in most cases, no swelling noticed, but the horse goes lame. If severe he will stand with his knee semi-flexed, when in motion he travels quite lame and flexes the knee as little as possible, the lameness increases on exercise and is particularly severe when trotting down hill. Manipulation of the parts causes pain and forcible flexion (by flexion we mean bending so as to fetch the bone of the forearm and that of the cannon as close together as possible) causes acute pain, so much so that the animal will frequently rear off the other leg. After a time a greater or less enlargement will be noticed, at first of rather a doughy feel, but gradually becoming harder as the process of ossification advances. In the meantime anchylosis is taking place, and when these two processes are completed inflammation ceases, and he will no longer go lame, but may go more or less stiff, according to the portion of the joint that is anchylosed. In the knee there are really three articulations. The small bones of the joint consist in seven and sometimes eight, arranged in two rows. The lower end of the large bone of the forearm articulates with the upper surface of the upper row, and here is where the greatest motion exists; in the articulation between the rows of bones there is less motion and in that between the inferior surface of the lower row and the upper ends of the cannon bones still less. The bones concerned in the lower articulation may be completely anchylosed without materially interfering with action. If the middle articulation be involved, stiffness will be noticed, and if the upper articulation, there will be a stiff knee. With a healthy knee it is an easy matter to flex the limb until the heel of the foot touches the point of the elbow; where anchylosis exists this is not possible, and the closeness to this contact will depend upon which articulation is anchylosed.

Treatment for this trouble depends upon the progress the disease has made when treatment commences. If before alteration of structure has

occurred, rest and hot poultices or fomentations, with cooling lotions, as one composed of one ounce each, sulphate of zinc and acetate of lead to a pint of water, will usually succeed in allaying the inflammation and effecting a cure; but if the disease has reached that stage in which the articular cartilage has become destroyed, it is not possible to effect a perfect cure, as this structure



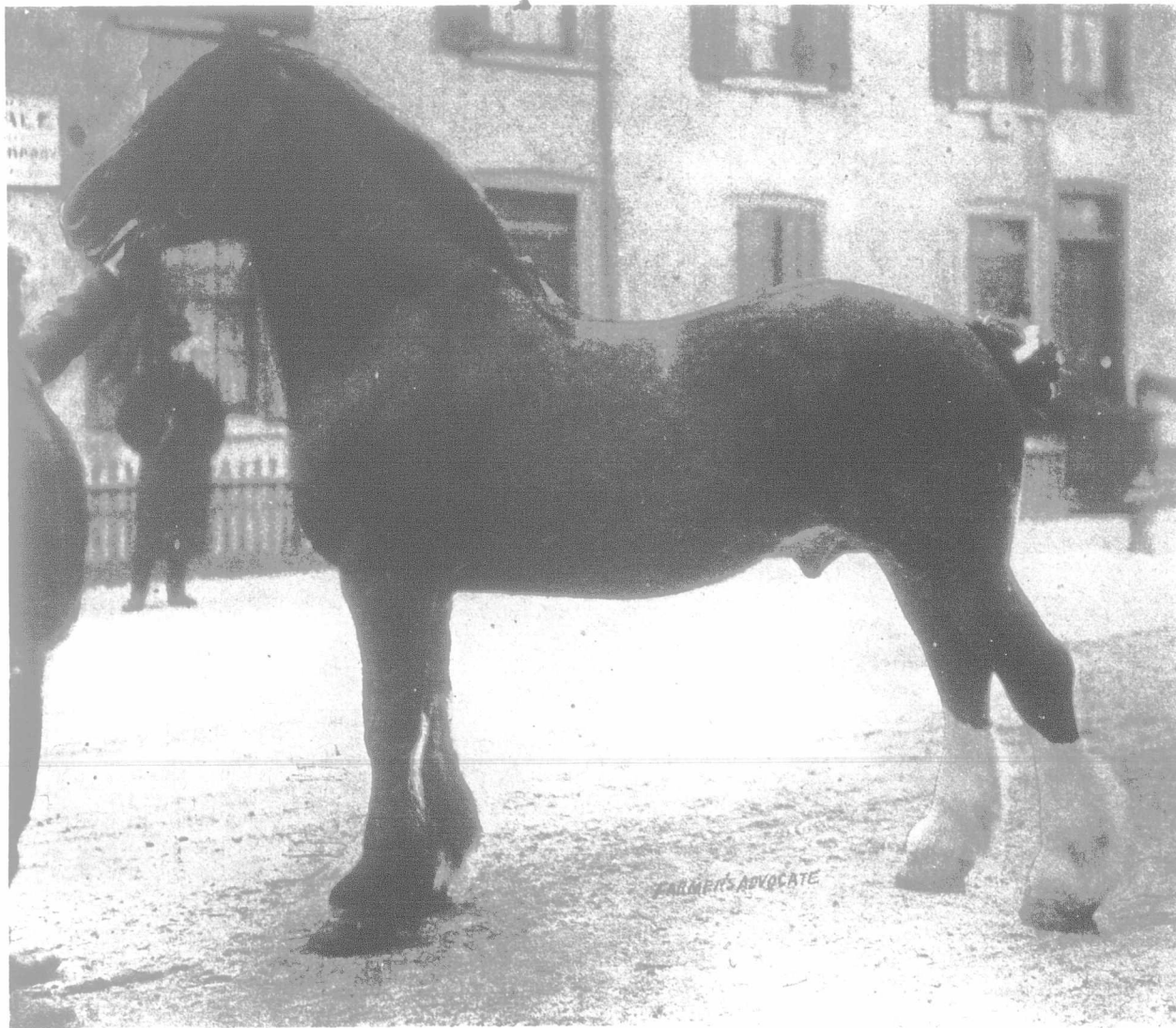
LT.-COL. D. McCRAE, GUELPH.

Presid ent American Cotswold Sheep Breeders' Association.

cannot be reproduced, and treatment must be directed to hasten on the process of anchylosis. This is done by counter-irritation, either by blistering or the actual cautery followed by blistering. The latter is the most satisfactory, but should be employed only by a veterinarian. In the meantime the animal must have rest, else the whole joint may become involved. It is usually necessary to give at least two months perfect rest, longer if possible.

I will speak of other bone diseases in future issues. "WHIP."

Best of all possessions is that grand quality, common sense, and those who can truthfully lay claim to the largest share are the very ones who feel that they have much to learn.



WOODROFFE PLOVER [2296]

First prize Canadian-bred Clydesdale stallion, Canadian Spring Stallion Show, Toronto, 1903. OWNED BY J. G. CLARK, OTTAWA.

FARM.

A Women's College.

To the Editor "Farmer's Advocate":

Sir,—When the idea of a Women's College at Guelph, Ont., as a department of the O. A. C. was accepted, there were several very pessimistic opinions expressed as to the degree of appreciation it would receive. It seems only fair to your paper to say that the response to the article I contributed to your Christmas number, on the "New Education for Women," has been astonishingly sympathetic. Letters have come to me, asking for further information, from the Atlantic to the Pacific. I did not dream that your paper had such a wide circulation.

One lady, a farmer's wife, writes from far away British Columbia, "that article was written for me." The writer had been concerned about the education of her daughters, and anxious that they should not be weaned away from the farm in the process of education, but that life on the farm should be made interesting. The idea of a school where agriculture was treated with the respect it deserves, together with the womanly arts pertaining thereto, was just what was wanted. The letters have all been from farmers' wives and daughters, with an occasional word of encouragement from a farmer's son. The questions asked have proved conclusively that the women living on farms are eager to improve their condition, and realize that they have not had as many opportunities for an education along their special lines as has been afforded to teachers and those engaged in other occupations.

The question has been asked so often, "Why are you so interested in agriculture, and the women on the farms," that I am tempted to make a personal explanation, so that in future I may not be misunderstood. My interest is inherited from generations of agriculturists, and half my life was spent on a farm. So to any of your readers who may think that my views are simply the theoretical musings of a city woman, without any practical knowledge of farm life, I beg to say that never for a day have I lost interest in rural life, and the knowledge of city life has enabled me to make comparisons from actual experience—not always in favor of the city, either. It is quite reasonable to question the views of one who has had no practical experience, and I am glad to have this little confidence exchanged with my readers, whom I trust will receive me as a friend. The curriculum of the New Women's College to be opened at the O. A. C. next September is under consideration, and will be published shortly. It will give a general outline of the courses of study, and it is hoped that a wide demand may be made for it, as the arrangement of studies is such that every one may find something for their special need. Could you not keep a supply at your office for inquiring subscribers?

Thanking your readers for their kind letters of appreciation, which have been too numerous to answer personally, and assuring them that the information they seek will be given in the published circular, which I shall see that they receive, I remain—

ADELAIDE HOODLESS.

[Editor's Note.—We presume copies of the circular referred to may be obtained from Mrs. Hoodless, Hamilton, or Dr. James Mills, O. A. C., Guelph.]

Hulless Barley.

Referring to the enquiry in your January 15th issue, regarding the feeding value of hulless barley, I may say that we have recently completed an analysis of this grain as grown at Grand Prairie, Ducks, B.C. For the purpose of comparison, we add the average composition of ordinary 6-rowed barley, as grown in Ontario—this average being obtained from 20 samples analyzed by us in 1895:

	Hulless Barley.	6-rowed Barley.
Moisture	9.26	11.96
Protein	8.81	10.57
Fat	1.22	2.06
Carbohydrates	77.76	68.90
Fiber	1.09	4.10
Ash	1.86	2.41
	100.00	100.00

From these results it appears that hulless barley is not so rich in protein and fat as 6-rowed barley. We may conclude, therefore, that it is inferior in feeding qualities to the latter. A point, however, in favor of hulless barley—and especially when intended for pig feeding—is that it contains less fiber than the 6-rowed barley.

FRANK T. SHUTT, Chemist.
Dom. Exp. Farms.

Road Making.

The time does seem ripe when more brains should be put into our road-making. Eastern Ontario, by its model road-construction train, has had a great incentive and a valuable object lesson which might with advantage be duplicated in other parts of Ontario, and in other Provinces as well. In addition to the splendid work which Mr. A. W. Campbell, Commissioner of Highways, is carrying on in Ontario, a good roads crusade through the medium of the Farmers' Institutes would be opportunity and of inestimable value. Between now and the time when road-work can be done, we want the readers of the "Farmer's Advocate" to do some solid thinking on the subject. Many municipalities have not been thoroughly awakened.

Thorough drainage is the first essential in building a good road. It is simply impossible to have good roads without it. Grading and gravel largely go for naught when undermined or submerged by water. Get the water away and subsequent efforts will count. Even ordinary clay roads without gravel, where the traffic is not too heavy, can be kept surprisingly good, even in a wet season, when properly drained. We recall such a clay road that last summer, which was very wet in that locality, was a pleasure to travel over. With the sides drained, it was also well graded—the second step in the making of a highway—not too wide and with enough crown to shed the water. After every shower it was somebody's business to scrape the road with a blacksmith-made grader. The weeds and thistles were kept cut and the culverts with large cement tiles were in good condition.

Municipal councils should employ thoroughly competent men to run their grading machines, and put them at work about the last of March or the first of April, or just as soon as the roads begin to dry up. Hitch a traction engine to the grader instead of horses, and keep it going until June; put in tile drains wherever practicable, and then furnish each sideroad or concession with a cheap grader, and have someone appointed to go over the road after rains. The "finishing touch" is to put on a coat of fine gravel—not rocks and boulders, to roll around for years, ruining rigs and horses, and largely nullifying the work of the church on the Sabbath, as far as temper and language are concerned. As a "means of grace," the average Canadian clay road is a desperate failure. It is fearfully and wonderfully made, or else, like Topsy, it is not made at all—simply "grewed up." Then remember this: After a road has been properly constructed it requires some intelligent supervision—it won't maintain itself properly for ever.

Take another case—one of the oldest gravel roads in the country, running from one city to another. For the most part, over a certain five miles of it, the roadbed was 30 or 40 feet wide, and in many places as flat as a pancake, often hollowing in the center, holding pools of water, and the tracks deep trenches of mortar. On several hills we noticed the center of the driveway actually lower than the sides, so that the water ran down in torrents, carrying back into the river the gravel which the contractor had recently been well paid for hauling out. Next year the process will be repeated. In fact, it was a clear case of go-as-you-please municipal perpetual motion, supported by the long-suffering taxpayer for the benefit of the contractor aforesaid. As we passed on, just inside the city corporation, the road reached its climax. At a half-mile of unfathomable ruts and mud, we awarded it, without chance of protest, the sweepstakes as a disgrace to any civilized country, and put up a sign at the end—"Abandon hope all ye who enter here." No alderman or city engineer had ever been seen to venture upon it. He would soon have disappeared for ever, amid the product of his own incompetence.

The work of the road reformer is not yet completed. J. D. T.

Mr. Dooley on Oats as a Food.

Mr. Dooley's latest is a satire on the numerous "breakfast foods" so widely advertised. Invited to breakfast with his friend Joyce, Mr. Dooley is served with something he likens to "Mush, be hovens!" "Says Joyce, 'It's a kind iv scientific oatmeal,' says he. 'Science,' says I, 'has extracted th' meal'.....Somewan discovered that

him as strong as a horse," said Mr. Hennessy. "It ought to," said Mr. Dooley. "Him an' a horse have th' same food."

Study the Weeds.

In the great war against weeds, it is of the utmost importance that farmers become familiar with their distinctive peculiarities as to habits of growth and the general appearance of the plants and their seed, so that they may be able to adopt suitable measures for fighting them.

Like all other plants, weeds are classified according to their length of life, as annuals, biennials and perennials. Annuals, as their name implies, exhaust themselves in a single season. They are of two classes: winter annuals and summer annuals. The first named variety spring up in the fall and live over winter, producing seed early in the summer; while the summer annuals spring up, grow and die during the same season. Biennials, although existing two years, only produce one crop of seed. During the first year they devote their energy to the production of seed-making materials, which are stored up in a fleshy taproot. The second year, the plant develops more fully, matures seed, and dies.

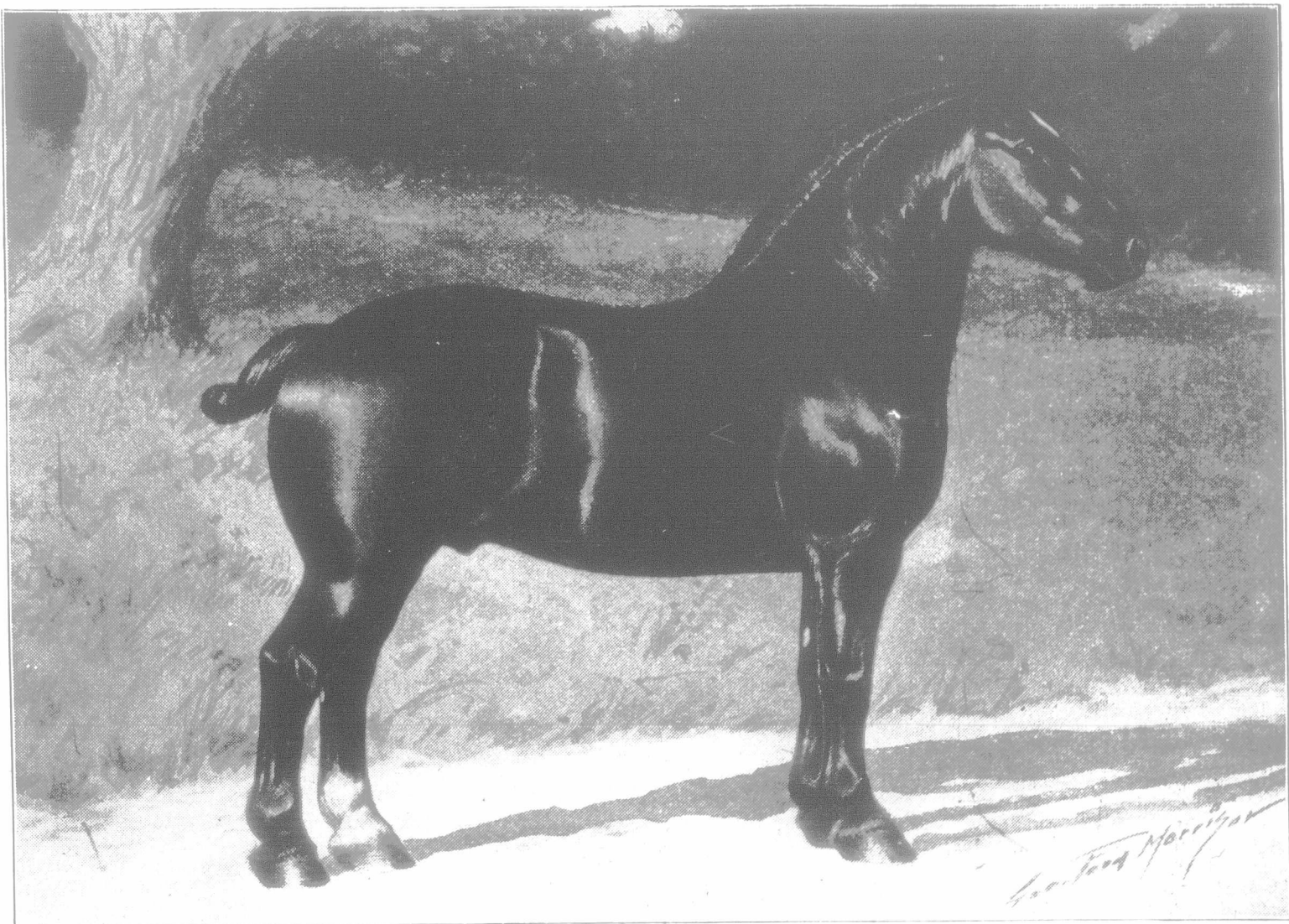
Perennials, like biennials, produce neither flower nor seed the first year. Unlike biennials, however, they yield repeated crops during succeeding seasons. There are two classes of this variety of weeds. One having creeping or underground stems, by which the plant spreads, and another which has an ordinary root, but does not multiply by that means. To this class belong bulbous and taproot perennials. Although a knowledge as to whether the life-history of a weed extends over one, two or more years may be of great value when methods of eradication are being considered, yet it must be remembered that annuals, for example, differ very much in the amount of labor necessary to destroy them. Each weed should be known, and, in this country where they are alarmingly on the increase, an effort should be made to encourage public school pupils to become interested in this work.

Unchangeable politeness is a grand virtue, and although it cannot transform a man into a saint it can so change him that to all whom he meets he may appear a lovely sinner.



MR. R. H. HARDING, THORNDALE.
President Dominion Sheep Breeders' Association.

th' more ye did to oats th' less they tasted, an' that th' less anything tastes th' better food it is for th' race. So all over th' country countless machines is at wurruk removin' th' flavor fr'm oats an' thurnin' thim into breakfast food. Breakfast food is all ye see in th' cars an' th' billboards.....Hogan tol' me he was out in Decatur th' other day an' they was eighty-seven kinds iv oats on th' bill of fare.....People don't have anny throuble with their digestions fr'm atin'. Tis thinkin' makes dyspepsy! worryin' about th' rint is twenty times worse fr' a man's stomach thin plum puddin'. What's worse still is worryin' about dygestion." "Joyce tells me his breakfast food has made



THE PERCHERON STALLION AURORE 29884 (45733).

Prize-Winner at the Show of the Societe Hippique Percheronne, Mortagne, 1902. Imported by Dunham, Fletcher & Coleman, Oaklawn Farm, Wayne, Du Page County, Illinois.

Fuel Problems.

The coal shortage which is being so keenly felt in every town in America has not failed to effect the farmers, although in most places sufficient wood is grown to supply fuel. Even where no direct effects are felt, the situation has been such as to set every thoughtful man pondering on the possible results of another such shortage. The possibility of it occurring again, when we are in a more helpless position, suggests to us that we should begin now to prepare for any emergency. There are three ways in which this preparation may be effected: 1. By the development of Canadian coal mining; 2, by the general adoption of electricity for fuel and light, and 3. by the planting of trees on every foot of rough land.

The first problem, being one for capitalists, does not present itself to the farmers for solution, except that it should be encouraged, but not supported, by legislative measures. Such development will, of course, benefit most those districts contiguous to the coal deposits, and unless the United States chooses to prohibit the exportation of coal, the greater part of our population will continue to use the American product. Unfortunately for Canada, our coal deposits are at either side of the continent, while the greater part of the population is toward the interior. It will, nevertheless, be well to be prepared for further "protective measures" on the part of our neighbors.

The general adoption of electricity is also a problem for the company promoter. This means of heating is certain to be more largely introduced in the near future. It is one of the most feasible of our modern innovations. The power from our many creeks and rivers could comparatively easily be utilized for the generation of heat. In this matter people should have clear ideas, as Township and County Councils are certain to be approached by companies asking for subsidies, bonuses, exemption, protection, etc. The answer which should be given these promoters, is that the day of such bonusing is past, and people are now prepared to give value for value. The inauguration of electrical heating plants should be put upon a purely commercial basis, and be subject to open competition. Neither should municipalities grant exclusive rights to companies contemplating engaging in the operation of electrical systems. By such means the necessity of municipal ownership will be avoided, and at the same time there will be no oppression from monopolies.

In regard to the more general planting of trees, it is noticeable that an increasing sentiment is abroad in favor of active measures for the preservation and propagation of our forests. The most effective improvement to each farmer, however, will be gained by each planting trees upon his own land, wherever such a course is practicable. By all means the rough lands and creek banks should be set with trees, and a more general system of tree planting on roadsides practiced. While we may never again feel as great necessity for wood as exists at present; still, we shall always need a certain amount of timber and lumber about the farm, and there is no better time than the present to begin making preparations for such emergencies.

Dr. J. Orlando Orr.

Dr. J. O. Orr has been unanimously appointed Secretary and Manager of the Toronto Industrial Exhibition, successor to Mr. H. J. Hill, whose retirement was necessitated by continued ill-health. The new manager was born in Vaughan Township, York County, in 1861, being the son of a farmer, Mr. Wm. A. Orr, still living retired in Parkdale, at the age of 84 years. Dr. Orr graduated in medicine in 1883, and has since practiced in Toronto. He entered municipal life as an alderman in 1890, being elected Chairman of the Parks and Exhibition Committee in 1891. He has been 13 years on the Fair Board, three years Chairman of the Finance Committee, and last year Chairman of the Executive Committee, as well as Vice-President of the Board. He has also been actively associated with the development of the Toronto Technical School. Among the agricultural souvenirs in Dr. Orr's possession is a silver medal which he won at a plowing match in his native township at 21 years of age. It is confidently expected that the future of the great Fair will amply justify the wisdom of his appointment for the important position which he now holds.

Cement Tank.

Mr. Wm. Quinton, Thron Co., Ont., tells us he has had in satisfactory use during the past year a round cement tank, out of doors, filled from well by windmill, through one-inch pipe over top. Other tanks are supplied from it. It is nine feet high and twelve feet in diameter, and the walls are ten inches thick, with a bottom three or four inches thick, over stones bedded on the clay. He used five parts sand to one of Portland cement. It was plastered about one-eighth of an inch thick inside, after the wall had dried, with equal parts fine sand and cement, and there has never been any leakage. It stands above ground.

DAIRY.

Dairymen's Meeting at Strathroy.

On January 27th a meeting of dairymen, farmers and ladies interested in dairying and domestic science was held in Strathroy, under the auspices of the Western Dairy School. Among the speakers were Prof. C. C. James, Mr. G. C. Creelman, Mr. Duncan Anderson, Mr. Erland Lee, Mrs. Torrance, and Mr. John Brodie. Mr. Erland Lee discussed the management of the dairy herd, laying particular stress upon the importance of selecting feeds with regard to their chemical composition, in order to minimize the first cost of dairy products. A ration recommended by Mr. Lee consisted of ensilage, red or alfalfa clover, bran, oil cake and oats. By mixing these foods, a nutritive ratio of about one to six could be secured; an ideal ratio for ordinary herds. Equally important to feeding the cows, is careful selection and persistency in breeding to type. Choose a breed, stick to it, and by the constant use of the scales and Babcock test endeavor to select animals possessing the very best dairy characteristics.

Mr. Duncan Anderson took for his subject, "Maintaining Soil Fertility," and the manner in which he impressed the fundamental principles of cultivation upon his hearers was a credit to any speaker. The importance of conserving soil moisture, of retaining fertility on the surface, of adopting a system of rotation, and of caring for manure, was most forcibly brought home to the



DR. J. ORLANDO ORR.
Manager and Secretary of Toronto Industrial Exhibition.

meeting. In the evening Mr. Anderson spoke on "The Farm as an Investment," giving figures to illustrate the relative importance of agricultural products. Instances were cited to show that in farming, the exercise of more brains in conjunction with brawn is essential to success. If farmers would cease comparing their profits of a year's operations with the salaries of their brothers in town, and remember that these profits are over and above their living, which is equal to the townsman's salary there, they would be a more happy and contented class of people.

The address of Mrs. Torrance, on "Fruit in Connection with Domestic Science," demonstrated to the audience that we are not living up to our privileges in the matter of a general use of fruits as a food. The stimulating, medicinal and nutritive values of our staple fruits were explained, and the practice of "preserving" fruits rather than canning them was strongly condemned.

Another meeting with an equally talented list of speakers is promised for the end of February. Although the attendance at the Western Dairy School is hardly as large as last year, still the work of instruction is improved, and the smaller classes receive a more thorough training. Not only dairying, but its associated subjects, bacteriology, veterinary elements, poultry-raising, domestic science, etc., are taught. The equipment of the school is of a high order, all the modern machines being available for the use of the students. Under Superintendent Arch. Smith's regime the equipment has been modernized, the attendance has increased by bounds, domestic science has been introduced, and the school has attained the status that its usefulness warrants.

Paying by Test.

The old question of paying for cheese factory milk by test is revived by the following letter from a Prince Edward County, Ont., subscriber. One strong point urged for the test system is that it removes the incentive to adulteration. On the points raised we also append two letters, from two careful students and practical authorities, which deserve the most careful consideration:

"A problem that bothers the patrons of our cheese factory, and one that we would feel very grateful to you if you would solve for us, is this: 'Is it the proper way to pay for the milk by Babcock test in a cheese factory where half the patrons feed their cows liberally and half feed them nothing—that is, when they can pick up enough to sustain life, and after that only straw or dried cornstalks?' Those that feed their cows contend that they feed a value into their milk which will make better butter and cheese, and by feeding the cows liberally the Babcock test is invariably lower, therefore they are giving the other patrons the benefit of their good feeding, in a better cheese. Those that do not feed, and consequently have a higher test, say 'the higher the test, the more cheese the milk will make, and, therefore, the test is correct,' ignoring entirely the fine points of the other half's contention. If all fed their cows alike the test would give satisfaction. According to Pro. Robertson's suggestion, we have been adding 2% to all the tests, but satisfaction is not reached yet. Prince Edward Island. DAIRYMAN."

I hardly think there is anything in the contention of those patrons who claim that they "feed" value into their milk, which makes better butter and cheese, when they feed their cows liberally, as compared with patrons who do not feed their cows so well. So long as the cows are in a healthy condition, and are giving normal milk, I think for buttermaking the percentage of fat will determine its value better than any other basis which we can accept. For cheesemaking, the percentage of fat, plus 2, we consider to be the fairest and most just method that can be adopted for dividing proceeds among patrons of cheese factories. This is not exactly correct, but it is near enough for all practical purposes, and no injustice is done to patrons who have their milk tested correctly and have two added to represent the caseous or curdy matter. H. H. DEAN, O. A. C. Dairy School.

The question of "Dairymen," "Is the Babcock test the proper method of paying for milk at cheese factories, where some farmers feed well and others do not," is one that has been widely discussed, and very often with the effect of confusing farmers and causing them to lose confidence in the test. My own opinion is that the Babcock test is undoubtedly the best system. It not only stimulates the breeding of cows giving a better quality of milk, but also encourages patrons to care for their milk (by stirring it well), and to deliver it at the factory in better condition. The fact that some farmers feed their cows liberally and others very poorly is no argument against using the test, for those who feed liberally, while not being able to increase the per cent. of fat in the milk, will very materially increase the amount of fat given by the cow, by greatly increasing the quantity of milk. Feeding cows liberally will not improve the quality of the milk for cheesemaking, but simply increase the amount of milk, although it may be argued that in districts where cows are well fed and cared for we find the finest quality of cheese, but this is owing to the fact that the production of milk is the farmer's chief source of revenue. The milk is usually better cared for, and delivered at the factory in better condition. The factories are larger and better equipped, and with better makers in charge. While the cows which are poorly fed may in some cases give richer milk than others which are well fed, we find (as the result of exhaustive experiments) that this is not always the case, and that the ability to give rich or poor milk depends more largely upon the individuality of the cow or breed of cows than on any system of feeding, but at the same time the cow must have plenty of good food and water to convert into milk, with its content of fat and other solids, which are not produced by magic.

The Babcock test is now being used extensively as the basis for paying for milk at cheese factories, and while it may not be an absolute measure of the cheesemaking properties of milk, it is by far the most equitable method of paying for milk, as rich milk will not only make a greater quantity of cheese, but also cheese of finer quality.

In the manufacture of butter, the food given the cows has a more pronounced effect, particularly during the winter months. As cows fed dry, hard food give milk containing a high percentage of white hard fats, which make the butter more difficult to churn and pale in color and of inferior texture, while the feeding of more succulent foods, such as grass, silage, roots, produces milk containing a higher percentage of soft fats, which

give the butter a deeper color and better texture, and which are more easily separated from the milk and churned.

The system of paying for milk according to quality should be encouraged, not only because it is a fair basis and tends to improve the quality of the cheese, but will also encourage the breeding of better dairy cattle.

The system of pooling encourages farmers to breed cattle, giving large quantities of milk, regardless of quality, and that, I think, is one of the reasons why it requires so much milk per pound of cheese at the factories.

I cannot see wherein the farmer who feeds his cows poorly profits by those who feed well. The poor feeder not only loses heavily by not forcing his cows to the limit of their capacity, but his herd will tend to deteriorate instead of improving, while the farmer who feeds liberally, not only receives the greatest possible profit from his cows, but is improving his herd from year to year, which in turn will make his business as a milk-producer and stock-raiser much more profitable.

ARCHIBALD SMITH.

Western Dairy School.

Who Knows?

To the Editor "Farmer's Advocate":

Sir,—The Western Dairymen's Association convention at Brantford was a great success. Good attendance, good addresses, good discussion, good looking fellows. Among other things, we were all lectured well on the supreme importance of always, in the manufacture of cheese and butter, "knowing where we are at" by testing. We heard of alkaline tests, acid tests, curd tests, hot-iron tests, rennet tests, acidimeters, and all the other meters to measure the acid, to measure the temperature, to measure the moisture, etc. It is test—measure—weigh; weigh—measure—test. Never guess at it, don't depend on smell or taste, but measure, weigh and test. No doubt this is of supreme importance, but after we have tested the milk, the cream, the curd, the starter, and weighed the milk, the curd and the salt, and sent the result to an exhibition for a prize, what occurs? After all our weighing, measuring and testing, we have a bit of cheese or butter passed under a nose, and sometimes two or three noses, and a score is chalked up, and we may be in it or out of it, just as it happens. If the final test, weight and measure, is to be a nose—why is not a nose good enough to follow all the way through? Suppose the nose gets a little out of repair, who knows the nose is out of repair? Not likely the owner of it. Or it might get "that tired feeling" before about 300 samples were passed under it in one afternoon.

Prof. Dean said that improvements must be based on "Science and truth." How about the nose? Science; truth? Eh? Science and truth are knocking Messrs. Nose & Co. out. Prof. Robertson stated that experiments made to ascertain the per cent. of moisture in butter proved that "the appearance of butter as sampled affords, generally speaking, no criterion as to its moisture content. Many of those reported as "dry," contained more than the average amount of water, while several returned as "moist" and "very moist," show, on analysis, the lowest percentages."

I think that in all the improvements surely some attention should be devoted to improvement in judging cheese and butter, based on "science and truth." Don't you? TESTER.

Cold Storage Rooms.

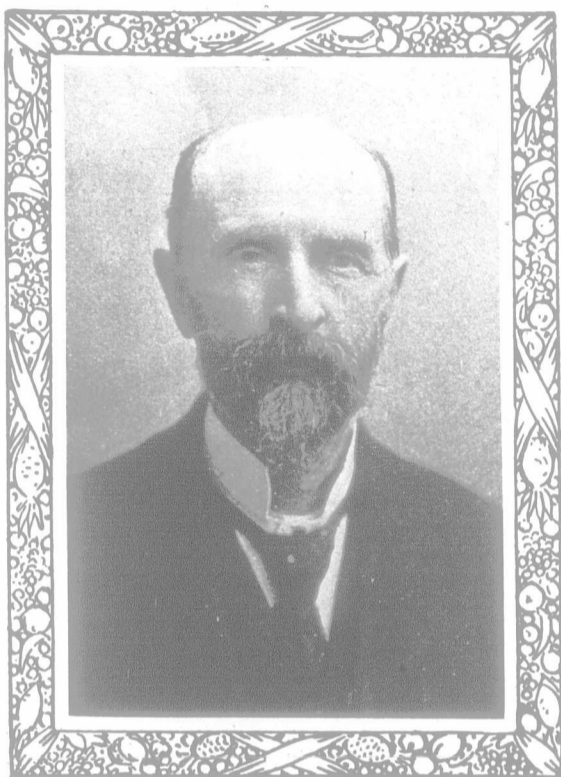
Owners of creameries not provided as yet with a cold-storage room, should avail themselves of the offer of a bonus of \$100 from the Federal Government, and build such a room in accordance with departmental plans. These plans may be obtained on application to the Commissioner of Agriculture, Ottawa. Those whose ice-houses or cold-storage rooms were found defective last season and could not be accepted by the Department, should now carry out the improvements suggested to them, whereby they will be in a position to obtain the bonus at the end of the coming season. To those who are uncertain whether they understand the plans rightly, the Department will gladly send special men who will explain things by word of mouth, and start them on the right lines. A good ice supply and cold-storage room are imperative. The cheese factory also requires them for the curing-room.

