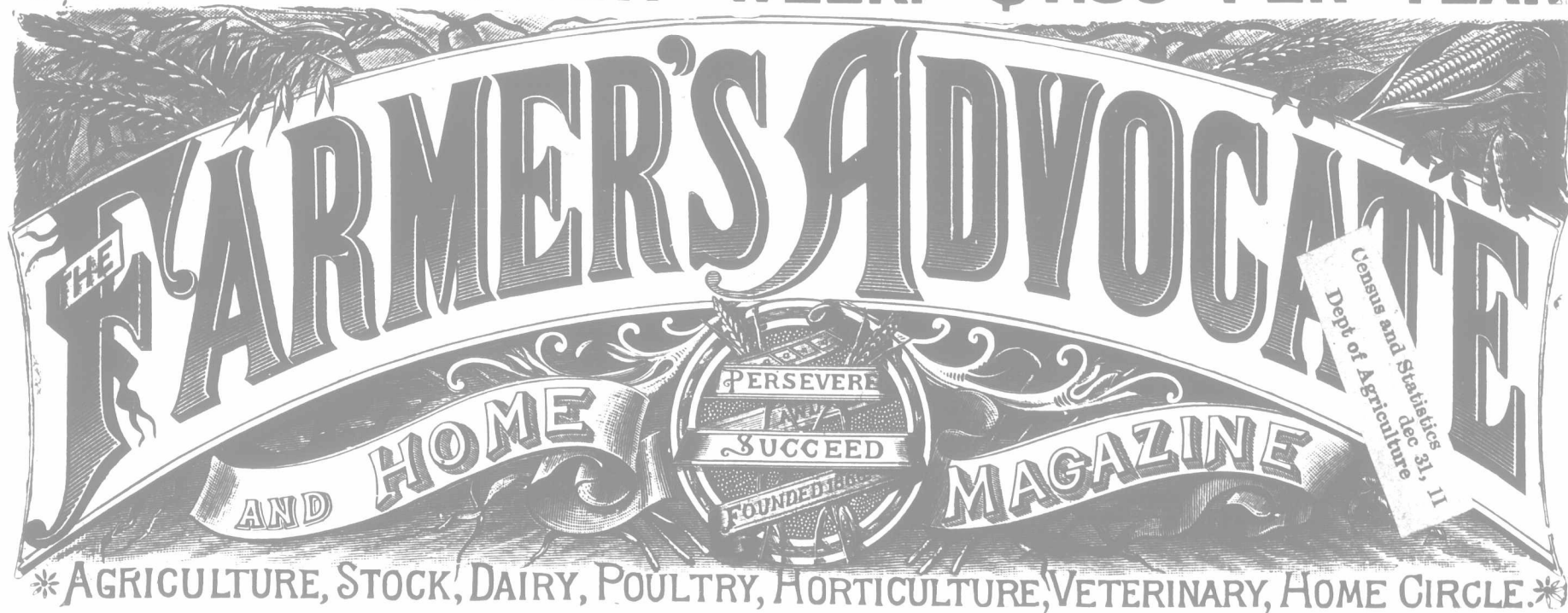


PUBLISHED EVERY WEEK. \$1.50 PER YEAR



ENTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

Vol. XLVI.

LONDON, ONTARIO, AUGUST 10, 1911.

No. 985

Do your baking with
flour made exclusively of
the HIGH-GRADE constituents
of the HARD-WHEAT berry

Have you ever baked with flour made exclusively of the high-grade constituents of the hard-wheat berry? If you haven't, now is the time to try PURITY Flour.

Only the cream of the Manitoba hard wheat—the best wheat in the world—is used for PURITY Flour. More than that, only a portion of the flour milled from this wheat goes into the sacks and barrels branded PURITY.

PURITY Flour consists exclusively of the high-grade constituents or portions of the Manitoba hard-wheat berry.

Every wheat berry has both low-grade and high-grade constituents, which are separated during our process of milling. So exact is our process that it entirely eliminates all the low-grade portions from the flour, which is finally branded PURITY.

The greater strength of PURITY Flour makes it go farther in the baking. With it you can make

more loaves to the sack or barrel than you have ever succeeded in doing before. The loaves will be more nutritious, too, because they contain the high-quality gluten, starch, phosphates and other muscle-building and blood-enriching elements of the hard-wheat berry.

Naturally flour that consists exclusively of the high-grade constituents of the best hard wheat has greater strength and nutriment, superior color, more delicate flavor.

If you'll just try to realize fully what it means to your cooking reputation you'll soon be using PURITY Flour.

Of course, PURITY Flour will cost

you a few cents more than lower-grade hard-wheat flour or soft-wheat flour.

But PURITY is very economical, because it makes "More bread and better bread." The cost per loaf is no more than when using weaker flour, and the food value is much greater.

Tell your grocer you are in a hurry to try PURITY Flour. He will supply you promptly.

When you see the batch of beautiful snow-white loaves, with their soft, evenly-textured crumb and dainty golden-brown crust, you'll be proud of your success with PURITY Flour. When you taste and enjoy the superb flavor of such high-class bread you'll be prouder still.

If you don't want to buy a large sack or barrel, you can get a small bag. PURITY is packed in 7, 14, 24, 49 and 98 pound sacks. Also in barrels and half barrels.

Make certain the PURITY trade-make is on the sack or barrel you buy, for that is your guide to the strong, reliable, high-quality flour that makes

43

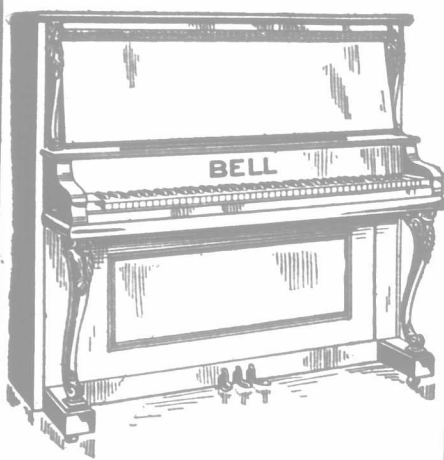
"More bread &



better bread."

PURITY FLOUR

BELL ART PIANOS
CANADA'S BEST.



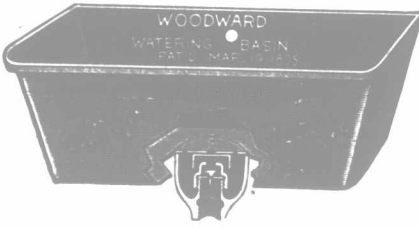
Known throughout the world. Used and recommended by master musicians.

The only piano containing the illimitable Quick-Repeating Action and the Bell Tone-Sustaining Frame.

The Bell Piano possesses several other valuable features, as described in our (free) catalogue No. 40. Send for it.

THE BELL PIANO & ORGAN CO. (LIMITED), GUELPH, ONTARIO.

WOODWARD WATER BASIN



Woodward Water Basins

Will increase the flow of milk from your cows, and at the same time keep them healthier. The water is always uniform in temperature. There is no swilling of cold water once a day and a resultant checking of the natural flow of milk.

They are not expensive to install, and the extra profit will pay for them in a very short time.

Send your name and address to-day for a copy of our free Catalogue.

Ontario Wind Engine & Pump Co., TORONTO Limited

ALWAYS WINS field competitions because of its wonderful capacity

See **The "Bissell"**



Disc Harrow in action and you'll buy no other. Write for Harrow Catalog to Dept. W

T. E. Bissell Co., Limited
Elora, Ontario 65

LIGHTNING

Send for free book, all about lightning and the Budd System of protection. Installed with binding guarantee of money refunded or damage made good. The standard everywhere. See insurance companies endorse and reduce rates on fire-protected buildings. Act now. Time is money. Write to:

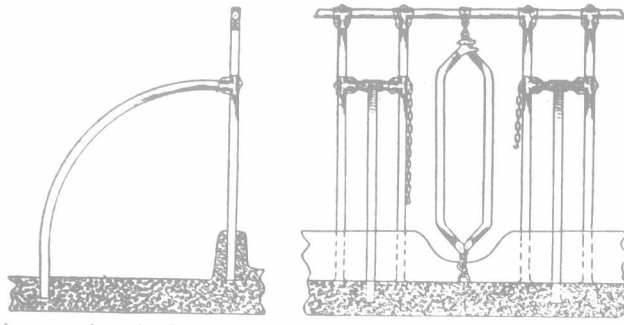
DODD & STRUTHERS, 465 6th Ave., Des Moines, Ia.

Arkona Basket Factory for Berry Boxes

11 and 6 quarts. Baskets, Crates, etc. Write for quotations. Special prices to vegetable and fruit growers' associations in car lots. Prices on application.

Geo. M. Everest, Prop., Arkona, Ont.

STEEL STALLS AND STANCHIONS



There never was a time in the history of Canada when the dairymen were paying so much attention to ventilation, sanitation and equipment of their dairy stables.

This is an age for cement and steel. When you are laying your stable floors it is an easy matter to install Steel Stalls and Stanchions.

An increasingly large number of stables are being equipped with

LOUDEN'S STALLS AND STANCHIONS

because they give PERFECT SATISFACTION wherever they are used. They are made of tubular steel, fastened together firmly with malleable coupling, without in any way weakening the stalls. The stanchions will hold the strongest bull, and yet they are so arranged that no weight of any kind rests on the animal's neck. For prices, plans, circulars, etc., write:

LOUDEN MACHINERY COMPANY, GUELPH, ONT.
Haying Tools, Barn Door Hangers, Cow Stalls and Stanchions, Hardware Specialties, etc.

When the Bluebirds start a warbling
And the Mocking birds to mock;
When the summers here with roses
And the sun's the farmer's clock;
"When the frost is on the pumpkin
And the foddors in the shock;"
When snow balls come a whizzing
And the paths the snow drifts block.

DE LAVAL CREAM SEPARATORS

Skim just the same



The De Laval Separator Co.
173-177 Williams St.
MONTREAL
VANCOUVER—WINNIPEG

Send for Catalog.

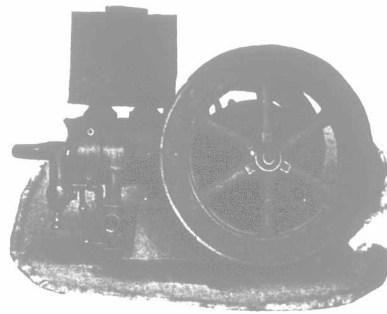
Engines for Farmers

The Barrie 3 H.-P. Engine is designed especially for farmers' requirements. Will do its work quickly and economically. Practically runs itself. No expert attention required. You can thoroughly rely on it.

Comes to you mounted on skid, with battery box and all connections made, ready for use immediately. Write for descriptive booklet, also agency proposition.

ADDRESS:

A. R. Williams Machinery Co., Toronto,
Ontario Distributors for
Canada Producer & Gas Engine Co., Limited,
BARRIE, 14 ONTARIO



The IDEAL Green Feed Silo

NOT AN EXPERIMENT BUT A TIME-PROVEN FACT

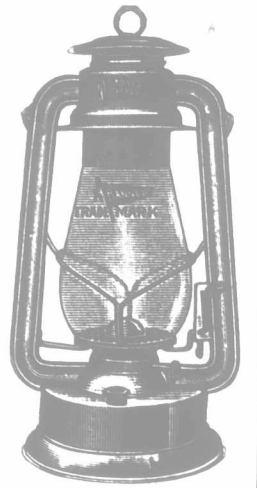
Don't waste your time and money on an experiment. Our silos have been tried and proved for years. Are built from lumber thoroughly treated with a specially-prepared wood preservative, and have other important points of superiority. Free catalogue on application.



THE OLDEST COMPANY IN CANADA BUILDING SILOS.
Canadian Dairy Supply Company, Limited
592 St. Paul Street, Montreal.

"BANNER"

COLD BLAST LANTERN
Double Seamed
Well Cannot Leak!

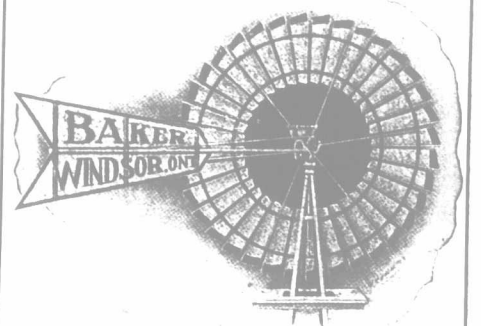


A calendar with every lantern. Costs no more than inferior lanterns.

Ontario Lantern & Lamp Co., Ltd.
Hamilton, a Ontario.

"BAKER" Wind Engines

The "BAKER" Wind Engine is built for heavy duty. Neat and compact in design. Do perfect work because they are built on principles that are absolutely correct, and the easiest-running mill made.



The wheel is built on a hub revolved on a long stationary steel spindle. As a result there is less friction.

It has a large number of small sails without rivets. The small sails develop the full power of the wind.

The engine is so constructed that the gears cannot wear out of mesh.

Has ball-bearing turntable, and self-regulating device.

All working parts are covered with a cast shield, thus protecting same from ice and sleet.

We make a full line of steel towers, galvanized steel tanks, pumps, etc.

All goods fully guaranteed. Write for catalogue No. 58.

THE HELLER-ALLER CO.
Windsor, Ontario.

WILSON'S (GOLD MEDAL) SCALES

We are selling direct to you at wholesale prices this month.

WILSON pays the freight

Get prices to-day. Easy terms.



C. WILSON & SON,
79 Esplanade St. East, Toronto, Canada

BUILD CONCRETE SILOS

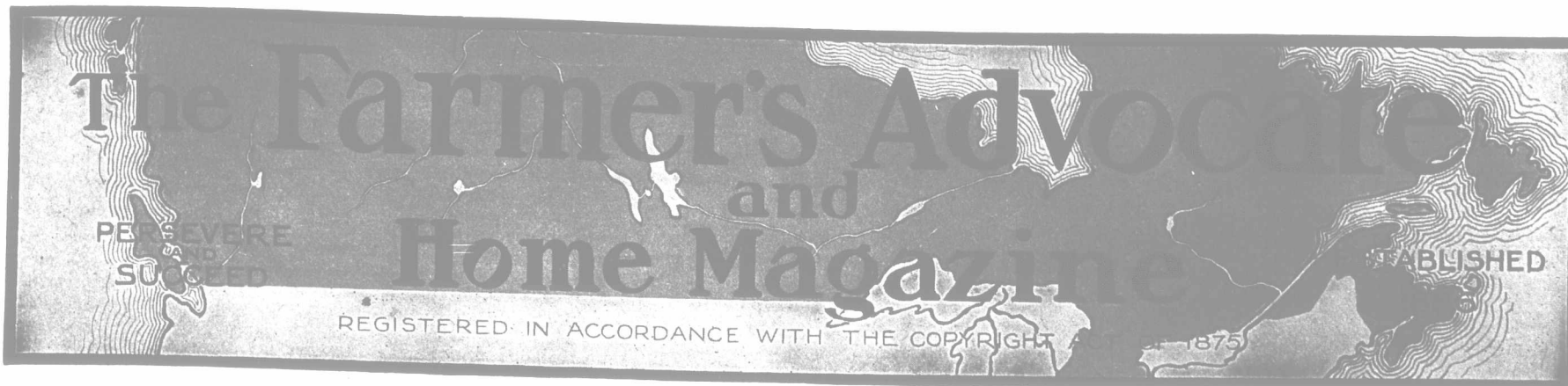
Any size with the London Adjustable Silo Curbs. Send for Catalogue. We manufacture a complete line of Concrete Machinery. Tell us your requirements.