New Brunswick Dairy School.

The accompanying engraving gives a good view of the Provincial Dairy School at Sussex, N.B., under the superintendence of Mr. Harvey Mitchell. The creamery course for the present year begins March 8rd, and the cheesemaking course extends from March 24th to April 16th.

Hand Separators vs. Creameries.

Both have their advantages and disadvantages. It seems to me that writers do not get at the kernel of this question. Milk producers are working for profit, and any method that cuts a hole in the profit is faulty. The reason our export butter trade has not kept pace with the cheese



MR. ARTHUR JOHNSTON.
President Dominion Cattle Breeders' Association.

trade is because it is not nearly so profitable to sell butter as it is cheese for export.

For instance, 100 lbs. milk, 3.6% fat, will make about 4½ lbs. butter. If this sells at 20 cents per pound, and the factory takes 3½ cents per pound for making, then milk is worth about 70 cents per 100 pounds. Can milk be produced profitably for that? That depends upon the cow and the method of feeding, etc. The question is not that, however, but is it the most profitable way of disposing of milk? Butter factories cannot begin to pay the price that cheese factories do, except a good value is obtained for the skim milk. When we add to the price of the butter sold 15 to 20 cents per 100 pounds for skim milk, then we come more nearly the value of the milk for making cheese. The profit, then, in butter-making comes through the skim milk, and the method that enables the producer of the milk to realize the most upon it is the best method. Some creameries make skim milk cheese, and the casein thus obtained has become of commercial value enough to realize 17 to 20 cents per 100 pounds for the skim milk. This means making both but-

ter goes to export price. Butter should be 30 cts. per pound now to equal the price of cheese, that is, patrons of cheese factories that draw their own milk are obtaining \$1.15 per 100 pounds of milk. Of course cheese is very high now, but butter is, as a rule, behind the price of cheese, comparatively. Indirectly though, buttermaking can be a great benefit to dairymen, if they will only make the most intelligent use of the skim milk, and raise good calves that will make good cows. Twenty cents per hundred pounds can be realized this way for skim milk, directly, but indirectly it would be hard to place its true value. If instead of cows averaging 3,000 to 4,000 pounds of milk a year, we had cows that would average 6,000 to 8,000 per year, then the patrons' net profit would be at least four times increased; that is, these cows would give fifty per cent. more milk and not cost for feed more than fifteen or twenty per cent. To get a better class of cows they have to be bred and properly raised, and nothing is of more value than good skim milk; not the miserable stuff that creameries generally return to their patrons, which is often run into a dirty, sour tank; and as creameries in winter do not generally run over two or three days a week, if calves were fed from such milk it would necessarily be from three to five days old before it reached the calf's stomach.

It has been said hand separators are bound to increase, owing to the "eloquence" of the agents, but the reason of their increase will be owing to the selfishness and negligence of the creamery operator, who looks more to his own profit than his patrons', and does not try to work for the common good and enable the patron to have his milk returned as good as possible.

Milk should be separated every other day at least in the winter to encourage dairymen to raise calves. The creamery saves the patron much labor, and should obtain a better price for the butter, but just as good or better butter can be made at the home from hand-separator cream, if the operator is skillful and clean. The separation removes many impurities, and the sooner the milk is separated the better.

Hand separators are expensive, and home buttermaking means much work, that must be attended to daily, and is not desirable unless feed is plentiful and skim milk is desired for calf-raising.

It seems to me the best plan for those that desire skim milk for calf-raising, and cannot obtain it good from creameries, is to have a hand separator (not too small) and take their cream to a creamery to be churned. If a patron can't take proper care of this small quantity of cream, he is not likely to take proper care of the larger quantity of milk; and just as good butter should be made from cream separated at home as at the factory, but creameries should not take cream from patrons that have not separators and pool it with cream from separators, as separators purify cream, and better butter can be made from separator cream than from any other.

It may interest readers to know how we do things here at Brookbank creamery. Our separator is run six days a week; it is now of 2,000 pounds per hour capacity. As we have 500 pounds per day during the winter, we start on this and

keep running the milk off as fast as it comes. Some patrons are told to come on certain days, at a certain time; most of the patrons come every other day, but not all the same day. We have very little waiting around in the cold. The milk it weighed in and measured with a yard measure, and skim milk is measured and sufficient deducted for the cream. The milk goes right from the separator to the patrons' cans, and as a patron said the other day, after taking a drink of the skim milk from the separator, "That milk is as sweet as when I brought it." We have now 13 calves on skim milk, and for our own calves we



PROVINCIAL DAIRY SCHOOL AT SUSSEX, N. B.

have to have the milk fresh daily. Our interests are the same as our patrons', and being run on business principles, it is needless to say there are no hand separators near the factory; at the same time, we have churned cream for a patron seven miles away. The cream is well taken care of, brought here every week and churned separately, and the butter is A1, and sells at top price, like that separated here. GEO. RICE.

Oxford Co., Ont.

GARDEN AND ORCHARD.

Plants in Cellar.

To keep plants in the cellar over winter you must keep them free from water, for water has killed more plants than all other causes combined. Especially is this true in the case of the amateur. She longs to carry her plants safely through the winter, and her solicitude leads her to water her treasures, giving a little water here and there where she thinks the soil looks dry or the plants wilted, and occasionally giving a thorough soaking to some particularly dry looking pot or tub. A few days later her anxiety carries her back into the cellar. The plants do not look well, and the watering pot is again brought into requisition. And so it goes on, and gradually her plants droop and die, and more watering does not seem to revive them. Another year she will probably declare that keeping plants in a cellar is a delusion and cannot be accomplished successfully, and she will leave many of her choice specimens in the open ground to be cut down by the frost, whereas—with little care—the cellar may be made to carry through a fine assortment of plants to contribute toward another summer's pleasure. One may often see flourishing beds of flowers in the early spring—long before it was safe to remove plants from a greenhouse—and upon inquiry almost invariably find they came from some thrifty housewife's cellar.—[Country Life in America.]

Spraying.

The fact that the many enemies of our orchards are not being completely checked or destroyed is evidence that we all have not been thoroughly spraying at proper times and in proper places. Spraying has come to be a necessity. It should now be regarded in the light of an insurance against insects and fungous diseases. It is a light outlay of money and time to carry the risk of a ruined crop. The practice is not analogous to treating cattle for lice, but is more of a preventive measure, especially where the apple scab, black-knot, rot and other diseases affect the trees and fruit. Spraying should be practiced by every person who owns a fruit tree. We do not advise every one to invest in apparatus for spraying, but some arrangement should be made whereby all fruit trees would have thorough treatment. Many good orchardists are doing this work at much expense, but are not meeting with the success they deserve, because their neighbors do not practice it and thus maintain a breeding ground for insects and diseases which infest the treated trees. The small orchardist should not excuse himself because of the smallness of his plantation, but every one should feel it his duty to assist in stamping out the orchard pests.

The time to begin this work is right now, if you have San Jose scale or oyster-shell barklouse in your orchard. The latter is practically everywhere, and the former is making rapid development where it is little dreamed of. For the treatment of fungous diseases and insects other than the scales, the time of treatment should begin just before the buds open, and continue at intervals until about the 1st of July. A spraying calendar will be published later, for guidance.

For the scales, the winter treatment with the California wash is now highly recommended on account of its cheapness, effectiveness and ease of application. This wash consists of lime, sulphur and salt of the following proportions: Fifteen pounds of stone lime are slacked in a kettle over a fire; fifteen pounds of sulphur are sifted or stirred in as the lime is slacking; these materials are boiled vigorously until the lime and sulphur are entirely dissolved; fifteen pounds of salt are then put in and all boiled for about a quarter of an hour. Enough hot water is then added to make fifty gallons. The mixture is then sprayed upon the trees while warm. During the month of March, or early April, is perhaps the best time to apply it, and the cost will be about two and a half to three cents per tree.

In many of our spraying operations, poor results are due largely to poor materials and apparatus. It is absolutely necessary that the materials be true to their names and of the best quality. It will not do to use copperas instead of sulphate of copper. The apparatus, too, is of great importance. There is a difference between spraying and sprinkling. Too often we drench the trees until the water runs off. Good spraying consists in simply turning the spray onto every part of the tree for just an instant, under high pressure. When trees are drenched with the insecticide or fungicide the surplus water washes off the chemical, but when they are simply sprayed the chemical remains on the leaf or branch until the moisture vaporizes. The importance of high pressure in spraying is well illustrated by passing the hand through a spray under different pressures. If the spray be under fifty pounds pressure the moisture will gather in large drops and fall off the hand, but if under 100 pounds pressure the hand will be covered with a very thin film which is on a disk, thus leaving the chemical wet and rebounded over the treated surface. In buying a pump for spraying, see that it will give a high pressure and a very fine spray.

POULTRY.

Make the Poultry Pay.

When farm help becomes scarce, and when all other branches of farming are in a prosperous condition, as at the present time, the poultry of the farm are very apt to be neglected. It is felt that there is not much in hens and that they are too small a business to engage attention, and this condition continues, until in a short time poultry-



MR. H. BOLBERT CASSEI, ONT.
President Canadian Holstein-Friesian Breeders' Association.

keeping, from sheer neglect of the many, becomes immensely profitable to the few. This condition is all very well for these few, but why should the many neglect their poultry? It is true that compared with a cow or a horse a hen is of very little value, but to have a constant supply of fresh eggs and dressed poultry is one of the things that adds very much to the comfort of farm life. Porridge, ham and eggs and toast make one of the best breakfasts that can be served, but without the eggs it lacks its best ingredient. Do not neglect the hens this spring, but make all arrangements now to lessen the work of caring for them in the busy season. Have the house cleaned up, cull the flock, renovate the nests, whitewash the house, and get the hens started to lay now, so that there will be early cockerels for the table and early pullets for next year's work. And when the hens are laying do not barter the eggs off for other kinds of food; there is nothing more wholesome or cheaper than good fresh eggs. A member



FARMER'S ADVOCATE

TIDY ABBEKIRK 1492.

Record, 505 lbs. 15 ozs. milk, 20 lbs. 15.51 ozs. butter, in 7 days.
HOLSTEIN COW, BRED AND OWNED BY MR. H. BOLBERT CASSEI, ONT.

of the Farmers' Institute staff of lecturers recently said: "Do not leave the small affairs of the farm to rush into something big, but carry on the small branches of farming just as assiduously as the larger, for in these the profits increase in greater proportion to the work required. Last year I asked my girls to keep a strict set of accounts with the hens for a whole year, and they surprised us with a balance in favor of each hen of 90 cents, after labor and feed had been credited.

ed." But in this case the money return was not the only recompense for the expenditure, for market values of poultry and eggs do not represent their true worth when fresh upon the farmer's table. There is something in the business, "dig it out."

Buy a Good Male.

There seems to be a great move in the poultry business, even among the farmers that have always considered a hen beneath their notice. Prices are up all round on poultry, and many farmers are beginning to open their eyes and are looking up some pure-breds. Some want eggs, some want birds. Some of these people are so far off in judgment that if asked more than fifty cents for a cockerel weighing ten pounds, they run away with the idea that the breeder is stuck either on himself or his birds. Good birds, where they stand in the yard, are worth for meat sixty cents. Some farmers have realized eight cents per pound by shipping to leading cities, and those that go in for fattening do much better. I have known persons to go to a breeder, buy his best cockerels, and to make it easy for themselves, wish to leave them for a while, say a week, a month. In one way this may seem all right to the buyer, but what about the breeder that must sell to a beginner at a small figure in order to do business at all, and keep the fowls in his flock, a hindrance to him in selling to the next customer, who must have the best in the yard or none, as the first party demands.

A careful breeder will go early, select good birds, pay for them and take them away, that there may be no danger of their being sold again, or any other mistake happening. Breeders of all kinds of stock should be paid for their painstaking and expense, and pure-bred fowls that are fit for breeders are surely worth more than market price. Let those looking for improved stock ask themselves the question how can a breeder pay from \$2 to \$15 for a stock bird and sell to others at less than prices on the market with the feathers all off? Let us all do a little to build a reputation for Canadian poultry, and the prices will soon be better for all. Do not let us be afraid of paying an extra ten cents or a dollar for a good cockerel. He is half the breeding pen. Perth Co., Ont. FARMER LITTLE.

Poor Layers -- Incubators.

I have twenty-four hens and about fifteen pullets, mostly Plymouth Rocks. They are housed in a moderately warm place; not so warm but what it freezes hard during a cold time. I give them a warm mash in the morning, composed of ground barley and bran; later, a mixture of barley and peas and oats whole, and either potato peelings or raw turnips, water slightly warmed, but I cannot get them to produce eggs. Can you explain why they will not lay, and what I can do towards making them lay?

2. Can you please tell me how to make an incubator?

R. R. W.

Stanstead Co., Que.
1. Give them all the sunlight possible; the fresh air will not hurt them. Provide them with grit and dust. Put some chaff in the house for them to work in. If you have milk give them some of it. Keep the place clean of droppings and filth. Do not crowd them; hens do best in small flocks of from ten to fifteen birds. Select the eggs for hatching from the best layers, and so breed a laying strain.

2. You could not make a satisfactory incubator as cheaply as you could buy one. The regulator

is a delicate piece of mechanism, which must be carefully adjusted, and can not be arranged perfectly by a novice.

The name and P. O. address on a post card will bring a sample copy of the "Farmer's Advocate," free to your friend or neighbor who would appreciate and be helped by a really first class agricultural paper.

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.]

MAMMITS.

Cow's udder swells and remains swollen for a few days, and as soon as the swelling disappears the milk will have lumps in it for two or three weeks.

York Co., Ont. N. K.
 Ans.—The repeated attacks of inflammation of the udder without apparent cause indicate tubercular disease of the gland. You had better have her tested with tuberculin, and if she reacts destroy her, as if she has this disease the milk is not fit for food. The lumps are the result of the inflammation. Treatment consists in purging with 2 lbs. Epsom salts and 1 oz. ginger, feeding lightly, and following up with 2-dr. doses nitrate of potash three times daily. Apply hot poultices to the udder. Change three times daily, and milk each time. Also rub well with camphorated oil.

INDUCING OESTRUM IN COWS.

I have a Shorthorn bull which I have been using the last two years, and intend selling in July. My cows are all to calve before the 15th of June. I always let the calves suck all but four cows, which milk and make butter for the house. Kindly let me know through your paper how I would get all my cows with calf before the first of July, 1903? Last year some of my cows did not come in heat till two months after calving.

SUBSCRIBER.

Quebec.
 Ans.—Cows that are nursing calves do not, as a rule, come in heat as soon after calving as those that are milked by hand. It is not unusual for cows suckling their calves to go two months before coming in season. The only treatment we can suggest to bring them in season earlier is liberal feeding, keeping the calves separate from the cows, allowing them to nurse only twice a day after they are a month old. Weaning the calf from the cow, and feeding it by hand, would probably hasten matters; or two calves could be nursed by one cow that is in calf. This would call for generous feeding of both cow and calf.

VARIOUS AILMENTS.

1. I had 22 pigs, weighing about 100 pounds each, fed on turnips, mangels and sugar beets, pulped together, and peas, oats and barley chop. One morning 11 of them were restless, sometimes sitting on their haunches, moving sideways with fore legs, foaming at their mouths and grinding their teeth. They would rise, push their heads against the pen for perhaps an hour, then roll over and kick. In four days they died.

2. For lice on cattle I clipped their backs and applied crude petroleum. This killed them. Is it injurious?

3. Give treatment for ringworm?

4. A yearling colt has small lump on the seat of spavin. Would it be wise to blister it?

Bruce Co., Ont. T. R.
 Ans.—1. Your pigs died from cerebral apoplexy, due to too high feeding and want of exercise. Regular exercise and less chop would have prevented the trouble. Treatment consists in purging with, say, four ounces Epsom salts, light feeding, and the application of cold water or pounded ice to the head. Good practice to slit an ear to allow some blood to escape.

2. So long as the application does not injure the skin it is not injurious. Mixing with sweet oil or linseed oil lessens the irritability.

3. Soften scales with sweet oil, remove and apply tincture of iodine.

4. If the colt does not show lameness leave it alone, if it becomes lame get your veterinarian to treat.

MUD FEVER.

1. Three-year-old Clyde colt has something like scratches. His legs are cracked from the heels up; he bites and irritates them.

2. How will I treat my hogpen, which is infested with vermin?

SUBSCRIBER.

Stormont Co., Ont.
 Ans.—1. Your colt has mud fever, which is really scratches extending up the limb. Heavy horses with beefy legs and coarse hair are predisposed to this trouble. Give him a purgative of nine drams aloes and two drams ginger, follow up with two ounces Fowler's solution of arsenic, night and morning, given as a drench in half pint cold water. Apply the following lotion to the limbs three times daily: Sulphate of zinc and acetate of lead, of each one ounce, carbolic acid one dram, water one pint. Do not wash the legs.
 2. Whitewash it, or spray with kerosene emulsion, coal oil or a ten per cent. solution of carbolic acid.

UNTHRIFTY MARE.

Six-year-old mare is in poor condition; hide-bound, hair dry and starey. Was fed on ear corn and timothy hay; eats very little hay, refused to eat the corn. I gave her whole oats, then boiled oats. She is driven a little occasionally, and sometimes stands two or three days.

E. S.

Brant Co., Ont.
 Ans.—It is probable your mare's teeth require dressing. This is often the case, even with young horses, and if so she will do no good until you have it attended to. Give her a purgative of eight drams aloes and two drams ginger, follow up with one dram each, sulphate of iron and gentian, twice daily. Feed hay of good quality and crushed oats, give a carrot or a turnip once daily, and a feed of bran twice weekly. Give regular exercise, and gradually increase the grain ration as her appetite improves, but at no time give more at a meal than she will eat heartily.

LAME HORSE.

My four-year-old horse pulled his right shoulder out of joint about three months ago. He is still lame.

SUBSCRIBER.

New Westminster, B.C.
 Ans.—You are mistaken about the condition. The shoulder joint is not dislocated, if so he would not be able to move the limb at all. Dislocation of this joint is very seldom met with. He has probably sprained the muscles of the shoulder and requires a long rest and repeated blistering. Blister in the same manner as is advised for curb in this issue. If there is a veterinarian near you, you had better let him see the horse, as it is impossible for me to make a correct diagnosis from the symptoms given.

ABORTION.

One morning I noticed my heifer straining. This continued at intervals until noon the next day, when she aborted.

1. Could anything have been done to prevent the accident?

2. Would it be advisable to breed her again at once, and how would you treat to prevent a recurrence of the accident?

W. A.

Elgin Co., Ont.
 Ans.—1. If she had been put in a nice box stall, removed from all excitement and given two or three ounces laudanum in half pint cold water, the dose to be repeated in three or four hours, if necessary, it is probable the accident would have been prevented.

2. It would be better to not breed her again for about three months. Some cows acquire the habit of aborting at a certain period of gestation. When your heifer reaches about the same period next gestation, keep her very quiet for a couple of weeks, feed lightly on easily-digested food and watch her closely. If any symptoms are shown give laudanum as directed.

Miscellaneous.

RESERVOIR ON BOILER.

Is the following scheme practicable for putting water into the boiler in our dairy? By placing a reservoir on top of boiler, equally strong as boiler, connected with inch pipe with valve? By opening valve will steam displace water in reservoir, with any head of steam?

T. M.

Bruce Co., Ont.
 Ans.—If reservoir be connected to boiler by one pipe only, the water in reservoir will not feed into boiler until the pressure in reservoir is as high as that in the boiler. It can be made work by connecting a pipe from the top of the reservoir to the top of the boiler; this pipe to be left open all the time. This will equalize the pressure in the reservoir and boiler; then by opening the valve in feed pipe the water will pass from reservoir to boiler. It is a very wasteful method of feeding a boiler. If the temperature in reservoir is made the same as that in boiler, the radiation of reservoir will be considerable.

BALANCING A RATION.

Will you please inform me, through your valuable paper, what would be a balanced ration for dairy cows, of cut oat straw, clover hay, oat chop, bran and mangels, and would it be improved by oil cake?

W. P.

Huron Co.
 Ans.—Yours is a good assortment of feeds. By feeding four pounds of bran, four pounds of oat chop, nine pounds of clover hay, eight pounds of straw and thirty pounds of mangels per day per 1,000 pounds live weight, you will have a ratio of 1 to 6.6. By adding to this one pound of oil cake, the ratio is narrowed to 1-5.9, a better ration for milk cows. We do not advise you to adhere strictly to these weights, as the individuality of the cows must be considered, some cows requiring much more food to produce a given quantity of milk than others. Simply use the balanced ration as a guide.

If you will send us on a post card the name and P. O. address of some friend or neighbor not receiving a first-class agricultural paper, and who would appreciate such, we will forward, free, a sample copy of the "Farmer's Advocate."

NOTES AND NEWS.

Canadian Hackney Horse Association Annual Meeting.

The Canadian Hackney Horse Association met during the show week. The report of the secretary-treasurer, Mr. H. Wade, showed a good margin financially, and 20 new animals registered. Provision was made to offer a cup as a special prize at the Calgary show, and \$50 apiece was voted to the Spring Horse Show and the Toronto Industrial Exhibition. The proposal to hold a Dominion Exhibition next year was heartily endorsed. The officers elected were: T. A. Graham, Claremont, President; E. C. Attrill, Goderich, First Vice-President; E. C. H. Tisdale, Beaverton, Second Vice-President, and Henry Wade, Toronto, Secretary-Treasurer. The directors are: H. N. Crossley, Rosseau; R. Beith, M. P., Bowmanville; R. W. Davies, H. M. Robinson, Dr. Andrew Smith, R. Bond, Geo. Pepper, all of Toronto; R. Miller, Stouffville, and Dent Dalton, Delhi. The Provincial representatives are: R. Davies, of Toronto; Jas. A. Cochrane, of Hillhurst; A. M. Rawlinson, of Alberta; J. A. S. Macmillan, of Brandon, and J. R. Frink, of New Brunswick. The representatives to fairs are: Toronto—E. C. H. Tisdale and Geo. Pepper; Western Fair, London—Adam Beck, M. P. P., and E. C. Attrill; Ottawa—R. Beith, M. P.; Montreal Spring Horse Show—R. Ness, Howick; Woodbridge—John Macdonald, John Holderness and Robert Bond. Thos. Graham and H. N. Crossley were appointed delegates to the Horse Breeders' Association.

Canadian Shire Horse Breeders' Association Annual Meeting.

On February 5th, the annual meeting of the Canadian Shire Horse Breeders' Association was held in Grand's Repository, Toronto. The President, Mr. W. E. Wellington, in his annual address, called attention to the importance of registering all eligible animals. A good year's business has been done, and the Association are in a healthy state. The question of placing import duties upon horses coming from the United States was freely discussed, and a committee was named to bring before the Canadian Horse Breeders' Association a resolution expressing the opinion of the meeting. The officers elected for 1903 are: President, Mr. W. E. Wellington; Vice-President, Mr. James M. Gardhouse, Weston; Second Vice-President, Mr. William Hendrie, Jr., Hamilton; Directors—Messrs. James Henderson, John Gardhouse, H. N. Crossley, Hogate, Wilkie, Barry and Bawden; Secretary-Treasurer, F. C. Wade; Delegates: To the Industrial Exhibition, Messrs. H. N. Crossley and John Gardhouse; to Western Fair, London, Messrs. F. C. Wade and Hogate; Central Fair, Ottawa, F. C. Wade; Horse Breeders' Association, Messrs. J. M. Gardhouse and Henderson.

Clydesdale Breeders' Association Annual Meeting.

On the 3rd inst., the annual meeting of the Canadian Clydesdale Breeders' Association was held in Grand's Repository, Toronto. The report of the Secretary-Treasurer, Mr. H. Wade, showed a surplus on hand of \$1,051.10; 694 pedigrees were recorded in 1902, and 278 were transferred from the Scotch Studbook to complete the pedigrees of imported animals. During the past year there has been a very marked increase in the number of imported mares, which will do considerable toward improving the breed in this country. It was decided to abolish the method of recording Scotch ancestors in the appendix. In future, such records will be embodied in the main body of the Studbook and assigned a Canadian number. Fifty cents each will be charged for ancestors so recorded. After considerable discussion, a resolution asking Parliament to restrict the importation of Western States ranch horses into Canada was adopted.

The officers elected for the ensuing year are: President, Wm. Smith, Columbus, Ont.; Vice-President, F. W. Hodson, Ottawa; Vice-Presidents for the Provinces: Ontario, O. Sorby, Guelph; Quebec, Robt. Ness, Howick; Manitoba, J. A. S. Macmillan, Brandon; Alta., J. A. Turner, Calgary; Assa., A. Mutch, Lumsden. Delegates to Fair Boards: Toronto Industrial, Robt. Beith, M. P., and Wm. Smith; Ottawa Central, Peter Christie and D. McCrae; Western Fair, London, Alex. Innes and Jas. Henderson; Quebec and Sherbrooke, R. Ness and Geo. Stewart; Horse Breeders' Association, P. Christie, Wm. Smith and F. Richardson. Directors—Jno. Bright, Geo. Gormley, Jno. Vipond, Thos. Graham, Peter Christie, J. M. Gardhouse and Henry Bong. Mr. Wade continues as Secretary-Treasurer for another year.

Record Year in Land Sales.

During 1902 more land was sold in this Western country than ever before. Besides the large land-dealing companies, numberless small ones and hosts of private individuals have speculated in this money-making business. The C. P. R., as usual, tops the list, having disposed of 2,420,440 acres at a total sum of \$8,140,245. Second comes Osler, Hammond & Nanton, with 1,145,698 acres, and the Canadian Northwest Land Company ranks third, with 516,000 acres for \$2,520,000.

Hamilton Shorthorn Sale.

Any doubts which may have existed as to the future of the business of breeding Shorthorn cattle must have been dispelled by the pronounced success of the auction sale at Hamilton, Ontario, on January 28th. The spacious sale pavilion was packed from floor to roof by farmers and breeders from many different parts of the Dominion, with a good sprinkling from the United States, of spirited bidders and buyers. The cattle were a superior selection from a number of excellent herds, about one-half the number being imported animals of the most popular breeding and the most approved type. They were, indeed, the most uniformly excellent consignment of cattle we have seen exposed at a public sale in Canada or elsewhere, showing a wealth of flesh and quality and character that could not fail to excite the admiration of breeders and all lovers of good stock. It was an evidence, on the part of the contributors, of faith in character of the cattle they were offering and of faith in the future of the breed that they were willing to risk the offering of such valuable animals in public competition, and their confidence, as the sequel showed, was not misplaced.

A satisfactory and pleasing feature of the sale was that a large proportion of the best animals were purchased by Canadian breeders, who are determined to keep up the reputation of this country for the breeding of high-class stock. Another pleasing feature was that a lady, Mrs. Eckford, of Alberta, was among the most spirited bidders, securing several excellent animals.

The auctioneers, Messrs. Robson, Ingram and Jackson, who sold about equal numbers, each did splendid work, maintaining the interest from start to finish, displaying commendable tact and judgment and demonstrating beyond a possibility of cavil that Ontario has within her borders thoroughly capable live-stock salesmen.

Mr. W. D. Flatt, as manager of the sale, displayed in all the arrangements his usual good judgment and generalship, and is entitled to the thanks of all lovers of Shorthorn cattle for his untiring efforts for the welfare of the breed, as he is entitled to the good wishes of all classes of the farming community for his desire to advance the improvement of live stock generally throughout the Dominion. While there were no sensational prices in this sale, and while the highest prices were not equal to those made at the Hamilton sale in August last year, the average was higher than on that occasion, which was about \$425, while the late sale figured out at an average of \$446 for the 54 lots disposed of which is certainly a very satisfactory result.

The highest price of the day was \$1,500, for the ten-months-old bull, Diamond Prince, contributed by Mr. W. D. Flatt. He is a roan calf of excellent type, of the popular Missie family, was bred by Mr. W. S. Marr, Uppermill, Aberdeenshire, and fell to the bid of Mr. E. G. Stevenson, of Detroit, Michigan, whose farm, we understand, is near Wallaceburg, in Ontario. Mr. Cochrane's splendid three-year-old imported bull, Scottish Beau, by Silver Plate, was secured at a bargain by Messrs. J. & W. B. Watt, Salem, Ont., at \$1,200. Capt. T. E. Robson, Ilderton, Ont., drew a rich prize in the imported red yearling Broadhocks heifer, Imp. Airy Duchess 3rd. W. G. Pettit & Son, Freeman, made a good investment in the Toronto champion cow, Crimson Fuchsia 13th, and her sweet heifer calf, at \$875. S. J. Pearson & Son, Meadowvale, Ont., who were spirited bidders throughout, secured a grand breeding cow in Imp. Glosterina 6th, due to calve this month, at \$800. Hon. John Dryden made a judicious selection for the Ontario Agricultural College farm in the sweet roan heifer, Dalmeny Fanny 6th, at \$725, and John Bright, Myrtle, Ont., who was a plucky bidder, got a prize in Imp. Spicy Louise at \$710, besides several real good things well worth the money.

The following is the list of sales, purchasers and prices:

Lovely Tulp (Imp.) and c. c.; E. G. Stevenson, Detroit, Mich.....	\$1,100
Gladys (Imp.) and c. c.; E. G. Stevenson.....	915
Airy Duchess 3rd (Imp.); T. E. Robson, Ilderton.....	900
Crimson Fuchsia 13th and c. c.; W. G. Pettit & Son, Freeman.....	875
Pandora (Imp.); J. G. Robbins & Sons, Hoop, Ind.....	800

Glosterina 6th (Imp.); S. J. Pearson & Son, Meadowvale.....	\$ 800
Vanora (Imp.); T. E. Robson.....	750
Dalmeny Fanny 6th (Imp.); John Dryden, Brooklin, for Ont. Ag. College.....	725
Spicy Louise (Imp.); John Bright, Myrtle.....	710
Boyne Lady (Imp.); Jas. Douglas, Caledonia.....	650
Fairy Queen (Imp.); John Hill, Wellesley.....	650
British Lady and b. c.; C. Hintz & Son, Fremont, Ohio.....	535
Lady Banff; J. H. Miller, Peru, Ind.....	530
Forest Princess (Imp.); A. W. Smith, Maple Lodge.....	515
Banff's Arabella; I. M. Forbes & Son, Henry, Ill.....	500
Dalmeny Nonparell 6th (Imp.); J. A. McGillivray, Uxbridge.....	500
Marchioness 23rd (Imp.); Wm. Ormiston, Columbus.....	450
Sweet Alice; W. G. Pettit & Son.....	440
Bertha 3rd (Imp.); D. Milne, Ethel.....	430
Beauty 15th (Imp.); C. Hintz & Son.....	415
Clemency 4th (Imp.); John Bright.....	410
Verbena's Dandy and c. c.; C. Hintz & Son.....	400
Heather Blossom 2nd; Mrs. Eckford, High River, Alta.....	400
Hillhurst Bridesmaid 3rd; John Bright.....	380
Scottish Primrose (Imp.); Graham Bros., Claremont.....	380
Julia Lynedoch (Imp.); H. Cargill & Son, Jargill.....	350
Augusta 3rd and c. c.; W. J. Shean, Owen Sound.....	325
Rosemary of Hillhurst; Graham Bros.....	310
Banff's Matchless; S. Dymont, Barrie.....	305
Welcome Hillhurst; T. Douglas & Sons, Strathroy.....	295
Cecilia Hillhurst; Andrew Knox, Norwood.....	280

Holstein Breeders Meet.

The annual meeting of the Holstein Cattle Breeders' Association of Canada was held in the Palmer House, Toronto, on the 3rd inst. Nineteen hundred and two has been a growing year for the Association; the registration of animals has largely increased, 29 new members were admitted to the Association, and there is a substantial surplus in the treasury.

Prof. Dean, of Guelph, addressed the meeting, calling attention to certain weak points in connection with the seven-day tests, and recommended that they consider some method whereby thirty-day tests could be made, and, where practicable, whole-year tests. He further pointed out to the breeders that he could not guarantee to get men to do the work of testing for the same salary as they have been accustomed to pay. The meeting considered this question, and decided that each individual would have to arrange with the Professor the details of his test.

The Association voted the following amounts to the different fairs, to be awarded as special or supplementary prizes: To the Toronto Industrial, \$100.00; to Ottawa, \$100.00; to the Winter Fair, Guelph, \$100.00; to Amherst Winter Fair, \$50.00; to Brandon Fair, \$25.00; to New Westminster, \$25.00.

The fixing of the date of the next annual meeting was left with the executive to arrange to have it at the same time as the other live-stock associations meet.

A resolution endorsing the movement to hold a Dominion Exposition in 1904 was unanimously carried.

The grant of \$5 to breeders towards defraying the expense of a first test will be made during 1903. The fee for the registration of animals over one year will be the same as last year.

On account of the unsatisfactory arrangement of railway rates, the Association joins in a memorial to be presented to Parliament asking for a railway commission.

After much discussion, the majority of those present decided in favor of reverting to the three-judge system at the Toronto Industrial Fair next fall.

The officers for the coming year are: President, H. Bollert, Cassel, Ont.; 1st Vice-President, Jas. Rettle, Norwich, Ont.; 2nd Vice-President, M. Richardson, Caledonia, Ont.; 3rd Vice-President, R. A. Stevenson, Ancaster, Ont.; 4th Vice-President, A. C. Hallman, Breslau, Ont. Directors: G. A. Gilroy, Glen Buell; Geo. Rice, Currie's Crossing; Ed. Adams, Toronto; B. Mallory, Frankfort; Secretary-Treasurer, G. W. Clemons, St. George; Auditors, Wm. Suhring, Sebringville, and J. H. Patten, Paris. Representatives: To Toronto Industrial Fair, Messrs. Ellis and Adams; to Western Fair, Messrs. H. Bollert and G. W. Clemons; to Ottawa, Messrs. J. A. Richardson and G. A. Gilroy; to Winnipeg, Messrs. Harriot and Munroe; to Amherst, Messrs. Logan and Cane; to Quebec fairs, Messrs. Herrick and Sweet.

Dominion Sheep Breeders' Meeting.

The annual meeting of the Dominion Sheep Breeders' Association was held in the Palmer House, Toronto, January 30th. The President, Mr. R. H. Harding, in his address, referred in hopeful terms to the outlook for the industry, and counselled the production of the best quality as the surest means of securing a market and the best prices. The Secretary-Treasurer's report, which was adopted, showed a considerable balance due the Treasurer. A motion approving of the holding of a Dominion Exhibition in Toronto this year, and of Government grants in aid of same, was unanimously carried.

The sum of \$50.00 was voted towards the wages of man in charge of stock shipments to the West.

A motion, endorsing the action of the Winter Fair Board re protests at the late show at Guelph, was carried.

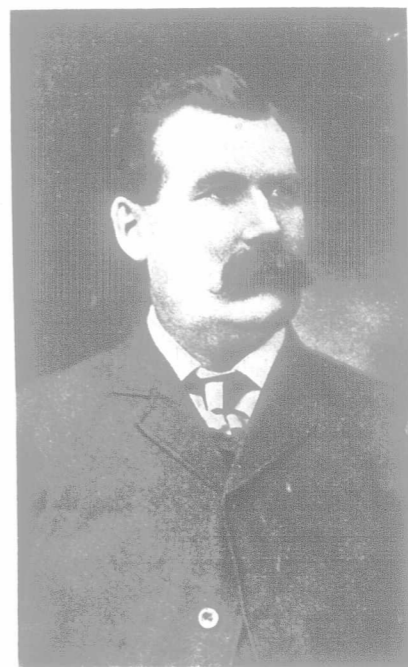
The election of officers for 1903 resulted as follows: President, R. H. Harding, Thorndale; Vice-President, J. M. Gardhouse, Weston. Representatives of breeds: Cotswolds, Col. D. McCrae, Guelph; Leicesters, A. Whitelaw, Guelph; Lincolns, J. T. Gibson, Denfield; Shropshires, D. G. Hanmer, Mt. Vernon; Ox-fords, Jas. Tolton, Walkerton; Southdowns, John Jackson, Abingdon; Hampshires and Suffolks, John Kelly, Shakespeare; Dorsets, Col. J. A. McGillivray, Uxbridge; Merinos, W. M. Smith, Scotland; Ontario Agricultural College, Prof. G. E. Day. Delegates to Fair Boards: Toronto Industrial, J. M. Gardhouse, John Jackson; Western Fair, London, A. W. Smith, A. P. Westervelt; Ottawa, F. W. Hodson.



MR. GEORGE JACKSON, PORT PERRY.



CAPT. T. E. ROBSON, ILBERTON.



MR. THOMAS INGRAM, GUELPH.

THREE LEADING LIVE-STOCK AUCTIONEERS.

Lady Gilmore; Wm. Hendrie, Hamilton.....	280
Queen's Diamond; D. C. Lowry, Niagara Falls.....	275
Rosamond; Robert Miller, Stouffville.....	260
Scottish Primrose 2nd (Imp.); Robert Miller.....	250
Cecilia 10th; W. R. Elliot, Guelph.....	250
Mina Rosalind; Arthur Johnston, Greenwood.....	250
Lady Beatrice; Wm. Hendrie.....	220
Lady Inglewood Hillhurst; John Gardhouse, Highfield.....	205
Rosedale; Mrs. Eckford.....	200
Strathallan Hillhurst; Wm. Hendrie.....	200
Oxmead Belle; Wm. Ormiston.....	200
Judith Moore; Wm. Knox, Norwood.....	190
Daisy Lee; Mrs. Eckford.....	175
Blue Bell; W. A. Douglas, Onondaga.....	155
Royal Bracelet 3rd; A. Duncan & Son, Carluke.....	140
Vacuna of Queenston; Mrs. Eckford.....	140
Smithfield Lass; C. Hintz & Son.....	135
BULLS.	
Diamond Prince (Imp.); E. G. Stevenson, Detroit.....	1,500
Scottish Beau (Imp.); J. & W. Watt, Salem.....	1,200
Springhurst; Joseph White, St. Mary's.....	370
Perfection; F. L. Fuller, Truro, N. S.....	200
Nonparell Officer; R. Miller.....	200
Lord Banff's Conqueror; C. D. Wager, Enterprise.....	200
Topsman's Champion; John Ivey, Jarvis.....	130

One cent invested in a post card, one moment to write on it the name and P. O. of some friend or neighbor who ought to have a really first class agricultural paper, and one moment to drop it in His Majesty's mail bag, will bring in return, a free sample copy of the "Farmer's Advocate."

Dominion Cattle Breeders' Annual Meeting.

The annual meeting of the Dominion Cattle Breeders' Association was held in the Palmer House, Toronto, January 29th, and was largely attended by members. The address of the President, Mr. Arthur Johnston, was congratulatory on the flourishing condition of the cattle business in the Dominion. The report of the Secretary-Treasurer, Mr. A. P. Westervelt, which was adopted, showed the society in a prosperous condition and recommended renewed efforts for the extension of interprovincial trade in live stock.

A resolution to memorialize the Dominion Government to use its influence with the British Government towards securing the removal of the embargo on Canadian cattle was, after considerable discussion, withdrawn, the prevailing opinion being that no good was likely to be accomplished by its adoption.

The election of officers for 1903 resulted as follows: President, Arthur Johnston, Greenwood; Vice-President, A. W. Smith, Maple Lodge. Vice-Presidents for the Provinces: Ontario, H. Wade, Toronto; Manitoba, Hon. Thos. Greenway, Crystal City; Northwest Territories, C. W. Peterson, Regina; Quebec, H. D. Smith, Compton; Nova Scotia, E. B. Elderkin, Amherst; New Brunswick, Thos. A. Peterson; P. E. I., F. G. Bovyer, Georgetown; British Columbia, G. H. Hadwen, Duncan's; Newfoundland, Hon. Thos. C. Duder, St. Johns. Representatives of Breed Associations: Shorthorns, John Isaac and T. E. Robson; Aberdeen-Angus, Jas. Bowman and J. W. Burt; Galloways, D. McCrae and R. Shaw; Representatives of other breeds, as named by their Associations; O. A. C., Prof. G. E. Day; General Director, J. M. Gardhouse. Delegates to Fair Boards: Toronto Industrial, Col. J. A. McGillivray and A. P. Westervelt; Ottawa, F. W. Hodson and N. F. Wilson; London, R. Gibson and T. E. Robson; Ontario Winter Fair, G. W. Clemons, John Bright and J. T. Gibson; Eastern Ontario Winter Fair, the President, J. G. Clark and N. F. Wilson; Brantford, G. W. Clemons.

A resolution, approving of the holding of a Dominion Exhibition in Toronto this year and recommending Dominion and Provincial Legislative grants for this purpose, was unanimously adopted.

A motion approving and endorsing the action of the Winter Fair Board in dealing with protests at the late show at Guelph was adopted.

Dominion Swine Breeders' Annual Meeting.

The annual meeting of the Dominion Swine Breeders' Association was held at the Palmer House, Toronto, January 30th, 1903. The President, Major G. B. Hood, in his address, congratulated the members on the prosperous condition of the trade, the steadiness of the market, and the creditable class of hogs exhibited at the leading fairs, and suggested that early action be taken to prepare for an exhibit at the St. Louis Fair.

The report of the Secretary-Treasurer, Mr. A. P. Westervelt, which was adopted, showed the Association in a very prosperous condition, the financial statement showing receipts of \$6,496.87, expenditures \$4,997.84, and a balance on hand of \$1,499.03. On motion, \$75 was voted towards payment of wages of man in charge of stock shipments in Government car.

The executive was instructed to carry out the suggestions of the secretary's report re interprovincial trade. A motion favoring the holding of a Dominion Exhibition this year was carried, and in that event \$300 was voted towards prizes on condition that Toronto Exhibition increase its list by that amount. It was decided that the judges in bacon classes at the Winter Fair should be two breeders and one packer.

Following are the list of officers elected for 1903: President, Maj. G. B. Hood, Guelph; Vice-President, Thos. Teasdale, Concord. Directors representing breeds: Berkshires, Geo. Green, Fairview; Yorkshires, J. E. Brethour, Burford; Chester Whites, R. H. Harding, Thorndale; Tamworths, J. C. Smith, Hintonburg; Poland-Chinas, W. M. Smith, Scotland; Duroc-Jerseys, W. N. Tape, Bentpath; Essex, Jos. Featherston, Streetsville; O. A. C., Prof. G. E. Day; General Director, Wm. Jones. Delegates to Fair Boards: Toronto Industrial, D. C. Flatt, R. P. Snell; Ottawa, J. E. Richardson, A. P. Westervelt; London, Geo. Green, D. DeCoursey; Peterboro, R. Vance; Guelph, G. B. Hood, Jas. Anderson.

The Fruit Marks Act.

Mr. W. A. McKinnon, Chief of the Fruit Division of the Department of Agriculture, Ottawa, has returned from a ten months' trip to Great Britain. Besides endeavoring to extend the trade in all classes of fruit, he has devoted considerable attention to the conditions of shipments upon arriving in port, with a view to determine the most satisfactory shipping cases, and the proper temperatures at which to hold the goods during transit. Mr. McKinnon reports considerable improvement in the condition of the packing since the introduction of the Fruit Marks Act, although instances where fruit has been falsely packed are still encountered. In the course of a year or two, when the requirements of the act as regards the proper grading of fruit are fully understood, it is expected that nearly all such cases will disappear. Mr. Alex. McNeil, Windsor, Chief Fruit Inspector, acted as Chief of the Division in Mr. McKinnon's absence.

Recent Publications.

Dr. Rutherford, Chief Veterinary Inspector for Canada, has just issued a bulletin on the foot-and-mouth disease. The disease has made three appearances in Canada, the last being in 1884, when it was discovered at the quarantine station at Point Levis, but was promptly exterminated. The recent outbreak in the United States has again drawn considerable attention to the disease. The history, symptoms, treatment and preventive measures are each dealt with separately in Dr. Rutherford's publication. The symptoms are given very plainly and fully, and considerable attention is devoted to methods of stamping out the disease when it once makes its appearance. It is highly important that the symptoms should be generally known and any outbreak immediately reported, as those concealing its existence are liable to a fine of two hundred dollars.

The Seed Division of the Commissioner's Branch of the Agriculture Department has now ready for distribution a bulletin on "The Conditions of the Trade in Timothy, Alsike and Red Clover Seeds." The results of the past year's investigation are given in detail, together with miscellaneous information of use to farmers and seed dealers. The subject of pure seed has been touched upon at many of the Farmers' Institute meetings this winter, and has created considerable interest, but as thus dealt with has been merely introduced and can be much more fully and profitably studied by consulting this bulletin. Copies of either of these may be had by applying to the Department at Ottawa.



MAJOR G. B. HOOD, GUELPH,
President Dominion Swine Breeders' Association.

Help the Township Fair.

Being apprehensive of the injury or destruction of the useful life of the Township Fair, as a result of the Circuit District Fair Plan, Mr. E. A. Garnham, ex-President of the Bayham Agricultural Society, writes us, in view of the approaching meeting in Toronto on Feb. 18th and 19th of the Association of Fairs and Exhibitions. He contends that reform is needed in the management of township fairs in order to secure the two essentials: 1st, money to pay prizes, and, 2nd, competition. Without donations he considers it about impossible to get the amount needed through membership. The plan which he recommends, and which deserves careful consideration, is that the Government grant to each township be \$200, or a sum equal to an amount (limited) granted by the council of the township in which the fair is held, to be levied on the ratable property of the township and collected with the other taxes, for this specific purpose, and every resident of the township to be entitled to a free membership of the fair. He suggests an act to relieve councils of the responsibility of making these grants without a petition or vote of the ratepayers. Having thus provided for the funds, "competition" will readily follow, persons of limited means or large families being enabled to attend the fair at a trifling cost, where they would become acquainted with stockmen and other progressive agriculturists, and be led to exhibit themselves, and later on at the larger shows.

Have you a friend or neighbor who would be interested in a really first-class agricultural paper? Kindly forward us his name and P. O. address, and we will mail him a free sample copy of the "Farmer's Advocate."

MARKETS.

Toronto Markets.

Trade was fairly good at the Western Cattle Market and prices for all classes, except best export, ruled steady. The drop in best classes reported in last issue has not recovered, and the opinion grows that high prices for export cattle are doubtful. Prices on this market are above an export basis. The supplies today were 970 cattle, 670 sheep, about 500 hogs, and 14 calves.

Export Cattle.—The English market is still weak and overstocked; choice heavy, \$4.00 to \$5.00; medium, \$4.40 to \$4.80. Mr. Wm. Levack, the heaviest purchaser of fat and export cattle on the market, informed our correspondent that he could purchase any quantity of cattle in Chicago and land them in the Toronto market cheaper than he could buy them here. Mr. Thos. Piers, of the firm of commission export cattle dealers, Liverpool and Manchester, said the condition of the British market was caused by the fact that a large number of cattle raised by English farmers were selling below our export basis, resulting in the market being somewhat demoralized.

Butchers' Cattle.—Choice picked loads of butchers' cattle, suitable for local trade, equal in quality to export, average 1,075 to 1,150 lbs., are sold at \$4.40 to \$4.60; medium, \$4.60; good, \$3.85 to \$4.35; common, \$3.25 to \$3.35; rough, undersized, poor stock canners, \$2.25 to \$2.75.

Bulls.—Choice heavy export bulls, \$4.25; light, \$3.50 to \$3.75.

Feeders.—Feeders in good request; best short-keep feeders, \$4.25 to \$4.40; medium and light, 800 to 900 lbs., \$3.00 to \$4.20.

Stockers.—Stockers, 500 to 700 lbs. each, of good quality, \$3.00 to \$3.25; mixed colors, poor quality, \$2.75 to \$3.00.

Sheep.—Market steady, \$3.50 to \$4.00 for ewes, and \$2.50 to \$3.25 for bucks.

Lambs.—Lambs sold to a good demand and prices steady at from \$4.50 to \$5.25 per cwt.

Milch Cows.—Milch cows and springers, \$30.00 to \$50.00 per head. One choice cow reached \$55.00.

Calves.—Best choice sold at from \$8.00 to \$12.00 per head, or from \$4.50 to \$6.00 per cwt. Choice veal calves are in good request always.

Hogs.—The Wm. Davies Co. are advising drovers to be particularly careful in their purchases for the next ensuing weeks, and that unless the hogs are exactly the required weights all others would be severely dealt with and culled to a lower figure. Best selected bacon hogs, \$5.90; thick fat and lights, culled, \$5.65; sows at \$4.50 to \$5.00 per cwt., and stags at \$3.00. Prospects are not very good for the next few weeks. Unless the English market takes an upward turn, \$5.75 will be the price.

PRODUCE.

Wheat.—Red and white, 70c. to 71c., middle freights; Manitoba No. 1 hard, 87c.; No. 1 northern, 85½c. In Toronto, eight hundred bushels of wheat sold as follows: White at 73c. per bushel, red at 72½c. per bushel, goose at 68½c. per bushel.

Barley.—No. 3 extra for export, 47c.; No. 3 at 42c. for export. In Toronto, barley sold at 48c. to 50c.

Oats.—New oats are quoted at 31c. for No. 2, north, and at 33c. No. 1. In Toronto, eight hundred bushels sold at 36c.

Chicago Markets.

Chicago, Feb. 10.—Cattle—Good to prime steers, \$4.40 to \$5.60; poor to medium, \$3 to \$4.25; stockers and feeders, \$2.25 to \$4.40; cows, \$1.40 to \$3.40; heifers, \$2 to \$4.60; canners, \$1.40 to \$2.60; bulls, \$2.00 to \$4.24.

Hogs.—Mixed and butchers', \$6.60 to \$7.05; good to choice heavy, \$6.90 to \$7.12½; light, \$6.40 to \$6.65; bulk of sales, \$6.60 to \$6.85.

Sheep and Lambs.—Steady to strong; good to choice wethers, \$4.50 to \$5.50; fair to choice, mixed, \$3.50 to \$4.50; native lambs, \$4.50 to \$6.50; western lambs, \$4.75 to \$5.40.

Buffalo Markets.

East Buffalo, N. Y., Feb. 10.—Hogs—Heavy, \$7.10 to \$7.15; a few at \$7.20; mixed, \$7 to \$7.10; Yorkers and pigs, \$6.95 to \$7; roughs, \$6 to \$6.25. Sheep and lambs—Top lambs, \$6.60 to \$6.65; fancy, \$6.75; common to good, \$4.25 to \$6.50; yearlings, \$5.25 to \$5.50; ewes, \$4.50 to \$4.65; top mixed sheep, \$4.50 to \$4.75; common to good, \$2.25 to \$4.

British Cattle Markets.

London, Feb. 9.—United States cattle, 6½d.; sheep, 7½d.

Liverpool, Feb. 9.—Canadian cattle, 6½d.; trade weak.

Montreal Markets.

Montreal, Feb. 9.—Trade was rather slow, but higher prices prevailed all round. A lot of 20 prime steers were sold at 5½c. per lb.; medium beasts, from 3½c. to 4½c., and the common stock, from 2½c. to 3½c. per lb. A lot of good-sized calves were sold at \$7 each, or a little over 5c. per lb. Good lots of fat hogs sold at from 6c. to 6½c. per lb., weighed off the cars.



"There's always love that's caring,
And shielding and forbearing.
Dear woman's love to hold us close and keep our hearts
in thrall;
There's home to share together
In calm and stormy weather.
And while the hearth-flame burns it is a good world,
after all."

Nelson and the Coxswain.

Just before the Battle of Trafalgar a mail was sent from the English fleet to England, and word was passed that it might be the last chance to write before the expected engagement. The letters had been collected from the ships, the letter-bags were on the vessel which was to take them, and she had got some distance on her way, under full sail, when Lord Nelson saw a midshipman approach and speak to Pasco, the signal officer. Then Nelson showed the side of his nature which so often won the sailors' hearts.

Pasco uttered an exclamation of disgust and stamped his foot in evident vexation. The admiral called him and asked what was the matter.

"Nothing which need trouble your lordship," was the reply.

"You are not the man to lose your temper for nothing," rejoined Nelson. "What was it?"

"Well, if you must know, my lord, I will tell you. You see that coxswain?" pointing to one of the most active of the petty officers. "We have not a better man on the Victory, and the message which put me out was this: I was told that he was so busy receiving and getting off his mail-bags that he forgot to put his own letter to his wife into one of them; and he has just discovered it in his pocket."

"Hoist a signal to bring her back!" was Nelson's instant command. "Who knows that he may not fall in action to-morrow? His letter shall go with the rest."

The despatch-vessel was brought back for that alone. Captain Mahan tells this story on the authority of the son of Lieutenant Pasco, who used to say that the sailors idolized Nelson. Evidently it was with reason.

Wisdom of Louise—On Valentines.

There is an ugly brass knocker on the side casing of the door of Louise's den. I hate the thing, for it grins in the most exasperating way, whether she is in or out, and I always give it a vindictive bang, as if to get even with it.

So I gave it a good hard knock, and put my hand on the door knob. There was no response, yet I knew Louise was there.

So I pushed the door open. There she stood. As a housekeeper would say, "the room was a sight to behold," and despite her former lecture on the subject, Louise was hardly "dressed up."

"Well," I said, advancing into the chaos, "what is it now, Louise, a church fair or a nonsense party?"

"Neither," she replied gaily. "Valentines, my child, valentines. Have you forgotten that the good Saint's Day is not far off?"

"Well," I retorted, "what of that? Are those pictures, cardboard, sealing wax and ribbons to be converted into valentines, pray? I don't suppose these kisses are?" and I helped myself to a fat pink one, as I made room for myself on the edge of the couch. But she made a dive at me, and caught the kiss while still intact.

"That's part of this very valentine," she said, examining it on every side for possible injury. "Just you watch."

On a square of heavy white egg-shell cardboard, she was pasting another square of blue paper, the center of which she had torn out heart shape, leaving jagged edges where it was torn, and thus revealing the egg-shell surface beneath, heart shaped. Near the apex of the heart she tied two candy kisses, passing white baby ribbon directly through the cardboard, so as to hold them in place. In the lobes of the heart she printed exquisitely with ink:

"I send you this with my best wishes,
Also with my sweetest kisses."

"There!" she cried, holding it up. "You needn't say that isn't original, for it is, and I'm going to send it to Aunt Mirandy Brannon."

"Mirandy Brannon," I echoed after her, "For goodness sake, Louise!"

"Oh, you needn't laugh," she said, turning to me with a bit of fire in her eyes, "but I tell you it is people like her who appreciate things of this kind. People don't outgrow sentiment, if once it is in them, and the older they grow the less they get and the more hungry they are for it. I tell you, Harriet, we don't half appreciate the loneliness of some lives in this respect. We are young and full of gaiety, and we think that the sweet things of life are ours by the right of youth. Somehow we forget that the heart stays young, though the body may grow old, and I can just imagine the pushed-out-of-the-way feeling one must have to see us young folks all exchanging these silly things, with never a thought of them and their craving affection."

"Take Emily, she'll have dozens of valentines, and she won't care half as much for them all combined, except, perhaps, Tom's, as Mirandy will for this bit of pasteboard sent by a foolish girl. It's the being thought of that counts. I have a whole list"—she turned the page of her note-book where I could see names written—"of people whom

I call my valentines. They are old folks, and neglected folks, and every one of them will be more pleased over the solitary valentine that I shall send them than you can possibly imagine.

"All of them old ladies? Mercy, no! I have quite as many dear old men on the list, and I send them a box of candy or a bunch of violets—yes, even the men, you scoffer, you, for I tell you"—Louise's voice grew earnest—"I tell you sentiment craves sentiment, and I've seen tears start in the eyes of more than one old man on account of my little valentine remembrance. It is even different from Christmas, for Valentine's day is distinctly sentimental, and as I said before, sentiment never grows old, or the heart too old for it.

"Try it yourself, and see."—[Harriet C. Cox.]

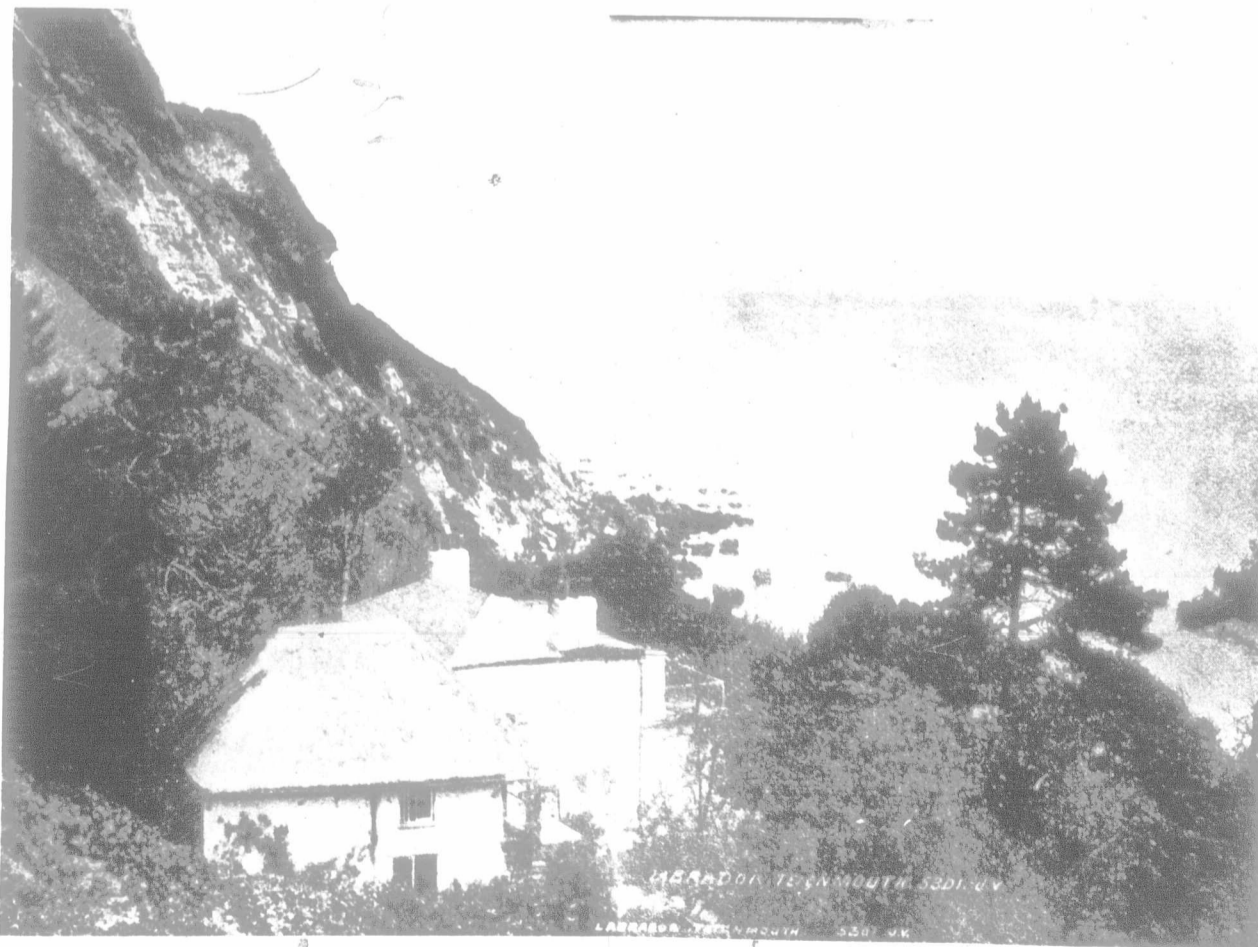
Something About Devonshire.

NO. I.

It has given me such sincere pleasure to receive messages from the Gloucestershire folks who, on both sides of the Atlantic, are readers of the "Farmer's Advocate," telling me that my little descriptions bring back to their minds scenes dear to them in the long ago of their childhood or youth, that I am going to see whether there may not be some others amongst the settlers of Canada's far-away, big Northwest who may, in the same way, find an interest in what I may have to tell of my pleasant stay in the county of their birth, beautiful, beautiful Devon. I have always loved Devonshire; it is associated with so many happy holiday hours of my long past girlhood. The soft Devonshire accent, with its distinctive pronunciation, sounds very pleasant to my ears. I like to hear my landlady ask me if I would like another "speun" (spoon), or prophesy that tonight there will be a full "meun" (moon). I like to be told that on both sides the Teign there still survive many of the old family of "Oonion," meaning of course "Onion," and that up to some ten years ago a son, or grandson, of the "John Oonion," who used to call me "little Missey," and ferry me over from Shaldon to Teignmouth and back again, still plied the oars of one of the two or three ferry boats, all that were then needful for the few visitors stopping at the little village on the other side of the harbor. Now there is a brigade of ferry boats, and a proprietor to receive your penny when you put your foot upon, or take it off, the ticklish-looking board which is still their primitive gangway, one which, when the waves are rough, seems possessed of a buoyancy which is of itself a warning to tread warily, if you would desire to land dryshod upon the beach. On the Shaldon side there still stands out, in bold prominence, the grand old "Ness," with its rocks large and small, scattered at its base, around which the adventurous may scramble to the sand and shingle beyond, and if the tide still serves, and their spirit of enterprise remains unquenched, they can get around the next headland too, and be well rewarded for the effort. There are still some shells and stones, such as the madrepora and agate, well worthy of the search, but whether it is that years have dimmed my sight, and my poor old back has taken on a stiffness which certainly never troubled me nearly fifty years ago (not a unique experience, by any means!), somehow I cannot find them, and I am the more readily disposed to believe what I am assured is really the case, that there are fewer and fewer of both stones and shells than there used to be. The wash of the waves and the action of the frost upon the soft, red sandstone has, in the course of years, made some changes in the actual outline of the cliffs, but has taken nothing from their grandeur or beauty. Teignmouth and Shaldon have shared long centuries back in various vicissitudes, having twice been nearly wiped out of existence, first by the incursions of the Danes, over 900 years ago, and then later on by the French. Tradition claims that

"In memory whereof, the Cliff exceeding red
Doth seem thereat again full fresh to bleed."
And truly the red of these grand old cliffs is very red indeed. There is a little battery and coast guard station by the lighthouse on the Teignmouth side, but there is no doubt that this is still a most unprotected line of coast, although the men of Devon will prove as valiant as of yore, if ever again called upon to defend it. This is what history tells us of the past:

"When Admiral Tourville was induced by James II. to bring his galleys to terrorize the English, every West Countryman who saw the unwieldy crafts afloat in Torbay imagined himself already a galley slave if something were not promptly done, and 'so,' writes Macaulay, 'the bacon on the ridge above Teignmouth was kindled. Hey-tor and Cawsand made answer, and soon all the hill-tops of the West were on fire. Messengers rode all night, and early the next morning 500 gentlemen and yeomen, armed and mounted, had assembled on the summit of Haldon hill. In twenty-four hours all Devonshire was up.' The Torbay landing being impossible, Tourville, desiring to intimidate the worthies of Devon, chose unprotected Teignmouth, sent off some of his galleys, and after shot and shell had cleared



TEIGNMOUTH VIEW, DEVONSHIRE, ENGLAND.

the way for the landing, 1,700 of his men plundered, devastated and fired the town."

But I am not disposed to linger over what has been, what may be, nor over what never, I hope will be again. I want to tell something of Devonshire as I find it to-day. I had so often revisited this particular corner of England in my day-dreams, when oceans separated me from it, that it would not have surprised me if I had felt some disappointment in the reality, but it has not been so. Crossing the veldt of South Africa, long before the war, when sleep at last had made me oblivious to sights and sounds which had cruelly kept me wakeful until it was so near dawn that it was not worth while to sleep at all, a dream of the green lanes of Devon, and the beating of the waves upon its shores, would come and come again, probably because I so longed for them and had then so little hope of ever being amongst them, and later on, in Canada, when the first burst of spring would bring us its own sweet buds of promise, I have frequently dreamt of the violets and primroses in the lanes of Devonshire, and would take the rain pattering upon my window panes for the lap, lap, lap of the tiny little breakers upon a sea-girt shore. Well, my wish has been granted, and God has been good to me, not only in giving me back as much recovered health as my years render possible, but in allowing me to retain unimpaired a keen appreciation of the beauties of this very beautiful part of my native land, and of these beauties I shall, I trust, be privileged to tell you something in the next issue of our Home Magazine. H. A. B.

Humorous.

The little daughter of the house sat down beside the minister, and began to draw on her slate. "What are you doing?" asked the clergyman. "I am making your picture," said the child. She worked away earnestly, then stopped, compared her work with the original, and shook her head. "I don't like it much," she said. "Taint a great deal like you. I guess I'll put a tail to it, and call it a dog."

In an Iowa court, recently, a lawyer arguing his case became very earnest. Then he paused a moment, and said: "I see Your Honor shakes your head as to that statement, but I desire to reaffirm what I have remarked." The court retorted: "I have not intimated how I shall construe your evidence or what my decision shall be. Your remarks are uncalled for." "You shook your head," was the reply. "That may be true," retorted the court. "There was a fly on my ear, and I reserve the right to remove it in any manner I see fit. Proceed with your argument."

"Excuse me, but I am in a hurry." "What do you want?" he was asked. "A job." "Do you? Well," snorted the man of business, "why are you in such a hurry?" "Got to hurry," replied the boy. "Left school yesterday to go to work, and haven't struck anything yet. I can't waste time. If you've got nothing for me to do, say so, and I'll look elsewhere. The only place I can stop long is where they pay me for it." "When can you come?" asked the surprised merchant. "Don't have to come," he was told. "I'm here now, and would have been to work before this if you had said so."

"I suppose," said the physician, smiling and trying to appear witty, while feeling the pulse of a lady patient, "I suppose you consider me an old humbug?" "Why, doctor," replied the lady, "I had no idea you could ascertain a woman's thoughts by merely feeling her pulse."

If the two young people of whom "Answers" tells this story were not reconciled by their own absurdity, they at least furnished amusement for others.

They had been engaged, but had quarreled, and were too proud to make up. Both were anxious to have people believe that they had entirely forgotten each other.

He called at her home one day to see her father—on business, of course. She answered the door-bell. Said he: "Ah, Miss Jepkin, I believe. Is your father in?"

"No, sir," she replied, "father is not in at present. Do you wish to see him personally?"

"I do," he answered, feeling that she was yielding, "on very particular personal business," and he turned proudly to go away.