LONDON Concrete Machinery Co'y, Limited,
Dept. B, London, Ont.

Largest manufacturers of Concrete Machinery in Canada. 1

See our exhibit at Toronto Exhibition south-east of Machinery Hall, or London Exhibition in Cement Machinery Building.

INVENTIONS Thoroughly protected in all countries. **EGERTON R. CASE,** Registered U. S. Patent Attorney, DEPT. E, TEMPLE BUILDING, TORONTO. Booklet on Patents and Drawing Sheet on request.



Vol. XLVI.

LONDON, ONTARIO, AUGUST 10, 1911

No. 985

EDITORIAL.

If the milk supply is rapidly falling off, try some soilage feeding, or, if you have it, silage.

A hot August, and a still hotter general election ought to make grand growing weather for the corn crop.

One of the greatest labor-saving devices with which any farmer can present his wife or daughter is a constant supply of good soft and hard water in the kitchen.

Far better than "knocking" the fall fairs would be to go to them, see where they can be improved, and do something toward putting them right.

Young men with pride enough in their work to prepare some prizewinning exhibits of live stock or farm products for the autumn exhibitions are not the type who hanker to leave the farm to manipulate a street-car brake.

Few of us have the weed problem as nearly solved as the Middlesex farmer who was showing the rural minister through his fields. Crossing an unfrequented spot near the head of the lane, he suddenly stooped to pull a plant intruder. "Ah," said he, "I missed that one."

"Can't afford it," is the answer made by some when asked why they are not using the up-to-date labor-saving devices and machinery on their farms. Machinery will do the work cheaper than labor, and the real truth of the matter is that they can ill afford to do without that which they imagine too costly an investment for their farm.

It is said that, "Of all man's social creations, his buildings are the best display of his crooked thinking." Buildings need not be expensive to be neat. Even if means are not at hand to build just what is desired, the condition of the buildings now up or in process of construction is always a good indication of what would be done were means more plentiful.

A farmer, in order to be prosperous, must possess a greater variety of knowledge than is required in most any other industry. This is not generally understood, yet it is true, and to get this required knowledge involves years of education, training and practical experience. School and agricultural college training, backed up by practical work on the farm, should be the aim of the young man of to-day.

Were the truth known, it is probable that the worst leaks of dairy farming occur in the feeding end of the business. Hence the value of this week's instalment of "The Farmer's Advocate" inquiry into the production of milk for the supply of cities and towns. The article records the actual methods of twenty-one dairy farmers. We would be glad to supplement these experiences by those of other readers, with special attention to economy and results.

Reorganising the Department of Agriculture.

The patronage system has been a curse to Governments in Canada, and a nuisance, rather than a source of strength, to members of Parliament. The distribution of offices and contracts distracts a large share of attention from constructive legislation, and dissipates energies that otherwise would be directed to more efficient administration. It becomes in this way a barrier to statesmanship in national affairs, and undoubtedly a prolific parent of graft. Happily, the Canadian Civil Service Commission, under Prof. Adam Shortt, in connection with the Department of the Secretary of State, has become a real factor in taking out of politics at Ottawa appointments in what is known as the "Inside Service," and as its working becomes perfected, will be extended more and more, putting an end to many improper appointments and promotions by enforcing impartial standards of qualification, and efficiency.

In a representative form of government like ours, with a Cabinet comprising a dozen ministers presiding over important departments, they will no doubt continue to exercise their prerogative in the selection of deputies or other important officers who share to a greater or less extent responsibilities in matters of administrative policy. In order to continuity and unity in the government on all larger issues, the different ministers require time to acquaint themselves with the plans of their Cabinet associates. Obviously, then, there should be a fair distribution of the business of government among the different departments, so that some will not be overloaded, and ministers find themselves more or less swamped at times.

A well-known case in point is that of the Department of Agriculture, at Ottawa, which, like Topsy of "Uncle Tom's Cabin," has "grewed up" during the past twenty-five or thirty years, until now it has become an antiquated piece of patchwork. It embraces some nine different branches, such as Archives, Patents, Copyrights and Trade Marks, Census and Statistics, Public Health, Health of Animals and Live Stock, Experimental Farms, Dairy and Cold Storage (including three divisions), Seeds and Exhibitions. To keep minutely in mind even the more important lines of work in all these is clearly beyond the power of any minister, and the time is evidently ripe for a thorough reorganization. This being census year, the situation of affairs is naturally aggravated. A great deal of the time of the Deputy Minister of Agriculture is occupied with his duties as Commissioner of Patents, involving out-of-town trips. As the reader will see at a glance, much of the work in the list of branches enumerated has absolutely nothing to do with agriculture; and such work as Public Health, Archives, Trade Marks and Copyrights should be turned over to, say, the Secretary of State, a comparatively small Department. An exchange that might possibly be made with advantage would be to transfer Census and Statistics to the Department of Trade and Commerce, and bring Grain Inspection under the Department of Agriculture, where it would seem more naturally to belong. According to the plan we are suggesting, the Department of Agriculture would then consist of Experimental Farms, Live Stock, Veterinary, Dairy and Cold Storage, Grain and Seed Inspection, Fruit, and possibly Poultry. With a common sense re-arrangement of the Department like this, placed under a Deputy Min-

ister possessing the practical qualifications and experience of an administrator like C. C. James or Dr. Jas. W. Robertson, the minister would himself be immensely relieved and fortified.

Time was when the heads of the different branches were enabled to lay direct before the minister important plans which they had worked out for the development of agriculture, but during the past year all this has been changed, and by the time their proposals filter through a maze of deputy-red-tapeism, the cake becomes dough, and good men are disheartened and disgusted. That such a system should longer continue, is out of the question, and it is little wonder that a species of "Sleeping Sickness" should creep over the Department, bringing apathy and inaction in its train. The situation is one that imperatively demands attention. As one of the greatest agricultural countries in the world, Canada is in its growing, formative time. Effort and money expended now for the purpose of right development will give far greater results than would be possible five or ten years hence. There are enormous opportunities ahead for constructive work, and all that capable men in the agricultural public service require is reasonable encouragement and latitude in its undertaking.

Get the Sunflower Habit.

There is a majesty and inspiration in the ways of Nature on the farm not to be found in man-made processes. The threshing-engine and separator are cold and silent, like a town foundry or grimy mill, till the stoker "fires up." When the fuel burns low, the wheels cease to revolve, and the machinery becomes dead again. But day-break follows dark, and harvest, spring, in unerring and endless succession. Whether we sleep or wake, the grass keeps growing. The bare, brown earth of ninety days ago is now covered with the glory of ten thousand corn fields, piling up nutriment faster than any other field crop. The sun has been the great transformer. It does not have to be wound up for every period like a clock, but is there doing business, day in and day out. And how the plants look for its rising over the orchard trees. The Portulaca bed lies demure and plain till the morning rays kindle its flat, green face into a bright glow of orange, pink, crimson, buff and white. That Mammoth Russian sunflower plantation, that had been running up by the yard lately, is a study these days. The rows stand like a regiment of stalwart soldiers, every gold-rimmed face turning methodically to the sun and following its circuit around, morning, noon, night. How comes the axis of the flower to make that rhythmic circle every day, from left to right, its face always inclining upward, until well weighted down with maturing seeds? Who will explain the mystery of it? At night every plant stood looking westward; in the morning, before the sun appeared, every one was right-about-face, watching for the eastern dawn. Having once secured a good foothold in the ground, the sturdy plant fairly revels in the sun. Its leaves grow big like wash-tub bottoms, and the flowers look up candidly into the sun's face, without ever blinking. It does no nervous hurrying, but moves along as stately as a queen. The more sun it gets, the better it grows, forming a safe, rich feeding-ground for the bees now, and a bag-filler for the chickens next winter. We do well to follow the plan of the giant Helianthus. Look up and ahead, not down. Get the sunflower habit.

THE FARMER'S ADVOCATE AND HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL
IN THE DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

Agents for "The Farmer's Advocate and Home Journal,"
Winnipeg, Man.

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries 12s.; in advance.
3. ADVERTISING RATES.—Single insertion, 25 cents per line. Agents. Contract rates furnished on application.
4. THE FARMER'S ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law.
5. THE LAW IS, that all subscribers to newspapers are held responsible until all arrears are paid and their paper ordered to be discontinued.
6. REMITTANCES should be made direct to us, either by Money Order or Registered Letter, which will be at our risk. When made otherwise we will not be responsible.
7. THE DATE ON YOUR LABEL shows to what time your subscription is paid.
8. ANONYMOUS communications will receive no attention. In every case the "Full Name and Post-office Address Must be Given."
9. WHEN A REPLY BY MAIL IS REQUIRED to Urgent Veterinary or Legal Enquiries, \$1 must be enclosed.
10. LETTERS intended for publication should be written on one side of the paper only.
11. CHANGE OF ADDRESS.—Subscribers when ordering a change of address should give the old as well as the new P.O. address.
12. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve "The Farmer's Advocate and Home Magazine," Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
13. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address—THE FARMER'S ADVOCATE, or
THE WILLIAM WELD COMPANY (LIMITED),
LONDON, CANADA.

Growing Winter Wheat.

The greater portion of the harvest has been removed in most districts, and with many the most pressing work following this is the preparation of the land for winter wheat. Winter wheat is a somewhat risky crop, but where the land is put in proper condition, very few failures result. There is a question in the minds of many as to whether or not fall-wheat growing pays on valuable land as well as some other crops. Many others are strongly in favor of the crop, and give several very plausible reasons for growing it. The tendency during the last few years has been to decrease the acreage devoted to the growing of winter wheat in Ontario, but the last two or three years have been an exception. Wheat-growing has experienced a gradual decrease in acreage during the last ten years, the falling-off amounting to about 300,000 acres in Ontario. In 1910 there were, however, about 80,000 acres more than the previous year, and the acreage for all of Canada shows an increase the last two years. Whether or not this increase will be maintained, remains to be seen.

Fall wheat, like most other crops, has its advantages. Among these is the fact that, provided the crop winters well, it lessens the acreage of spring seeding, and the spring is a very busy season, when labor is scarce and time precious; so that if a few acres are sown to wheat, much time is gained. This is perhaps one of the strongest points in favor of the crop.

Then, again, there is the argument that the more different kinds of crops a man grows, the better are his chances, because he is almost certain to get good returns from some of the crops, and with the rest wheat stands a good chance. Mixed farming necessitates the growing of as many of the different grains as possible. There are still those who claim that, to clean land and raise the standard of fertility of the soil, it is necessary to summer-fallow. There are cases where noxious weeds are so prevalent that this system is resorted to, but where good cultivation

and a short rotation of crops have been followed, there is no reason why the farm should become so dirty as to need fallowing. Corn-field tillage will eradicate most weeds, but the crop is not early enough off for wheat. Fallowing is believed now to be an expensive practice, but where a field has been cultivated throughout the summer and has received a fair dressing with barn-yard manure, winter wheat makes a good crop, for it begins growing in the fall, and thus commences to draw upon the plant food, a part of which, and particularly the nitrates, would be lost by leaching if no crop was sown on the field. It is this loss of plant food that is a strong point against fallowing, and, as far as preventing this loss goes, wheat is a good crop for the fallow.

Does it pay to grow wheat on valuable land? This is the question answered in the affirmative by some, and negatively by others. One thing is sure, and that is, any land that will grow wheat well is valuable land. Very few of the growers of grain ever figure out just what it costs them per bushel to produce a crop. According to estimates from over 5,000 reports obtained by the American Bureau of Statistics, the cost of producing a bushel of wheat in 1909, taking the average of each State separately, ranged from 44 cents in Montana, to 96 cents in South Carolina. The cost depends largely on the value of the land, cost of labor, and yield per acre, and, while the cost in South Carolina was high, the price was high enough to make a profit of 30 cents per bushel, while the profit in Montana was 33 cents per bushel. The average yield on the farms reported was 17.2 bushels, which means a profit of a little over five dollars per acre. This is not as big a profit as could be made from some special lines of farming, and many hold that land is more valuable to grow feed for live stock than it is to grow grain to be sold off the farm. Selling grain must be hard on the soil fertility, whereas feeding all of it to the live stock maintains the plant food in the soil.

One thing against the wheat is that it makes a break in the rotation. Short rotations are necessary for clean farming and highest returns, and where wheat is sown it is often placed upon clover sod, and must be sown either on sod, stubble or fallow land. For the best yield the fallow stands first, but few farmers summer-fallow now, so that the wheat must go on either sod or stubble land. Now, it is known to be good practice to place the corn and hoed crops on the sod, and follow these with a cereal, after which it is seeded down. Stubble land is often not suited to the production of a large crop of wheat, and to insure a good crop it is advisable to give the land a dressing with manure. As fall wheat is a satisfactory crop to seed down with, this manuring is twofold in its benefit, for it insures a good crop of wheat, and at the same time improves the chances of the clover being a good catch. Barley stubble seems to be better suited to wheat production than oat stubble. This is to some extent due to the fact that the barley, being harvested earlier, permits of longer and more thorough cultivation.

For those who decide to sow some wheat, it is necessary that they take some means to insure a good crop. If the soil is a clover sod, early plowing after the hay is off, and a thorough working with the disk, cultivator and harrow to get the sod well rotted and the land in good tilth is essential. Very little manure is needed on new clover fields that are in good heart, but if the land is at all poor, a light dressing of manure should be applied. Where the crop is sown on stubble land, manure is always essential, if large yields are expected. Wheat should never be placed on land that is not in good tilth, and the failure or success of the crop depends largely on the cultivation given the soil before sowing, and on the amount of manure applied.

The time of sowing is also an important factor. Comparatively early sowing usually gives the greatest yields. The exact time of sowing depends on the locality, the latter part of August and up to the middle of September being the general rule of time of sowing. Where the Heslan dy is in evidence, sowing after September 15th is advisable. It is better that the crop get a good top before winter sets in. Only good plump seed should be sown, and, if all these precautions are taken, a very fair-paying crop should result.

Beauteous New Brunswick.

Editor "The Farmer's Advocate":

Unfortunately, in Ontario, as well as in the other Provinces of Canada, the tide of travel takes us westward, and few of us realize how much we miss by our indifference to the attractions of the Maritime Provinces in general, and New Brunswick in particular. While engaged in the work of the Women's Institutes in that Province, I had an excellent opportunity, such as falls to the lot of few, to become acquainted with the Province, and particularly with the agricultural population.

There is a fascination about New Brunswick—the rivers are so large, the hills are so high, and the distances are so great. The gradual slope of the farms on either bank of the rivers, the dense woods, the wonderful inland waterways and the excellent harbors, make New Brunswick one of the most desirable Provinces in our Dominion.