"I beg your pardon," she cried after him, as he reached the lowest step, "but who shall I say called?"

A county curate in England who was newly married called on a great lady of the village, and, as he presented his wife, introduced her with the flippant and horribly ill-bred quotation, "A poor thing, madam, but mine own." The lady, looking at the curate severely, replied: "Your wife ought to have introduced you as 'A poorer thing, but mine owner.'"

"These aren't the kind of biscuits my mother used to make," he said. "Oh, George," she faltered, on the verge of tears. "Well, they're not," he repeated, emphatically. "They're enough sight better." And then the sun came out again.



TEIGNMOUTH BRIDGE, DEVON, ENGLAND.

THE QUIET HOUR.

Spiritual Insight.

"I fear not Thy withdrawal; more I fear,
Seeing, to know Thee not—hoodwinked with dreams
Of sighs and wonders—while, unnoticed, Thou
Walking Thy garden-still, commun'st with men,
Missed in the common-place of Miracle!"

How often might we echo Jacob's words: "Surely the Lord is in this place, and I knew it not." We talk of a "providential" escape, as though God only occasionally had anything to do with our affairs; even as the Syrians thought that the Lord was God of the hills but not of the valleys, and Balak imagined that if Balaam would come into "another place" God might allow him to curse Israel. When some great trouble comes we can say, "It is the Lord," and perhaps may be able to add, "let Him do what seemeth Him good." But are our eyes open to His presence every day, do we know Him under any disguise?

Sometimes men have what they call "a stroke of good luck," even as the disciples who had been fishing all night without success, and then suddenly caught 153 great fishes. On that occasion only St. John had spiritual insight enough to recognize Him from whom the success came, saying, "It is the Lord." Last month a young engine-driver of my acquaintance broke his collar-bone, and was forced to go to the hospital. A day or two later the engine he was accustomed to drive was involved in a terrible collision, and if he had not been disabled he would probably have been killed. In such a case it is easy to give very hearty thanks for the slight accident which saves a man from a greater; but God does not always lift the veil at once to show us the meaning of what He sends. It is our business to trust Him, even when we do not understand, being very sure that He is planning everything for our best interests.

Saul of Tarsus had his eyes opened to the fact that in persecuting Christians he was persecuting his lawful King and Master. If only our eyes were always open to this solemn truth, how different life would be. We too often forget that our unkind thoughts and words about other people are accepted by Christ as done to Him, just as certainly as the kind acts. How sorry and ashamed we should feel if, when busily engaged in unkind conversation, we should hear His voice saying, "Why persecutest thou Me?.....I am Jesus whom thou persecutest."

Perhaps we don't really believe that this rule applies in such a small matter as ill-natured gossip—but why should it not? If Christ is willing to accept as a gift to Himself such a trifling kindness as a cup of cold water, surely He will accept the small unkindnesses too. Even little children must be treated with consideration for His sake, who has said, "Whosoever shall receive one such little child in My name, receiveth Me."

Then there is another person who is often the target for criticism and abuse, at the hands of many members of his congregation. Let us try to remember the promise, "He that receiveth whomsoever I send receiveth Me," and also the warning, "He that despiseth you despiseth Me,

and he that despiseth Me despiseth Him that sent Me." These rules work both ways, and we have need to pray earnestly that God may open our eyes to see Him everywhere. Those who shall be condemned at the last because they have neglected to supply the wants of their needy brothers and sisters, will answer: "Lord, when saw we Thee an hungred, or athirst, or a stranger, or naked, or sick, or in prison, and did not minister unto Thee?" That is just the point—they do not "see." Don't we fail to see Christ many a time when we should have seen and recognized Him?

There is a story told of a poor shoemaker called Martin, who received in a dream a promise that the Lord Jesus would visit him on the morrow. He lived in a cellar and could only see the feet of those who passed by. Three or four times during the day he saw shabby boots shuffling wearily past the window, and each time he hurried out to invite the tired wayfarers in for rest and food. All day he watched for the expected Guest, and went to bed sad and disappointed because He had not come. Then in a dream the shabby men, women and children he had cheered and helped came one by one, looked earnestly at him, and said: "Martin, dost thou not know Me." Then he understood that Christ had really visited him that day.

Let us pray for clear, spiritual vision, that we may know, to-day and every day, that the Lord is in this place—yes, in your home and in mine—and may leave all our affairs in His hands to dispose of as He sees best. Then only shall we understand the perfect peace of a heart stayed on God, a peace which nothing can shake as long as the trust remains.

"I cannot always see the plan on which
He builds my life,
For oft the sound of hammers, blow on blow,
The noise of strife,
Confuse me till I quite forget He knows
And oversees,
And that in all details, with His good plan
My life agrees.

"I cannot always know and understand
The Master's rule,
I cannot always do the tasks He gives
In life's hard school,
But I am learning with His help to solve
Them, one by one,
And when I cannot understand, to say,
'Thy will be done!'"

HOPE.

Length of Rivers.

- The longest river in the world is the Missouri River to the Gulf of Mexico, 4,800 miles.
- The next longest river in the world is the Nile, 4,200 miles.
- The third is the Amazon, 3,750 miles.
- The fourth is the Venesol, 3,400 miles.
- Then comes the Mississippi, 3,200 miles.
- The Yang-tse-kiang, 3,320 miles.
- The Obi, 3,000 miles.
- The St. Lawrence is 2,000 miles long.
- The Yukon is 1,600 miles.
- The only river of any importance in Australia is the Murray, 1,500 miles in length.

THE CHILDREN'S CORNER.

Between Ourselves.

The "Hostess" has sent on to me a story written for our Corner by a little Manitoba girl named Jean Murray. It is the story of a child who got lost in her father's two-hundred-acre wheat field and was not found until next morning, when the searchers discovered her lying asleep not a quarter of a mile from home. Your Manitoba wheat fields must indeed be a wonderful sight, Jean, if any one can get lost in them.

Here is a letter which reached me in November, but has been crowded out until now:

West Montrose, Nov. 25, 1902.

Dear Cousin Dorothy:—

I have just finished reading "Our Corner" in the "Advocate," which reminded me that I had intended to write to you to-night.

I have just returned from a trip to Bracebridge to visit my friend, Hilda Beaumont. You will likely remember, after both of us got first prizes, you said we ought to correspond. We started writing then, and have been ever since. We became quite intimate friends without seeing each other.

Papa was going up to Sault Ste. Marie, so I went with him as far as Bracebridge and spent about a week with Hilda.

I had a lovely time with her. She is very nice, and I am sure I am thankful that you ever mentioned about our corresponding.

Muskoka is very different from Waterloo Co. Here, there is very little water, and in Muskoka there is so much. I had never seen a lake or a very large river before I went up there. The Muskoka River and lake are near Mr. Beaumont's; in fact, the river (at least part) is just in front of their house.

While up at Mr. Beaumont's I went for four steamboat rides, and down to the lake a couple of times in the rowboat. Of course, I was out in the rowboat more than twice. This was a great thing for me, having never seen a lake or large river before. Then we (Hilda and I) went to the top of a very high rock, where we could see quite a distance around. It was just a lovely scene. Of course, this scene would be much prettier in summer, when everything is fresh and green.

I may possibly try the competition later. I think Hilda would be able to write a very good composition on Canadian farm life. I must close. From

HILDA BOWMAN.

Hilda Bowman and Hilda Beaumont won prizes in a "Children's Corner" competition some time ago, and the similarity of name induced them to start a correspondence with each other. As you see, they have, through their connection with the "Advocate," won something worth far more than a prize—I mean a true friendship—and I heartily congratulate them both. No one knows better than I how a friendship begun in girlhood may grow stronger and more precious as years roll on. In my first week of life at a boarding-school in Toronto, my friendship with "Mollie" began. Her kindness to a miserable, homesick child has never been forgotten, and never will. Every year I have learned to value more her true and loyal friendship, and I hope the two Hildas may be friends till death—and beyond it. Of course there are plenty of school-girl friendships which don't deserve to be called such. Girls are often inseparable for a few weeks, and then declare they "can't bear" each other. These quarrels are generally caused by that little member which can do such great things—the tongue.

"I told a secret! It wasn't much
For a little girl to tell.
And I only told it, softly and low,
To my intimate schoolmate, Belle.
But the silly secret grew and grew,
And all around it spread,
Until at last it was hard to find
The thing I had really said.
And when I sat in mamma's lap
With all my troubles told,
She said 'twas the 'matter great' that grew
From the 'little fire' of old.
So I learned a lesson well that night
Before I went to bed,
And mamma gave me a rule to keep,
And this is what she said:
'The only way is never to say
A word that can offend.
Not even close to the listening ear
Of the dearest intimate friend."

Have any of you had an experience like that? If you read the third chapter of the epistle of St. James, you will find that he says the tongue is harder to tame than any wild beast. He also says that it can do a great deal of mischief, although it is so small, just as a very tiny flame may start a terrible fire. Now, if you were going to tame a wild beast thoroughly, you would have to begin before it was full-grown; it is also much easier to put out a fire before it gets very big. So you had better begin at once to tame your

tongue before it has grown too wilful and strong to be controlled.

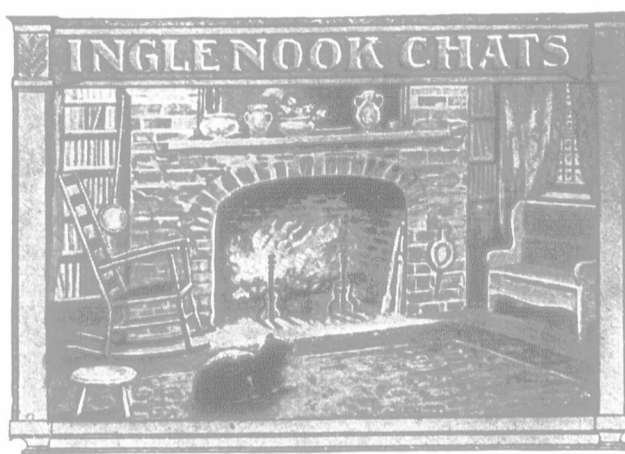
"You have a little prisoner,
He's nimble, sharp and clever;
He's sure to get away from you,
Unless you watch him ever."

"And when he once gets out, he makes
More trouble in an hour
Than you can make in many a day,
Working with all your power."

"He sets your playmates by the ears,
He says what isn't so,
And uses many ugly words
Not good for you to know."

"Quick, fasten tight the ivory gates,
And chain him while he's young!
For this same dangerous prisoner,
Is just—your little tongue."

COUSIN DOROTHY.



My dear Guests,—

"A bold yeomanry, their country's pride,
When once destroyed can never be supplied,"

sang Goldsmith many years ago, and realizing the truth of his assertion, the ruling powers of our great Dominion have been, and are, exerting many efforts to assist those who have devoted themselves to the pursuit of agriculture. The establishment of the Farmers' Institute should be of great benefit, but how many there are who fail to take advantage of the benefits it places within their reach. These same people are, in most cases, the ones who whine about the monotony and narrowness of farm life, when it is extremely doubtful if they subscribe for a journal devoted to their interests, or even for the local weekly.

It is a matter of regret that in many instances the meetings of the Farmers' Institute are so poorly attended. The speakers come willing and competent to address the people and to discuss with them the different problems pertaining to farming, etc. Do you not suppose it must have a very depressing effect upon them when they see that scarcely any have come to listen to them? Another trouble is that most of our farmers are so abnormally modest in presence of these speakers (many of them plain farmers themselves), that they sit in silence, never voicing the question or protest that rises to their lips. Once outside of the hall, oh, that's another story. Their tongues become suddenly loosened, and it is really marvellous what knowledge they have. Why, then, in the name of all that is reasonable, do they not diffuse that knowledge where it would benefit a number, instead of pouring it into one individual's ear. Even your very failure along certain lines may be of as much benefit to your listeners as another man's success, inasmuch as it will warn them off the rocks upon which you have foundered. This matter of friendly discussion is a vital part of the success of the Institute, and it lies with the audience, not with the speakers, to promote it. The latter are always willing to answer any questions put to them, and to ask questions pertaining to subjects of interest to himself is the best way for the farmer to derive benefit from the meeting. At one of the meetings in North Lanark, Mr. T. G. Raynor, a very pleasing speaker, touched on the subject of the home garden, tree planting, etc., mentioned the various evils that follow the too-prevalent custom of over-clearing land, and strongly advocated the planting of trees about the farm buildings, not only as a wind-break, but also as a protection from disastrous electrical storms. Some varieties of trees, he said, were great conductors of electricity, and attract the current which might otherwise destroy more valuable property. In speaking of the garden he said: "Do away with those little seven-by-nine fenced-in gardens; plant everything in rows instead of beds, and cultivate with a horse-hoe." Now, this is very good advice, but it requires the co-operation of the men of the house to carry it out successfully; they, however, think they have already enough to do, and so they "let the women-folks mind the garden," with the result that the farm table lacks

many luxuries easily procurable. By the way, now is the time to procure catalogues from some of the leading seedsmen; take plenty of time to make your selection, and then order early; when you want to start early seedlings you will have no troublesome delay.

A funny subject for the Ingle Nook, is it? But this is a farmer's ingle, therefore it is quite appropriate.

Ada M.—There are no restriction as to who may join our circle. The fact of taking sufficient interest in the Nook to write to us or take part in any of the competitions announced constitutes membership, so you may consider yourself as duly initiated and thoroughly welcome. So you like pictures. Have you ever seen the "Perry Pictures," copies of all the most famous paintings? They may be procured at the low rate of one cent each, and are very beautiful. They have large sizes at five cents each.

Sadie R.—You have misunderstood rules for this contest—The quotations must be from the works of Canadian authors.

Olive Kidd, in a very kind letter, acknowledges receipt of prize for Memory Gems, and in conclusion says: "My father considers the "Advocate" very essential to successful farming"—an opinion shared by most of the representative men of that calling.

THE HOSTESS.

Ingle Nook Chats, Pakenham, Ont.

(The contributions of A. L. McDiarmid (Class I.) and Mary Ker (Class II.) to the last "Memory Gem" contest should have appeared in this issue, but lack of space prevented.)

The Three Little Chairs.

They sat alone by the bright wood fire,
The grey-haired dame and the aged sire,
Dreaming of days gone by;
The tear-drops fell on each aged cheek;
They both had thoughts that they could not speak,
As each heart uttered a sigh.

For their sad and tearful eyes descried
Three little chairs placed side by side,
Against the sitting-room wall;
Old-fashioned enough as there they stood,
Their seats of flag and their frames of wood,
With their backs so straight and tall.

Then the sire shook his silvery head,
And with trembling voice he gently said—
"Mother, those empty chairs!
They bring such sad, sad thoughts to-night,
We'll put them forever out of sight
In the small dark room up-stairs."

But she answered, "Father, no, not yet;
For I look at them and I forget
That the children went away.
The boys come back, and our Mary, too,
With her apron on of checkered blue,
And sit here every day.

"Johnny still whittles a ship's tall masts,
And Willie his leaden bullets casts,
While Mary her patchwork sews;
At evening time three childish prayers
Go up to God from those little chairs,
So softly that no one knows.

"Johnny comes back from the billowy deep,
Willie wakes from his battle-field sleep
To say a good-night to me;
Mary's wife and mother no more,
But a tired child whose play-time is o'er
And comes to rest on my knee.

"So, let them stand there, though empty now,
And every time when alone we bow
At the Father's throne to pray,
We'll ask to meet the children above
In our Saviour's home of rest and love,
Where no child goeth away."

—Mrs. H. T. Perry.

Grandma's Silver Hair.

She wears no royal robes of silken splendor,
No coronet above her brow so fair,
But fitting crown for face so sweet and tender,
The shining radiance of her silver hair.

She wields no sceptre, save of love and duty—
Our household saint before whose shrine we kneel—
But at her touch earth's common things gain beauty,
And on her head God sets his shining seal.

Around each silver thread is twined a blessing;
Each tiny wrinkle cradles love's embrace;
Time's restless hand has traced, with soft caressing
Life's holy record on the well-loved face.

O diadem of priceless worth and splendor,
Pure emblem of a noble life well spent,
With thoughts of thee, in retrospection tender,
Our dearest hopes and memories are blent.

—Ida Goldsmith Morris.

If You Want Choice Re-cleaned

CLOVER AND TIMOTHY SEED

WRITE FOR SAMPLES TO

George Keith,

Seed Merchant,

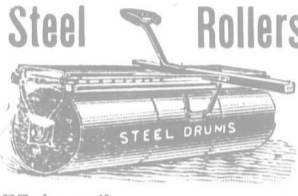
Established 1866. TORONTO.

Catalogue of Garden, Field and Flower Seeds sent on application.

For Sale: Thoroughbred Jersey heifers and heifer calves, 1 fine yearling Jersey bull and bull calves. One 3-year-old Holstein bull at a bargain. McCUAIG & ROBERTSON, Vankleek Hill, Ont.

BISSELL'S Steel Rollers

6, 8, 9 and 12 feet widths. A long way ahead of all other rollers. Do you care to know why Bissell's are Best? Full particulars FREE, by mail.



T. E. BISSELL, ELORA, ONT. DEPT. W.

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Seeds
the Kind that Leads
cost more—yield more.
sold by all dealers.
1903 Seed Annual
postpaid free to all applicants.
D. M. Ferry & Co.,
Windsor, Ont.
Seeds

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.

Mammoth Bronze Turkeys, S. G. Dorkings, Barred Rocks. Best lot of birds we have ever offered. **ALFRED E. SHORE,** White Oak, Ont.

Settlers' Low Rates West.

Via Chicago and North-Western Ry., every day from Feb. 15th to April 30th. Colonist one-way second-class tickets at extremely low rates from stations in Ontario and Quebec to points in Colorado, Utah, Montana, Nevada, Idaho, Oregon, Washington and California, also to Victoria, Vancouver, New Westminster, Nelson, Rossland, etc., etc. Full particulars, rates and folders can be obtained from B. H. Bennett, General Agent, 2 East King street, Toronto, Ont.

GOSSIP.

Note the advertisement of an extensive unreserved auction sale of 300 head of registered Shropshire sheep, to be held in the City of Brantford, Ont., on Feb. 26th, as announced by the well-known breeders and prizewinning exhibitors, Messrs. D. G. & J. G. Hanmer, whose intention is to hold annual auction sales at the same place. The present offering includes 100 young breeding ewes in lamb to a Royal winning imported ram, 150 ewe lambs, and 50 ram lambs. This is a rare opportunity to secure superior stock at your own price and on easy terms.

THE ROCKWOOD SHORTHORN SALE. Attention is again called to the advertisement of the dispersion sale, by auction, of Shorthorn cattle and Cotswold sheep belonging to Mrs. Thos. Waters, with a selection of Shorthorns from the herd of Mr. John Sockett, to take place near Rockwood station, G. T. R., and six miles from Guelph, on February 26th. The catalogue includes the pedigrees of 26 head of well-bred registered cattle—cows, heifers and young bulls. The sires appearing in the pedigrees are richly-bred and were well up to a high standard in individual excellence, and have left a good impress on the herds. The females of breeding age have calves at foot or have been bred to the fine imported bull, Merry Hampton, by Lord Hampton, a richly-bred Missie bull.

HARTMAN'S SHORTHORN SALE. On February 24th, as advertised in these columns, the entire herd of richly-bred Shorthorns belonging to Messrs. J. W. Hartman & Sons, Elm-hedge, Ont., near Meaford, G. T. R., will be dispersed by auction, owing to a change of business. For many years, Mr. Hartman, Sr., has maintained a strong herd of choice and select Scotch families, on which high-class bulls of the best breeding have been used. The herd comprises representatives of such favorite families as Minas, Mysies, Nonpareils, Miss Ramsdens, Isabellas, Matchless, and other useful sorts, including a capital lot of young cows and heifers in calf or with calves at foot, and some of the cows nursing calves again in calf to the grand old champion bull, Abbotsford, now at the head of the herd, of the choice Cruickshank Village family, sire of a long list of first-prize winners at leading shows. Most of the young things are sired by the late stock bull, May Duke, a son of the Cruickshank Clipper bull, Clipper King, bred by Hon. John Dryden, and of the Watt-bred cow, Mildred 4th by Imp. Hospodar. There are three young bulls, 13 months old, by this sire, good enough for herd-headers. There are also a lot of registered Berkshire sows to be sold, and they are sure to be good ones, as Messrs. Hartman have been breeding from the best herds in Canada. This is certainly one of the best opportunities offered in many years for securing cattle of choice breeding and character. All interested should send for catalogue and attend the sale.

UNRESERVED AUCTION SALE of registered

SHROPSHIRE SHEEP

It is our intention to hold Public Auction Sales annually on the Agricultural Park, in the City of Brantford.

The undersigned will sell by Public Auction on **THURSDAY, FEB. 26th, 1903,**

At one o'clock,

300 REGISTERED SHROPSHIRE

Of the best breeding quality, as follows: 100 breeding ewes, one and two years old, in lamb to Royal winning imported sire and choice Canadian-bred sire; 150 choice ewe lambs and 50 ram lambs (flock headers); one imported ram, weighing 300 lbs., two years old, and two shearing rams. The above is the largest sale of Shropshires ever offered in Canada, and those establishing flocks should not miss this opportunity of securing the very best obtainable.

POSITIVELY NO RESERVE BIDDING.

TERMS OF SALE—Eight months' credit on approved joint notes.

W. ALMAS, D. G. & J. G. HANMER, Auctioneers. Proprietors.

EGGS FOR HATCHING—White Wyandotte, Buff Orpington, Houdan and Pekin duck, \$1.25 per setting.

C. W. HEAVEN, Pinegrove, Prescott, Ont.

THE CANADA PAINT CO. LTD.
MONTREAL AND TORONTO
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PAINT VARNISH FOR ALL PURPOSES

For FARM HOUSES and FARM IMPLEMENTS
The Best Paints are made by
The CANADA PAINT COMPANY, LIMITED.
Ask the local dealer for Shade Cards.

CENTRAL ONTARIO
PURE-BRED STOCK ASSOCIATION
Second Annual Sale, to be held at Webber's Hotel,
CAMPBELL CROFT,
Garden Hill Station, Midland Division, G. T. R., on
WEDNESDAY, MARCH 18TH, 1903.
At 1.30 p. m. sharp.
W. B. CAMPBELL, - - CAMPBELL CROFT.
SEC.-TREAS.



DRESSED DOLL FREE!

GIRLS, would you like to have this beautiful dressed doll? If so, send us your name and address on a post card and we will send you one doz. large, beautifully colored packages of Sweet Pea Seeds postpaid. Sell them at 10c. each, return us \$1.20 and we will immediately send you the most beautiful Doll you have ever seen. Dolly is fully and fashionably dressed, including a stylish hat, underwear trimmed with lace, stockings and cute little slippers ornamented with silver buckles. She has lovely golden curly hair, pearly teeth, beautiful eyes and jointed body.

Eva Gilley, New Westminster, B.C., said: "I received your pretty Doll and am very much pleased with it. It is a perfect beauty and far exceeded my expectations."

Lizzie Sprout, Newdale, Man., said: "I received the Doll and think it is a fine Premium. It is the loveliest Doll I have ever had."

Gerrie McDonald, Bonavista Bay, Newfoundland, said: "Thanks very much for my beautiful Doll. I am more than pleased with it."

GIRLS, just stop and think what a truly wonderful bargain we are offering you. You can get this lovely big Doll completely dressed for selling only ONE DOZEN packages of Sweet Pea Seeds. Each package is beautifully decorated in 12 colors and contains 42 of the rarest, prettiest and most fragrant varieties in every imaginable color. They are wonderful sellers. **Everybody buys.**

Maggie Sinclair, Shelburne, Ont., said: "I sold all the seeds in a few minutes. It is a pleasure to sell them."

Mary Speeles Mono Mills, Ont., said: "I no sooner opened my parcel than I had all the seed sold. They went like wildfire."

A 50c. certificate free with each package. Girls, write us at once and this beautiful Doll will be your very own in a short time.

Prize Seed Co., Dept. 567 Toronto

GOSSIP.
Choice Ayrshire bulls fit for service, also bull calves and heifers in calf, are offered by Mr. W. W. Ballantyne, Stratford, Ont., who has a first-class herd of up-to-date Ayrshires, bred on producing lines, imported and bred from imported stock, and he offers them at "live-and-let-live" prices.

Attention of stock breeders and farmers is called to the advertisement of an auction sale of various classes of pure-bred stock to be held on March 18th, at Campbellcroft, Garden Hill Station, G. T. R., under the auspices of the Central Ontario Pure-bred Stock Association, of which the secretary is Mr. W. B. Campbell, of Campbellcroft, Ont., who will furnish further information.

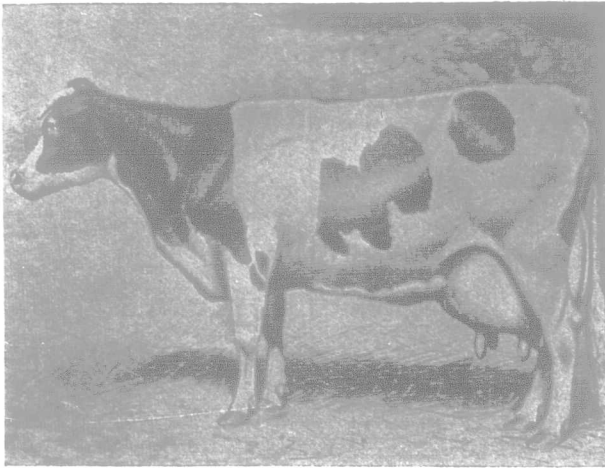
Holsteins and Holstein Grades

AT AUCTION.

E. D. TILLSON ESTATE, LTD., PROPRIETORS OF ANNANDALE STOCK FARM, have instructed the undersigned to sell by public auction at TILSONBURG, on THURSDAY, MARCH 5TH, beginning at 11 a. m., the following list of pedigree and grade animals:

THOROUGHbred BULLS.

1. GENERAL McDONALD, No. 1910, Vol. 5.—Sire Colanthus Abbekerk 2nd, No. 1110, Vol. 3; dam Mountain Duchess, No. 738, Vol. 5. Age, 2½ years.
2. Iosco's De Kol, No. 2216, Vol. 6.—Sire Netherland De Kol Pietertje, No. 23725, Vol. 5; dam Woodland Iosco, No. 39689, Vol. 5. Age 2½ years.
3. COLANTHUS ABBEKERK 4TH, No. 2385, Vol. 6.—Sire Colanthus Abbekerk 2nd; dam Sjut Siepkje Queen. Age, 8 months.
4. ANNANDALE COLANTHUS 2ND, No. 2411, Vol. 6.—Sire Colanthus Abbekerk 2nd; dam Mountain Duchess 2nd. Age, 7 mos.
5. DUKE OF PORTLAND, No. 2241, Vol. 5.—Sire Count Mink Mercedes; dam Mondamin's Daisy Barrington. Age, 1 year 5 months.
6. ANNANDALE DUKE 2ND, No. 2384, Vol. 6.—Sire Colanthus Abbekerk 2nd; dam The Annandale Mercedes Queen. Age, 3 months.
7. ANNANDALE COLANTHUS 2ND, No. 2585, Vol. 6.—Sire Colanthus Abbekerk 2nd; dam Clarabell Mercedes Queen. Age, 2 months.



THOROUGHbred COWS.

NO.	NAME.	NO. VOL. NO.	NAME.	NO. VOL.
1.	Mary Ann Queen	688 1	7. The Annandale Mercedes Queen	1892 3
2.	Clarabell Mercedes Queen	836 2	8. The Annandale Triumph	2231 1
3.	Sjut Siepkje Queen	834 2	9. The Annandale Queen	2232 1
4.	Nettie Tensen's Queen	737 2	10. Lady Inverness	2507 1
5.	Mountain Duchess	738 2	11. Mountain Duchess 2nd	2509 1
6.	The Annandale Princess	1443 3		

HEIFERS.

NO.	NAME.	NO. VOL. NO.	NAME.	NO. VOL.
12.	Princess Dixie De Annandale	3132 6	14. Annandale Beauty 2nd	3732 6
13.	Annandale Duchess 2d	3610 6	15. Lady Inverness 2nd	3779 6

With the exception of some of the older cows, the sire of the above heifers and cows was Colanthus Abbekerk 2nd, No. 1110, Vol. 3, a magnificent bull and splendid stock getter, standing at the head of the Annandale herd of the late E. D. Tillson for several years. The extended pedigree of this bull shows the Annandale herd descended from ancestors well developed along the lines of milk and butter.

In addition to the Thoroughbred stock, the following list of exceptionally choice **GRADE HOLSTEINS** will be offered:
 50 Cows, 25 of them fresh and balance due to calve during March, April, May and June, in calf by pedigree sires, 5 heifers, due to calve in April. 17 yearling heifers. 13 heifers, 3 to 7 months. All from Thoroughbred sires.
 1 Holstein Grade bull, coming 2 years. 1 Holstein Grade bull yearling. 1 Holstein Grade bull, 7 months. 12 steers, coming 2 years. 2 farrow cows.
 Any enquiries concerning the above stock will be promptly answered and catalogues furnished on application.

Tilsonburg is easy of access, being on the Wabash, Grand Trunk, Michigan Central, and T. L. E. & P. Railways. The Annandale Farm is situated in the corporation, a few minutes' walk from the stations of roads mentioned.
 TERMS.—Eight months' credit will be given on approved joint notes, without interest, 6 per cent. per annum discount allowed for cash. No animal to be removed until settled for. Animals bought and not settled for will be re-sold, the loss (if any) to be paid by the defaulter. Decision of the auctioneer to be final in all cases of dispute.
 Lunch served at 1 p. m. L. V. GARNER, Auctioneer.

E. D. TILLSON ESTATE, Ltd., TILSONBURG, ONT.

Low Rates to California.

Via Chicago, Milwaukee & St. Paul and Union Pacific line. Feb. 15 to April 30, 1903.

Only \$33 Chicago to San Francisco, Los Angeles and many other California points. One-way, second-class, colonist tickets.

Will be glad to send you additional information.

A. J. TAYLOR, Can. Freight and Pass'r Agt., 8 King Street East, Toronto, Ont.

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 Invest in a bank that never fails—education. Attend our school if you can, but if you cannot, then take our "Mail Course" in Penmanship, Book keeping, Shorthand, etc. Circulars free.
 W. J. ELLIOTT, Principal.

HOLWELL MANOR FARM

FOR SALE:
 Two Scotch Collie bitches, one 8 mos., the other 15 mos. old.
 D. G. GANTON, ELMVALE, ONT.

WINDMILLS



The Canadian Airmotor

will earn more for you in one year than any other implement.

A Terror to Grind, Cut Straw, Pulp, and Pump Water.

Agents from the Atlantic to the Pacific Write us.
ONT. WIND ENGINE & PUMP CO. LIMITED. TORONTO, ONT.

PLEASE MENTION FARMER'S ADVOCATE.

GOSSIP.

When in the vicinity of Markham, Ont., recently, an "Advocate" representative made a call on Mr. Ed. Robinson, importer and breeder of choice Shorthorn cattle, and found his magnificent herd of 50 head in prime condition. Thirty-five head of this lot are imported, and the herd represents such noted Scotch families as Broadhooks, Jilts, Undines, Isabellas, Marr Roan Ladys, Campbell Marys, Orange Blossoms, Kiblean Beautys, Reid's Marys, Marchionesses, Gwynnes and Lovelys, at the head of which is the rare good bull, Imp. Rustic Chief, bred by Alex. Watson, Auchronie, sired by the Queen's Guard. He is a roan, very even, thick, smooth, and with abundance of quality. Among the females are eight imported two-year-old heifers, as follows: Roan Rose by Abbotsford 2nd, Myra 2nd by Lord Harold, Annie by Lovat's Chief, Daisy by Jubilee Star, Dorothy Princess by Proud Star, Jilt 21st by Scottish Prince, Rothnick Rose 4th by Scottish Prince, Betsy by Lovat's Chief. All of these are either in calf or have calves at foot, by such notables as the Marr Missie bull, Conqueror's Crown, and King Victor. Besides these, there are twelve yearling heifers, all imported, as follows: Lettuce by Knight of Strathbogie; Prisca and Pappae, by same sire; Apple Pie, Sally and Sweet Briar, by Ivanhoe; Cherry 2nd and Tulip, by Orton; Beauty 32nd, by Count St. Clair; Primrose 2nd, by Hogarth; and Millstream, by Sweet William. In three-year-olds, imported, there is Love Bird, by Scotland's Fame. She has a nine-months-old bull calf, by Knight of Strathbogie—an extra nice, thick youngster; Duchess Gwynne 6th, by Baron Lee, has a red yearling heifer by Scottish Prince, and one at foot by King Victor. There is ten-months-old red bull, imported in dam, by Golden Fame, dam Dorothy Princess by Proud Star—an extra good one; also, one white yearling bull, by Imp. Baronet, dam August Lassie 2nd by Indian Sailor. He is also a very good, even type of animal. On the day of our visit, there arrived from quarantine the beautiful model show cow, Mary 15th (imp.), 3 years old, in calf to Nonpareil Duke. Lately, Mr. Robinson has sold two imported cows to Dixon Bros., Luana, Iowa; two imported heifers and one bull to Good-fellow Bros., Maeville; one bull, imported in dam, to T. Morser, Markdale; one bull, imported, to R. McLennan, Holmfild, Man.; one cow and yearling heifer to Walter James, Rosser, Man.; two cows to E. B. Sullivan, Iowa; and five head to R. Miller, Stouffville. Anything in the herd is for sale. Mr. Robinson's farm lies within the corporate limits of Markham village, and is only twenty miles from Toronto.

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 1½ 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. Specks, Monq 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 **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. Geo. 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.**

When Spring Opens, You Will Need a **FROST & WOOD**

WINDSOR DISC HARROW

This illustration shows the Windsor arranged for three horses, and done without tools of any kind.

It is the finest land leveler in Canada. Examine the Agent's sample and **LEAVE YOUR ORDER NOW.**

THE Frost & Wood Company LIMITED. Head Office and Works: **Smith's Falls, Ont.**

BRANCH OFFICES:
 Toronto, Ont. Montreal, Que.
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Seeds

THAT
SUCCEED

THE SEED HOUSE of J. A. SIMMERS has had nearly fifty years' experience with seeds, and the results of this are placed at the service of farmers, gardeners or amateurs in a finely-illustrated catalogue issued FREE. No user of seeds, professional or amateur, can afford to be without the valuable information contained in this catalogue. SEND FOR IT.

J. A. SIMMERS,
Seeds, Bulbs, Plants,
TORONTO, ONT.

Desirable Farm FOR SALE:

In Elgin County, Ontario (extreme south of Canada), parts of Lots 23 and 24, 12th Con., Tp. of Aldersborough, near West Lorne Station, M. C. R. (main line between Buffalo and Detroit); also on L. E. & D. R. R.

170 ACRES

in good state of cultivation, well fenced, partly tile drained, good buildings, water before cattle in stables; geared windmill for grinding, pumping, etc.; some woods, balance mostly seeded down to grass; grows any kind of grain or fruit grown in Canada; abundance of pure water; church and school convenient; mail twice a day; no ditch tax; outlet on farm for draining. For further particulars address

ALEX. LOVE, Eagle P. O., Ont.

UNRESERVED AUCTION SALE OF 57 COTSWOLD SHEEP 57

1 shearing ram, 6 ram lambs, 31 breeding ewes—all young, 19 ewe lambs. All registered. At my farm, Lot 1, Con. 1, Burford Tp., half mile west of Falkland, half way between Paris and Princeton, G.T.R., on Governor's Road, on Wednesday, March 11th, 1903.

Sheep sale at 1 p. m. Lunch at noon.

Terms.—All sums of \$10 and under, cash; over that amount, 7 months' credit on approved security. A discount of 3 per cent. off for cash on all sums entitled to credit.

Persons giving notice to proprietor by mail of intention to attend, will be met at Paris station at 11 o'clock, conveyed to sale and returned in evening. JOSHUA PELTON, Prop., SCOTT DAVIDSON, Auctioneer, Canning P. O., Ont.

THIRD ANNUAL Provincial Auction Sale of Pure-bred Cattle

will be conducted under the auspices of the Dominion Cattle, Sheep & Swine Breeders' Associations AT Guelph, Ont., February 25th, 1903.

SELECTED STOCK—nothing but good representatives of each breed will be allowed to enter and be put up for sale. Orders to buy may be placed with the Secretary, and will be honorably discharged.

REDUCED PASSENGER RATES.
SPECIAL RATES TO BUYERS.

For copy of rules, catalogue and full particulars, apply to

A. W. SMITH, Pres., Maple Lodge, Ont.
A. P. WESTERVELT, Secretary, Parliament Buildings, Toronto.

NOTICES.

CORRECT SPRAYING.—The development of the Hardie spray pump business in Canada has necessitated the erection of a factory in Windsor, Ont., where this simple and efficient apparatus for the use of the orchardist will be turned out rapidly and up-to-date. Without a proper spray pump thorough spraying is impossible. The salient features of this pump are referred to in the advertisement of this company, which appears elsewhere in this issue, and in which they offer to send free their book on spraying.

THE MILNER PETROLEA WAGON CO., whose advertisement appears in this issue, while not very long established, have already attained prominence on the market, owing to the high-grade wagons they are turning out. Their factory, erected at Petrolea, Ont., in 1902, is certainly one of the most complete of its kind in Canada. Mr. Milner, long and favorably known in connection with the manufacture of wagons, is superintendent. Dealers and agents throughout the Provinces and Territories are handling these wagons, and they are found to be giving excellent satisfaction.

GOSSIP.

GREAT SALE OF DAIRY CATTLE IN SIGHT.

The announcement, in our advertising columns, of the dispersal sale, by auction, on March 5th, of the great Annandale herd of registered Holsteins and Holstein grades, over 100 head all told, belonging to the estate of the late Mr. E. D. Tillson, Tilsonburg, Ont., is one of great interest to farmers, dairymen and breeders throughout the Dominion. Thoughtful readers of the "Farmer's Advocate" will have noted the splendid milk record of the Annandale herd published in these columns from time to time. Under the careful and intelligent supervision of the late Mr. Tillson, who was eminently practical in all his work and planned to make his farm and his cattle pay good dividends, remarkable results were attained in the line of improving, by breeding, selection and feeding, the productive capacity of his cows, until, in the last three years, this large herd of milking cows, numbering over sixty, and including heifers, made the following phenomenal record of milk production:

1900—54 cows averaged...	10,933 lbs.
1901—05 " " " " " "	9,353 " "
1902—56 " " " " " "	9,593 " "
1900—5 best cows aver...	16,852 lbs.
1901—5 " " " " " "	13,117 " "
1902—5 " " " " " "	14,133 " "

One of the cows in this herd, a grade Holstein, bred on the farm, produced in 12 months and 15 days 20,132 lbs. milk and 822 lbs. of butter in the year ending April 20th, 1899, and in eight years has produced 101,000 lbs. of milk.

To appreciate the character of this herd of cows, it is only necessary to reflect that the average milk production of Canadian dairy cows is less than 4,000 lbs., and that a cow that yields 6,000 lbs. is considered an extra good one.

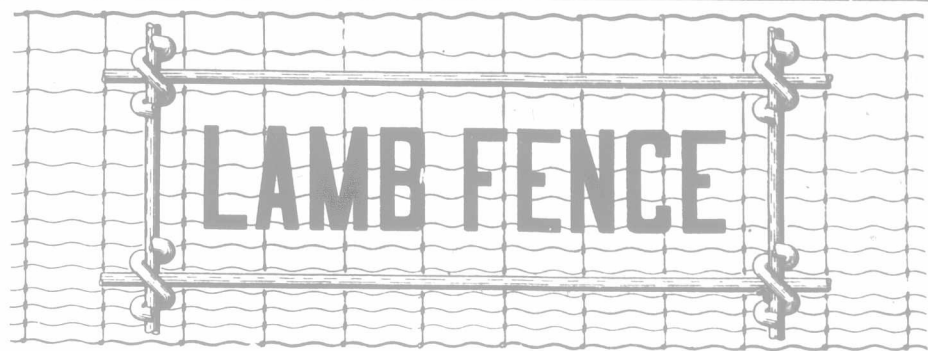
There are in the herd, to be sold, 22 head of pure-bred registered Holsteins, 15 of which are cows and heifers and 7 young bulls, from 3 months to 2½ years old.

With the exception of some of the older cows, the sire of these, also of the grade cows and heifers, was Colanthus Abbekirk 2nd, No. 1110, Vol. 3, a magnificent bull and splendid stock-getter, whose extended pedigree shows the Annandale herd descended from ancestors uncommonly developed along the lines of milk and butter production. Pedigreed Holstein sires have been used in the herd for over twelve years, and there are in the sale 50 grade Holstein cows, 25 of which are fresh and the balance due to calve in the next three months, besides a grand lot of heifers of various ages. The terms of the sale are easy, the place easy of access, and the occasion is one that should attract dairymen from many districts. Ordinary cows are worth good money now, and it will be economy to buy first-class producers and sell off those that are doing little more than paying their board. One good cow is worth three ordinary ones, and will cost much less to keep. See the advertisement of this sale, and send for catalogue and fuller information.

TO THOSE with a taste for Japans

"SALADA"

CEYLON GREEN tea is delicious. Then it is without paint or adulteration in any form, and of double strength. Sold in the same form as the celebrated "SALADA" blacks, in lead packets only. 25c., 30c., 40c., 50c., and 60c. per pound.



CHEAPEST BECAUSE IT'S BEST.

The H. R. LAMB FENCE CO., Ltd., LONDON, ONT.

UNRESERVED DISPERSION SALE

I will sell by public auction, at my farm, 5 miles east of Erin, C. P. R., and 6 miles west of Georgetown, G. T. R., 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 of the get and produce of winners. Catalogue mailed on application.

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

Conveyances will meet forenoon trains at Erin, C. P. R., and Georgetown, G. T. R., and return after sale.

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 = 19446 =, proven to be one of the best stock bulls in Canada, both in the show-ring and fat-stock shows. Females of the Minas, Mysie's, Ury's, Nonpareils, Isabellas, 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.

DE LAVAL

GUARANTEED CAPACITIES.

"HUMMING-BIRD"	250 lbs. whole milk per hour,	\$ 65
"DAISY"	350 " " " " "	85
"BABY" No. 1,	450 " " " " "	100
"BABY" " 2,	600 " " " " "	125
"BABY" " 3,	1000 " " " " "	200
"DAIRY" TURBINE,	1000 " " " " "	225

There is a big difference between the advertised and actual capacity of the miscellaneous lot of separators sold to-day; but please remember that De Laval capacities are Guaranteed and are enough greater than competing machines to more than offset the apparent difference in first cost.

THE DE LAVAL SEPARATOR CO., 77 York St., Toronto.

CREAM SEPARATORS

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.

Best grocers sell it.

80%

Increase in the Fruit Crop.

This is the actual results of spraying with the wonderful

Hardie Spray Pumps

That's Why They Work so Easy.

We make them in many sizes and styles. Our catalogue tells you all about them. It is free—send for it.

The Hardie Spray Pump Mfg. Co.

93 Sandwich St., Windsor, Ont., and Detroit, Mich.



EWING'S Selected Farm and Garden SEEDS

are thoroughly reliable and better cannot be found. We mail free our Illustrated Seed Catalogue for 1903 to all sending us their addresses. Our assortment is complete, and includes full lines of Plants, Flowering Bulbs, Shrubs, Tools, etc., besides all varieties of seeds for farm or garden, and Seed Grain.

WILLIAM EWING & CO'Y,
SEED MERCHANTS,
142 MCGILL ST. MONTREAL.

Catalogue Printing Our Specialty.

Many of the best Catalogues in Canada are produced by us. Latest type faces, designs, ornaments, and modern machinery.—Best in America. Up-to-date covers designed by special artists without extra charge.

London Printing & Litho. Company, Ltd., LONDON, ONTARIO.

This Will Interest Many.

F. W. Parkhurst, the Boston publisher, says that if any one afflicted with rheumatism in any form, or neuralgia, will send their address to him at 894-57 Winthrop Bldg., Boston, Mass., he will direct them to a perfect cure. He has nothing to sell, and only tells you how he was cured after years of search for relief. Hundreds have tested it with success.—Advt.

Prize List Spring Stallion Show.

Class I, section 1A—Clydesdale stallions foaled previous to Jan. 1, 1899—1 Graham Bros.' (Claremont) Stately City; 2 Smith & Richardson's (Columbus) King's Cross; 3 Smith & Richardson's Duke of Cornhill; 4 Robert Beith's (Bowmanville) Prince Priam; 5 J. B. Hogate's (Sarnia) Sir Reginald; 6 Smith & Richardson's Laird of Craigie; 7 W. J. Squire's (Mitchell) Sir Oswald; 8 O. Sorby's (Guelph) Pride of Morning; 9 Wm. Colquhoun's (Mitchell) Climax.

Class I, section 1B.—Clydesdale stallions foaled in 1899—1 Smith & Richardson's Pioneer; 2 R. Beith's Peveril; 3 R. Beith's Star of Roses; 4 Graham Bros.' Border Sentinel; 5 Wm. Colquhoun's Coynachie; 6 H. G. Boag's (Churchill) Primrose Pride; 7 Graham Bros.' Gallant Lorne; 8 J. B. Hogate's Carron Jamie.

Three-year-olds.—1 Graham Bros. (Cairnhill, imp.); 2 Robert Ness (Cecil, imp.); 3 Smith & Richardson (Lavender, imp.); 4 Graham Bros. (Craig Stamp, imp.); 5 O. Sorby (Florist, imp.); 6 Hugh Semple, Harewood, (Silver Prince); 7 T. Swan Smith, Montreal, (Kitchener, imp.).

Two-year-olds.—1 J. B. Hogate (Royal Park, imp.); 2 J. A. Tainer, Calgary, (Glenevis); 3 J. W. Cowie, Markham, (Alexander Macqueen); 4 J. H. Millard, Altona, (Lyon Macqueen).

Canadian-bred Clydesdale and Shire stallions, four years old and over.—1 J. G. Clark, Ottawa, (Woodroffe Plowboy); 2 Francis Russell, Cedarville, (Lord Aberdeen); 3 Graham Bros. (Merriment 2nd); 4 W. F. Broad, V. S., Lindsay, (Granite Lad); 5 Geo. Isaac, Markham, (Prince Royal); 6 Ed. Hoy, Orchard, (Gordon Anderson); 7 W. J. Wells, Temperanceville (Laird Macqueen).

Three-year-old class.—1 Graham Bros. (Pride of Eastfield); 2 Eaid & Everett, Simcoe, (Lord Donald); 3 Smith & Richardson (General Gordon); 4 Smith & Richardson (General Macqueen); 5 Dely Bennett, Russelton, (Perfection); 6 Jas. Gostlin, Lindsay, (Union Boy). Two-year-olds—1 J. W. Cowie (Macqueen 2nd); 2 O. Sorby (Charming Prince); 3 Robt. Davies (Royal Sensation); 4 Geo. Davidson & Sons, Cherrywood, (MacCarra); 5 D. Carstairs, Bomanton, (Prince Pearl); 6 J. G. Clark (Arbitrator Again); 7 W. R. Stewart, Toronto, Lieutenant Junior). Yearlings—1 J. W. Cowie (Macqueen's Best); 2 H. G. Boag, Churchill, (Proud Gordon); 3 Jas. Gostlin, (Simon Macgregor).

Shires, four years old and over.—1 J. J. Anderson, Dominionville, (Flagship); 2 J. B. Hogate (Nateby Monarch 2nd); 3 Morris & Wellington (Geo. Lennox). Three-year-olds—1 Morris & Wellington (Bank Statesman); 2 Morris & Wellington (Vulcan 2nd). Two-year-olds—1 and 2 Morris & Wellington (Coronation and General Favorite).

Sweepstakes Clydesdale, Graham Bros. (Stately City); Sweepstakes Shire, Morris & Wellington (Coronation).

GOSSIP.

Five young Shorthorn bulls and some females are advertised for sale by J. R. McCallum & Sog, Tona Station, Ont., sired by a son of imported Royal Sailor. These should be worth looking after.

Attention is directed to the advertised auction sale of 57 head of registered Cotswold sheep, property of Mr. Joshua Pelton, Canning, Ont., near Paris, G. T. R., to take place on March 11th.

Mr. John B. Pettit, Fruitland, Ont., breeder of high-class pure-bred poultry, writes that in his efforts to build up heavy-laying strains of the breeds he handles, he is meeting with success, and finds that careful breeding with that aim in view brings satisfactory results, and he can furnish birds and eggs from birds that are the result of years of careful mating and breeding, and have won many prizes at the largest poultry exhibitions in America. At present he has a few splendid cockerels in S. C. B. Leghorns, S. C. B. Minorcas, Barred and White Plymouth Rocks and White Wyandottes to dispose of, and his endeavor is to deal honestly and give his patrons satisfaction and good value. His motto is "Quality before Quantity."

A TRIUMPH



IN MACHINE MANUFACTURE

IS THE **McCORMICK BINDER** . . .

During 1902 more McCormick machines were sold than in any previous year, a fact which attests the wide-spread popularity of the world-renowned machine. The seventy-two years success of the McCormick has made this name a household word throughout the world.

The McCormick is the machine to buy for 1903.

Write for beautiful McCormick calendar and copy of 1903 book entitled "A MODEL MACHINE."

GENERAL AGENTS FOR McCORMICK MACHINES,

H. R. THURBER, Toronto, Ont.
A. B. CLANCY, Montreal, Que.

SAVE YOUR HAY & SAVE EXTRA LABOR

SPECIAL LABOR SAVING TOOLS.

MAXWELL TEDDER SIDE DELIVERY RAKE & LOADER.



ST. MARY'S, ONT. CANADA.



IS THERE AN AGENT IN YOUR DISTRICT

IF NOT ADDRESS THE FIRM DIRECTLY

DAVID MAXWELL & SONS, ST. MARY'S, ONTARIO, CANADA.

YOU FEED 4 COWS or 4 STEERS **ENSILAGE** at same 3 on other cost as 3 Rations. 25 to 40 per cent. saved feeding good sweet ensilage. We furnish you STAVES, one piece, full depth of silo. Our FREE book, "Silos and Silage," has full details, and much of interest to your purse. **WILLIAMS MFG. CO., Kalamazoo, Mich.**

SUPERIOR DISC DRILLS

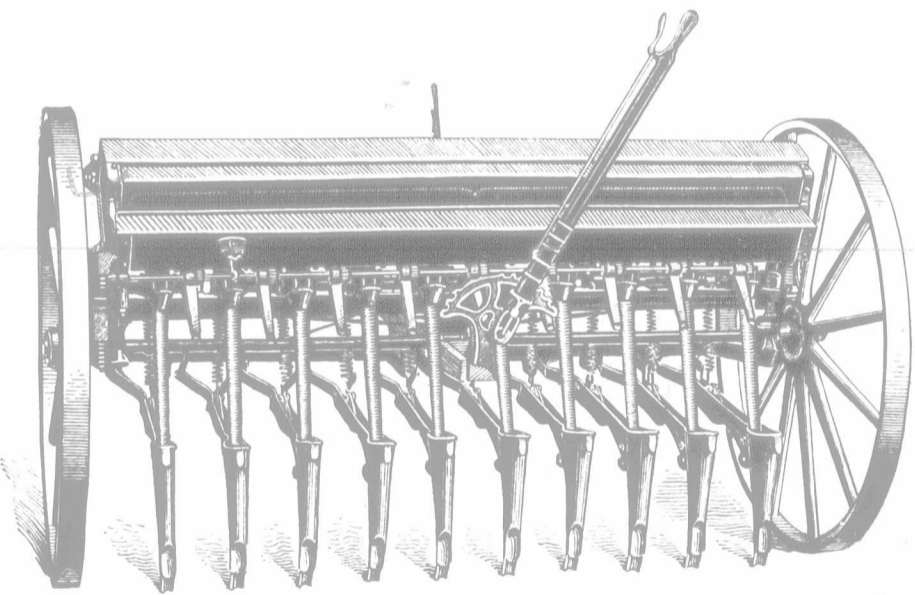


SUPERIOR DRILLS ARE NOW ON SALE IN CANADA.

The above illustration shows the SUPERIOR SINGLE DISC DRILL. It is an interchangeable Drill. It can be supplied with Double Discs or Shoes, as purchaser may desire. To change from one style to another it is only necessary to remove draw-bars and discs. The bars bolt to front of frame. SUPERIOR DRILLS are made of the best material. They are strong and durable. They save seed, time, worry and repair bills. They do more work with less labor to both man and team than any other drill. SUPERIOR DRILLS successfully sow all kinds of grain, under any condition of seeding, in every section of the grain-growing world.

WRITE FOR FREE CATALOGUE AND INFORMATION TO
SUPERIOR DRILL CO., MCKINNON BLDG., TORONTO.

The NOXON CO., Ltd., INGERSOLL, CANADA MANUFACTURERS



THE NOXON CELEBRATED SPRING-PRESSURE, ALL-STEEL HOOSIER DRILL.

The NOXON CO., Limited, INGERSOLL, CANADA.

**Binders, Mowers, Rakes,
 Cultivators, Drills,
 Harrows and Pulpers.**

Fitted with—
**Steel Hoppers,
 Steel Conducting Tubes.
 Adjustable Spring Pressure.**

Tongue is detached by removing two bolts.
 Same lever applies pressure and lifts hoes from ground.
 Nothing about it to shrink, split or rot.
 The best and a long way the winner.

Best Values in SEEDS!

"The Pioneer Seed House of Canada."
 ESTABLISHED 1850.

Our beautifully-illustrated, up-to-date catalogue of "Everything valuable in Vegetable, Flower and Farm Seeds" is now ready, and will be mailed free to all applicants. SEND FOR IT.

In QUALITY our stocks are "Second to None," and PRICES will compare favorably with those of any other reliable house in America.

Special offer: "Bruce's Empire Asters."
 1 pkt. each, separate, of 6 of the best varieties, all colors. Retail value, 60c; postpaid for 25c.

JOHN A. BRUCE & CO., HAMILTON, CAN.

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, MRS. THOS. WATERS, or JOHN SOCKETT,
 Guelph, Rockwood, Ont.

H-T-T. Published monthly, 52 pages. Tells all about Hunting, Trapping and Raw Furs. Sample copy, 10c. Hunter-Trapper, Box 6, Gallipolis, Ohio.

WANTED:
 Man to work on farm near St. Catharines. Young married man preferred. Apply to
G. B. McCALLA, Guelph.

Our Priced
CATALOGUE
 is our agent for Reliable nursery stock, in variety. Direct deal will give you satisfaction. We can please our 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. 1,950 Fountain Pens given away to help **FREE!** us introduce **BLUNE**, the best laundry blue made. Only one day's time required. Write quick. **O. COBER, Hespeler, Ont.**

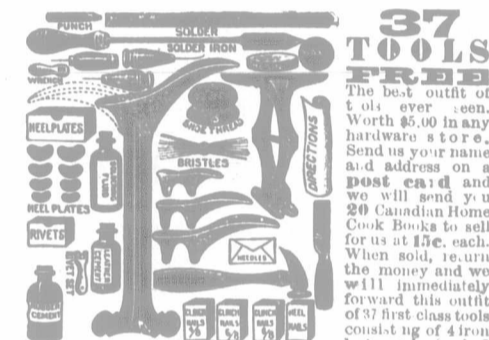
PICTURES ON CREDIT —NO SECURITY ASKED—

We send you 15 large beautifully colored pictures, each 16x22 inches named "The Angels Whisper," "The Family Record," "Christ Before I Die," "Rock of Ages." These pictures are handsomely finished in 12" mats and could not be bought for less than 50c. each in any store. You sell them for 25c. each, send us the money, and for your trouble we send you a handsome gold-finished **Double Hunting Case Watch**, lady's or Gent's size, richly and elaborately engraved in solid gold design, with stem wind and set, accurately adjusted reliable imported movement. Write us a **post card** today and we will mail you the pictures postpaid, also our large illustrated Premium List showing dozens of other valuable prizes. Address, Home Art Co., Dept. 528 Toronto.

MAGNETO BATTERY \$1.89 ELECTRIC BATTERY WORTH \$5.00

DOCTOR IN YOUR HOME
Always ready. Cannot get out of order. Never wears out. You turn the crank and generate an electric current which can be regulated at will. Weak enough for a baby or powerful enough to overcome a strong man. Nothing like it for

Apoplexy, Meningitis, Paralysis, Neuralgia and all other nervous affections, Dyspepsia, Rheumatism, etc., etc. The best doctors recommend the use of electricity even when everything else fails. **Not one cent to pay till you see it.** Just send us your name, address and nearest express office, and we will send you this Electric Magneto with full instructions for examination. When it arrives, test it thoroughly, and if found perfectly satisfactory, pay the express agent our special wholesale price, \$1.89, and express charges, and it is yours. If you do not live near an Exp. office, or wish to save Exp. charges, send \$1.89 cash and we will send the Battery postpaid. **Johnston & Co., Box 533 Toronto**



37 TOOLS FREE
 The best outfit of tools ever sent. Worth \$5.00 in any hardware store. Send us your name and address on a **post card** and we will send you 20 Canadian Home Cook Books to sell for us at 15c. each. When sold, return the money and we will immediately forward this outfit of 37 first-class tools consisting of 4 iron lists and stand, 3 awls and wrench, 1 hammer, 1 knife, 2 bottles cement, 1 bag of bristles, 1 ball wax, 1 ball thread, 3 pkgs. clench and 1 pkg. heel nails, 4 prs. heel plates, 6 needles, 1 clamp, 1 box rivets, 1 rivet set, 1 harness punch, 1 bar solder, 1 bar resin, 1 bottle soldering fluid and complete directions for repairing boots, rubbers, harness, tinware, also 8 repairing saws, etc., etc. You can make hundreds of money with this outfit doing little jobs for your neighbors, besides making your own repairs and thus saving the many dollars paid to shoemakers, tinmiths, harness makers, etc. Write today for the Cook Books. You can easily sell them and earn this valuable outfit of 37 tools in a few minutes. **Harry Fitch, Niagara Falls, Ont.** A 50c. certificate free with each book. **Notice.**—We are putting the price down to \$3.00 in order to clear out a small stock. If you want one write at once. **The Home Specialty Co., Dept. 520 Toronto, Ont.**

2.85 GOLD HUNTING CASE WATCH

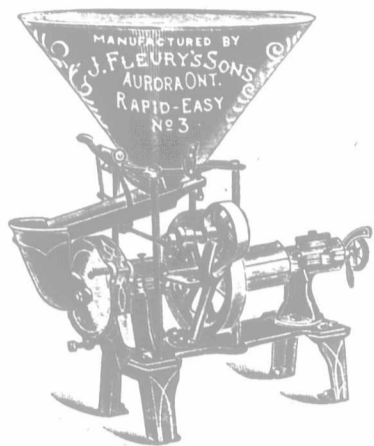
A genuine \$25.00 Gold Watch in appearance, magnificent, full engraved, gold-finished, double hunting case, stem wind and set, **accurate Ruby Jeweled Works**, correctly timed and regulated. Send us your name, address, and nearest Express Office (mention whether Lady's or Gent's size), and we will send the watch for free examination. If satisfied that it is just as represented, pay \$2.85 and express charges and it is yours. **\$2.85 is a special price for a short time.** Write at once. **Terry Watch Co., Dept. 551 Toronto.**

MAGIC STEREOSCOPE FREE

BOYS and GIRLS!
 Here is something new. Nothing less than a Magic Lantern that works without a light. A you have to do to see the views is to look through the lens, when a beautiful scene will spread out before you, revealing all the delicate effects of color found in real living scenery. With each Stereoscope we send an assortment of views on glass, which will afford you and your friends endless amusement. We give this splendid Stereoscope free for selling 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.** A 50c. certificate free with each package. **So, do it, Mono Mills, Ont., will not let you sooner than I had all the seeds sold. They won't like to wait.** Write us a **Post Card** today and we will send you a Stereoscope postpaid. **THE PRIZE SEED CO., DEPT 525 TORONTO, ONTARIO**

FREE LANTERN AND ENGINE
 Splendid Magic Lantern with powerful lens 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. 6 Huss 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** today and we will mail the Pens postpaid. When sold return \$1.20 and we will forward immediately with the Lantern and Engine. **THE PEN CO., DEPT 584 TORONTO, ONT.**

"RAPID-EASY" GRINDERS



DIFFERENT SIZES, adapted to all styles of POWER and to EVERY PURPOSE. CUSTOMERS say they do MORE WORK with SAME POWER than any other Grinder, and plates last longest, therefore CHEAPEST.

"I sold the Grinder to three brothers. It is working well and they are HIGHLY PLEASED with it." A. J. BRADLEY, Belwood, Ont.

"Please send us by express 2 sets 12-inch plates for No. 3 'Rapid-Easy' Grinder. Customer is MORE THAN PLEASED with the Grinder." T. J. TRAPP & CO., Ltd., New Westminster, B.C.

"The No. 2 'Rapid-Easy' Grinder which I purchased from your agent, A. Gillham, has given me ENTIRE SATISFACTION. It runs VERY EASY. I can grind fast and do GOOD WORK in ALL KINDS OF GRAIN. It is NO TROUBLE to grind hard barley and make a SPLENDID JOB of it. I have ground oats at the rate of ONE BUSHEL PER MINUTE, running with a HORSE-POWER and 2 SPAN OF HORSES. I do better work with my Grinder than others in this locality do with stones. I would recommend the 'Rapid-Easy' to any intending purchaser. I may add that the plates that you supply are VERY good indeed. I have not used up the FIRST SET yet, and I have done A LOT of work." NOAH HOILES, Maple, Ont.

SOLD IN ALL PROVINCES.

Lithograph hanger and information on application to: The Fairchild Co., Winnipeg, Man.; The T. J. Trapp Co., New Westminster, B. C.; W. R. Meigaw, Vernon, B. C.; A. A. Johnston, 212 St. Paul St., Montreal, Que.; P. T. Legare, Quebec, Que.; J. Clark & Son, Fredericton, N. B.; The Lounsbury Co., Newcastle, N. B.; W. F. Dibble & Son, Woodstock, N. B.; Bligh & Prince, Truro, N. S.; Hilsley & Harvey, Pt. Williams, N. S.; A. Horne & Co., Charlottetown, P. E. I.; J. M. Clark, Summerside, P. E. I., or

J. FLEURY'S SONS, Aurora, Ont., Can.

Write to-day. Medals—World's Fairs, Chicago and Paris. Write to-day.

HERSEE & BICKELL 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.

Bush., \$1; 5 bush., \$4.50.

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.

Grass Peas (re-cleaned), bush., \$1. Wild Goose Wheat (re-cleaned), bush., \$1.20. Speltz, 50 lbs., \$1.25. Low prices in quantity.

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.

"I would not turn my hand to choose between the five leading American Incubators. They are all hot-air machines, identical in construction. There is nothing new in Incubators."—THE VIEWS OF AN EXPERT POULTRYMAN.

The Chatham Incubator makes its bow.

Its makers, THE M. CAMPBELL FANNING MILL CO. OF CHATHAM, LIMITED, believe that a high-grade Canadian Incubator is in urgent demand. We believe that Incubators are beyond the experimental stage, and their construction an exact science.

- Adopted the best principles. Used the best material. Employed the best workmanship. Added the best finish. Equipped with the best instruments.

We have, therefore, 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 bass-wood; 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.

SAVE 20 CENTS PER SHEEP on every sheep you shear with STEWART'S PATENT SHEEP SHEARING MACHINE. The day of the old-fashioned hand shears is past. No owner of 10 sheep or more can afford to shear by hand, even though the work be done for nothing. Don't butcher your sheep, shear with this machine and get ONE POUND MORE EXTRA PER HEAD. It will more than cover the cost of shearing. Send today for valuable book, "Hints on Shearing." It is free and will save you money. CHICAGO FLEXIBLE SHEET CO., 209 Ontario St., CHICAGO.

Please Mention Farmer's Advocate,

GOSSIP.

W. C. Shearer, Bright, Ont., orders a change in his advertisement offering a number of Barred Plymouth Rock cockerels, that, he says, for good breeding and individual excellence cannot be surpassed. This is an excellent opportunity for farmers' sons and daughters to secure the nucleus of a very popular and profitable breed of poultry. Give the boys and girls something of their own, it will cultivate in them a larger liking for the farm.

Messrs. D. Milne & Son, Ethel, Ont., write: "Our Shorthorns are doing well. Our sales for the last month have been: one bull to Gavin Kirkwood, Chesley, Ont.; one cow to Joseph Engler, Henry, Ont.; one bull to Thomas Stevenson, Ethel, Ont.; one bull to Thomas Dickson, Atwood, Ont.; and one bull to A. W. R. Burdon, Middlemiss, Ont.; and we have added to our herd the grand young imported cow, Bertha 5th, bred by J. & A. Milne, Cairn Hill, Scotland. She is due to calve March 22nd, to Sir James (82334), who was got by the Miss Ramsden bull, Lord Lyndoch (74900), bred by Jas. Durno, the breeder of the \$10,000 bull, Choice Goods, and out of Lady Douglas, by Lord Douglas (64313).

FREE ADVICE TO STOCKMEN.

An Eminent Veterinarian Offers His Services Free of All Charge During February to Readers of This Paper.

ANY reader of this paper may now have—free—consultation, advice and prescription for any animal from the eminent veterinary surgeon, Dr. Hess. He is a graduate of famous American medical and veterinary colleges, and these institutions of learning and the profession generally recognize his written works as authoritative and his preparations for cattle, horses, sheep and hogs as standard remedies.

No matter how much money you may be willing to pay a veterinary, you could not get better service than Dr. Hess will give absolutely free during February. But this offer is good only for this month.

If you have an animal that is ailing from disease or injury, write at once. The only conditions are that you send a two-cent stamp for reply, and state what stock you own, what stock food you have fed, and mention this paper. Address Dr. Hess & Clark, Ashland, Ohio, U. S. A.

This offer is intended to cover specific cases—to demonstrate Dr. Hess' ability. It is not an offer of general advice on the training and care of stock.

While you are waiting Dr. Hess' reply it would be well to get a package of Dr. Hess' Stock Food (100 lbs., \$5.00; smaller packages a little higher proportionately) and begin conditioning all your stock. It is a scientific preparation that nourishes the vital organs of an animal, and gives to all foods the elements of strength and vitality they may lack—producing perfect condition, vigorous health, greater weight, a positive weight producer.

The use of this wonderful tonic and remedy is so simple that anyone may employ it without further direction than is shown on the wrapper. But if any of our readers would like to make a study of the diseases of stock and poultry, he can get a copy of the comprehensive "Dr. Hess' Stock Book" free of all cost by mentioning this paper, stating what stock he has, what stock food he has fed, and addressing Dr. Hess & Clark, Ashland, Ohio, U. S. A. This is a standard work written for the use of the people at large.