The impressions that I received on my first trip in the Province, from Adam Junction up to Perth, have remained very clear, and it is to this part of the Province that my thoughts turn first. For miles we ran along the shores of the St. John river, and I never saw this river afterwards without feeling that I was getting back home. As far as I have seen, there is no other river in Canada that can compare with this "Rhine of America." The farms slope gradually away from the river, their upper edges covered with spruce woods. All summer long the river is dotted by immense rafts of spruce logs being towed down to mills at St. John.

It is not only in this river that the rafts of logs are to be found, but in every river and stream in the Province large enough to float a log. Millions of feet are taken out of New Brunswick woods each year, and yet the lumberman will tell you that, owing to the rapid growth of the spruce tree, the forests are just as valuable to-day as they ever were, and, after seeing the woods at close range, you can easily believe it. They are a solid mass of vegetation, through which it would be almost impossible to force a path. The gray caribou moss hangs from the branches of the spruce trees, and the thick undergrowth grows to the very edge of the roads. If a cleared piece of land is left ungrazed or uncultivated for a year, it will be covered with small spruce trees, and in ten years be almost as thickly wooded as it originally was.

The New Brunswick woods must be a delight to hunters, for many times in our trip we caught sight of deer, and once saw two moose, like clumsy, overgrown colts, trotting through a piece of half-cleared land which lay along the track. We heard tales of bears and of the giant cats which inhabit the woods in some districts, and making the keeping of sheep an impossibility for the surrounding farmers.

One of the first impressions you get in New Brunswick is, "What a great Province for agriculture!" This impression is particularly strong when going through Carlton County, in the districts surrounding Sussex, and going further inland in the districts back from the St. John River or along the Petitcodiac. Unfortunately, the majority of the farming class in New Brunswick have never proved this impression to be true, probably because they have never been entirely dependent on their farms as a means of support. In the winter, numbers of the men work in the lumber woods, and very often go river-driving in the early summer, and the farm is a secondary consideration. They can make a fair living without farming very ardently, and so the farms are neglected for lumbering in the winter, and very often for fishing in the summer. The farms are often cropped steadily without any regard for the soil or for the advantages of rotation of crops, until much of the land is useless, and will require years to build it up to its old-time fertility. There are many cases, however, where the land has been intelligently worked, and the results prove that, given a fair chance, the greater part of the soil of New Brunswick will yield just as profitable crops as anywhere in the Dominion.

The Government has proved that, with proper care, apples may be grown to great advantage in the Province, and they have established several demonstration orchards which are proving to the farmers that apples cannot only be grown, but can be profitably grown.

The farm homes in New Brunswick are particularly attractive. During my trip through the Province I never saw a stone building, and only twice did I see a brick house. The houses are clapboarded or shingled, and are painted white, with red roofs. Very often the other buildings are white, also, and it seems to give the whole landscape a fresh, clean appearance, when it is dotted with these groups of white buildings. The schools are also painted white, and, in comparison with our stone buildings, are, on the outside, at least, particularly clean and cheerful-looking.

It was the churches of New Brunswick that attracted me particularly. Every couple of miles you pass a church painted white like the other

buildings, and even within a mile or two of the large towns you find these country churches. I could never decide whether the people of New Brunswick were particularly religious or whether they needed the churches more than some of us in the other Provinces do, where we confine our church-building efforts to the towns. There may, however, be another side to this question. Perhaps the New Brunswicker realizes that it takes exceptional religious zeal to stand a drive of four or five, or six or seven miles to church over such roads as they have in most of the country districts. Those roads—the farmers dig up the sod and clay from the sides of the roads and bank it up in the middle, and then blame the Government because the result is, to say the least, not all that can be desired.

New Brunswick, like all the Eastern Provinces, has given up many of its best citizens to help populate the great Canadian West, and in many cases these young farmers have left their farms and their comfortable homes to face the hardships of the West, not realizing that the Province of New Brunswick will in the near future prove an undeveloped gold mine. Because of this Westward movement, farms may be secured very, very cheaply. In some cases the money paid for the entire farm would not put up the buildings which are on the place. This state of things makes New Brunswick a particularly attractive spot for the home-seeker from over the seas. Here, well-watered, well-wooded farming land may be obtained very reasonably, when fancy prices would have to be paid for some treeless, waterless home on the plains, where the settler would have to build his own shack and run chances of frost and drouth. Nowhere have I met with such whole-souled hospitality as from the people of New Brunswick. Nothing is too much trouble, and the best in the house is placed at the service of the stranger. Anyone visiting in New Brunswick may be assured of a hearty welcome from the people.

Of the beauties of the cities, such as Fredericton, St. John, Moncton and Chatham I will not speak, though a great deal could be said about them. They are thriving, up-to-date cities and towns, with beautiful buildings, well-paved streets, good business districts and excellent hotel accommodation. Most of my trip was through the rural districts of the Province, and it is about these districts that I am most enthusiastic. New Brunswick is rapidly becoming famous as a summer resort. The railway systems in the Province are splendid, and make travelling a pleasure, while the great inland waterways make the boat trips particularly attractive. Nowhere along the Atlantic coast are the conditions so favorable for the making of a popular resort. With the hunting and fishing, the delightful climate, and the scenery, no place in Canada should tempt the holiday-seeker as does New Brunswick.

In conclusion let me say that, while it has been my good fortune to visit most of the Provinces of our Dominion, none have appealed to me as did New Brunswick, and I have never been so proud of the fact that I am a Canadian as I have since I visited New Brunswick.

Waterloo Co., Ont.

ALICE M. ELLIOT.

British Prosperity.

"It would seem, taking all things into consideration, that the material prosperity and comfort of the people of Great Britain and Ireland have never been greater than during the last six months. Employment has never been better since statistics began to be taken. The returns of the Local Government Board show that pauperism has sunk much below the normal. British exports for the six months have easily beaten all previous records. Home railway traffics have been expanding in a most satisfactory manner. The output of our shipbuilding yards is at a maximum. Everything prospers. Everyone is in good spirits except the professional pessimists." —[The Nation.

HORSES.

Crushed oats are easier digested, and, therefore, more profitable, than whole oats.

The driver's aim should be to manipulate the reins with a light but firm and steady hand.—[Scottish Farmer.

A roll after a hard day's work is greatly appreciated by the horse. It takes the place of extra feed.

Summer green feed acts as a natural stimulus to the action of the horse's digestive tract, especially the bowels.

The value of salting the work horse regularly is often underestimated by horsemen. It is good practice to keep the material before them at all times.

Remember that sudden changes of food may cause colic. This is the season when a change of diet is forced upon the horse in many cases. New hay, new oats, green corn, etc., are often used. Make the change gradually, and no harm will result.

One of the best advertisements for the horse-breeder is a good bunch of foals and yearlings. Almost invariably a breeder's stock is judged by the quality of the younger stock. If the colts are right, the chances are that their sires and dams are good individuals.

A horse that is extremely tired should not be given a heavy feed until he has had a little rest. Some feeders act on the supposition that a large amount of feed is what is needed to replace the lost energy. It must be remembered, however, that a horse so exhausted cannot digest food as well as one that is fresh, and, therefore, should be fed accordingly.

The exalted position in farm economy which the horse has held has been threatened in turn

by the bicycle, the electric car, the automobile, and now the aeroplane; but all combined have not prevented, and will not in future keep horses from increasing in numbers and value. As a source of power on the farm and a substitute for human labor, which becomes scarcer each year, horses, in combination with the greatly-improved farm machines, hold an economic place on the farm which is secure and firmly established—more so, in fact, than ever before.

The Horse Trade.

"More Clydesdales for Canada," or some such topic, forms the heading of an article in nearly every issue of the Old Country farm papers which have come to hand the past few weeks. From the descriptions given of the different horses being brought out, we gather that they are a very high-class lot, many of them being numbered among the most successful prize and premium winners of their home land. What does this mean to Canadian horse-breeding? There can be but one answer. Horses are sure to become more numerous in this country, and, with the increase in numbers, we can reasonably hope for an improvement in quality. More horses are likely to be imported this year than in any one previous year, and the quality of these horses is said to be very high. A large percentage of the animals imported are stallions, so that each year the excuse for using scrub sires becomes less and less.

Horse-breeders need have little fear of flooding the market. The right kind of horse will find a ready sale on Canadian markets for years to come. The country is growing, and more drafters are required each year. Produce the size and the quality, and good prices and quick sales are assured. It speaks well for horse-breeding as a business that our breeders continue to increase their importations of the best that can be had in the Old Land, and it is a great advantage to horse-breeders generally to be privileged to use and benefit by horses of these importations. Our greatest sires come across the water, and the men who have spent their money to bring these horses out deserve the patronage of the horse-owners of the country. As well as being a help to them, it will place the small owner in a better position to dispose of his surplus stock, because, in the first place, better stock will result; and if it becomes known that a certain district is producing nothing but the very best class of animals, buyers will be more numerous in that district, and will be willing to pay higher prices, because they are assured that the stock is of the best.

With heavy-draft geldings selling as high as \$350 each, and the supply short, even at that price the right kind of drafter is scarcely likely to become too numerous for a long time to come. Work must be done, and there is nothing, thus far, that will do it so efficiently and economically as the horse. Importers and breeders should congratulate themselves on being able to secure for Canada such valuable stock as they are bringing out, and these men should receive the co-operation and support of the farmers and horsemen of the country.

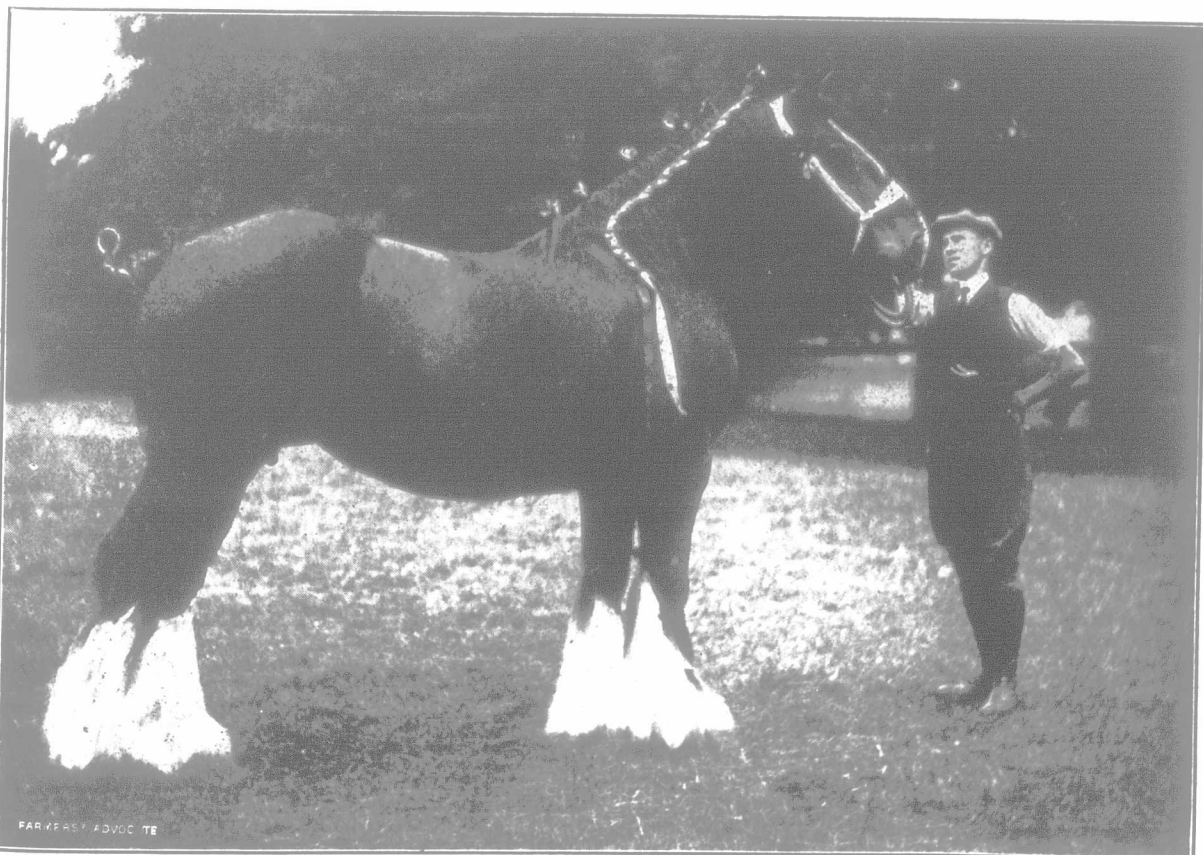
The Origin of Clydesdales and Shires.

I wish you would tell me how the Shire horse originated, also the Clydesdale, as we have quite a discussion on those subjects at our Clubs. Is there any difference between the two breeds?

Charlottetown, P. E. I. P. S. B.

The foregoing question is one that has occupied the minds of many of the devotees of these two breeds of horses, and one that has often been discussed in "The Farmer's Advocate" and other farm journals. The Clydesdale is the recognized draft breed of Scotland, and owes its high degree of excellence largely to the judicious matings made by Scotch breeders. Like many other breeds of live stock, the origin of this breed is somewhat veiled in obscurity, but it is known that early in the eighteenth century, John Paterson, a tenant-farmer of Lochlyoch, in Lanark County, Scotland, near the River Clyde, imported from England a black Flemish stallion, which was bred to mares of the district, producing a superior type of draft horses. To this black horse may be traced in lineal descent, through the celebrated sire, Glancer (335), most of the best Clydesdales of the present day. Professor Wallace, a leading Scotch authority, admits the use of English blood on the Clydesdales up to comparatively recent times. Tintock, a Shire stallion, was used in Scotland on Clydesdale mares about 1860, producing excellent breeding females. The grandams of the great Prince of Wales (673) were both sold as English mares. The Scotch breeders went on breeding, laying particular stress on quality, especially of feet and legs, and a type has been developed which is now a distinct breed, the modern Clydesdale.

The origin of the Shire is also somewhat speculative. Horses of this type existed in England from very early times. It is said that one hun-



Misty Morn.

Shire mare. First prize at the Royal Show, England, 1911. Owned by Sir Walpole Greenwells.

dred stallions were brought to England from Flanders, Holland and Germany in the twelfth century. Bakewell went to Holland and imported mares, which he mated with the stallions of England with a view to improving the type. The east and central part of England has been the special region of Shire horse breeding, and, as with the Clydesdales, the breeders worked to fix an approved type. The old-fashioned type was large, somewhat coarse, and slow, with excess of feathering. The modern Shire horse is the result of careful breeding, and is a great improvement over the horse of fifty years ago. The large size, hairy legs and draft type have been maintained. Quality, action, flat bone, good feet and uniformity have been made strong points of the breed.