With the aid of the Dr. Hess Stock Book you can become a master of all diseases of cattle, horses, sheep, hogs and poultry. You will not only be familiar with all the disorders of stock, but will know the remedy to be applied. It may save you great sums of money. If you make you a local veterinarian, what will be very useful.

FREE SLEEPING DOLL

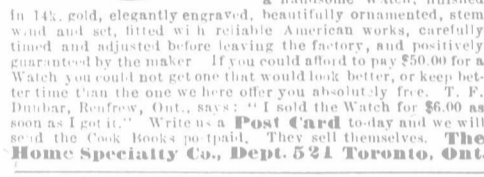
GIRLS! We trust you. We don't want one cent of your money. We want to make you a present of the big, beautifully dressed pretty Sleeping Doll. Dollie has long, golden curls, moving basque, head, arms and legs and blue eyes that shut and open, go to sleep and wake up, like a



real live baby. Her hat is trimmed in the latest style and her dress is made of the richest material, cut in the latest fashion and elegantly trimmed with lace and velvet. She has long, stockings and lace-trimmed underwear, and can be dressed and undressed as often as you like. This doll is a charming beauty and prettier than you can possibly imagine. Lizzie Sprat New York, N.Y., says: "I received the Doll today. It is the prettiest Doll I have ever seen." Remember, you can get her free. All we ask of you is to send only 15 of our large, beautifully colored packages of Sweet Pea Seeds at 10c. each. A 50c. Certificate free with each package. Gertrude Reid, Seaforth, Ont., says: "I received my box at 3 o'clock and at half-past all the packages were sold. They went very fast." Write a Post Card to-day and we will send the Doll free. Prizes Seed Co., Dept. 526 Toronto.

14K. GOLD WATCH FREE

What is the use of spending \$25.00 or \$50.00 for a Watch when you can get one for nothing that looks like a Solid Gold Watch and keeps time equal to any \$50.00 Watch. Here is your chance. We will give this handsome reliable Watch to any person who will send us only 16 Canadian Home Cook Books at 15c. each. These books are nicely printed, beautifully bound and each contains 739 choice recipes. Every Lady buys one. A 50c. certificate free with each book. This is not a cheap pocket clock, but a handsome Watch, finished beautifully ornate, stem-wind and set, fitted with reliable American works, carefully timed and adjusted before leaving the factory, and positively guaranteed by the maker. If you could afford to pay \$50.00 for a Watch you could not get one that would look better, or keep better time than the one we here offer you absolutely free. T. F. Dunbar, Rosford, Ont., says: "I sold the Watch for \$6.00 as soon as I got it." Write a Post Card to-day and we will send the Cook Books to you. They sell themselves. The Home Specialty Co., Dept. 521 Toronto, Ont.



GOLD \$1.95 WATCH

Guaranteed. Looks worth \$5.00. Keeps perfect time. Not one cent down. Send name and address and we will forward watch to your next express of the express of agent \$1.95 and examine it as much as you please before paying one cent. Then if satisfied that it is worth at least three or four times what we ask, pay the express and we will forward it to you. This watch is heavily plated with 14K Gold, elaborately engraved and handsomely ornamented. It has open face, dust proof case, it stem-wind and set and has genuine American-made works. We guarantee your money back if you are not satisfied. If you do not live near an express office send \$1.95 cash with order and we will forward the watch by mail postpaid. We know you will please you. Ladies' size, hunting case, 75 cents extra. John Robins, Sir James Falls, Ont., says: "My watch is worth ten times what it cost." Order to-day, Johnston & Co., Dept. 522 Toronto.

antee it for 1 year and will send back your money if you are not satisfied. If you do not live near an express office send \$1.95 cash with order and we will forward the watch by mail postpaid. We know you will please you. Ladies' size, hunting case, 75 cents extra. John Robins, Sir James Falls, Ont., says: "My watch is worth ten times what it cost." Order to-day, Johnston & Co., Dept. 522 Toronto.

GIRLS! TAKE ME I AM FREE

I want a mamma. Don't you want a pretty doll? I can talk, I can sing, I can say "Mamma." And I can cry, too, like any baby. I have golden curls, big blue eyes, rosy cheeks, pearly teeth and a lovely complexion. They say I am as pretty as a picture and I can talk. You never saw a doll that could do that, did you? But the best of it is you can get me without spending one cent. All you have to do is to send 10c each on 15 packages of Lemon, Vanilla and Almond Flavoring Powders. One package equals 20c. worth of Liquid Flavoring and is far better than any other. A 50c. certificate free with each package. Bessie Spencer Holloway, Ont., said: "Everybody loves me, my certificates and thought they were splendid." Girls, I want a mamma and I know you can get me for nothing. Write to-day and we will send you the Seeds post paid. Dominion Seed Co., Dept. 530 Toronto.

you want a pretty Talking Doll, write to-day and we will send you the Seeds post paid. Dominion Seed Co., Dept. 531 Toronto, Ont.

FREE AUTOMOBILE

A wonderful invention. An exact model of a real Electric Carriage. Runs itself for a long distance in either a straight line or circle, made entirely of metal, beautifully painted and ornamented. Given for sending 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 most useful and most fragrant varieties in every one hundred colors. Everybody buys A. E. Evans, St. Johns N.B., said: "The seeds went like hot cakes. I got 10c. for the first five with one package. Write us a post card to-day and we will send you the Seeds post paid. Dominion Seed Co., Dept. 530 Toronto.

SEEDS ON CREDIT.

We trust you with 6 large beautiful colored packages of Sweet Pea Seeds to sell at 10c. each. When sold, return 60c. and we will send you this handsome Oval Ring made of Solid Gold. Also set with three large beautiful opals that show all the colors of the rainbow. This is an exceedingly handsome ring and must be sold from a real opal even by an expert. Write us a post card to-day and we will send you the Seeds postpaid. Gladys Brown, Cheverie, N.S., said: "I sold all the seeds in a few minutes." THE DOMINION SEED CO., DEPT. 588 TORONTO.

Columbia Graphophone FREE



Edison's most wonderful invention free to you. Astonishing baritone. A genuine Graphophone made by the celebrated Columbia Graphophone Co. of New York and Paris, the best of its kind in the world; also 5 records, reproducing songs, speeches, animal imitations, instrumental selections, etc., in a most life-like manner, given for selling only 16 25c Cook Books at 15c each. These books are nicely printed, beautifully bound and contain 739 choice recipes. They are hot sellers. Every lady buys one. Florence Ascott, Toronto, Ont., said: "I sold all the Cook Books in a short time. Everyone thought them splendid and very cheap. Write us a post card to-day and we will send you a Cook Book postpaid. A 50c certificate free with each one." Mary Payne, Brimston's Corners, Ont., says: "I received my Graphophone all right and think it is a very fine Premium for so little work. THE HOME SPECIALTY CO., DEPT. 558 TORONTO.

WE TRUST YOU

With 2 doz. large beautifully colored packages of Sweet Pea Seeds to sell for us at 10c each. For you to trouble we will give you a beautiful little Watch with gold hands on which a large rose with buds and leaves is elegantly enamelled in seven colors. Edna Robinson, Powassan, Ont., says: "My watch is a perfect beauty." Write us a Post Card to-day and we will send you the Seeds postpaid. A 50c Certificate free with each package. Grace Brown, Ch. Verre, N.S., said: "I sold all the Seeds in a few minutes." THE DOMINION SEED CO., DEPT. 592 TORONTO, ONTARIO.

FIRE OPAL FREE

This handsome ring, beautifully finished in 14k gold, set with a magnificent Fire Opal Solitaire, with all the varied and delicate colors of the rainbow, always showing a flaming fiery red spot glowing in its centre; whence the name—Fire Opal. We give this splendid ring absolutely free for selling 4 doz. 25c Cook Books at 15c each. They are splendid sellers. Every lady buys one. Laura Barry, Blackville, N.B., said: "Your Cook Books went like hot cakes. Everyone was pleased with them." Write us a Post Card to-day and we will send you the Cook Books postpaid. A 50c certificate free with each one. Don't delay, and this beautiful Fire Opal Ring will be yours in a short time. Lydia Smith, Neum Teuch, N.S., says: "I am delighted with my Ring. It is an excellent Premium and looks fully worth \$1.00." THE HOME SPECIALTY CO., DEPT. 558 TORONTO.

BEAVER CLOTH CAPE FREE

Navy blue, black, or brown, any size. Made by skilled cape tailors from finest quality imported English Beaver cloth. Tapered seams. Cut full 30 inches long with wide stylish sweep over 150 inches and 6-inch well-lined warm storm collar. Handsomely trimmed with best imitation Persian Lamb. Warm, comfortable and stylish. The newest fashion for 1903. We have only a few left. Write us a Post Card to-day and we will send you the Cape free. Remember you could not buy this Cape in any store for less than \$5.00 cash. Do not delay if you wish to secure this grand chance. THE HOME SPECIALTY CO., DEPT. 57 TORONTO.

CHINA FRUIT SET FREE

The large Fruit Bowl and 12 dainty Fruit Dishes, all hand decorated with beautiful sprays of Violets, Lilies of the Valley and delicate leaves, in lovely natural colors. Each dish has the latest fancy-shaped edge, decorat d all around to a depth of 2 inches with a beautiful raised design in pink and gold, very rich. This handsome set could not be bought in any store for less than \$2.50. It has that ring to the touch found only in the best china. It will set off your table better than anything you have ever owned, and will not cost you one cent. Simply send us your name and address on a Post Card and we will mail you 1 doz. 25c Cook Books to sell for us at 15c each. When sold return \$1.50 and we will immediately forward this elegant set. Laura Barry, Blackville, N.B., said: "Your Cook Books went like hot cakes. Everyone was pleased with them." A 50c certificate free with each Book. Write us today and you will never get another chance like this. THE HOME SPECIALTY CO., DEPT. 522 TORONTO.

ENAMELLED LADY'S WATCH FREE

For selling at 10c, each only 2 doz. Enamel, beautiful and novel Non-aesthetic Flavoring Powders. One package yields 200 worth of liquid Flavoring and is superior. Used by the leading caterers, hotels and restaurants. Every housekeeper buys them. A 50c certificate free with each one. Write us a Post Card to-day and we will send you the Watch free. Miss E. Easton, St. John's, N.S., said: "I sold all the Powders in half an hour. It is just what I needed." It is a very nice watch in a few minutes. It is a very nice watch in a few minutes. It is a very nice watch in a few minutes. THE HOME SPECIALTY CO., DEPT. 522 TORONTO.

BANG! BANG! BANG!



FREE MAGAZINE RIFLE

with one loading. DEATH TO CATS. 20 Shots in 1 Minute. 300 Shots in 1 Minute. Boys, Boys, Boys, a Magazine Rifle Shooting Air Rifle made to-day. It has globe sights, steel barrel and fittings, pistol grip and spruced walnut stock. All parts inter-changeable. Magazine holds 200 Shots. We have placed a large contract with one of the biggest manufacturers, and in order to use the immense quantity we have bought, we have decided to put the price down to just one half of what has former been asked for this Gun, who will give you this magnificent weapon absolutely free to anyone who will sell for us only 2 doz. large packages of Sweet Pea Seeds at 10c each. Each package is beautifully decorated in 12 colors and is a rare, prettiest and most fragrant varieties in every imaginable color. Everybody buys. They are the best seeds ever handled. M. S. Rees, Mono Mills, Ont., said: "I never saw a better seed than I had all the Seeds sold. Write us a Post Card for Seeds to-day. If you are smart, you can solve the puzzle and send us the correct answer at once. It will cost you only one cent for postage. We will mail you the Rifle, Watch and Chain and Rifle to-day. THE HOME SPECIALTY CO., Toronto, Ontario.

A GOLD WATCH FOR THE CORRECT ANSWER

A beautiful Gold-finished Watch, handsomely engraved (Ladies' or Gentlemen's size), will be given to everyone who correctly answers the following puzzle:

V - T - R - A

There are four letters, represented by four dashes, omitted from the above word, and when the proper letters are supplied the complete word will be the name of a very noted Queen. To everyone who sends us the correct answer we will present, absolutely free, a beautiful Gold-finished Watch, such as anyone would be proud to own. If you are smart, you can solve the puzzle and send us the correct answer at once. It will cost you only one cent for postage. We will mail you the answer we shall promptly write you, explaining one further condition necessary to be complied with by you to be a successful competitor for one of these beautiful and valuable Watches. This condition is very simple; in fact, it is merely a slight favor which we would like you to do for us. It will cost you nothing, and will not take up more than half an hour of your time. We shall write you all about it and tell you more about this beautiful Watch as we hear from you. Boys answer this, here is your chance. Send us your answer on a Post Card at once. Is not this a beautiful Watch worth the investment of one cent for postage? Do not delay as we have only a limited number of these valuable Watches on hand. Address—THE ENTERPRISE CO., DEPT. 533 TORONTO, 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, Shebrooke, Ont., says: "I never saw any thing like this. The Rifle, Watch and Chain and Rifle are just what I needed." Write 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 Chain and Rifle to you. Write us today. THE HOME SPECIALTY CO., Toronto.

CHOICE CHINA AND CUT GLASS FREE



BOOKS ON CREDIT. WE TRUST YOU.

We have just published a splendid collection of 739 recipes which we are anxious to get introduced into all parts of this country. To make it possible for everyone to own a copy we have put the price down to 15c a copy, though our Canadian Home Cook Book is in many respects superior to books sold at from \$5.00 to \$10.00. To secure an enormous sale for our book we give 20 copies of decorated English china, 6 pieces of imitation cut glass and an English Jet ware teapot to every lady who will sell only 20 Cook Books for us at 15c each. Write us a post card and we will send the books postpaid. Sell them, return the \$3.00, and we will send you carefully packed all the following: 6 cups, 6 saucers, 6 tea plates, English china, fancy edge and beautiful 1 colored decorations; 2 English china cake plates, gold lined with fancy edge and raised ornamentations; 1 cream jug, 1 spoon holder, 1 butter dish, with lid, 1 sugar bowl, with lid, in handsome imitation cut glass, and one beautifully designed English Jet ware teapot and lid, with pretty pink and gold decorations. All these 28 pieces are full size and are given for selling only 20 of our Cook Books at 15c each. Write us today with the Cook Books. Mrs. Cammie, Montague, N.S., said: "I had got at an excellent selling your Cook Books. My revenue was delighted with them." Then in our Cook Book is not only 2 months, we have already sold over 40,000 copies, and the demand is becoming greater every day. We expect to sell 200,000 copies. Nothing so good as a table-like book and handsome china, and you can get every pie shown in this picture absolutely free. Write to-day. Home Specialty Co., Dept. 523 Toronto.

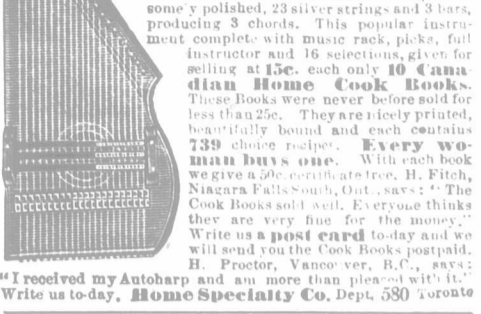
George Clark WILL GIVE YOU THIS RING

Solid Gold finished, set with Rubies and Pearls. FREE for selling 4 of my large Art Pictures at the reduced price of 25 cents. All different. No trouble to sell these pictures, they are handsome art productions, done in 10 to 17 colors, originals costing 200 to 500 dollars. The first four you meet will gladly take them at 25 cents to help you win the premium. The Ring guaranteed worth many times this small service, but want to introduce my pictures at once, this small service, but want to introduce my pictures at once, this small service, but want to introduce my pictures at once. Send No Money in advance. I trust you and will send the pictures as soon as you send me the money. Write to-day. THE HOME SPECIALTY CO., DEPT. 529 TORONTO

FREE Gold Ring and Gold Bracelet

Beautiful Gold Ring and Gold Bracelet given free for selling at 15c each only 7 Canadian Home Cook Books. The books are nicely printed, beautifully bound, and each contains 739 choice recipes. Every housekeeper buys one. A 50c Certificate free with each one. Write us a Post Card to-day and we will mail the Ring and Bracelet to you. Write us today. THE HOME SPECIALTY CO., DEPT. 591 Toronto, Ont.

FREE SWEET TONED AUTOHARP



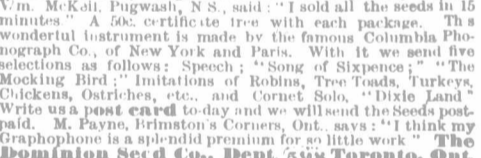
Made of selected California redwood, handsome y polished, 23 silver strings and 3 bars, producing 3 chords. This popular instrument complete with music rack, picks, full instructor and 16 selections, given for selling at 15c, each only 10 Canadian Home Cook Books. These books were never before sold for 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 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. 530 Toronto.

FREE LANTERN AND ENGINE



Splendid Magic Lantern with powerful lenses showing dozens of pictures in colors and in black and white. K. Al Scan Engine with brass boiler and steam chest, steel piston rod and fly wheel, and Russian iron burner compartment, given for selling only 3 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. A 50c certificate free with each package. Write us a post card to-day and we will mail the Seeds postpaid. When sold return \$1.20 and we will forward immediately both the Lantern and Engine. THE DOMINION SEED CO., DEPT. 582 TORONTO, ONT.

FREE KNIFE



We give this beautiful Pearl-Handled, Four-Bladed Knife of best quality highly tempered steel, burnt red bolsters and brass lining, for selling only 42 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 Luppy, Kesteven, Man., said: "I sold the 80s in a few minutes. They went like wild fire." A 50c Certificate free with each package. Write us a Post Card to-day and we will send you the Seeds postpaid. Raymond Polby, Holand, Man., says: "My Knife is just beautiful. It is a most excellent Premium for the little work I did." THE Dominion Seed Co., Dept. 595 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." A 50c certificate free with each package. Write us a post card to-day 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 daisy and I am very much pleased with it." THE DOMINION SEED CO., DEPT. 596 TORONTO, ONT.

FREE ENAMELLED WATCH FOR MEN OR BOYS

Handsome Silver Enamel watch which a Deer is elegantly enamelled on the rich brown fur and delicate coloring making the whole design absolutely true to life. A very beautiful and a thoroughly reliable watch that makes a very purpose of the most expensive timepiece, given for selling only 14 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 to-day and we will mail the Packages postpaid. Don't delay. Win. Frankoski, Shou 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.

Some watchmakers
harp on Railroad Watches.
More than twenty
Elgin Watches

have been sold for every mile of rail-
way trackage in the world. Sold by
every jeweler in the land; guaranteed
by the world's greatest watch works.

ELGIN NATIONAL WATCH CO.
ELGIN, ILLINOIS.

GOSSIP.

A very desirable farm is offered for sale in the advertisement of Mr. Alex. Love, Eagle P. O., Elgin Co., Southern Ontario. Owing to the death of his wife, Mr. Love has disposed of his herd of Shorthorn cattle, and purposes retiring from farming. The location is an ideal one, where corn and fruit of all kinds grow to perfection, as well as all farm crops. The land, as a result of feeding cattle on the farm for many years, is in good heart, and the buildings are good and convenient.

Three and a half miles from Perth station, on the C. P. R., is the farm of Mr. R. E. White, breeder of Shorthorn cattle. The stock bull is Waterloo Lad 31071, bred by J. M. Gardhouse, sired by Imp. Prime Minister, dam Waterloo Daisy 28273 by Imp. Guardsman. He is a dark red, three years old, a very even, straight-lined bull, thick, and a good handler, and is leaving his stock right. Duchess of Lanark is a big, fine cow, four years old, also bred by Gardhouse, sired by Imp. Scottish Pride, dam Gipsy Maid 23604 by Earl of Aberdeen 3rd, grandam Roan Duchess 48th by Imp. Ingram's Chief. Lily Gordon 31090 is an extra nice red cow, sired by Sir James 21328, dam Lily of Balsam 2nd by Imp. Julius Caesar. She was bred by Arthur Johnston, and is now suckling an extra good three-months-old roan heifer calf by Strathmore 26997, by the great bull, Abbotsford; dam White Rose of Strathallan 2nd by Imp. Vice Consul. Mr. White is offering any or all of these animals for sale. They are built right and are bred right, and are guaranteed breeders, and will be sold well worth the money. Write Mr. White, to Perth P. O., Ont.

Thornhill Stock Farm lies one and a half miles from Millbrook station, G. T. R., and is the property of Messrs. Redmond Bros., the well-known breeders of thick-fleshed, high-class Shorthorns. Their herd at present numbers 24 head, nearly all of them belonging to the grand old thick, evenly-fleshed Marigold family, with the blood of Challenge and Barmpton Hero strongly infused, and, practically all of them sired by Imp. Prime Minister, Imp. Royal Member and Sailor Champion, a rare good son of Imp. Royal Sallor. Sailor Champion is the sire of that model young bull, Lord Chesterfield, that won first as a yearling and junior sweepstakes at Toronto last fall, and this is the herd that produced him, and be it known that Lord Chesterfield is a representative of the kind of animals bred by Redmond Bros. At present, there is a five-months-old red bull calf, sired by Imp. Royal Member, and out of one of the choice cows, that is the making of a cracker. There are also an exceptionally thick, even pair of yearling roan heifers, and a few younger heifers, any of which are for sale. During the last year, this firm's sales have been both extensive and satisfactory, animals going as far as Texas and to different parts of Canada. Lately, they sold to Mr. Geo. Gies, of Grand Valley, the noted old stockmaster, Imp. Royal Member, who did grand service for Messrs. Redmond Bros. The bulk of their cows are now in calf to him.

7 HOLSTEIN BULLS FOR SALE.
Five yearling bulls, sired by a grandson of De Kol 2nd; 1 bull, rising 2 years old, and 1 aged bull, Korndyke Queen De Kol's Butter Boy, of Korndyke and De Kol breeding.
JAS. A. CASKEY, Madoc, Ont.

Valuable Residential Farm Property FOR SALE.

186 acres on bay shore adjoining Owen Sound. The buildings, ornamental grounds, 150 acres of the land, 30 acres of hardwood, 5 acres of mixed fruit, water supply, fencing, underdraining and location on deep-water front cannot be excelled in Ontario. As Owen Sound is making rapid strides towards a city, this property is rapidly enhancing in value. It will be sold this spring. Terms—One-half cash; balance to suit purchaser. For further particulars apply to
W. M. MARRISON,
Royston Park, Owen Sound, Ont.


GOSSIP.

Two miles from Lyn station and four miles from Brockville, on the main line of the G. T. R., lies the farm of Brown Bros., the well-known breeders of Holstein cattle, whose herd at the present time numbers about 38 head, including such notable cows as Jessie Veeman, whose butter record is 26 lbs. 4 ozs. in 7 days; Lorena Diamond Netherland, butter record 17 lbs. in 7 days; Tidy Abbekirk De Kol, 13 lbs. 12 ozs. in 7 days, as a three-year-old, after milking four months; Lady Waldorf De Kol, milk record 12,000 lbs. in nine months. Lady Aakron's Pietertje Josephine also gave 12,000 lbs. in nine months, and is now giving 60 lbs. a day; Pietertje Wietske, 2,000 lbs. in 30 days; Mondamin Daisy's Pearl, 1,903 lbs. in 30 days; and many others equally as good. A number of the younger females of the herd were sired by Lady Waldorf's De Kol, whose dam's butter record is 20 lbs. 2 ozs. in 7 days. The present stock bull is Emperor Joseph by Colanthus Abbekirk's Sir Oliver, dam Empress Josephine of Brookside, whose milk record is 14,700 lbs. in ten months. He is a massive, typically-formed animal, and a prizewinner many times over. His lieutenant in service is the richly-bred youngster, Sir Ybma De Kol Hengerveld by De Kol's Butter Boy 3rd, dam Ybma 3rd's Pledge, whose two-year-old butter record is 15 lbs. in 7 days. Brown Bros. are now offering for sale seven young bulls, out of the above cows, and sired by the stock bull; about 14 one, two and three year old heifers, and several heifer calves—an exceptionally choice lot. Write Brown Bros., to Lyn P. O., Ont.

"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., K. Antoine St., St. Hyacinthe, Que.
Price 45c. each. Shipped only in crates of 5.



SHOEMAKER'S BOOK ON POULTRY
and family almanac for 1908. Over 20 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.
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We'll sell you a better hatcher for the money than any other incubator on earth. New improved regulator, that can't get out of order. Biz book—200 illustrations free.
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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.
C. J. DANIELS, 196 to 200 RIVER ST., TORONTO.



Poultry and Eggs Wanted
CHICKENS } Empty crates forwarded on application.
DUCKS }
TURKEYS } Highest market prices paid.
GEESE } Correspondence solicited.
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. SHERRINGTON,
Box 100, Walkerton.

Barred Rocks and Pekin Ducks.
We offer special bargains in young stock, from our choice strains, for 30 days. Send for FREE ILLUSTRATED CIRCULAR.
H. GEE & SONS, FISHERVILLE, ONT.

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 Kessuth.)

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

COCKERELS
S. C. B. Leghorns, S. and R. C. B. Minorcas, B. and W. Plymouth Rocks and W. Wyandottes. Choice "utility" and "fancy" strains. Write for circular. Eggs in season. JOHN B. PETTIT,
Fruitland, Ont.

Plymouth Rock COCKERELS.
A selected number of very choice cockerels of the National strain, bred from a pen of Rock hens noted for their large size, perfect color, and persistent laying of good large eggs.
W. C. SHEARER, Bright, Ont.

Creamery Package Mfg. Co. LIMITED.
COWANSVILLE, QUE.,
MAKERS OF HIGH-GRADE
BUTTER AND CHEESE MACHINERY
Supplies for the Factory or Farm Dairy.
Illustrated circulars and catalogues FREE for the asking.



Whey Pump.

Send for Illustrated Price List.

Head Light silver steel
Lance Tooth Saw,
WILKINS & CO
TORONTO.

HEADLIGHT LANCE-TOOTH CROSSCUT SAW is four gauges thinner in the front than the back; is one of the fastest crosscut saws made. Every saw fully guaranteed. Only 50c. per foot.

COMBINATION COBBLER'S, TINSMITH'S and harnessmaker's outfit should be in the possession of everyone. Will save its cost over and over again. Only \$1.85 each.

HOLLOW GROUND RAZOR, fully guaranteed. The best in the market. Only \$1.00, postpaid.

FOUR-PRONG MANURE FORK, the best. Usually sold for 6c. Our price, only 10c. each, while they last.

FARM BELLS, \$1.75, \$2.25, \$3.00 and \$4.00 each.

CHURCH BELLS from \$12.00 to \$50.00 each.

WILKINS & CO.
166-168 KING ST., E.,
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THE MOST NUTRITIOUS.
EPPS'S COCOA

An admirable food, with all its natural qualities intact, fitted to build up and maintain robust health, and to resist winter's extreme cold. Sold in 1 lb. tins, labelled **JAMES EPPS & Co., Ltd., Homeopathic Chemists, London, England.**

EPPS'S COCOA
GIVING STRENGTH & VIGOUR.

EVERGREENS
Hardy sorts, Nursery grown, for wind-breaks, ornament and hedges. Prepaid \$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 Specialist, Dundee, Ill.**

DISCARD Hamstraps and get "Sure-Go" Hamfastener. A 20th Century Idea. No Buckle. Outlasts Harness. Simple, quick; works like a charm; can work it with mittens on. 100,000 pre-engaged. Introduced through Mail Orders awhile @ 50 cents a pair, prepaid. Order today. Send only current funds. Address: **JOHN HAUSAM, 175 B RACINE, WISCONSIN, U. S. A.**

RED RIBBON STUD

Largest Importers and Breeders of **Shire Horses**

in the Dominion, including first-prize winner at Royal Agricultural Show in England, and winning more prizes at Industrial and other large shows than all others combined.

Stallions and mares all ages, home-bred and imported, always for sale. Over 50 to choose from.

MORRIS & WELLINGTON,
Fonthill P. O., Welland County, 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, G. F. R. Crampton, Ont.
7 miles from Ingersoll.

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, Dornley, 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 Stallion

FOR SALE: Young Erskine, foaled October, 1902; dark brown, with stripe in face; strong, clean limbs; silky hair; strong-muscled, good action. Sire Joe Anderson, by Calmbroegie Stamp, by Boydston Boy; dam Nell, by Erskine time. For particulars and price, address: **G. F. J. SHORT, Moorefield P. O. and Sta., Ont.**

FOR SALE: An Imported Hackney Stallion
Registered in England and Canada. He is solid black; weighs 1,370 lbs.; stands 16 hands high; 59 inches 6 feet 6 inches. Sound, and a sure foal-gaiter. He has high action, and he never was beaten in the show-ring, either as a Hackney or as a Carriage stallion. The reason for selling is the owner going West. For price and particulars apply to **G. A. RYAN, Riceville, Ont.**

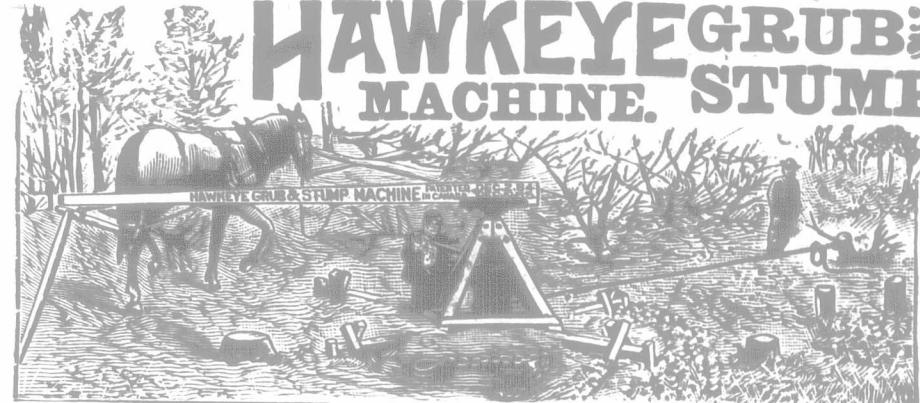
GOSSIP.

VANNATTER'S SHORTHORN SALE.

Attention is again drawn to Mr. Ira B. Vannatter's sale of Shorthorns, on March 11th, as advertised in this issue. Mr. Vannatter is a comparatively young breeder, but is moving along right lines, as a look through the present herd and at their pedigrees will show. Eight years ago Mr. Vannatter started with a purchase from the noted Green Grove herd, of Mr. Fletcher, Binkham, Ont., of the prize-winning show cow, Pearllette Butterfly by Baron Camperdown =1218= (47385) (imp.), dam Lady Butterfly by Lord Cecil, grandam Pearllette Butterfly 3rd by Breadalbane (imp.), imported by H. Thompson, of St. Mary's, and sold by him for \$1,100.00. She was a rich roan, very thick-fleshed, with handling qualities seldom equalled, and which she has certainly transmitted to her offspring, and is prominent in the herd to-day. The stock are not fat, but all in good healthy condition—the young heifers and bulls just right. The cows have not been kept for show, but for breeding purposes, at which they all are doing well. Butterfly Bell by Duke of Waterloo =20616=, dam Pearllette Butterfly by Baron Camperdown =1218= (imp.), is rising eight years, and carrying her seventh calf. She is a big cow of good quality, and a splendid milker. One of her heifers, Eunice by Royal Exchange =22679=, is a thick-fleshed cow, of splendid type, and an excellent handle. She is rising five, and will drop her third calf in May. Another, Butterfly Star by Royal Hero =24609=, is rising three years, and has a splendid heifer calf at foot by Mysie Sailor =35626=, and will be safe in calf again by time of sale. Eagle Girl by War Eagle =13015= (a Toronto silver medal bull), and out of Pearllette Butterfly by Baron Camperdown (imp.), is of the low-down, thick-fleshed type, and a heavy milker, more milk than her calf will take at four months' old. She is rising seven, and carrying her sixth calf, four of them heifers. Her first calf, Beulah by Royal Hero =24609=, is rising five, and has a lovely heifer eighteen months old at time of sale, and a bull eight months (both fit to go into any herd), and is due to calve in June. Her second was three last November, has a bull calf eleven months old, and is due to calve again in March. Rhema by Royal Hero =24609=, and out of Pearllette Butterfly, was three years last September. She has a calf one year old at time of sale, which will take the eye of the best judges, and is due to calve again in March. We cannot speak of each of the young things separately. In one stable are five young heifers, got by Mysie Sailor, and not a common one among the lot. In a box-stall are three nice dark roan bull calves under eight months, also by Mysie Sailor. In another stall stands one seventeen-months bull by Mysie Sailor and one 21-months by Speedside Lad—both good ones. The present stock bull, Mysie Sailor =35626=, will also be sold. He is just past three years old, is a rich dark roan, close to ground in both brisket and flank, very straight in the lines, and a splendid handler, carrying a heavy coat of the best of hair. He is a very heavy bull, yet as straight on his feet and legs as a calf, is perfectly quiet and sure. He was bred by Mr. Geo. D. Fletcher, Binkham, Ont. His sire, Spicy Robin, was winner of second prize at Toronto and London in 1902, and a getter of winners at Toronto in both 1901 and 1902, and sire of many high-priced animals, among them one of his heifers, which sold by auction in Chicago for \$740.00; another yearling was the highest-priced female at the Provincial sale, Guelph, 1901. He was by Red Robin =24808=, out of Roan Lady by Bampton Hero =324=, Mysie Sailor's dam, Mysie 46th =34106=, produced Miss Mysie, who sold for \$1,075 in Iowa, 1900. The farm is five miles east of Erin, C. P. R., and six miles west of Georgetown, G. T. R. Conveyances will meet forenoon trains at both these stations, and return after the sale, thus saving visitors any inconvenience and making it convenient for them to arrive at the farm before noon, and return home same evening if they wish. In case of storm, sale will be conducted under cover.