As to the difference in the origin of these two breeds, there seems to be very little to say. The two breeds have been built up from practically the same origin, by following a line of breeding intended to develop a type, which has been fixed in both cases, and two excellent heavy-draft breeds, with characteristics much alike, yet quite different and distinct, have resulted. Robert Wallace said: "The most rational view to take of the position of matters, after setting aside all narrow prejudices of nation or of breed, is to regard the heavy-draft horses of England and of Scotland to be different types of the same breed." Many horsemen still hold that there is no difference in these breeds, and that if high-class specimens of each breed were stood side by side, difficulty would be experienced in naming the breed to which each belonged. It is a fact that some of the best quality Shires resemble Clydesdales very much, but they often possess greater scale and more feathering, and stronger bone, and can generally be distinguished from the Clydesdale. The English breeders emphasized weight and scale, while the Scotch made quality a strong point. The best representatives of each breed at the present time are not lacking in either of these requisites, and we have little need to concern ourselves greatly about the origin of either breed, as long as we make sure to use only the very best individuals as breeders.

LIVE STOCK.

With the rapid growth of the dairy business, more swine could be kept.

Skim milk and whey, in combination with a grain ration, makes a solid flesh that is desirable in finishing pork.

Grain, in conjunction with good pasturage, is a very good method of fattening sheep and lambs for the fall market.

The maternal impulse in the dairy cow is so strong that the cow, if food fails, will draw upon her body for the material to keep up the milk flow, and thus feed her offspring. No cow should be fed so scantily that this becomes necessary.

Steers and heifers intended for winter fattening should not be allowed to fail in flesh now that the pastures are short. Some precaution should be taken to keep them gaining in flesh. The aftermath on clover fields is good. Alfalfa fed as a soiling crop, or corn, will do much to keep them in condition. If allowed to lose flesh now, it will take a lot of feed and considerable time to get the animals making satisfactory gains when placed in the stall on dry feed.

Calf-rearing is an important factor in the live-stock industry. Good stockers and feeders are scarce, and this is no doubt due to the fact that a large number of calves that would make very good animals for this purpose are vealed or otherwise disposed of when very young. Where skim milk is available, calves can be raised very well. Where prime beef is the object, whole milk should be used, but this is very seldom practiced, unless a very high-class "baby beef" is required. Where at all possible, and where the calves are of a breed that will go on and develop into the right kind of feeders, they could quite profitably be kept for this purpose. Wholesale destruction of calves is very bad practice.

Tuberculosis Commission Report.

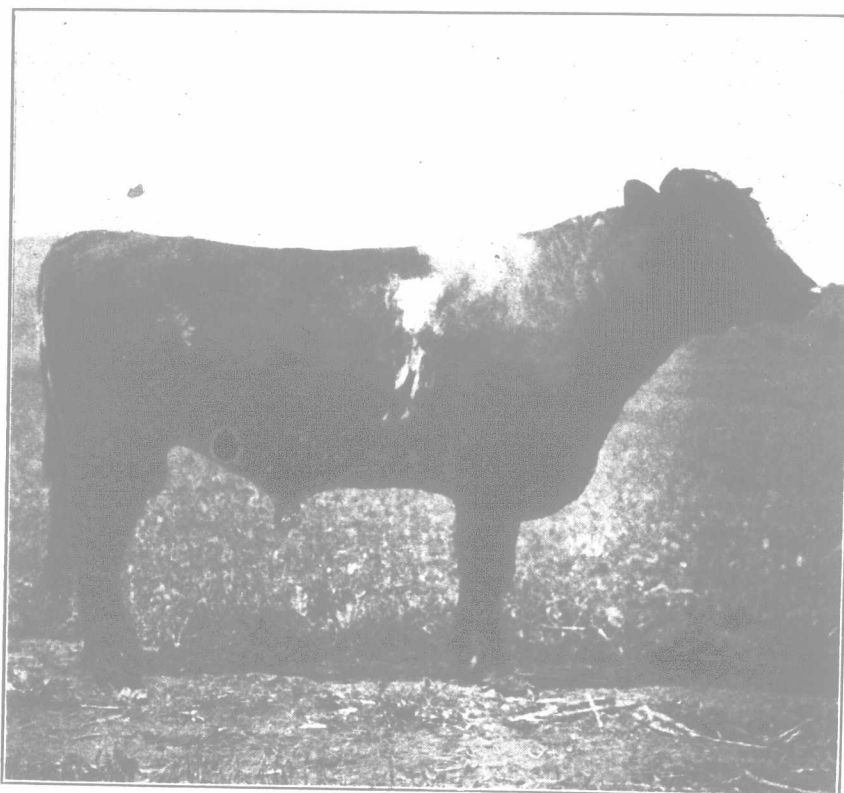
Following the famous pronouncement of Prof. Koch against the supposed identity of human and bovine tuberculosis, and their intercommunicability, a Royal Commission was appointed in Great Britain to investigate the subject. After ten years' work and the issue of three interim reports, the final deliverance has been published. In substance, the report is that, though differences are found between the bovine and human tubercle bacilli, there can be no doubt that reciprocal infection exists between the two, and the milk of tuberculous cows is stated to be clearly the chief

cause of human infection by bovine tuberculosis. A strong recommendation is made that food regulations, especially in relation to meat and milk, should be more stringently enforced.

Flushing Ewes.

The time for weaning the lambs has or soon will have arrived, and the flockmaster is immediately concerned with getting the ewes in the best possible condition for the breeding season. It is generally believed that two lambs per ewe will make the flocks more profitable than if there is a high percentage of single lambs. The time to influence the numbers which will constitute next year's lamb crop is this fall, previous to and during the mating season. The size of the lamb crop determines to a great degree the extent of the profit from the flock. When every ewe produces one good strong lamb, the business yields a profit, but when, in addition to this, a large percentage of the ewes bring two, instead of one, the profits grow into very attractive proportions. Those shepherds who get the largest lamb crop year after year are those who practice a system, at this period of the year, known as "flushing."

After the lambs are weaned, the ewes are placed on short, dry pasture for a period of three or four weeks. This causes the secretion of milk to cease, without trouble or harm to the ewe. Of course, the length of time that the ewes are kept on this kind of feed is regulated somewhat by the time that the breeding season is to commence. A stubble field or old pasture makes a very good run for the sheep during this period. The scanty amount of feed supplied has the effect of placing the ewe's system in a condition of low vitality, which is greatly stimulated when more generous feeding follows.



Capelton -76477-

Shorthorn bull at the head of the dairy herd of J. H. M. Parker, Lennoxville, Que.

From three to four weeks previous to the time of mating, it is necessary that the ewes be placed on luxuriant pasture. For this purpose there is nothing better than a field of second-growth clover which has made good growth. This makes a sweet, tender and palatable feed, on which the sheep will gain rapidly in flesh. If a field of this kind is not available, a rape pasture should be provided. Where the flock does not seem to be doing well, a small grain ration might be added, but this is seldom necessary where green feed is abundant. Oats, or a mixture of oats and peas, makes a very good grain ration. If a few cabbage are on hand, they will be much relished by the flock. The object is to get the sheep gaining in flesh as rapidly as possible. By this management, many advantages result. Flushed ewes not only produce more twins, but they are more sure to breed than ewes which have not received special care at this time. Ewes so handled will be brought into the breeding season about the same time, which makes it possible to have all the lambs dropped pretty well together in the spring. This is a decided advantage, for the lambing period is a period which requires the close attention of the shepherd; and if it can be shortened, so much the better. The owner is able to control the time of lambing of the flock, and is not bothered with the lambs being dropped from time to time over a period of months. A nice uniform lamb crop results, which can be disposed of to better advantage than a bunch of lambs of all

ages and sizes. It has been found that ewes suckling twins do not lose any more flesh than those suckling single lambs, and that twins make, in many cases, as rapid gains as single lambs; therefore, the more twins the flock produces, the larger the profits. Sheep-breeders can do nothing better than give this method a trial, and, if properly managed, the results will amply justify the continuance of the practice.

THE FARM.

A Motor-Car Man's View.

Editor "The Farmer's Advocate":

As a motor-car owner, I have read, with much interest your article in the current issue of "The Farmer's Advocate," relating to the automobile and the elimination or alleviation of the dust nuisance. With certain of your arguments I am in accord, but not with your article in its entirety. As you say, you have endeavored to discuss the dust evil without bitterness, but not, I should say, without bias. I believe that underlying much of the opposition to the motor-driven vehicle is the feeling, existing among certain of the farming community, that motors are not good for the farmer from a financial standpoint, inasmuch as they tend to do away with the use of horses. It is the old story of the opposition of the English 'prentice boys to the introduction of labor-saving machinery; of the opposition of the weavers to the spinning jenny, and the opposition of the farmers of a century ago to Stevenson's locomotive, which they said would burn the crops, as they ripened, through sparks from the smoke-stacks.

Everything new has its troubles, and the auto,

next to airships, is the newest on the boards. But I do not wish to be understood as saying that there is not a great grievance to be remedied. In riding through the country, I have noticed frequently the fields and crops covered with dust. As a lover of all animals, I have been sorry to see horses trying to pick the grass which was covered with sand in the whitened fields, and I would not begrudge paying something toward a scheme which would tend to lessen the clouds of dust which rise in dry weather off main roads after passing of vehicles, be they automobiles, wagons or buggies, for the farmers themselves, in going about, raise a certain amount of dust. Of course, it is a matter of fact that the automobile raises the greatest amount, and the bigger the machine, the greater the cloud. But automobiles have come to stay, and all that can be done is to find a remedy for the dust evil.

I cannot agree with your argument regarding the damage done to the roads by auto tires. It strikes me that the narrow, iron tires of wagons of farmers and others are to blame, and that if a law were enforced in the country, similar to that in existence in this city, which says that wide tires must be used on all heavy vehicles, the roads would be better the year round, and the municipalities would be money in pocket. You ask, too, why the farmers of Middlesex should be compelled to pay for the upkeep of roads for Mr. Smith, or Mr. Jones, or Mr. Brown, of London, so that one or all can enjoy a spin through the country? This does not strike me as good argument. It is no more forceful than if an autoist should ask why the people of London should be called upon to maintain roads in the city for the farmers and other outsiders to use? London is good for the farmers, and the farmers are good for London. Their interests are closely linked.

Engineer Talbot, the county engineer, does not believe that auto tires injure roadways to the extent your article would have us believe, so that we may conclude that there are two sides to the question.

On the score of dust the autoist must plead guilty, however, to being the greatest sinner amongst vehicle-users. As you know, the auto-owners of the Province have offered to do something toward keeping up good roads, and I believe this would include the keeping down of the

dust. Oil appears to be the only remedy. People in the city, who live on much-used thoroughfares, are compelled, for their own convenience, to pay a frontage tax, to water the streets and keep down the dust. Would it not be to the interests of the farmer whose farm is along the main road, and who suffers from the dust evil, to pay a small frontage tax to help cover the cost of purchasing and applying the oil? If he were willing to do this, I believe the auto men would not object to increase in license fees to help the good work along. Up till 1911, auto licenses cost four dollars per year, and renewals two dollars. But now renewals cost the same as the original license. You point out that at present the total taxes on autos amount in Ontario to only about \$25,000 per year; but, with the increase of the number of motors in use, this will soon be doubled and tripled. I believe your suggestion for a graded system of fees is right. The man with a fifteen or twenty horse-power car should not be compelled to pay as much as the man with a fifty horse-power machine. The New York State tax of from five to fifty dollars, according to horse-power, is a good one. I would say that cars of twenty horse-power and under should pay a tax of, say, six dollars per year; up to thirty horse-power, ten dollars; up to forty horse-power, fifteen dollars; and greater horse-power than this, twenty-five dollars, per annum. This money, minus the cost of collection and supervision by the Ontario Government, should be handed over to the county councils, and applied to the upkeep and oiling of main highways where the dust has become a pronounced evil. But the man who owns a valuable farm on the main highway has as much right to help pay for his own convenience and the protection of his fields from dust as has the man who resides on a main street of a city, and who does not own even a horse and buggy, but who pays from three to four cents a foot for street-watering.

In closing, I would like to say that, as a rule, I have found the automobile men to be considerate of other users of the road, but occasionally a rattle-brained driver comes along who drives at top speed, and is in danger to himself and everybody else. The farmers may take it for granted that such a man as this will find no sympathy amongst motorists when he gets into trouble. The man who values his car and the lives and property of the people he meets on the road will be content to go along at a moderate pace and keep within the law.

ED. J. CARTY.

[Note.—An experienced and capable journalist, Mr. Carty naturally possesses a good stock of common sense, which he uses in running his motor. The lack of it on the part of so many men who run these machines has made them an unmitigated nuisance on the roads, and this is the real reason of country antipathy, not a fear that the price of horses will be reduced, for horses command a more ready sale, at higher prices than before the advent of the auto. The proof of the damage done the roads is the roads themselves where the motors are most used.—Editor.]

How the Auto Destroys the Road.

Editor "The Farmer's Advocate":

I would like to draw the attention of your numerous readers to a subject that I think is of considerable interest to farmers, but, on account of its newness, have not given it the serious thought and attention it deserves. That is, the effect the new traction service is having on the principal thoroughfares, in the shape of the automobile traffic. In other countries the same effect has been noted; that is, that, wherever the auto appears in great numbers, the effect on the roadbeds is at once to put them out of condition. We have an excellent exhibit on the road leading from London to Lambeth. I have used that road for upwards of fifty years, and in all my experience I have never known that road to be in such a dangerous condition as it is at this moment, and I am inclined to think that the whole or greater portion of the cause of this condition lies in the fact that never in the history of that road has there been so many automobiles using it as during the season of 1911.

Let any person watch the course of the automobilist, and it will be found that they always keep in the regular tread, never taking the side or a new tread to sort of even up or spread the wear on the general surface. This, I assume, is a matter of habit, especially at night, as he does not want to take any chances on the side of the road.

The autoist will not admit that his wheels will injure a road, and, to the unthinking individual, it is quite natural to imagine that a soft tread-wheel, like a cat's paw, would never

injure a road surface. But it does, and the reason is not far to find. The tendency is to create a vacuum by that portion of the tire surface touching the earth or roadbed. To get a fair idea of what that means, let a wagon stand on, say, a pavement, alongside of an auto on the same pavement, then compare the amount of tire surface on the two types of wheels that touch the surface of the pavement. It will be readily seen that only a fraction of the steel tire touches the pavement, while a very large area of the rubber tire has a hand-like grasp of the pavement surface; in the one case there is not a particle of chance for the creation of a vacuum, while in the other (the rubber) vacuum conditions are almost perfect; hence, the two actions are wonderfully different. In the case of the large-diameter, slow-rolling steel tire, the natural tendency is to roll down the road as would the action of a land roller the lumps in a field. The contrary is the effect of the rapid-striking, small-diameter rubber tire, which, by creating a vacuum, lifts up, as does a suction machine of any kind; hence we see such enormous clouds of dust every time one of those 30 to 50-mile-an-hour machines passes by. Watch the action of a one-horse carriage on a dusty roadway, when the wind is blowing across the trail, and it will be noted that the greater portion of the dust comes from the action of the feet of the horse, very little coming from the four wheels. Compare that with what happens from the four wheels of the auto. Here you have a splendid exhibit of the lifting-up process—a natural tendency to disintegrate or destroy and scatter the particles that go towards road formation. Another evil is the smallness of the wheel. Every depression that exists in a roadbed will suffer more from the shock it receives from a rapid-driven small-wheel than from the slower-moving large one. To illustrate this, lift a brick out of a pavement, get into any auto, and let the usually rapid running take place, and note the effect on the machine, also the position of the tire when it strikes the depression. Now try a wagon or carriage over the same depression, and note the mechanical effect. Hence, the city pavement suffers equally. To such an extent has the dirt and dust nuisance become in the city that, notwithstanding all the sprinkling and scraping and sweeping, housewives have just as much dusting to do as five years ago, or when the auto was practically an unknown quantity.

With these facts before the farmer, I think the only remedy is to adjust the tax in a more equitable way, or raise the auto license to a much higher figure, and graded so that the man with the heavy car would pay in proportion to his ability to destroy; that is, a 4, 5 or 7 passenger outfit will do more damage than a runabout or a 2-passenger machine. And, as some counties in the Province have practically no traffic from this class of road destroyer, I think the Government should allow the license to be issued by the county. In this way, the sections most used would get a greater revenue, so that a better return could be made to the highway. Possibly the Government might continue to issue the license, and, by checking the locality, give back to each county a share of the income, in proportion to its number of licenses. The auto has come to stay—there can be no question about that—and when we know that it is injurious to a roadbed, I think it is but fair that that set of people should be compelled to materially assist in the cost of road maintenance.

London, Ont.

JOHN M. PARSONS.

The Automobile License.

Editor "The Farmer's Advocate":

In the past, I have been surprised at the very mild attitude displayed against the "devil wagon" (auto) by "The Farmer's Advocate," but your eyes have seen the menace they are to agriculture. The editorial, in your issue of July 27th, is freighted with facts (more could be stated), and it is to be hoped you can bring about some legislation that will afford farmers relief.

People who are not in close touch with all classes of farmers have a very vague idea of the mischief these autos work, especially in the rural parts. Farmers' daughters, who used to play an important part in the business of the farm, are now driven from the roads. Farmers' wives, who need a change and a pleasure drive as much as anybody, are now deprived of that luxury.

As a rule, those who own autos are people of means (they ought to be, anyway), and if the unvarnished facts were placed before them, I believe they would be willing to pay. I believe each machine ought to pay a flat rate of \$5.00, and \$1.00 for each horse-power as a yearly license for running on our country roads. The side-roads and other lines would be immune, and the farmer's family could drive with greater safety. Then give the municipal council authority to grant a license to run on the roads under its control. In regard to the dust nuisance, farmers should be encouraged to set out shade trees along the roadside. They answer for a dual purpose—gather dust, and keep the roads moist and dust-proof. "The Farmer's Advocate" can do no better work than to bring about some measure of relief to the farmers from the auto nuisance, and it is my sincere wish that its voice may ever grow stronger in its cheerful words of encouragement in times of trouble, by wise counsel, its lofty aim, and true constructive character.

York Co., Ont.

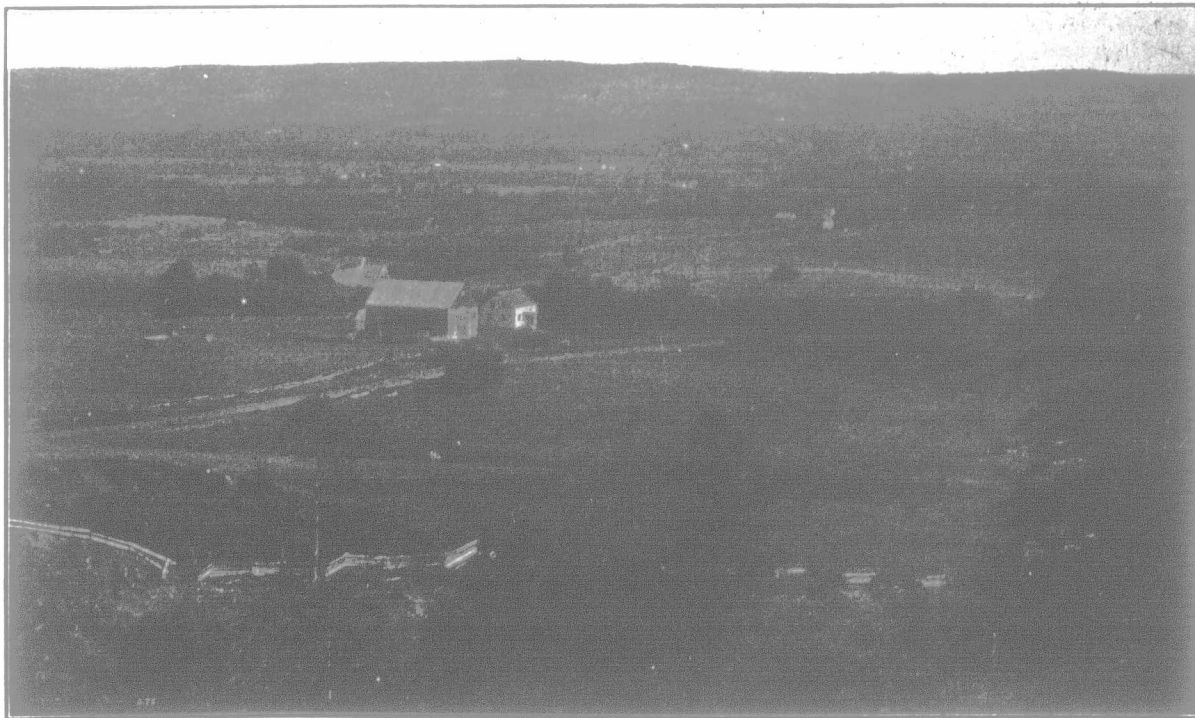
W. HENRY.

An Advocate of the Plow.

Editor "The Farmer's Advocate":

I have read with a great deal of interest the various articles published in regard to after-harvest cultivation. While my method is to a great extent similar to some mentioned in the different letters, I will give it in brief. Like Jos. Douglas and others, I favor plowing the ground as soon after harvest as possible. If the ground is soft enough, the gang plow is used, and the ground is plowed to a depth of about four inches. If the land is dry and inclined to be hard, the single plow is used. I use a wide-bottom plow that will cut a wide furrow and still only turn a four or five inch furrow. The ground, after plowing, is harrowed down, and then the spring-tooth cultivator or disk harrow is used. I use both, according to the land and what weeds are in it, but for general work I think I prefer the cultivator.

If the land was carefully plowed, every thistle and other weed should be cut off, and the harrow and cultivator will drag them out on top. The land is kept well worked for a month, and then it is ready to be plowed again. If the field has any low spots, or is usually a little wet in the spring, it is not plowed in the regular way, but is ridged up. One correspondent calls it back-plowing; others call it cut-and-covering. Call it what you like, it certainly is a good method of fall plowing. With the land all in ridges, the frost has a better chance at it, and at the weeds too, and in the spring it dries off quickly, and can be worked several days in advance of land



Nova Scotia Fruit Valleys. Back of Berwick, King's County.

plowed in the usual way. To prepare the ridged-up land in the spring, I first harrow with the ridges, and then cross them, and next put the cultivator over it. It is now in good shape for the seed, and, with another harrowing after sowing, put it into first-class shape. The early-sown grain is always the best, and this plan enables you to get on the land from three to five days earlier. The value of early-sown grain has been clearly demonstrated this season.

Just a word here to emphasize the value of careful and thorough preparation of the seed-bed. Too much time cannot be put on the land, and every bit of extra work will count. I find this year that the drilled grain is doing better than what was sown broadcast. One writer advises narrow lands, so that the water may get off early in the spring. When the land is ridged up, you have no trouble with water laying on the land. It will follow every furrow, and, if water furrows are added where needed, the water will be carried off the field in short order.

A word in conclusion re preparing for next year's corn crop. I like clover or timothy sod the best. This is plowed after the hay is taken off, and kept well worked all fall. If manure is available, it is applied in the fall, and the land plowed to a depth of about five or six inches. If manure is not to be had, the ground is harrowed last thing in the fall, so as to be level, and the manure can be then easily hauled out through the winter. If stubble land is to be used, the same treatment as used for sod is advised. If you have a warm fall, a large percentage of the weed seeds will germinate, especially in the early-plowed sod. C. H. K.

York Co., Ont.

[Note.—The prompt use of the roller after the plow, where the land turns up dry and lumpy, in order to make a firmer and mellow mulch that will better serve to retain soil moisture, is a point deserving of consideration, and upon which testimony based on close observation would be valuable.—Editor.]

How to Finish Silo Filling.

Editor "The Farmer's Advocate":

About silo-filling, I would say that corn should be past the glazed stage when it is cut. If cut too green, the grain is nearly all water, and the silage sours. A September frost will not affect the stalk or ears. The leaf is not of much value, and a light frost will not injure it to signify. Should the leaf get frozen, cutting should be done without delay. If no frost occurs, a few hours' wilting in the sun will be beneficial.

We cut with a corn harvester, and its only fault is that it leaves a rather high stubble. If cut by hand, I would use a short hoe, but I prefer the machine, as the sheaves are easier to handle than loose corn. We draw the corn from the field on a low wagon, with two sills for a rack, with stakes at the corners. If a low wagon is not available, take the hind wheels off the farm wagon, and get two very low ones made to fit the axle, and it will answer very well. I prefer an ensilage cutter, with blower. To run at full capacity will require an 18-horse-power engine, from four to six teams, according to the distance the corn is from the silo, three men in the field to load the wagons, one man to help the teamsters hand the corn to the feeders, two men to feed the machine, and two in the silo. Such a gang should fill a round silo, 14 feet in diameter and 30 feet high in a day.

To distribute the corn in the silo, make a long, three-sided trough, invert it over the silo, put hood of blower under one end, and the corn will shoot along inside and under the trough. Then block the trough by nailing a board in it over the center of the silo. The corn striking the board with the force of the blower will split the short lengths and make it more palatable for stock than if elevated with a carrier.

I would prefer to co-operate with the neighbors and buy an outfit for filling, but my nearest neighbors haven't silos. I pay about the same price as I do for a threshing machine. It is sometimes difficult to get them, as it has to be done during the threshing season. If we had our water-powers developed, and electric power on the farms, each farmer could have his own cutting and filling machine, and do it with his own help. A silo thirty feet high will settle seven or eight feet. If the pastures are short, I would start to feed as soon as filled; between feeding and settling, the silo will soon hold another half-days' filling. Then feed off the top again and there will be no waste. If the silage is not required at once, let it settle for a few days, pitch off what is spoiled on top and refill. When the silo is finally filled, go up every day for a week and level and tramp the silage. A few inches of straw on top, sprinkled with water, will save the corn. If there is no trough or other arrangement to deliver the corn properly in the silo, the blower will send the leaves to one side, and drop the corn on the other. It must be mixed with a fork in that case, or it will not keep. The weight of corn will settle it, except close to the wall, where the friction prevents it. After the silo is

half full, I tramp next the wall, and let the center care for itself. I would advise planting the corn thin, so that it will grow large ears and stalks. Then let it mature well before cutting, and mix it thoroughly in the silo. And the silo-owners will not regret having built a silo.

JOHN M. HOULDETSCHAW.

Simcoe Co., Ont.

Faitor Spurge: A Pernicious Weed.

E. B., North Perth.—"I am sending by mail a weed that I would like to know the name of. I have both it and bindweed all through a ten-acre field. Can you tell me how to eradicate them?"

The specimen received is Faitor Spurge, called in botany *Euphorbia Esula*. It is a new weed to Canada, if absent from the official weed lists and weed books is sufficient to justify that designation of it. All the spurges have a more or less poisonous, acrid, milky juice. The one under notice is a smooth, erect, branching plant, with narrow, nearly linear, leaves on its stem and main branches, and yellowish-green, somewhat kidney-shaped leaves on its flowering branches. In a patch or field where the plants are growing close together they average about 15 inches in height, but in good soil, with plenty of room, a plant may send out several strong, nearly erect branches from near the root, and reach a height of two or three feet. Before the flowering parts appear, it suggests a stout specimen of toad-flax. Its yellowish-green flowers, which are so small that a lens is needed to see their parts, are borne on the summit of an umbel having from three to a dozen or more rays two or three inches long. The drawing shows such an umbel, with all the rays cut off at the middle except one showing the flowering



Faitor Spurge.

leaves and the two seed pods. The seeds are lodged in a hard, three-celled capsule about the size of a small pea. This, on ripening, splits elastically, and shoots out its smooth, white seeds a considerable distance.

The owner of a ten-acre field badly infested with both faitor spurge and convolvulus bindweed has a large weed contract on his hands. Both the weeds named have perennial, running rootstocks which the cultivator and harrow are liable to spread throughout the field. The roots of the bindweed may be the worse of the two for spreading by cultivation in damp weather, but the spurge seeds more freely, and its stems are a greater nuisance in the crop. The problem of eradication, however, is not double, for the treatment that will eradicate or control the one will have a similar effect upon the other.

Smothering has proved an effective means of dealing with bindweed. In small patches, compost, straw or tar-paper may be employed for this purpose; but areas whose size puts smothering out of the question, summer-fallowing, followed by hoe crop, is recommended. The summer-fallowing is begun in favorable weather in May, by shallow gang-plowing, followed by harrowing. In a fortnight or thereabout, another crop of the weed will be showing, upon which the wide-toothed cultivator and harrow are to be used. Repeated cutting with the share-cultivator, followed by harrowing that drags the roots up and exposes them to the sun, will weaken the weed so much that a well-cultivated hoe crop in the following year will complete its eradication. In our present knowledge, the lowest price of clean-

ing up a field badly infested with these weeds seems to be two years' incessant warfare with the rootstocks. J. D.

Starting a Produce Market.

A young man with only about \$100 cash capital, in addition to personal effects, writes "The Farmer's Advocate" about starting a produce market in his local village. His idea was to have the farmers of the locality subscribe the capital, and pay him a salary of, say, \$1,200 per year as manager, the profits to be divided among them proportionately. If the village is incorporated, and the business promises sufficiently well, the municipality might properly undertake the establishment of a market to supply the needs of the place, the general progress of which it would help. It is doubtful if the proposal would appeal successfully to farmers in the locality. If it is to be a simple produce business, then it had better be commenced in a small way by our correspondent depending upon his own ability and resources. As he gains experience and the trade grows profitable, he will be able to extend his operations, as many others have done. But he should take his time, and avoid speculative plunging.

THE DAIRY

Good Cows and Poor.

Many grade cows are making good records this season in the cow-testing associations under the Dominion Department of Agriculture. One near Cassel, Ont., has given over 300 pounds of butter-fat in three and a half months. In the associations at Warsaw, Ennismore, Cassel and Tayside, Ont., the average yield of all cows tested for June is over 35 pounds of butter-fat. Eight associations in Quebec average over 30 pounds of fat per cow, but a good many herds in Ontario and Quebec average less than 700 pounds of milk and 24 pounds of butter-fat during June.

In Prince Edward Island, the highest average yield for June is at Kensington, where the 150 cows included in the "dairy record center" there give 787 pounds of milk, 3.7 test, and 30 pounds of fat. Included at this center are several individual cows giving over 900 pounds of milk and 35 pounds of fat. One of the best yields is from a seven-year-old grade Shorthorn, giving over 1,120 pounds of milk and 40 pounds of fat. But hard by these good records are found poor yields of only 500 pounds of milk and 18 pounds of fat from six and seven-year-old cows that freshened in April and May.