Accidents will happen
and it pays to have a fence that is accident proof.
The No. 7 Top Wire in **Page Fences** is break-proof at 3000 pounds' strain—common wire same size at 1700 pounds.
Page Fence Wire is tempered to stand that strain. Its coil takes up summer slack and gives spring for winter tension, and acts as a cushion to meet accidental strains.
"Page Fences wear best"
PAGE WIRE FENCE CO., Limited
Walkerville, Ont. Montreal, P.Q. St. John, N.E. 107



HAWKEYE GRUB MACHINE, STUMP
Works on either standing timber or stumps. Will pull an ordinary Grub in 1 1/2 minutes. Makes a clean sweep of Two Acres at a Sitting. A man, a boy and a horse can operate it. No heavy chains or rods to handle. The crop on a few acres the first year will pay for the Machine. Send postal card for Illustrated Catalogue, giving price, terms and testimonials. **MILNE MFG. CO., 886 8th St., Monmouth, Ill.** (Address Milne Bros. for Shetland Pony Catalogue.)

FREE PERCUSSION GUN

Given for selling only 10 packages of Sweet Pea Seeds, at 10c. each. The packages are beautifully colored in 12 colors, and each one contains 42 of the rarest, prettiest and most fragrant varieties in every imaginable color. **Everybody buys.** Roy Luppy, Rosewood, Man., said: "The Seeds went like wildfire." A 50c. certificate free with each package. This splendid Rifle is 25 inches long, has bright nickel barrel, improved lock and hammer and highly polished wood stock, carefully selected and tested. It explodes caps and ah, oh, shot, slugs or darts with terrific force. Write us a **Post Card** to day and we will send the Seeds postpaid. We formerly gave this Gun for selling \$1.50 worth; but as we have only a few left, we have put the price down to \$1.00, in order to clear them out. Write at once if you want one. **Prize Seed Co., Dept. 524 Toronto, Ont.**

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.
Shorthorns of both sexes for sale.
BEAVERTON P. O. AND STATION.

Blood will tell



When an animal is all run down, has a rough coat and a tight hide, anyone knows that his blood is out of order. To keep an animal economically he must be in good health.

DICK'S BLOOD PURIFIER

is a necessity where the best results from feeding would be obtained. It tones up the system, rids the stomach of bots, worms and other parasites that suck the life blood away.

Nothing like Dick's powder for a run down horse.

50 cents a package.

Leeming, Miles & Co., Agents,
MONTREAL.



Curb, Splint,

contracted cord, thrush, grease heel and all forms of lameness yield readily to

Tuttle's Elixir.

Used and endorsed by Adams Express Co., Reading Trotting Park, Mass., Aug. 31, 1899.

Dr. S. A. Tuttle, V. S.

Dear Sir—I want to add my testimonial to your list recommending Tuttle's Elixir for curbs, broken tendons, thrush, and nails in the feet. I have used it on all of these cases many times, and never failed to make a cure.

J. H. NAY,
Founder, Pacumonia, etc.

Given internally it is sure cure for Colic, Distemper, Founder, Pacumonia, etc.

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 genuine but Tuttle's. Avoid all blatters; they offer only temporary relief if any.

LYMAN, KNOX & SON, Agents,
Montreal and Toronto, Canada.

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.

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.

Dr. J. Watson, - Howick, Que.

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.

Registered Clydesdale Fillies

FOR SALE.

The well-matched fillies, Maud Lawrence 3331, by Imp. Lawrence Again, 3 years old, dam Hattie McInnis, and Lady McInnis, by Imp. McInnis, dam Imp. Maid of Burdine. She is 2 years old. They are one of the best pairs in Canada.

R. D. DUNDAS, ONT.
Fraserville Station, SPRINGVILLE P. O.

GOSSIP.

The three-year-old Shorthorn bull, World's Fair King =28431=, is advertised for sale in this issue, by E. C. Attrill, of Goderich, Ont. He is a red 2,020-pound son of the prize bull, Beau Ideal, by Imp. Sittyton Stamp, out of Imp. Bessie Lass, and his dam is the heavy-milking cow, World's Fair Maid, which made such a splendid record in the dairy test at Chicago in 1893. Several of the bull calves offered by Mr. Attrill are sired by Diamond Jubilee, and are all red, with little white, and about a year old.

Mr. Alex. Burns, Rockwood, Ont., places an advertisement in our columns of his herd of Shorthorns, and writes: "I have been in the Shorthorn business for thirty years, and have always found the best cattle to be the most profitable. I have on hand some freshly-imported ones, which will greatly improve the herd, as they are from some of the best breeders in Scotland and are high-class animals. Anyone interested would do well to look up my ad., and also come and see the animals, as there are some thirty head to choose from."

Messrs. F. Martindale & Son, York, Ont., write: "Our herd of Shorthorns, now numbering about forty-five head, are wintering well. The calves that are now coming are grand ones, which show the right type, and prove the value of Bandoleer =40106= as a sire. We also have eight grand heifer calves, from eight to fifteen months old, that are well worthy of mention. A few of them are by our former stock bull, Mariner =36064= (imp.). The following are some recent sales: To Geo. Hopper, Springvale, one bull 12 months old; to John Crawford, Rosseau, bull calf seven months old; to John A. Freeman, Hannon, bull eight months old; to Geo. Hutchinson, Cheltenham, bull 12 months old, bull eight months old; to A. A. McKillop, Wallacetown, a very choice one by Mariner (imp.); also one bull eight months old to Ira Minor, Lowbanks. This bull was out of Eugenie =40367=, and sired by Mariner =36064= (imp.). He is a rich roan, and was specially mentioned in our report in 'Gossip,' of the Nov. 15th issue. He has developed to an extra fine bull—straight, good back, even-fleshed, well-sprung and deep-ribbed, and of the best quality. We sold Mr. Minor a bull, three years ago, of the famous Nonpareil family, and were pleased to see him back again. We still have some very good young lulls for sale and would be pleased to correspond with any person desiring to purchase stock of this description. Our advertisement will be found in another column."

NOTICES.

"THE LITTLE ORGANIST OF ST. JEROME" begins and gives its title to a collection of short stories by Mrs. Annie L. Jack, of Chateaugay Basin, P. Q., well known as a contributor to the magazines. Published by Wm. Briggs, Toronto. Price, 60c., postpaid.

A GOOD GRAIN DRILL is a necessity on every farm, and as the time is drawing near when seeding will be the order of the day, it will be the part of wisdom to look up the best. The Superior Disk Drill, which can be supplied with disks or shoes, and is easily changed from one to the other, is advertised elsewhere in this paper by the superior Drill Co., McKinnon Building, Toronto. Look up the ad., and send for their catalogue and information.

"THE PAMPHLET, 'STASSFURT INDUSTRY,' just published, contains an interesting description of the famous potash mines in Germany, from which the potash imported into America and used for manuring is derived. The chapter under the use of potash in agriculture is one of the important ingredients of a complete fertilizer adds to the value of the book, and among the illustrations, those showing the experiments at Stassfurt, N. Y., are of particular interest to practical farmers. Copies of the pamphlet can be had free, by writing to the Niagara Falls Works, 93 Nassau St., New York, N. Y."

Stallions

DALGETY BROS.,
LONDON, ONT.,

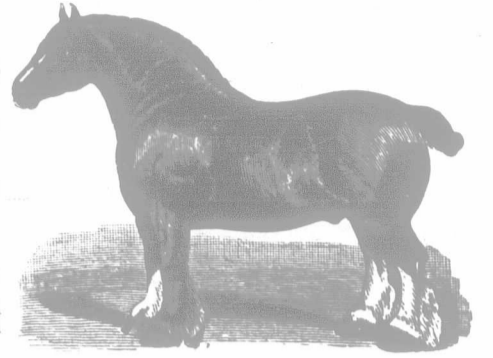
Largest Importers of Horses in Canada.

FIFTH CONSIGNMENT this season will arrive at Toronto first week in March, and will include some extra good horses.

Our motto: Small profits and quick returns.

on

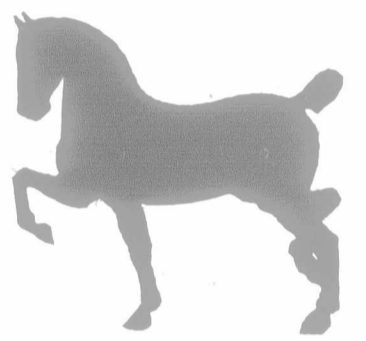
DALGETY BROS., LONDON, ONT.



100 PERCHERON, SHIRE AND HACKNEY STALLIONS AND MARES

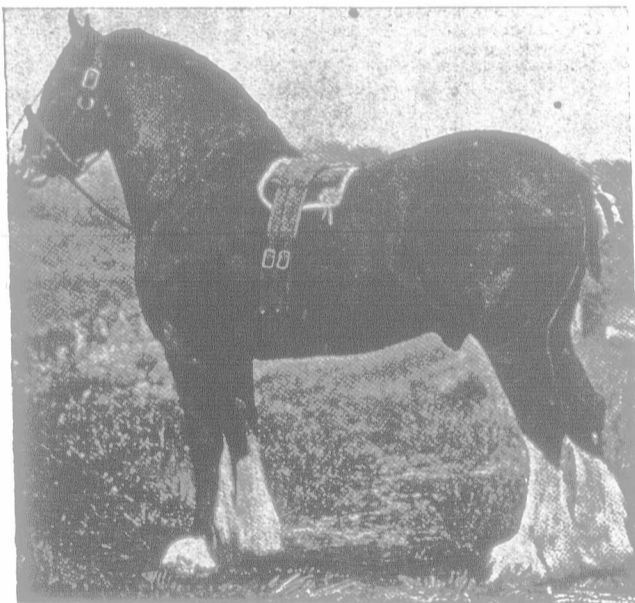


All good ages, good colors, with lots of size, quality and action, at prices below competition, on easy terms. Every stallion sold on a gilt-edge and responsible guarantee. At the Indiana, Ohio, New York State Fairs, and International at Chicago, on eighteen head won 178 first prizes, grand sweepstakes 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.



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.

on

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.

on

Please Mention the Farmer's Advocate.

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.

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 Cairn; also 13 mares bred from imported stock. Shorthorns, imported and home-bred, all ages. Stations:

Oshawa & Brooklin, G.T.R., Myrtle, C.P.R.
Long-distance Telephone, Columbus.
Telegraph, Brooklin.



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.

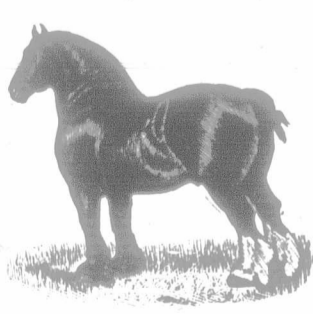
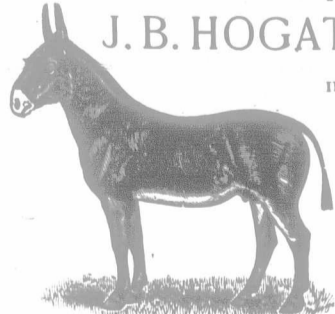
ALEX. GALBRAITH & SON,
JANESVILLE, WIS., AND BRANDON, MAN.

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 to 15 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.

GOSSIP.

A two-year-old Canadian-bred Clydesdale stallion is advertised for sale by F. J. Short, Moorefield, Ont., which, from his description and breeding, should be worth looking after. See the ad.

The Shorthorn heifer, Victoria, portrayed on another page, the property of Mr. Leonard Burnett, Hillside Farm, Greenbank, Ont., was sired by Epsom Prince =25708=, by Velvet Prince, by Imp. Sussex; grandam by Imp. Vensgarth; bred by Mr. Cruickshank. The dam of Epsom Prince was by Baron Aberdeen 2nd, and her dam by Imp. Royal Barmpton, the sire of Barmpton Hero, and her grandam the sweepstakes bull, The Doctor (imp.). The stock bull in the Hillside herd at present is Imp. Count Sarcasm, bred by Mf. Wm. Duthie, Collynie, Scotland.

The twenty-eighth annual meeting of the American Berkshire Association was held in the office of the Association, Springfield, Ill., January 28th, 1903. The auditor's and Treasurer's reports showed that the receipts for the year were \$6,996.80, and the disbursements \$6,650.88. As there was a balance on hand at the beginning of the year of \$1,399.45, the balance in the treasury is \$1,745.37.

The stock of the Association that has been held in blocks by individuals was purchased by the Association, and a resolution was adopted hereafter restricting the holding of more than one share of stock at \$100.00 or four shares at \$25.00 by any one individual or firm. A committee was appointed to make the necessary arrangements to reduce the shares of stock to \$25.00.

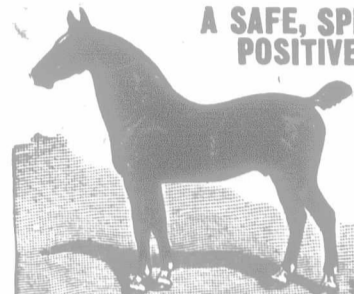
The following officers were elected: President, Geo. S. Prine, Oskaloosa, Iowa; Vice-President, Goe. F. Weston, Biltmore, N. C.; Secretary, Frank S. Springer, Springfield, Ill.; Treasurer, D. W. Smith, Springfield, Ill.

The magnificent Shorthorn cow, Nonpareil 57th, whose picture appears elsewhere in this issue, was bred and is owned by Messrs. J. & W. Russell, Richmond Hill, Ont. She is of the noted Nonpareil tribe, so successfully bred at Sityton and Kinellar in Aberdeenshire, and was sired by Lord Stanley =17849=, the junior champion bull at the World's Fair at Chicago, and who headed the young herd, that won the grand sweepstakes herd prize of \$600 over all beef breeds for the Messrs. Russell at that show, and which were all bred by themselves. Her dam, Nonpareil 44th, was by Prince Royal =2288=, by Imp. British Statesman, and of the Kinellar Fair Queen family. Her grandam was by Imp. High Sheriff =131=. With such breeding and ancestry at her back, and the liberal supplies of turnips which the cattle on Springbrook farm receive, it is not surprising that Nonpareil 57th has developed into one of the grandest if not, indeed, the best cow in the Dominion, combining, as she does, in the highest degree the cardinal virtues of constitution, symmetry, quality and beauty. She is from the same dam as Nonpareil 52nd, winner in 1900 of the gold medal and championship for Messrs. Russell at the Toronto Exhibition. This last named cow is still in splendid shape, having bred two calves since winning that trophy, and is forward in calf again. The whole herd is in fine condition, and comprises a grand lot of young things of the best type and quality. The imported bull, Fitz-Stephen Forester =36030=, now at the head of the herd, a roan son of the Deane Willis bred Stephen Fitzlaverder, of the Cruickshank Lancaster tribe, sired by Hapton Javelin, out of Golden Geraldine by Count Lavender, is doing sterling service as a breeder, as the strong backs and long, level quarters of his progeny amply attests, and as one would expect from him, considering the clear-cut character of his forbears, both on the side of his sire and of his dam, who is a scion of the famous Warlabby Flower family. The yearling and two-year-old heifers and bulls, by Golden Measure and British Hope, are splendid specimens, built on the blocky type, full of substance and quality, and fit to show in any company in any country.

Horse Owners Should Use
GOMBAULT'S

Caustic Balsam

The Great French Veterinary Remedy.
A SAFE, SPEEDY AND POSITIVE CURE.



Prepared exclusively by J. E. Gombault, ex-Veterinary Surgeon to the French Government Stud

SUPERSEDES ALL CAUTERY OR FIRING

Impossible to produce any scar or blemish. The safest best Blister ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses or Cattle.

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, Etc., it is invaluable.

WE GUARANTEE CAUSTIC BALSAM will produce more actual results than a whole bottle of any liniment or spavin cure mixture ever made.

Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

THE LAWRENCE-WILLIAMS CO., Toronto, Can.

J. M. GARDHOUSE, WESTON P. O., ONT.
SHIRE AND CLYDE HORSES, SHORT-HORN 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.

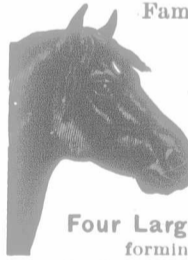
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USINESS Y UYING ELGIANS

Proprietor,
BOOM
Importer,
DANVILLE, QUE.

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.

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, Burlington Junction Sta., on Freeman P. O. G. T. C. 1/4 mile from farm.

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,** County Grey, Swinton Park, Ont.



Our money winning books, written by men who know, tell you all about

Potash

They are needed by every man who owns a field and a plow, and who desires to get the most out of them.

They are free. Send postal card. GERMAN KALI WORKS, New York

Advertisement for No. 3 "Prize" feed grinder, featuring an illustration of the machine and text describing its benefits for grinding feed.

Advertisement for Manitoulin Shorthorns, featuring the name Edwin Beck and location Gore Bay, Manitoulin Island.

Advertisement for Scotch-Bred Shorthorns, listing various breeds and breeders like L. E. WEEBE.

Advertisement for Shorthorns, Clydesdales and Leicesters, featuring the name John Dryden and location Brooklin, Ontario.

Advertisement for W.M. McIntosh, featuring location Burgoyne P. O. and Port Elgin Sta.

Advertisement for John Dryden & Son, featuring location Brooklin, Ontario, and products like Cruickshank Shorthorns.

Advertisement for For Sale: One Shorthorn Bull Calf, featuring name Hugh Thomson and location St. Mary's, Ont.

Advertisement for Shorthorns and Leicesters, featuring name James Douglas and location Caledonia, Ont.

Advertisement for Shorthorns, Leicesters and Berkshires, featuring name E. Jeffs and location Bond Head P. O.

Advertisement for Lord Wilmot (32863) shorthorn bull, featuring name G. Bettschen and location Dundee, Ont.

Advertisement for High Class Shorthorns, featuring name J.R. McCallum and location Iona Sta., P.O. Ont.

Advertisement for Please Mention Farmer's Advocate, featuring name Rodney, Ont.

GOSSIP.

Dr. John Spencer, V. S., formerly of the "Farmer's Advocate" staff, now Assistant Veterinarian at the Virginia Experiment Station.

Five miles from Coatocoke station, in the Province of Quebec, and 124 miles east of Montreal, lies Homeroft Dairy Stock Farm.

The Chester Whites are of the improved bacon type. The stock here is King George's Boy 2313 by Imp. Darby.

The Blue B. Rocks are of Hawkin's strain, and there are a number of very choice cockerels for sale. Write Mr. Parsons, to Barnston P. O., Que.

GALBRAITH'S LATEST.

Mr. Alex. Galbraith, Janesville, Wis., writes: "We are sending to our Manitoba branch at Brandon, by express, tomorrow, another carload, containing five Clydesdale stallions."

The Suffolks include Bentley Victor and Bentley Lord, both prominent prizewinners at the Royal and other important shows in England.

The Percherons are an exceedingly choice lot, with beautiful quality and perfect conformation, and every animal is not only sound, but is thoroughly guaranteed in every respect.

This makes over 50 horses we have sent to Brandon in the last 90 days. We always send our very best, believing as we do that Canadian buyers are more critical than Americans.

SHORTHORNS FOR SALE

10 choice Shorthorn heifers and 10 young bulls, of choicest quality and breeding, at reasonable prices. G. A. BRODIE

Five young bulls of choicest breeding and quality; also forty cows and heifers, a very choice lot. Herd headed by Bandoleer =40106=.

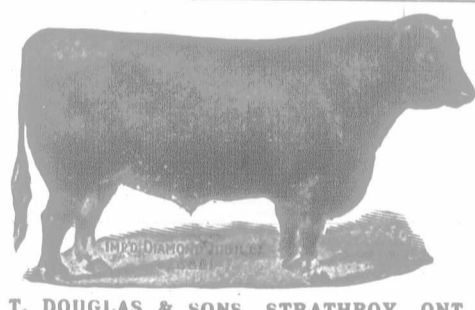
Dark red bull calf, Blue Ribbon 2nd, 13 months old, sired by Blue Ribbon (imp.) 17095 (63703).

2 Imported bulls coming 2 years old, 4 bull calves, from 8 to 12 months old, from imported sire and dam.

Our entire flock of Shropshire sheep, 75 head. 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.

I am now offering bulls from 8 to 16 months old. Heifers of all ages, some in calf. Present stock bull, Roan McKay =37267=.



SHORTHORNS & CLYDESDALES

100 SHORTHORNS TO SELECT FROM. Herd bulls (imp.) Diamond Jubilee =28861= and Double Gold =37852=.

S. DYMENT, BARRIE, ONT. Breeder of Scotch Shorthorns

Shorthorns and Shropshires. Scotch and Scotch topped families of Shorthorns, young bulls and heifers for sale.

HIGH-CLASS SHORTHORNS. Heifers and bulls of various ages. Price reasonable.

Maple Grange Shorthorns. CLARETS, LAVINIAS AND BEAUTYS.

R. & S. NICHOLSON Sylvan P. O. Parkhill Station, Ont. Importers and breeders of

SHORTHORNS. Have for sale: 13 IMPOTER HEIFERS, 2 IMPORTED BULLS, 7 YEARLING BULLS, 20 HEIFERS (choicest).

Home-bred herd composed of Nonpareils, Minns Clementines, Cruickshank Lovelys, Shorthorn Rose mays, A. M. Gordon's Estelles, Miss Synce, etc.

ARTHUR JOHNSTON, GREENWOOD, ONTARIO, CANADA.

Offers at private sale young SHORTHORN BULLS AND HEIFERS of the choicest Scotch breeding. Quality unsurpassed.

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.

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 33049.

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.

Goodfellow Bros., Macville, Ont.

Spring Grove Stock Farm Shorthorn Cattle and Lincoln Sheep.

HERD prize and sweep-stake 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 Brawith Bud tribe.

T. E. ROBSON, ILBERTON, ONT. SHORTHORNS.

A number of choice young bulls, heifers and cows, for sale.

A. M. Shaver, HAMILTON STA. Ancient 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.

CHARLES RANKIN, WYEBRIDGE, ONT. Importer and breeder of Shorthorns, Oxford Downs and Berkshire Pigs

STOCK BULL FOR SALE. Have decided to offer for sale my noted stock bull, Spicy Robin =28259=.

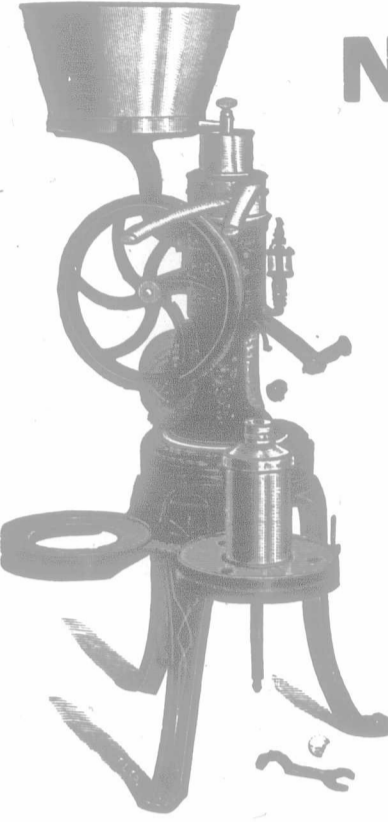
GEO. D. FLETCHER, Binkham P. O., Ont. ERIN SHIPPING STATION, C. P. R.

BELLEVEU SHORTHORNS. Both sexes, Imported and home-bred. All ages. Prizewinners at home and abroad.

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.

WM McDERMOTT, Living Springs P. O., Fergus Station.

WHAT THE NATIONAL WILL DO.



NATIONAL

It will increase the yield of butter about 1 lb. per week, and about 30 to 60 lbs. per year, and will pay 8 on its cost price annually with one cow, and pay for itself in one year with 12 to 15 cows.

It will be placed on trial beside any other Cream Separator and prove to be superior in construction for convenience, easy operating, cleaning, close skimming, quality of cream and butter, style, fine finish and lasting service.

The only Cream Separator having its bowl and all parts made and finished in one shop in Canada under the supervision of the best Cream Separator experts obtainable.

The bowl is not filled with innumerable complicated parts to adjust and wash every time it is used. It has no stable-tainted, enamelled casing into which the milk and cream is discharged, that requires hot water at the barn to wash it every time it is used.

The National is designed for convenience and to overcome every objectionable feature found in other Cream Separators. A sample machine sent for a free trial to prove all that is claimed for the National.

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:

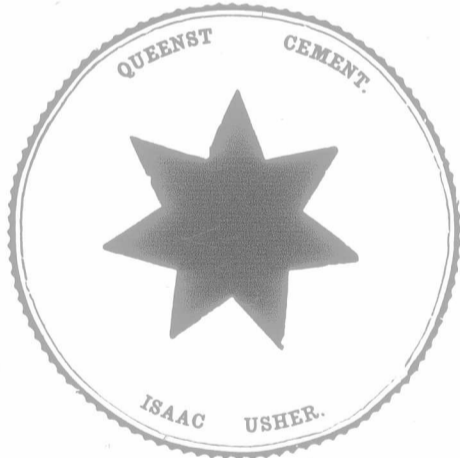
The CREAMERY SUPPLY CO., Guelph, for South-western Ontario.
The T. C. ROGERS CO., Guelph, for Ontario North and East.
JOS. A. MERRICK, Winnipeg, Man., for Manitoba and N.-W. T.
JOHN A. ROBERTSON, 108 Union Avenue, Montreal, Quebec.

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

Going to Build?

A new house, barn, silo, concrete floor, or any other such work? If so, use


Queenston Cement



ISAAC USHER,
QUEENSTON, ONTARIO.

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.

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 post-paid. 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 SPOUTE, NEWDAM, MAN.** says: "I received the Doll and think it is a fine specimen. It is the loveliest Doll I have ever had." Address: **THE HOME SPECIALTY CO., Dept. 579 Toronto.**

BISQUE DOLL

GOSSIP.

Mr. James Douglas, Caledonia, Ont., writes: "I am sending you a change of advertisement for next issue, from which your readers will please notice that I am offering my herd bull, Imp. Christopher =28859=, for sale, as I had to make a change on account of his calves coming of breeding age, and have bought another and will not need the two. He is a good bull and a good breeder, all right in every way—sure, quiet, and a capital worker. He is a thick, fleshy bull, with a fine coat of mossy hair, and he is recorded in the A. H. B. I also am offering some very fine young bulls by him, and some females that I am breeding to the bull I bought to follow him, Imp. Rosicrucian of Dalmeny (82117).

Dalgaty Bros. have sold to M. C. E. Behee, of Owen Sound, one of their newly-imported stallions, Sir Martin (10649). This young horse is one of the best kind, and will make a very heavy one, with the best kind of feet and legs, with the feather in the right place. This horse was only shown once, at Barr Head open show, where he won first prize in a large competition. He was sired by the noted sire, Lord Stewart (10084), grandsire Castlereagh (18342). His dam is the noted mare, Lady Die by Golden Avon, second dam, The Dowager by Darnley (222), third dam by Walter Scott. If this horse proves as good a stock producer as his sire is, he will be a great boon to the people that use him. His sire's service fee was fifty dollars (\$50.00). Sir Martin was bred by the Most Honorable Marquis of Londonderry, K. G., Seaham Hall, Seaham Harbor.

Being in Ottawa, recently, an "Advocate" representative boarded a street car and was soon landed at Hintonburg, opposite the splendid dairy farm of Messrs. R. Reid & Co., breeders of typical Ayrshire cattle, Clydesdale horses, Berkshire and Tamworth hogs. In the long rows of well-arranged stalls were to be seen 60 head of big, well-formed, heavy-milking Ayrshires, a number of which are imported. At the head of the herd is the grand stock bull, Imp. Duke of York, a bull of great length, substance and quality. Among the many cows are a number showing a butter-fat test of four per cent, and with milk records of from 55 to 50 lbs. a day. In younger animals, are a number of two-year-old heifers that are extra nice, showing an evenness and tueness to type that makes winners and record-breakers. There are also about seven one-year-olds that have only to be seen to be appreciated, and a few heifer calves. In young bulls, there are three yearlings and eight calves, all sired by the stock bull, and a rare good lot they are. Any of the young animals and a few of the older ones are for sale.

The Tamworths are certainly a superior lot. The main stock boar is Imp. Whittaker Bruce, winner of a host of prizes at the leading shows. Next in service is a son of his, Maple Crest Bruce, a young boar that for type, quality, perfect form and finish has very few equals. In females there are several brood sows, among them being Imp. Knowlflower. They are ideal animals and winners all through. In younger ones, there are several very choice young sows for sale. The Berkshires are of the improved type. The stock boar is King Highclere 2nd, a very long, even, smooth hog. In this breed there are also several young sows for sale. Messrs. Reid & Co. report sales as exceptionally brisk, being considerably taxed to keep pace with their orders.

In Clydesdales they are offering for sale the grand yearling stallion, winner of first place at Ottawa last fall, sired by The Chief, dam Erskine Libby (imp.), a mare that weighs 1,295 lbs. This is a very big, thick, brown colt, with grand, flat, flinty bone, very even in his make-up, and shows a wonderful development of muscle, possesses lots of quality, and can go some too. He will make a 2,200 pound horse. Note Messrs. Reid & Co.'s ad. and write them to Hintonburg P. O., Ont.

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.

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 28855. They are rare good ones. Price right.

H. PARKER, DURHAM P. O. and STATION.

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. CREEAR, Shakespeare, Ont. om

SHORTHORN BULLS FOR SALE: A choice lot of Shorthorn bulls from 10 to 16 months old, sired by Imp. British Statesman (63729) =20833=; and cows of the Mara family. They must be sold at once. Prices away down to suit customers. **FITZGERALD BROS.,** om Elm Dale 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

FOR SALE
6 SHORTHORN BULLS.

14 months old; also heifers and cows. Would sell a carload. Imp. Prince William at head of herd. om **Jas. Gibb, Brookside, 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 sired, 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, Listowel Station, 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.

Imp. Shorthorns and Lincolns

A. D. MUGUGAN,
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 shagging 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:

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.

CEDARDALE SHORTHORNS.

FOR SALE: 3 bulls from 1 to 2 years old, two of them of Lord Gloster 28865 and Flora dams, the other by Cedarville Chief 28838, Beauty dam; a big, growthy, sappy lot.

Dr. T. S. Sproule, Markdale, Ont., P.O. and Sta.

Baby's Own Soap



PURE, FRAGRANT, CLEANSING.
ALBERT TOILET SOAP CO., MFRS.
MONTREAL.

IMPERIAL



CREAM TARTAR

BAKING POWDER

PUREST, STRONGEST, BEST.

Contains no Alum, Ammonia, Lime, Phosphates, or any Injurious.

E. W. GILLET COMPANY LIMITED Toronto, Ont.

SHORTHORNS: We are offering 3 extra choice yearling bulls, all from imported sires, straight Cruickshank, with Lavender 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 11 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.

James Bowes, Strathairn P.O., Meaford Sta.

GREEN GROVE SHORTHORNS:

I am now offering a few heifers, Clarets, Floras, and one Missie; also a choice year-old bull, by Aberdeen of Markham.

W. G. MILSON, GORING P.O. and MARKDALE STATION.

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 flock at the Pan-American; International, Chicago, 1901 and 1902.

J. T. GIBSON, om DENFIELD, 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.

om ROBERT MILLER, - STOUFFVILLE, ONT.

PLEASE MENTION FARMER'S ADVOCATE.

GOSSIP.

A few years ago Mr. Robt. McBrien, of Chatsworth, purchased a pair of good, pure-bred Clydesdale mares, for which he paid a long price, and at which his neighbors stood aghast. Since then Mr. McBrien has sold three colts, the offspring of this team, for \$1,600, and still has a very valuable colt on hand. Mr. McBrien has recently purchased another 1,950-pound mare from Mr. A. Crow, of Annapolis. The first-class stock has proven a good investment for this man, and will do the same for others.

Stockholders of the Ohio Poland-China Record Company held the annual meeting at Dayton, Ohio, January 28th. The advisability of consolidating the different Poland-China Records was considered, and many were in favor of such. A committee was appointed to confer with similar committees that may be appointed by other record companies. Officers elected were: President, L. N. Bonham; Vice-President, L. C. Nixon; Treasurer, J. H. Lackey; Secretary, Carl Freigau, Dayton, Ohio. Executive Committee, J. M. Klever, J. H. Lackey, A. M. Brown, Carl Freigau, Dayton, Ohio.

IMPORTANT PURCHASE OF SHORT-HORNS.

Messrs. A. & G. Mutch, near Regina, N.-W. T., having determined to found a herd of Shorthorns, recently visited "Maple Shade," the home of Hon. John Dryden, at Brooklin, Ont., where they found a large number of choice heifers of extra quality, from which four were selected, representing as many different families—two roans and two reds, the latter being sired by the imported bull, Collynie Archer, and the former by Prince Gloster, the present stock bulls at Maple Shade, both superior animals of the choicest breeding, and prepotent sires, as evidenced by the younger animals of the herd. Collynie Archer was bred by Mr. Duthie, of Scotland, and selected for use on Mr. Dryden's herd. His pedigree is exactly the same as that of the great show bull, Marengo, the winner of the championship in Great Britain for three successive years. Collynie Archer has made a splendid record at Maple Shade. Ten of his heifers, all under two years and of Scotch breeding, made an average of \$710 each in June last at auction in Chicago. Prince Gloster, the younger bull, seems likely to prove equally good as a breeder. One of his heifers of last year's crop, and the first that has been shown, easily took first place in a large class at the Whitty Model Fair last fall.