Between yields of 40 and 18 pounds of fat in one month there is too great a difference to be overlooked. It is all the difference between a very satisfactory return and no adequate payment whatever for all the energy, time, feed and care expended on cows that are not capable of making money for their unfortunate owners. Conserve your energy by keeping better cows. You cannot afford to keep a herd of only medium capacity. Cow-testing pays abundantly, for it shows which cows are making a good profit, and again, which cows cannot by any strength of imagination, be considered in the same category. C. F. W. Ottawa.

Dairy Farm Investigation. II.

STABLING.

Many different styles of stables were found among those on the twenty-one dairy farms which are the subject of this write-up. Cement forms the floor of every stable visited, and many of them are also fitted with cement feed troughs or mangers. Eleven of the stables were partitioned into stalls, and ordinary chain ties were used. The owners claimed that the cows seemed to be quite comfortable with this kind of tie, and that the only trouble they had was a little difficulty in keeping the cows clean, the chains allowing them to back up and go ahead, often permitting them to lie down in the filth and excrement. This seems to be the only great disadvantage of the chain tie. Swinging iron stanchions were found in only two stables, and a swinging wooden stanchion in one. The three owners praise them strongly, claiming comfort and cleanliness as their strong features. They make a very neat and attractive stable, and keep the cows a little cleaner than chain ties. Seven of the stables were fitted with rigid plank stanchions and no partitions in the stable. More cows can be stabled in the same space by using this method, but it has the appearance of being rather an uncomfortable tie, although the owners stated that they were entirely satisfactory, that the cows did not seem to experience any discomfort, and that the rigid stanchion was an economy of space, as well as a tie which kept the cows from getting down in the excrement. A few of these men reported some injury to cows' udders from being trampled upon by the cows standing beside them. This is

one drawback of not having partitions between the cows.

A noticeable feature of all the stables was the amount of light. This is essential to the health of the cows and to the sanitation of the stable. Light is destructive to the disease-producing bacteria, and every stable should have as much of it as possible.

The care of the stable is an important factor in the production of good milk. Regular cleaning, whitewashing and liming should always be practiced. Seven of the stables were not kept whitewashed, and they were not so light or so clean as those which were. Lime was used in the gutters after cleaning the stables each day in seven stables. This, the owners stated, was a good method of suppressing odors. The cleaning of the stables was done regularly on nearly all the farms, two men having them cleaned three times daily, eight twice daily, and the remaining eleven once each day. There was a tendency on the part of some, owing to press of other work, to neglect the stables a little in summer, and a couple of cases were noted where the stables were only cleaned twice per week. While these stables were not in a very dirty condition, they were not to be compared with those which were cleaned and limed daily. Foul odors quickly arise. Manure heaps in the yard over summer, hogs kept in the same stable with the cows, bad eggs in the stables, and stagnant water close to the buildings, should always be avoided.

WATERING.

Watering dairy cows, particularly during the winter months, is something that good dairymen differ on. One man will see no harm from turning the cows outside to water, while another would not think of letting them out, preferring that the water be kept before them at all times. Of the 21 herds, 13 were watered outside, and their owners claimed that no falling-off in milk was noticeable, provided the cows were not left out too long at once or until they became chilled. On rough or very cold days, only a few are let out at a time, so that the others do not have to stand in the cold and wait until the boss cows are through drinking. They are tied in again as soon as they get their drink, and the owners stated that they believed that the exercise did the cows good, instead of harm. The eight men who were the exponents of inside watering all had practically the same system installed. Some pumped the water to the supply tank with a gasoline engine, while others used a windmill. The water was retained in a small bowl in front of the cows, and they were never let outdoors during the entire winter. A little difficulty is experienced in keeping these water bowls clean, but most of the dairymen stated that this did not give them much trouble. One advantage of the inside watering is that the cattle have the water before them constantly, and can take a drink whenever they like, and, according to some who have observed them, they drink far more inside than when let outside, the water is warmer, and they are not so likely to become chilled. Cows not accustomed to watering outside go back considerably in milk flow if turned out, but cows accustomed to going out for drink usually do very well, and the little exercise and fresh air thus obtained is good for their general health.

SUMMER FEEDING.

This season has been comparatively dry, and the pastures have suffered as a consequence, making it a necessity to feed some kind of fodder other than pasture grass, if it is hoped to keep up the milk supply. Some good practical information on this subject should be of value to dairymen, and for this reason special care was taken to get the rations being fed during the summer months, with a view to keeping up and increasing the milk flow. The herds will be known by number, and range from number one up to number twenty-one, and, as far as possible, the summer feeding will be given in full. The rations fed were as follows:

Herd No. 1—Each cow is fed 1 pound of mixed grain to 3 pounds of milk given. The grain consisted of one-third oats and two-thirds bran, with a little oil meal added. No silage or silage was fed, and, to keep up the supply, which began to fall off, a little rolled oats was fed, and the grain ration increased.

No. 2—This herd got alfalfa and green peas and oats, fed as a soiling crop. Ensilage was fed until the middle of June. No grain was fed in summer.

No. 3—Brewer's grains were used in this herd, and were fed about 10 pounds per cow twice a day. The owner did not approve of this method, but, as he had no silage or green feed available, he considered these the cheapest feed.

No. 4—Cows in this herd were getting three quarts of meal each twice per day, the meal consisting of a mixture of 1 ton of corn, 1 ton of shorts, 1 ton of oats, and $\frac{1}{2}$ ton of bran.

No. 5—This herd was being well fed, each cow getting about 8 pounds of a mixture of rolled oats and bran each day, as well as about 15 pounds of ensilage twice per day.

No. 6—This herd had a very large pasture field of some 160 acres, and consequently were able to get enough green feed. The grain ration consisted of about 4 pounds of bran and shorts each per day.

No. 7—No green feed fed until corn is ready. About ten pounds of brewer's grains twice per day constituted the grain ration.

No. 8—Brewer's grains, one-half bushel per cow per day, and about 40 pounds of silage makes the feed of cows on this farm, besides good pasture.

No. 9—Brewer's grains, 10 pounds at a feed, twice per day, made the extra feed for a cow in this herd.

No. 10—This herd was getting brewer's grains and silage, about a bushel between two, twice per day.

No. 11—No summer feeding of any kind was practiced in this herd, and the cows fell off two quarts each at a milking during the severe weather the beginning of July.



An Electric Plow.

Tested by Hon. Adam Beck, near Munich, Germany. Plowing 25 acres per day.

No. 12—Bran, oats and barley chop, mixed and fed 1 gallon at a feed once per day, and this supplemented by fodder made up of oats, barley and peas, pastured nights, formed the summer ration of this herd.

No. 13—A grain ration of 2 quarts of bran and 1 quart of mixed chop, twice per day, was fed each cow in the herd.

No. 14—No summer feeding practiced.

No. 15—Three quarts of bran twice each day, and a basket of silage between three cows, morning and evening, was keeping up the supply on this farm.

No. 16—Feeding alfalfa as a soiling crop. Grain feeding to commence this month and consist of 4 quarts of chop and bran, mixed, twice per day.

No. 17—Brewer's grains, 10 pounds at a feed, twice per day, and 1 quart of shorts each and a small amount of silage.

No. 18—Two quarts of oat chop twice per day, and $\frac{3}{4}$ bushel of silage morning and evening, is the ration of cows in this herd in summer.

No. 19—Three quarts of oat chop and $\frac{1}{2}$ bushel of silage each, twice per day, was fed on this farm.

No. 20—Three-quarters of a bushel of silage per day, in two feeds, with no grain.

No. 21—Clover hay night and morning, with $\frac{1}{2}$ bushel of silage, constituted the ration of a cow on this farm in summer.

Nearly every owner reported a slight falling off in milk supply during the dry, hot weather, but those that were not giving the cows any feed other than pasture grass were the heaviest losers. Nearly every man called upon signified his intention of going more extensively into summer feeding, and the general opinion expressed was that soiling crops, prominent amongst which were alfalfa and oats and peas, or summer silage, should be produced on every farm on which dairy herds were kept, if the largest possible returns were to be expected. Every farm visited had a comparatively high acreage of corn, and all intended feeding this as a green food as soon as it was ready. The pastures on some farms were standing the dry weather and heat very well, while on others they were very short and parched, but whether the grass is scarce or not, it certainly pays to feed some grain and fodder, if high returns are to be expected. The herds that were being fed were in good condition and were not being depleted in flesh by scant pastures. If feed is not available, the cow draws upon her body for the production of milk, and if cows are to be kept in the best condition while milking, special feeding is necessary during the summer, as well as the winter months. Silage bids fair to become a staple summer feed for the dairy cow, as also do soiling crops, one of the best of which is alfalfa.

[Note.—The last of this series of articles will be published next week, and will include the winter feeding of these same herds.—Editor.]

Ropyness in Milk.

A number of complaints have recently been made by some very good dairymen that their cows are giving ropy milk, and, as many other farmers and retailers of milk may have like trouble with their supply, and be in the dark as to the cause and control of this unsatisfactory state of things, a short explanation of the trouble may be of value at this time.

While it is possible that certain affections of the udder, such as inflammation or garget, may cause ropy milk, it is far more likely to be caused by a bacillus. It is not generally caused by any disease in cattle, and, in fact, is not caused by a disease-producing germ, but by a common bacillus that lives in water, and is not harmful to either man or beast. The specific germ causing the trouble is known as *Bacillus lactis viscosus*. It lives indefinitely, and multiplies in water containing organic matter. The germ, though extremely minute, has a comparatively thick, gelatinous covering when it grows in milk; and as one germ, when dropped into milk, will increase into millions of its kind in twenty-four hours, it is an easy inference as to what makes the milk sticky. The milk becomes practically a mass of these organisms.

The source of the organisms in the milk is usually from water from the wells, cisterns and cooling vats. Just one drop of such water in a can, or accidentally dropped into the milk from



A Suitable Dairy Outfit.

Barn, silo, and some of the dairy cows belonging to Mr. Hourd, Middlesex Co., Ont.

any source whatever, will serve as a starter, from which the ropiness will soon develop. There are scores of ways in which the milk can become laden with these bacteria from a water supply containing them, or from dust. These bacteria will develop at low temperatures, but, as it takes from twelve to thirty-six hours for the ropiness to appear, the milk has usually left the milkman's or farmer's hands before this condition is noticed, and these men know nothing of it until they hear their customers' complaints next day.

The remedy for the trouble, then, is to prevent the germs from getting into the milk. Souring of milk, caused by the development of the lactic-acid germ, will prevent the development of the germ which causes the ropiness, and farmers have been known to leave their milk without cooling, preferring that it sour, rather than become ropy. To prevent the germs getting into the milk, it is necessary that the origin and mode of entrance be known. A good method is to take a number of thoroughly-scalded small vessels and place a little milk in each, and put in one a little water from the well or cistern, in another a little from the cooling vat, in another a little dust from the stable or milkhouse floor, and so on, until every possible suspected material has been tried. Cover the vessels and set them away for twenty-four hours. Then, using a spoon or fork, test each sample for ropiness, using a different spoon or fork for each. This will likely prove where the source of the germ is. All cans and utensils should be thoroughly scalded previous to use each time. If the source is found to be the water used, no more such water should be allowed to touch the dairy utensils, or, if no other water is available for filling the cooling vats, a little potassium bichromate, one part to one thousand of water, may be used. This is, however, a poison, and care must be taken to prevent its access to the milk. The floor and walls of the milk-house should be disinfected with a five-per-cent. solution of sulphuric acid (oil of vitriol), which may be sprinkled around with an old broom. The only remedy necessary is to ascertain the source of the trouble and prevent the entrance of the organism-bearing material into the milk.

POULTRY.

Some Poultry "Don'ts."

Editor "The Farmer's Advocate":

Don't neglect the late-hatched chicks. They need more care and feed than the early ones. Bugs and worms are scarce these hot days, so you will have to supply animal food in some form. Fresh ground bone, given once or twice a week, will be found to give excellent results. Green food is also needed, as the grass is quite dry and tough during the hot weather. Lettuce chopped up fine is relished by the chicks. They will also eat mangels, etc., if chopped up fine. Keep a good supply of fresh water on hand. Don't neglect to give the ducklings plenty of shade. In fact, if their pen can be put under the shade of trees, so much the better. The recent hot spell clearly showed the necessity of plenty of shade to many an amateur duck-grower.

Don't forget that lice and mites thrive best these hot days. Keep the hens with chicks well dusted with a good insect powder, and keep the

chicks well greased. Keep watch over the hen-house; look on the underside of the roosts every few days. You may find them covered with little red mites some morning. Coal oil or hot whitewash with carbolic acid in it will kill them. Even a kettle of boiling water poured over the roost will put the present crop out of the way, but you will have to keep on the lookout for another batch in a few days.

Don't forget to sell off all those old hens. They aren't laying very well now, and it won't pay to keep them over winter, and, besides, they will bring a good price now. C. H. R.
York County, Ont.

Profit in Poultry for Farmer and Horticulturist.

Editor "The Farmer's Advocate":

It is chiefly the object of the writer to impart information acquired during a hard, matter-of-fact experience, that may be useful to all classes of poultry-keepers, but more particularly to give encouragement to the industry among farmers and horticulturists, in the hope that the numbers of such poultry-keepers may be rapidly augmented throughout the country.

There is not the slightest doubt that poultry should be kept far more generally and in greater numbers by the farmers, market gardeners and horticulturists. The birds will live almost entirely on the waste, and repay the trifling amount of trouble involved in attending to their wants, by supplying the owner with an abundance of fresh eggs and juicy meat, to say nothing of the tremendous benefits that the soil will derive from the cultivating, fertilizing and scavenging propensities of the feathered Solomon and his numerous harem.

Farmers and horticulturists are exceptionally well situated for keeping poultry on a more or less extensive scale, as they are in a position to give the birds ample range, on which they will provide themselves with a very large proportion of the necessary food for a "laying diet." They are also able to keep the birds in small colonies, scattered through pastures, meadows and orchards, so reducing to a minimum the risk of disease.

From a profit-making point of view, fowls are kept to the best advantage when they are able to pick up for themselves the greater portion of their food. But this must not be understood to mean that they can be left to shift for themselves. The latter form of poultry-keeping, which, alas, is too prevalent in this country, invariably means disaster to the farmer, and frequently to the flock. It always results in dirty implements, sheds and outhouses, where the birds have taken refuge for the night, wrecked gardens, and persistent invasions of the barn floor and oat bins by day, and finally leads to the axe for the offenders, and an end to the industry, as far as this flock is concerned.

Fence your garden, if it is absolutely necessary to keep your birds near to it. The wire will last for years, and, properly handled, you will soon find out how well the "biddies" are paying the interest on the small amount of capital invested in the improvement. Secondly, feed your hens regularly what grain is necessary, and so do away with more than half the cause of the degradations in the garden and oat bin. Biddy would far sooner have a good fat "bug" as a

side-dish with the grain you should feed her in return for the fresh egg she gives you on your breakfast table, than a mouthful of your green tomatoes. But if you don't give her any "board" for providing you with a good meal, she is certainly going to be just where you don't want her, in her endeavors to provide for herself. Small blame to her.

Properly managed, nothing will pay the farmer better than his flock of hens, for I could, if necessary, give a chartered accountant's certificate verifying the fact that a flock of ordinary, thoroughbred, utility Barred Plymouth Rocks, kept on the outskirts of this city, have, since the first of January, 1911, made for their owner a clear profit of nearly \$3.00 per head, after paying all feed accounts and out-of-pocket expenses. These pullets, or similar ones, could have been purchased in the previous fall for 75 cents a head, or raised for less. Now, have you any other live stock on your farm that has earned for you in five or six months a clear profit of over three times its value on first cost, after deducting feed, labor, etc.? I think not.

We must not forget that on the farm a good deal of grain, etc., is unavoidably wasted, and not only this, but an abundance of insect life is found, which would feed fowls, keep them in better health, and more profitably than anything else. These advantages farmers get for nothing, and must consider whether it would not be better worth their while to feed poultry upon the waste and insect life than the scores of sparrows, crows, etc., that come for the waste, and carry away other, besides.

Where the soil is infested with angle-worms, it is a capital thing to coop chickens where they can run over the ground, especially early in the morning, when so many insects are abroad and can readily be picked up. And I venture to say that few caterpillars that dropped from the trees in the orchard would ever escape the watchful eye of the young stock foraging underneath, and regain the leaves they are destroying. Too many poultry-keepers cut down their profits by increasing their feed bills. They pen up their birds in a limited run, where there is not enough insect life to go round, and then have to supply the extra quantity of grain and beef scraps to get results which are not half so satisfactory. If you watch a flock of chickens when first released from the colony house, brooder or coop, in the early morning, you will at once see that, after a few grains of the wheat or corn you have thrown down for them, they will turn their backs upon it and scatter in all directions for the succulent, early worm. If these are plentiful in the neighborhood, you will even have a difficulty in enticing them back to feed before nightfall.

I have had a flock of chickens that made straight off in this manner every morning, and were not seen again till the evening meal, and they made 1½ to 1½ pounds in six weeks—a good margin for profit at the price broilers fetch the first week in June.

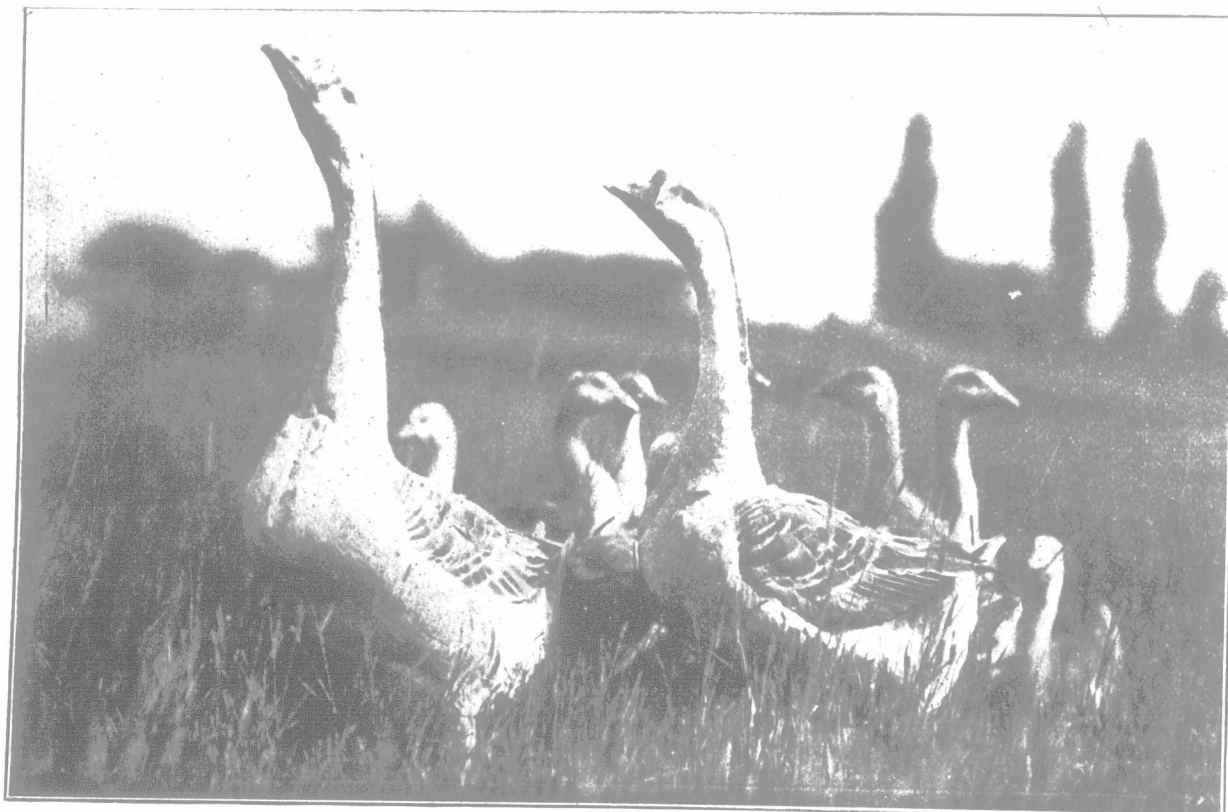
Fruit-growers should especially give this subject careful attention. A good deal of spraying might be avoided if fowls or ducks were used for the purpose Nature intended them, viz., to clear the land of vermin and many of the pests that cause such ravages in the orchard, and which are a source of expense and vexation to the owner; it is hard for him to contend with.

Central Exp. Farm. WALTER SCOTT.

GARDEN & ORCHARD.

Standards for Judging Fruits.

The Ontario Fruit-growers' Association have approved for trial in the year of 1911 standards for the judging of apples, pears, peaches, plums, cherries, seedlings (any other variety), grapes on single plates. They have also formulated a standard for collections of the foregoing fruits on plates, as well as for boxes of apples, pears and peaches. Barrel packs of apples are also dealt with, and the package and packing of each scored. The qualities considered and given a certain number of points each are for the commoner fruits, form, size, color, uniformity, freedom from blemish, and the total score is 100. To give an idea of how the points are divided, this is the way apples or pears on plates will be scored: Form, 15; size, 15; color, 25; uniformity, 25; freedom from blemish, 20. In box and barrel pack, 25 per cent. of the points are allowed for package and packing. The different terms used at exhibitions and in connection with the preparation and packing of the fruit are explained fully, and anyone contemplating exhibiting fruit this autumn should procure and study a copy of this pamphlet. The committee which formulated the different score-cards consisted of W. T. Macoun (chairman), W. H. Dempsey, A. E. Sherrington, Prof. J. W. Crow, H. S. Peart (deceased), and W. H. Bunting. Copies of this leaflet should be procurable from P. W. Hodgetts, secretary of the association, Parliament Buildings, Toronto.



A Good Type of Geese.

The "Silver Leaf" Disease of Trees.

Editor "The Farmer's Advocate":

As the name indicates, the Silver Leaf disease may be recognized by a silvery or milky gloss on the upper surface of the leaves of apples, plums, peaches, cherries, pears, currants and gooseberries. In this country, authentic cases have only occurred on apples and plums, but in Europe this disease has often been found in the other kinds of fruits. It is somewhat difficult to recognize the silvery appearance of the leaves, which, however, may become so pronounced as to completely whiten with a kind of bluish-white tinge, the foliage of one or more limbs, or often the whole tree. The present use of sprays, like Bordeaux or lime-sulphur results in the covering of the leaves with a bluish or yellowish-white film, and this may give the tree an appearance not unlike "Silver Leaf," but, on wiping the leaves, this covering is, of course, easily removed, while in the real "Silver Leaf" the color will remain. Hence, it is important to distinguish carefully between these two facts, and, in order to be sure of the disease, specimens will gladly be examined and reported upon by the Division of Botany, Central Experimental Farm, Ottawa. Growers should, however, try to become familiar with the appearance of this disease, which is by no means a new trouble in this country, but which has, unfortunately, escaped detection, until the discovery of undoubted cases of "Silver Leaf" in Nova Scotia a few months after taking up my duties here. No doubt every reader is familiar with the silvery foliage of some of our native willows and poplars. From a distance, these trees may easily be recognized on account of the bluish-white appearance of their foliage. If you bear in mind the appearance of this color when examining your orchards, and if not due to any milky film of sprays, there exists the probability of the presence of the "Silver Leaf" disease. I again solicit samples of foliage, for we cannot be too careful in taking every possible step to prevent this disease from becoming a source of real danger to one of the country's most important industries.

NATURE OF THE DISEASE.

The "Silver Leaf" is injurious to the life of the trees that have been enumerated. The trees may at first show only one limb affected; gradually another limb falls a victim, until the whole tree becomes involved. The disease works slowly, and it may take from three to five years before the disease has involved a whole tree. This depends, naturally, upon the size of the tree. During the first few years the affected branches may bear fruit, but bearing soon becomes a thing of the past, and the tree dies, limb after limb. It may be said that a tree, once attacked, nearly always dies; and, as it is our experience that it bears little fruit previous, protection practically amounts to immediate destruction of the trees which show this disease.

CAUSE OF DISEASE.

The cause of "Silver Leaf" in fruit trees has been very much discussed in England, and one of the foremost mycologists of England firmly disputes any disease "theory." His evidence in favor of a physiological disturbance, however, is, in the face of repeated and successful inoculation experiments, of very little, not to say of the slightest importance. It is very likely that, as in many other diseases, there exists in this case, too, predisposing factors which may be of physiological nature, which render the tree more liable to contract the disease, but there exists in my mind, and in that of many careful and reliable investigators (Percival, Pickering, etc.), little doubt that "Silver Leaf" has been due to an infection with *Stereum purpureum*. This fungus I have found associated with this disease everywhere where I have traced this disease. Moreover, reports from other countries (New Zealand, South Africa, etc.) also show that this species of *Stereum* is always found where "Silver Leaf" trees exist. Again, in this country I repeated the inoculation last November, and every tree thus inoculated now shows "Silver Leaf" quite plainly. Trees inoculated with another fungus which frequents dead wood of fruit trees, and check trees made with inoculation cut made with a sterile knife, and, finally, those growing in the same row; but, where no wound of any kind was made, remained perfectly free from "Silver Leaf" disease.

WARNING TO GROWERS.

"Silver Leaf" disease has been recorded and has been personally observed in the following Provinces: Ontario (Ottawa only), Nova Scotia (several records), New Brunswick, British Columbia, and experimental orchards in Manitoba. No case has yet been recorded from Quebec, Niagara

District, or any of the other Provinces where fruit is grown. This must not be taken as an indication of its non-existence. I have reason to believe that the disease is very widely spread.

The Disease is Very Serious.—Growers in this country are advised to examine their trees very carefully, and give the disease no chance of establishing itself firmly all over the country. The fruit industry is in real danger. Without wishing to be an alarmist, we cannot afford to neglect the lessons taught by the disease in other countries, and every fruit-grower should unite with the Department in the efforts which are now being made to arrest and control the spread of "Silver Leaf."

PRECAUTIONS.

Stereum purpureum, the fungus which causes "Silver Leaf" is a wound parasite. The fungus is liable to gain entrance through any wound in the bark or root. It produces its fructification on dead wood only, hence its true nature has not been at once recognized. The fructification appears as more or less large, depressed or horizontal brackets of a dull crimson color. Remove at once all trees that are wholly involved; do not allow the stump to remain in the ground. It is generally on the stump, in, or lying on the ground, where the fructification of the fungus is produced. The whole wood of any "Silver Leaf" tree should be destroyed by fire. Take the tree out any time before fall; in fall, the fructification appears more generally. Cut and burn any silver-leaved branches, and watch the tree. If, after cutting away a branch, "Silver Leaf" appears in others, haul the tree out. When removing a tree, the roots also should be dug out, then fill in the hole with stone lime mixed with soil, and allow three months before planting another tree in its place. Local infections of single limbs may take place, and the inoculation experiments have shown that such a limb may recover, but it is best to remove an infected limb as soon as noticed. The disease is liable to spread from limb to limb, so do not take any risks.

W. T. GUSSOW, Dom. Botanist.

Central Experimental Farm.

Pruning Raspberries.

The old wood should now be cut out of the raspberries, so as to give all the strength of the root system to the young canes for next year's crop. Much of this has already died, perishing immediately upon the picking of the berries. This is caused by the exhaustion of maturing a full crop and the stronger drain of the young canes, which are growing very rapidly now. Their long, thrifty canes are pushing their way across the middles, and threatening to soon block the passage of the cultivator. Means must be taken to prevent such a result, for, with upspringing weeds, it is impossible to safely discontinue cultivation; but even without the menace of the weeds, the vigorous growth of the young canes must be maintained without check, and this requires that no surface crust be allowed to form to cut off the supply of oxygen from the roots, and the bacteria of the soil that tirelessly manufacture plant food into available form.—[Market-growers' Journal.

Fruit Crop Report.

The report issued August 2nd, 1911, by P. W. Hodggets, secretary of the Ontario Fruit-growers' Association, shows that a very considerable amount of damage to the crop has resulted from the storms, particularly, heavy wind and hail storms, which several of the districts have lately experienced. The estimated loss from this cause, by districts, is as follows; Milton, 10 per cent. of the apples; Lambton, 20 per cent. of the apples, and a smaller percentage of plums and pears; Jordan, winter apples 10 per cent., summer apples 30 per cent., pears 20 per cent., plums 10 per cent., and grapes 5 per cent.; Georgetown, 33 per cent. of all varieties excepting Spies; New York State, 25 per cent. loss in all counties bordering on the lake; St. Catharines, very little damage reported; Chatham, no damage reported, and the crop of summer and fall fruit fair, with winter fruit light; Huron, apples are badly blown off by recent storms; Brant, 30 per cent. of the Greenings are on the ground, and other varieties have suffered badly; Forest, 25 per cent. of the apples, plums and pears were blown off; Sparta, apples are marked by hail to some extent, and many blown off; Oxford only lost about 5 per cent. by wind, and the crop is improving; Simcoe, much havoc by wind, but enough are still left to mature properly; Gore, ten per cent. of the crop down; Prince Edward, no hail, but 5 per cent. of the apples are blown down; Owen Sound, the loss from wind is about 33 per cent.; Jordan, from 50 to 75 per cent. of the fruit in this section was completely destroyed

by hail on July 23rd; Port Burwell, about 30 per cent. of the apples have been blown off. Wentworth reports a loss of 10 per cent.

Nova Scotia still reports a bumper crop. It is estimated at over one million barrels. Apples are still looking well in sprayed orchards, while some districts report that fully 75 per cent. of the fruit in unsprayed orchards is affected with the codling moth and curculio.

Summer apples are reported as selling for from \$1.00 to \$1.25 per barrel, while buyers in Prince Edward Island have offered \$2.50 to \$2.75 per barrel, f.o.b., station, for fall and winter fruit.

Experiments With Tomatoes.

Editor "The Farmer's Advocate":

During the season of 1910, at Cambridge, New Brunswick, a series of experiments were conducted by the writer with tomatoes, under field conditions. The object was to determine how best to combat the leaf-spot of tomatoes, and also the cracking of the ripening fruit. A study was also made of any advantages or disadvantages which might arise from the different methods of pruning and staking the vines. Four Earliana plants were used in each experiment.