One of the heifers purchased belongs to Mr. Cruickshank's favorite Lavender family, tracing through bulls used by Mr. Dryden to imported Lavender Pride by Cumberland, acknowledged by all to be one of the greatest sires of the Sittytown herd. He was the sire of the greatest Shorthorn bull of recent years, Scottish Archer. Another heifer belongs to the Cruickshank Brawith Bud family, the pedigree showing eight cows of Mr. Cruickshank's own breeding. Both these heifers are exceptionally thick and low-set, with splendid coats of hair. Another one is of Mr. Cruickshank's Venus or Easthorpe family, and is a beautiful red, on short legs, and a typical Shorthorn. The fourth is of great size for her age, and in every way desirable. She belongs to the Lady Eden tribe, the oldest of all the families in Mr. Dryden's herd. Her dam, at six years, was sold at Chicago for \$530, and her own sister for \$440. The individuals of this family are uniformly good, and this heifer is one of the best. We congratulate Mr. Mutch on his excellent commencement. He has, no doubt, secured animals of great individual merit and of the choicest breeding to be found anywhere.

These heifers are to be bred to Mr. Dryden's prize Cruickshank bull, Clipper Hero, and next year Mr. Mutch will add a first-class young bull for his use in the future. We shall watch the result with great interest. It is not often young breeders start with such choice pedigrees, and animals which show it by their appearance, and we feel sure that the whole country will gain by the further development of this herd.



The Frost 10 Wire and 6 Stay Fence is the strongest and heaviest wire fence made—good openings for good agents; write us at once for terms. Ask for catalog.

THE FROST WIRE FENCE CO., WELLAND, ONT. WINNIPEG, MAN.

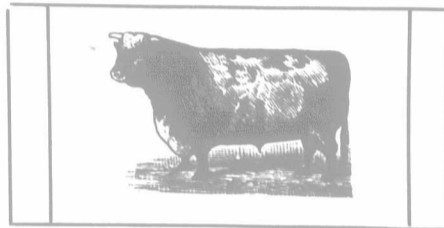
FOR SALE. 9 Straight Scotch Shorthorn Bulls
from 9 to 18 months Herd-headers at common prices. Also females of all ages.
Station, Telegraph and Telephone office adjoin the farm.
D. Milne & Son, Ethel, Ont.

GEO. ISAAC, BOMANTON, ONT.

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.



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.

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.

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,

Allan 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

W. C. EDWARDS & CO.,

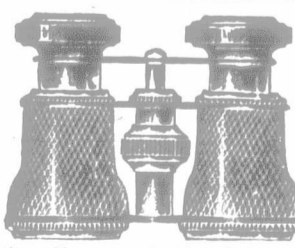
Rockland, Ontario.

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.

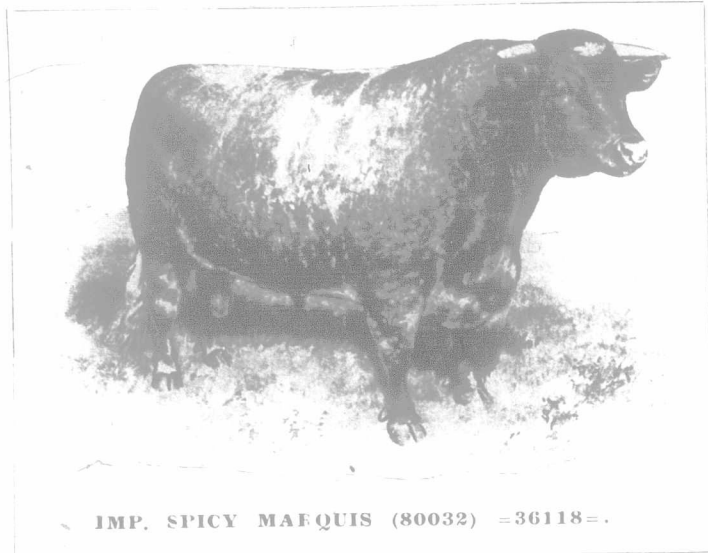
S. J. PHARSON & SON, MEADOWVALE P. O. C. P. R. Station and Telegraph Office.



\$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 non-rotating body with satin lined interior carrying case and leather strap. Every part made of best material, finished and fitted with scientific exactness. Send us the greatest bargain you have ever seen, pay the Express Agent \$1.95 and I Express and 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 Ranchmen, 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.**

TROUT CREEK HERD OF
SHORTHORNS



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.

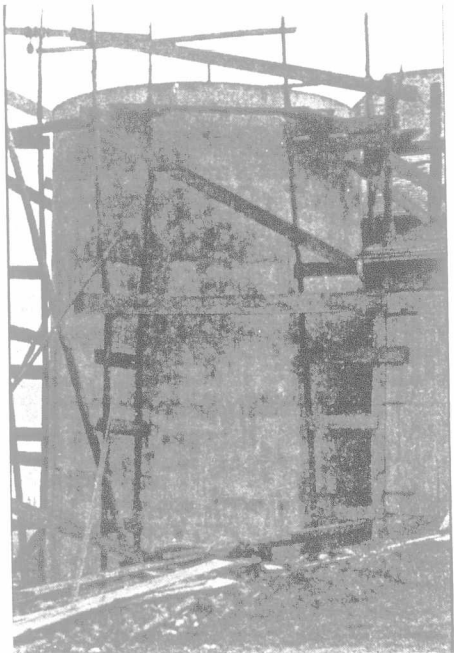
We keep a choice lot of both imported and Canadian-bred cattle. Personal inspection invited. Parties desiring to see the herd will be met on arrival of trains, if notice is given. Visitors always welcome. Address,

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 00
Stone, 10 yards at 10c	1 00
7 men, 7 days at \$1.25	61 25
Supervising, 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 00

Estate John Battle, Manufacturers of "Thorold" Cement
THOROLD, ONT.

GOSSIP.

O'Neil Bros., Southgate, Ont., write: "We have decided to offer for sale our great stock bull, Sunny Slope Tom 1st 1170 and 86085, bred by C. S. Cross, of Emporia, Kansas, U. S. A. He was sired by Wild Tom, he by Beau Real, he by anxiety 4th, by Anxiety. As a calf, Sunny Slope Tom won first in class and third sweepstakes Hereford bull of any age. He is a sure stock-getter, and his get have been successful in the show-ring whenever shown. The other bulls we are offering are plainer and are within the reach in range of value of the farmer and ranchman. The females are a very choice lot, and will be appreciated by prospective customers on examination. We have had a very successful season so far, having disposed of 15 bulls and 20 females of all ages since fall. We desire to express our appreciation of the "Advocate."

TREDINNOCK AYRSHIRES.

Quebec is the home of the Ayrshire. In this Province are a number of herds of continental fame for superior excellence, and none more so than the Tredinnock herd, the property of Mr. Robt. Reford, of Montreal. The farm lies close to the station at Ste. Anne de Bellevue, on the main line of the G. T. R., 20 miles west of Montreal. Connection is also made at Ste. Anne with the C. P. R. This model farm is under the management of Mr. James Boden, who was born and reared in Ayrshire, and, consequently, from childhood has been associated with this favorite dairy breed of cattle, and, having a natural innate love for his native cattle, has thoroughly mastered their peculiarities, and as a judge of what constitutes typical dairy form in this breed, has few equals and no superiors. The herd is made up of 70 head, all either imported direct by Mr. Boden or bred from imported stock, and it is a sight worth going miles to see—the long rows of beautiful, deep-bodied, sleek animals, with their large, even udders, with the breeding of each animal placed under glass over their heads, and the floors kept scrupulously clean. The stock bulls are: Lord Dudley of Drumsue (imp.), by Brownchief of Drumsue. Lord Dudley is a massive, typically-formed bull, weighing 2,000 lbs., and winner of first and sweepstakes at Toronto and Ottawa in 1901. Last fall, owing to his getting a little sour on strangers, he was not shown. The other stock bull is that grand old noted sire, Glencairn 3rd (imp.), a bull second to nothing ever imported as a sire of winners. In young bulls, we were shown seven August and September calves, all by Lord Dudley, and out of such grand cows as Betsy 1st of Fairfield Mains (imp.), winner of first at Buffalo in milk test and second at Toronto last fall; Bluebell of Hillhouse (imp.), a Scottish champion, milk record 60 lbs. a day; Jessie of Ste. Annes by Imp. Glencairn 3rd, whose test shows a percentage of 5% butter-fat, Molina of Ste. Annes by Imp. Glencairn 3rd, winner of second at Toronto, '02; Kirsty Wallace of Auchengrain (imp.), milk record 66 lbs. a day, testing 4.0 per cent., and winner of second place in the milk test at Buffalo; Lady Grace of Ste. Annes by Glencairn 3rd, winner of first at Toronto, '02, in the three-year-old class, with a butter-fat test of 3.30 per cent.; Polly of Mechlin (imp.), with a test of 4.30 per cent.; Stately 1st of Balmangan (imp.); Lily 1st of Barcheskie (imp.), winner of 17 first prizes in Scotland. Indeed, the whole herd shows an equally high test of butter-fat and milk records. At present, there are for sale eight yearling heifers, out of imported cows and sired by imported bulls, as choice a lot as the breed produces, and eight heifer calves, besides a number of older ones. In fact, there are very few animals in this herd reserved, so that if it is a show animal, a producer, or a combination of both that is wanted, either in single animals or in car lots, Tredinnock herd can produce them. Write Mr. James Boden for prices, etc., to Ste. Anne de Bellevue Que.

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.**

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.**
BONNIE BURN STOCK 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. W. RUSSELL, STOUFFVILLE, ONT.**

SCOTCH SHORTHORNS. Urya, Stamfords and Matchless. Young, vigorous females, all ages, for sale. Shropshire sheep and Yorkshire pigs. **ROBT. BATTY, Glenbourne Farm. Meaford P. O. & Sta.**

For Sale Some choice young **YORKSHIRES** (H. Lywell strain) of both sexes and different ages; also young Shorthorn bulls, sired by British Hope (30946). Price moderate. Write: **C. & J. CARRUTHERS, Cobourg Station and P. O. Ont.**

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 feet twice a day. **L. F. SELLICK Druggist, Morrisburg Ont.**

SUNNYLEA FARM. For sale: Jerseys—6 yearling bulls; females any age. Tamworths—30 boars and sows, different ages. Shropshire sheep—rams and ewes of good breeding. Prices reasonable. **H. E. WILLIAMS, Knowlton, P. O.**

JERSEY BULL

The richly-bred two-year-old Jersey bull, "Pride of Norval," solid color, black points, to gue and switch, quiet and well broken to tread-power, and sure stock-getter. Dam tested 17 lbs. 5 ozs. 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. MINMAN & SONS, GRAFTON, 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.**

DO YOU WANT A SNAP?

Jersey cows and heifers, also two young bulls, at low prices, from prizewinning stock. Write for prices. **W. W. EVERITT, Dunedin Park Farm, CHATHAM, ONT.**

Jersey Bulls

Out of tested show cows and sired by Brampton's Monarch (imp.). As we have the largest herd of pure-bred Jerseys in Canada, we are able to offer great choice. Come and see or write for what you want. **B. H. BULL & SON, C.P.R. and G.T.R. stations, Brampton, Ont.**

HOLSTEIN BULLS

For sale: From 4 to 7 months old, having sires in their pedigrees from such strains as Inka, Netherland, Royal Aaggie, and Tritonia Prince, and out of imported females that have proven their worth at the pail. **THOS. B. CARLAW & SON, Warkworth**

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 **WM WILLIS, NEWMARKET, ONT.**

Maple Park Farm Holsteins.

Netherland De Kol (imp.) stock-hill. Stock of all ages for sale from the **De Kol Pietertje Clothilde and Barrington** 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**

THE VALUE OF CHARCOAL.

Few People Know How Useful it is in Preserving Health and Beauty.

Nearly everybody knows that charcoal is the safest and most efficient disinfectant and purifier in nature... Charcoal is a remedy that the more you take of it the better it is not a drug at all, but simply absorbs the gases and impurities always present in the stomach and intestines...

GOSSIP.

From the corner of Notre Dame and McGill streets, in the city of Montreal, per street car, a thirty-minute ride lands the visitor within one mile of the beautiful and modernly equipped farm of Mr. W. Watson Ogilvie, opposite Lachine Rapids, where, under the skillful management of Mr. Robert Hunter, are to be seen what is perhaps the choicest lot of imported Ayrshire cattle on the continent...

AYRSHIRES

WATSON OGILVIE, PROPRIETOR.



Ogilvie's Ayrshires won the herd and young herd prizes at Toronto, London and Ottawa in 1900; also at the Pan-American, in 1901, and in 1902 they won all the herd prizes and medals, sweepstakes and diplomas, with one exception. The cows are all imported, and were carefully selected for strength and constitution, style, size of teats, and milk (quantity and quality). The herd is headed by Douglasdale (imp.), champion at the Pan-American and at Ottawa, Toronto and London, in 1902, ably assisted by Black Prince (imp.). Stock, imported and home-bred, for sale at all times.

ROBERT HUNTER, Manager.

Near Montreal. One mile from electric cars. Lachine Rapids, P. Q.

AYRSHIRES AND GUERNSEYS

of all ages for sale. Superior breeding, deep milking strain. A few very choice heifers, 1 year and under, from imported and home-bred dams. Prices reasonable.

ISALEIGH GRANGE FARM, DANVILLE, QUEBEC.

Homecroft Stock and Dairy.

Ayrshires, Chester Whites, B. P. Rocks. Write us for best young bull in Canada. Some A 1 bull calves; also some beauties for young sows. See that you look up our chickens.

J. F. PARSONS & SONS, BARNSTON, QUE.

Springhill Farm Ayrshires, FOR SALE

One bull 16 months old, three bulls 7 months old, all from imported sire and deep-milking dams. Females, all ages.

Robt. Hunter & Sons, Maxville, Ont.

DAVID A. McFARLANE, Breeder of high-class AYRSHIRES.

Young stock for sale from imported and home-bred foundation. Prices reasonable.

Springburn Ayrshires.

We are making an especial offering of five bulls, from 9 to 12 mos. old, bred by Lord Minto 10133, and out of producing dams. A grand, typical lot. Write quick, as we are selling cheap.

H. J. WHITAKER & SONS, North Williamsburg P. Q.

Maple Cliff Dairy and Stock Farm

AYRSHIRE CATTLE, BERKSHIRE and TAMWORTH PIGS. Cattle of both sexes in single or carload lots. Pigs both sexes, pairs not akin.

AYRSHIRE CATTLE

SHROPSHIRE SHEEP, B. P. ROCK FOWL and 20 YOUNG LARGE ENGLISH BERKSHIRES FOR SALE.

CHOICE AYRSHIRES

A first-class light-colored, Aug., 1901, bull. Two April, 1902, bull calves. One 4th prize winner at Toronto, 1902, light colored. Others spotted, dark red and white.

HIGH-CLASS AYRSHIRES

At "Live and Let Live" Prices. Two bulls fit for service; one February and three March, 1902, bulls, and a number of young bull calves; also heifers bred lately, and younger.

CHOICE AYRSHIRES

Present offering: 4 bulls, from 1 to 2 years old, by choice sires, and out of producing dams, and A individuals.

NETHERLEA AYRSHIRES.

Present offering: 3 bulls fit for service, prize-winners; also a few young females, sired by Napoleon of Auchenbrain (imp.), whose dam's record was 72 lbs. a day, and all of them out of record cows.

Tredinnock Ayrshires.

Imported bulls at head of herd: Glencairn 3rd, Napoleon of Auchenbrain, and Lord Dudley. Forty imported females, selected from leading Scotch herds, and their produce from above-named bulls. Size combined with quality and style, well-formed udders, good-sized teats, and capacity for large milk production.

Brown's Holsteins

We are offering for sale: 2 three-year-olds, 4 two-year-olds and several younger heifers. Also a few young bulls, out of record cows and by our grand stock bull; in fact, we will sell anything in the herd.

BROWN BROS., Lyn P. O. and Station.

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.

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.

SPRING BROOK STOCK FARM

Am offering a 12-months, richly-bred DeKool bull; 2 heifers (9 months), and 3 cows. Also a choice lot of Tamworths of different ages. Write at once for prices.

Riverside Holsteins

3-BULLS FOR SALE—8 from 3 to 10 months old, sired by Victor DeKool Pieterje and Johanna Rue 4th Lad. These young bulls are from Advanced Record of Merit stock.

Menie Stock Farm

Choice young AYRSHIRE bulls and heifer calves, from 2 to 9 months old. Also cows and heifers all ages. Write WM. STEWART & SON, Menie, Ont.

High-class IMPORTED AND HOME-BRED AYRSHIRES,

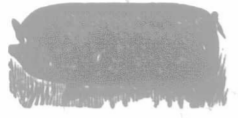
including cows, heifers and young bulls out of our prize and sweepstakes cows. Foundation selected with due regard to quality and productiveness. Come or write.

High-Class Ayrshire Cattle

FOR SALE: Both sexes; bulls and heifer calves from 2 to 9 months old; cows and heifers all ages. Famous prize-winners bred from this herd, including Tom Brown and White Floss, sweepstakes prize-winners at Chicago. DAVID BENNING & SON, "Glenhurst." Williamstown, Ont.

WILLOW LODGE BERKSHIRES

Herd headed by Long-fellow 10th of H. P., assisted by the noted prize-winner, Highclere Crown 3rd. Sows, the best money will buy, and are winners. Young stock of both sexes and all ages for sale, not akin.



W. WILSON, SNELGROVE, ONT.

Chester White Hogs & Shropshire Sheep

Shropshire sheep and Chester Whiteswine. Write for prices. Mammoth Bronz turkey eggs for sale in season. Wm. E. Wright, Glanworth P.O., Ont.

FOR SALE: Yorkshires and Holsteins

Best type and quality. Young stock constantly on hand. Prices right. R. HONEY, Brickley P. O., instead of Warkworth.

Yorkshires—For one month only I will sell boars and sows weighing nearly 100 pounds for \$9 each (registered), and Ontario express paid. WM. TEASDALE, Thornhill Sta., and electric cars. Dollar P. O.

YORKSHIRES FOR SALE.

Boars fit for service, sows in farrow and ready to breed, and young stock on hand. Prices reasonable.

WM. HOWE, BRUCE CO., NORTH BRUCE, ONT.

Large English Yorkshires

Imported and Canadian-bred Yorkshires, from stock of the best British herds. A choice lot of boars, ready for service, and a number of sows being bred to Imported Dalmeny Long Sam, for sale. Also young pigs, all ages.



H. J. DAVIS, Box 518, WOODSTOCK, ONT.

PLEASE MENTION FARMER'S ADVOCATE

Langelier's Yorkshires

I am expecting, by the first steamer next spring, a few choice sows with litters. Will book orders now for young stock, 8 to 10 weeks old, to be delivered at beginning of May. This is a rare chance to buy imported stock at reasonable prices. Write me now, and ask also for the finest poultry circular published in Canada.

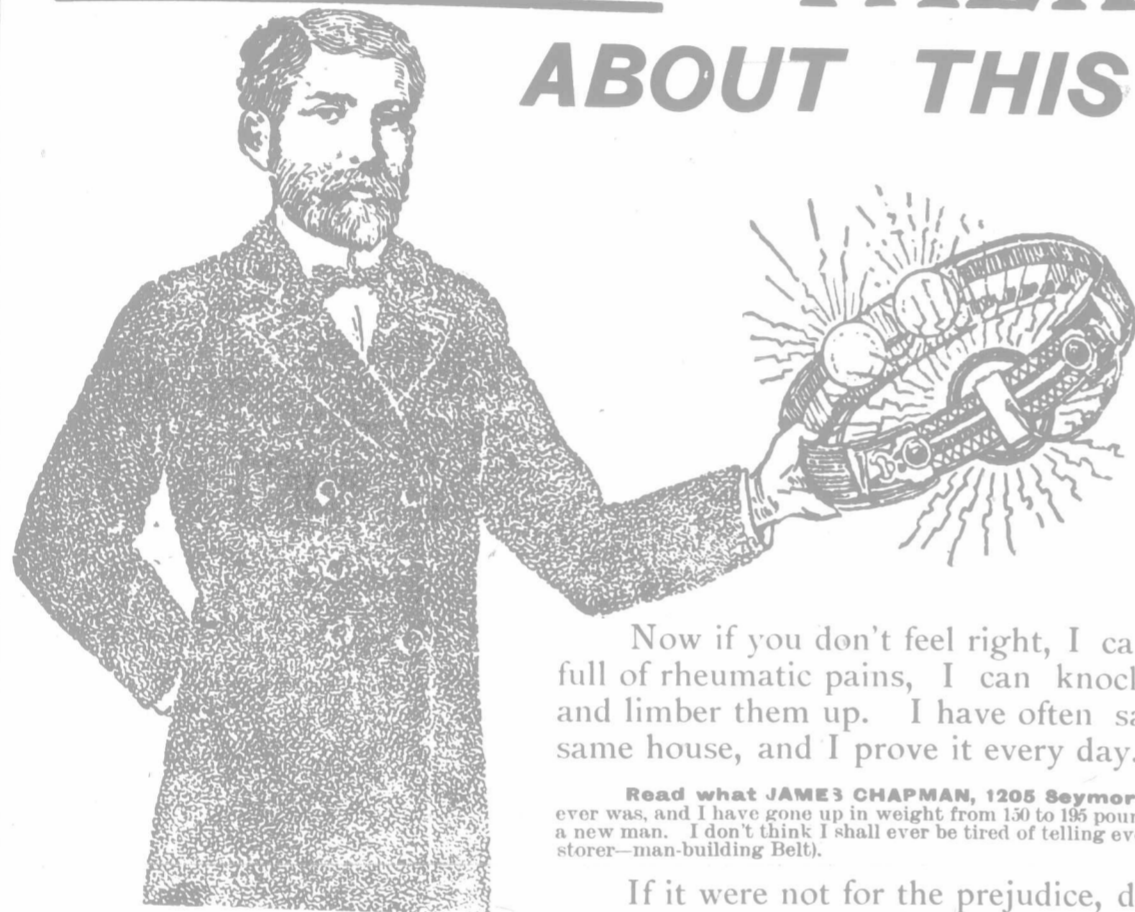
GUS. LANGELIER, Quebec City.

SPRUCE GROVE HERD OF YORKSHIRES.

A number of choice young boars fit for service, sired by Summer Hill Member. Also pairs 10 weeks old, not akin. Prices right. Also young sows in pig.

FRED. C. SMITH, New Hamburg, Ont.

MEN! I WANT TO TALK TO YOU ABOUT THIS BELT.



I want to talk to men who have pains and aches, who feel run down physically, who realize that the old "fire" and energy which were so evident in youth are absent now; men who can't stand the amount of exertion they could years ago. I want you—if that means you—to see what I have done for others who were just as badly off. That's my introduction. If a friend in whom you had confidence presented some one to you and said: "Jack, here's Brown; he has made good with me and I trust him," wouldn't you trust him, too?

Now if you don't feel right, I can cure you with my Electric Belt. If you are full of rheumatic pains, I can knock them out. I can pour oil into your joints and limber them up. I have often said that pain and electricity can't live in the same house, and I prove it every day.

Read what JAMES CHAPMAN, 1205 Seymour St., Vancouver, B.C., writes to me:—I am stronger now than I ever was, and I have gone up in weight from 130 to 195 pounds. My health is something wonderful. I can truthfully say that I am a new man. I don't think I shall ever be tired of telling everybody what the Belt has done for me. (I might say your health restorer—man-building Belt).

If it were not for the prejudice, due to the great number of fakes in the land, I would not be able to handle the business that would come to me. The "Free Belt" fraud and the "Free Drug" scheme, which are not free at all, or the "Just as Good" Belt offered for a dollar or two, which gives no current at all, have made everyone sceptical, but I know that I have a good thing, and I'll hammer away until you know it.

One thing every man ought to know is this: Your body is a machine. It is run by the steam in your blood and nerves. When you begin to break down in any way you are out of steam. That's just what I want to give you back.

MR. GEO. S. BROOKS, Shanty Bay, Ont., wore one of my Belts, and he says:—Your Belt is all that you claim it to be. I can recommend it to any one who is suffering from rheumatism. It has cured me of indigestion, also my kidneys, as I used to suffer a good deal from kidney trouble, and I do not feel it at all now.

I have a cure in every town. Tell me where you live and I will give you the name of a man I've cured.

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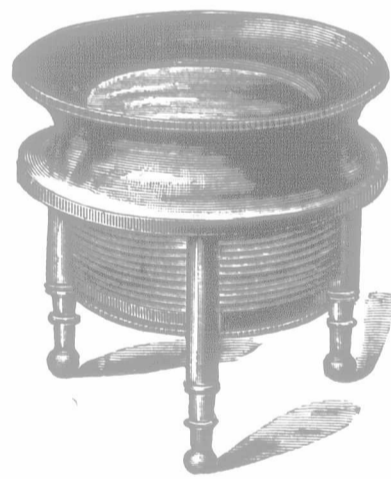
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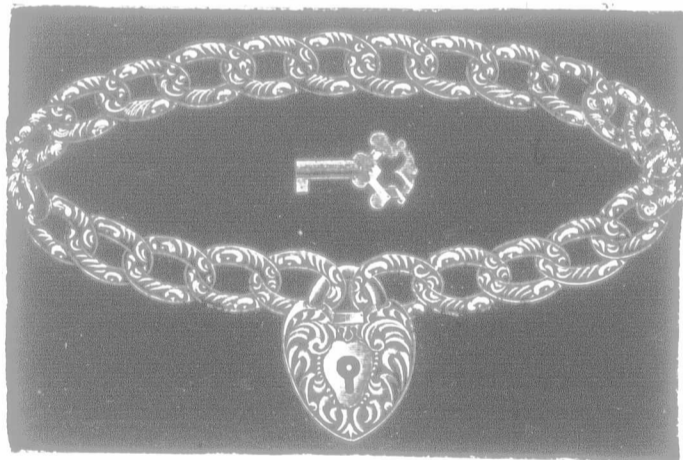
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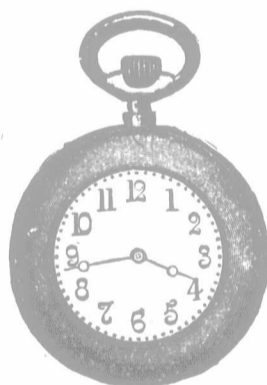
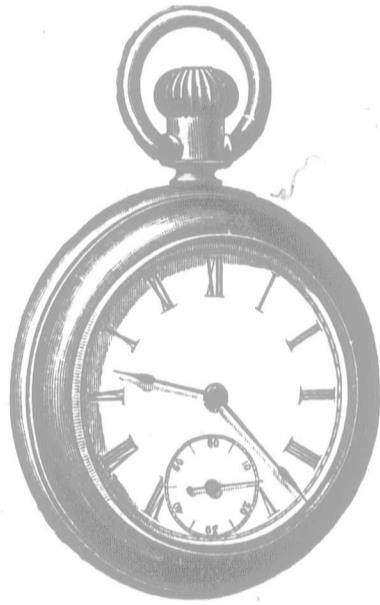
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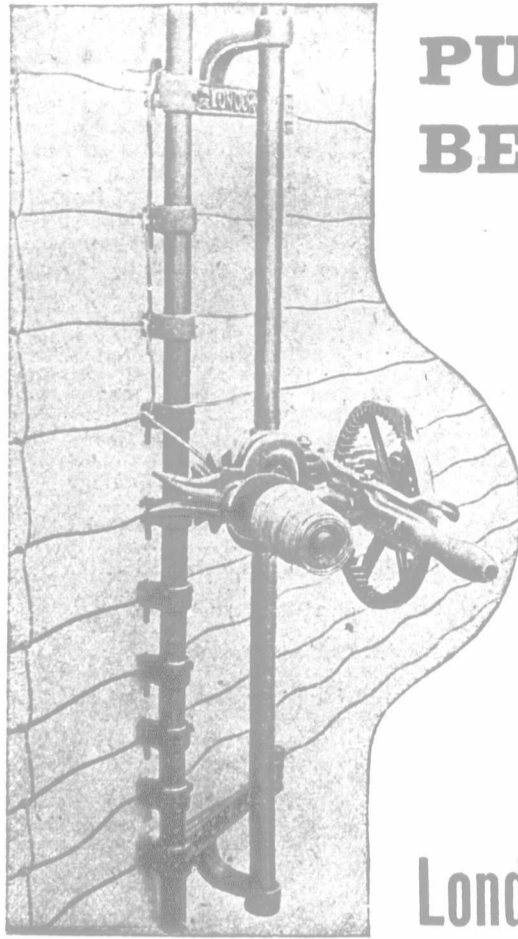
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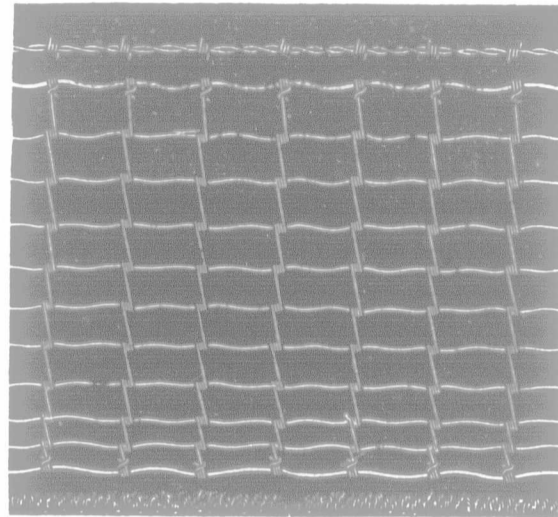


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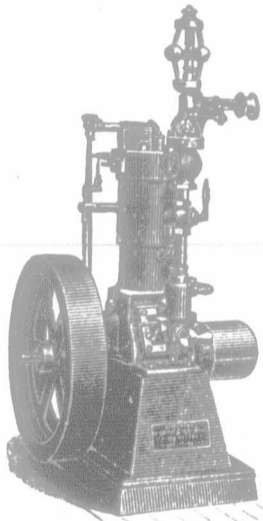
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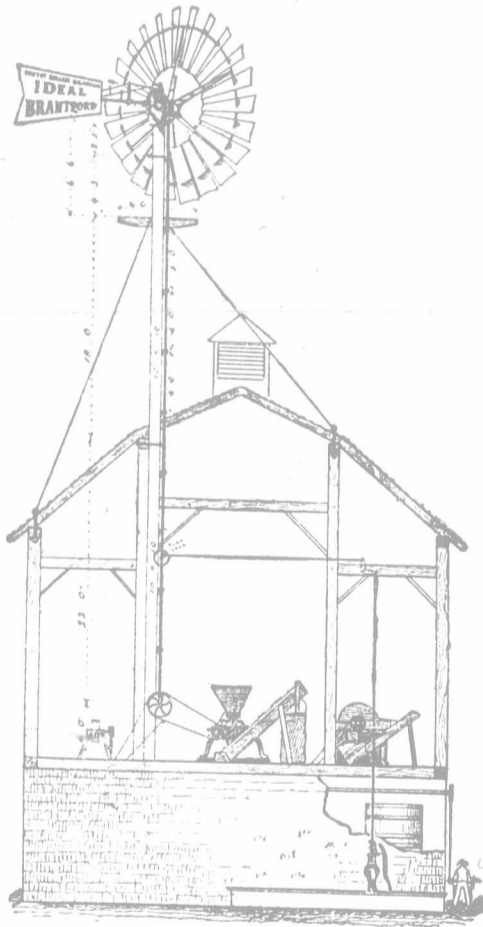
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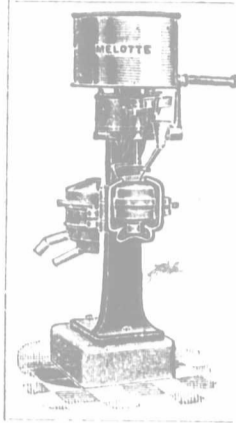
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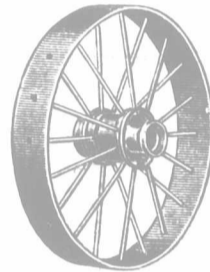
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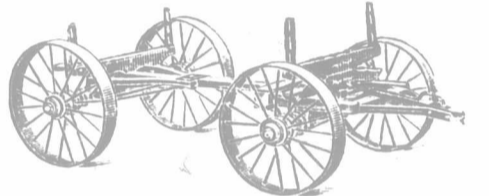
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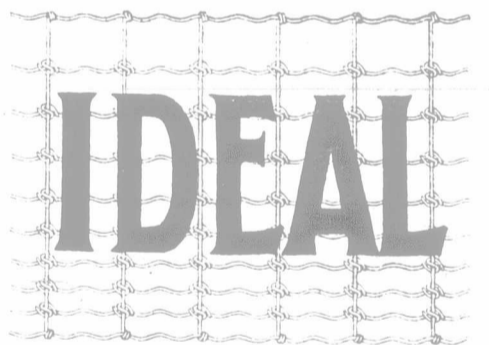
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