It was shown that leaf-spot can be controlled by the use of Bordeaux mixture. There is no one application which is all-important, freedom from disease being, with slight variation, proportional to the number of sprays. The application of Bordeaux immediately after plants are transplanted to the open field is not to be recommended. In every case, plants were much injured by its use when this was done, and their recovery from same was slow.

The advantage was with the staked plants. Especially was it noticeable in plot 12, where plants were kept from the ground by means of stakes placed over plants in camp style. Leaf-spot can be controlled by Bordeaux, but if early ripe fruit is wanted, it does not pay to do so. Any check to the plant tends to ripen its fruit. Leaf-spot tends to produce that check, and consequent ripening. The best prices for tomatoes are always obtained in early season. The combining of these two factors, viz., early ripening, and consequent better prices, gave to the unsprayed plot the advantage in ripe fruit, by the end of the season, of 48¢ cents. If we should add the cost of spray and its application to sprayed plot, the difference would be still greater.

In any locality where the season is long and quantity of fruit is the only consideration, spraying would pay, but not otherwise, with the possible one exception of spraying before plants go in the field. The same conclusion may be drawn from results obtained from plots where vines were kept from the ground. There was less leaf-spot, but the fruit was later. Two plots which were covered with canvas, for another purpose, remained green until the end of the season. This would indicate that in dry seasons you would expect less "spot" than during wet ones. This is amply borne out in the field, for in wet seasons plants are often entirely defoliated.

The exceeding wet weather interfered somewhat with the experiments re "cracking," but both field and plot showed that continuous wet weather would not produce this condition. Field and plot showed that wet weather, followed by dry, would not cause it, for under such conditions good fruit was obtained free from blemishes. On the other hand, wet weather following dry would crack the fruit quickly. The experiments seem to prove only one thing, that cracking is caused by rapid growth of fruit, brought on by wet conditions following dry.

The application of common salt in different quantities did not lessen cracking; in fact, it seemed to increase it. We had hoped that, as salt checks growth, we might be able to hold back on the subsequent growth caused by late rains, and thus prevent cracking. Following rain, the interior of the tomato grows faster than the skin, and cracking is the result. Some practical remedy for this, which annually brings much loss to the grower, must yet be sought. The picking of the fruit green, and ripening same in a cool, dry, dark room, is the only effective method of dealing with the difficulty. The flavor of fruit thus ripened is somewhat impaired, but in some seasons it is the only method of saving the crop.

The effect of pruning was studied in three plots. It is noteworthy that plot 15, which was not pruned, produced almost exactly as much fruit as 13 and 14 together, one of which had all laterals removed, and the other shortened. In the case of plot 13, where all laterals were removed, fruit was no earlier, and much less of it. This practice is strongly to be condemned. The shortening of all laterals had little effect. There was nothing gained sufficient to warrant its being done. Ripe fruit seemed to be produced a little earlier than in plot 15, but no earlier than in some others left unpruned. E. M. S. Macdonald College.

Fruit Box Standards.

The following resolutions will be submitted for the consideration of the Third Dominion Conference of Fruit-growers, to be held at Ottawa next winter by the delegates from the British Columbia Fruit-growers' Association:

That this British Columbia Fruit-growers' Association adopt as a standard apple box for all purposes the 10 x 11 x 20 inches, and that we instruct our delegates to Ottawa to use every endeavor in their power to have the words "For export only" expurgated from the Canadian Fruit Marks Act, sec. 325. That the Association recommend that the four-basket plum crate be 15½ x 15½ x 4½ inside. That the present pear box, 18½ x 11 x 8½, be the legal size. That the peach crate be 18½ x 11½ x 4½. That the pear box, 8½ x 11 x 18½, be adopted by this Association as a standard box for crab apples.

THE FARM BULLETIN.

Agricultural Legislation at Ottawa

It was expected that the session of Parliament just closed would have gone down in history as one of great importance to the agricultural industry of Canada, but the whole country knows that the reciprocity pact was not allowed to reach a division of the House of Commons upon its first reading. Because of the time spent in debating this far-reaching measure, a number of bills affecting agriculture had to be left over.

Early in the session, however, a number of agricultural measures went through. While only a portion of the supplies necessary to carry on the work of the several branches and divisions of the Department of Agriculture were voted, the amounts asked for by the Minister of that Department were sanctioned. When the House again meets, the remaining portion of the vote will doubtless be carried through.

AMENDMENTS TO SEED-CONTROL ACT.

To prevent the distribution of the seeds of noxious weeds through commercial channels is the constant effort of the Seed Commissioner. This official has his inspectors constantly on the outlook for channels in trade through which these pests of the farm are being spread. When the original Seed Control Act was drafted, it named all the weeds that it was thought necessary to cover in the measure. Investigation showed that a number of bad ones were missed, and as time went on new ones were cropping up. In certain sections, weeds not named in the Act were working serious havoc, while they were not known in other parts of the country. It was, therefore, thought well to provide for these unwelcome introductions, and consequently, during the past session there was enacted an amendment authorizing the Governor-in-Council to name the seeds which should be considered the seeds of noxious weeds. By this amendment, any weed found to be bad can be brought under the operation of the Act within reasonable time.

This amendment extends also to flax seed, as well as to clover and grasses. In the original Act, flax seed was not included in the list of seed with which the seeds of noxious weeds must not be mixed when offered for sale. The amendment adds flax seed to the list.

Provision is made for the grading of timothy, alsike, red clover and alfalfa seed under different standards of quality into Extra No. 1, No. 1, No. 2, No. 3, etc. Heretofore, there were two standards, No. 1, and a lower standard, below which no seeds offered for sale must go.

Three years of investigations showed the Seed Commissioner that large quantities of bad seeds were being distributed, mixed with bran and other mill feeds. It was the custom of many mill owners to get rid of screenings in this way. Analyses showed that samples of bran, shorts and middlings contained as high as 246 vital seeds of weed per pound, while feed oats unground contained over 4,000 such seeds per pound. It was realized that many of these seeds pass through the systems of animals, retaining their vitality. This is why the Act was amended so as to make it necessary that bran, shorts and chop feed must, according to law, be free from vital seeds of any of the noxious weeds coming within the operation of the Seed Control Act.

GRADING FRUIT.

The Inspection and Sale Act, which now includes the Fruit Marks Act, was amended so as to cover all fruit packed and offered for sale either wholesale or retail in Canada, as well as for export. Heretofore, the Act covered only the export trade, and many and bitter were the complaints of Canadians who were getting the little apples and other inferior fruit in the middle and bottom of the package. Now all fruit offered for sale must be honestly packed, and the receptacles must be properly marked. Further, it is unlawful to mark or cause to be marked a wrong name, or the name of any person or firm other than the one who actually packed the package.

INSECT PESTS.

An important regulation was passed by Order-in-Council while the House was in session. It has to do with insect pests likely to be introduced on imported nursery stock. According to the Order, under the Destructive Insect and Pests Act, the importation of any plant or nursery stock infected is prohibited, and importation shall be only through certain ports: Vancouver, October 1 to May 1; Niagara Falls, October 1 to May 15; Winnipeg and St. John, March 15 to May 15, and from the 7th of October to the 7th of December; Windsor and St. John's, Que., March 15 to May 15, and from September 26 to December 7. Exemption is made in cases of greenhouse plants, herbaceous perennials, bulbs and tubers, and necklace poplar. Notice of intended importation is required, and the sale of any infected stock is prohibited. Inspectors to carry out all the regulations have been appointed. They will have power to enter any lands and premises where infection is supposed to exist. The regulations are lengthy and somewhat radical.

VOTES FOR AGRICULTURE.

The amounts of money asked for by the minister in the main estimates exceeded last year's appropriation by a little more than one hundred thousand dollars. Had the session reached a normal termination, there would have been submitted, with other supplementary estimates, slightly more than half a million dollars additional money for agriculture. The plans involved with this sum cannot be considered in this review.

DAIRY AND COLD-STORAGE BRANCH.

The vote of \$100,000 last year has been increased by \$10,000, in order to take care of a general extension of the work. Special experiments in buttermaking are being carried out under the direction of Geo. H. Barr, to learn the best system of conducting the cream-gathering system of buttermaking. The special object is to learn the best method of handling the cream at the farms, as well as the best treatment to give the cream after it is delivered at the creamery. The work is being done on a large scale at the Renfrew creamery, which has been properly equipped for the work. The cow-testing work is rapidly expanding. Already, about 175 associations are in working order, representing some 1,200 members and 14,000 cows. This year, special officers are being stationed in certain sections to work up cow-testing in the whole neighborhood, and incidentally to encourage the use of improved stock, as well as better feeding and care of animals. Each farmer in the localities is asked to take a sample of the milk of each cow at regular intervals, and these samples are sent to factories to be tested. The Department pays the factories five cents per test. The results are given to the officers, and the farmers themselves weigh and keep a record of the weight of the milk. The results of the tests are worked out by the Departmental officer, who hands them to the farmers for their guidance in weeding out the poor cows. Dairy record centers are established in Oxford, Peterboro and Lanark Counties, in Ontario; St. Hyacinthe and Brome, in Quebec; and Kensington, Prince Edward Island.

Work in the Market Extension Division is constantly growing. A cargo-inspection officer is stationed at Liverpool, and under him officers are at work at large British ports. These men watch the cargoes of perishable products as they land, and read the records of the thermographs maintained in the cold-storage chambers of ships. Reports, including the readings, are forwarded to the Dairy and Cold-storage Commissioner at Ottawa. Inefficient handling is reported to the shipping companies, who are always ready to improve conditions where necessary.

Experiments in cooling fruit are being carried out. The system involves the forcing of cold, dry air into filled cars. The packages are so packed as to leave spaces and avenues for circulation. When the fruit is properly cooled, ice is put in to hold the low temperature, and the car is closed and sealed for the journey.

The appropriation for bonusing cold-storage warehouses remains the same as last year—\$75,000.

THE SEED BRANCH.

Sixty thousand dollars, as against \$50,000 last year, was asked on behalf of the work of the Seed Branch, which administers the Seed Control Act. The work is making healthy growth, and requires the extra money. Three thousand dollars of the additional vote is for publications of the Branch. This will provide for a commencement in the work of preparing a book on grasses having colored plates similar in style to the Book of Weeds issued by this Branch. The Seed Branch does much valuable educational work in connection with seed fairs and standing field-crop competitions. In connection with the latter, the Branch co-operates with Provincial Departments of Agriculture, the Federal Branch supplying the judges. Financial and other assistance is granted, when applied for, to seed exhibitions organized by Provincial Departments of Agriculture.

ture. The grant towards a Provincial exhibition amounts usually to \$250.

More than 7,000 samples of seed were tested for farmers last year at Ottawa and Calgary, in addition to tests made for purity of samples gathered by inspectors in connection with the administration of the Seed Control Act.

EXPERIMENTAL FARMS.

Thirty thousand dollars was added to the vote of last year to carry on the work of the Experimental Farms, bringing the amount up to \$160,000. In addition, \$75,000 was approved for organizing and carrying on additional branch farms. A similar vote was made for new farms last year. Besides this, \$25,000 was voted to the Department of Public Works for new buildings and repairs. The work to be done includes the construction of a new dairy barn at the Farm at Agassiz, B. C., and repairs to buildings and fences at the Central Farm.

The general work at all the Farms is being extended under the new director. Exhaustive experiments in cultivation and rotation are being undertaken, and new work is being taken up with live stock. At each farm an assistant superintendent, who is a graduate of an agricultural College, has been appointed. The head of each division at the Central Farm has also been provided with a trained assistant.

Besides the five original farms, at Ottawa, Nappan, N. S.; Brandon, Man.; Indian Head, Sask., and Agassiz, B. C., there are now in operation farms at Charlottetown, P. E. I.; Fort Rouge, Que.; Rosthern and Scott, in Saskatchewan; Lethbridge and Lacombe, in Alberta; while smaller stations have been organized at Kamloops, B. C.; Fort Vermillion, on the Peace River, and Forts Smith and Resolution, beyond the 60th parallel of latitude.

HEALTH OF ANIMALS AND LIVE STOCK.

The vote for the Health of Animals and Live-stock Branches remains the same as last year, viz., \$250,000 for the former, and \$52,000 for the latter. For Meat Inspection, the vote is enlarged from \$120,000 to \$140,000. These Branches are well organized and doing a valuable work for the live-stock industry. The growing export and import trade call for strict and thorough supervision, in order to prevent introductions of disease, as well as to see that our stock going abroad cannot be found fault with by the health departments of importing countries.

An important new work nearing completion, under direction of the Live-stock Commissioner, is that of the Sheep Commission, whose report will shed much valuable light on the conditions of the industry in Great Britain and the United States, besides the state of the industry and its possibilities in Canada, from ocean to ocean. This report will deal very fully with the wool situation.

Twenty thousand dollars was voted to the Department of Public Works to construct corrals and dipping vats along the boundary line between Canada and the United States, and for the maintenance of cattle quarantine stations generally throughout the Dominion, in a proper state of efficiency.

TOBACCO.

The vote to carry on the work of the Tobacco Division has been increased from \$5,000 last year, to \$15,000 for the present one. More elaborate experiments are being carried out at the stations in Essex and Kent, in Ontario, and the two Quebec stations. A new station is being established in British Columbia, where the Chief of the Division, Mr. Charlan, has made a careful investigation, and found certain parts of the Province exceedingly favorable for tobacco-growing. It is estimated that the tobacco crop of 1910 was worth \$1,000,000. With proper methods and the growing of the most suitable varieties, it is believed that the industry is capable of great expansion.

EXHIBITIONS.

Two hundred and eight thousand dollars are set apart for exhibitions, as against \$178,000 last year. This includes \$150,000 for world's exhibitions, \$8,000 for renewing and improving exhibits at the Canadian Institute, London, and \$50,000 for the Dominion Exhibition.

The world's exhibition receiving attention this year is the "Festival of Empire," which was postponed last year on account of the death of King Edward. At this exhibition, Canada maintains an elaborate display of Canadian products, artistically arranged as a fac-simile of the Canadian House of Commons. The Canadian Institute is a permanent institution in London. It forms part of an extensive exhibition maintained by the Colonies of the British Empire. The Canadian exhibit consists of products which show the natural resources of the Dominion. Such of the exhibits as lose freshness are being constantly renewed.

The Dominion Exhibition this year is being held at Regina, Sask., on August 1st to 12th.

INSECT PESTS.

Last year, \$2,000 was set apart to administer the Destructive Insect and Pest Act. This year

\$10,000 was put down as necessary to meet the needs. The increase is needed to meet the more exacting regulations of the Order-in-Council referred to in this article.

INTERNATIONAL INSTITUTE OF AGRICULTURE.

To meet the obligations of the Department towards the International Agricultural Institute, organized and carried on at Rome, Italy, \$10,000 are required. This amount is the same as voted last year. The Department contributes a substantial grant, besides publishing bulletins made up of extracts from the Bulletin of Statistics, the Bulletin of Agricultural and Social Intelligence, and the Bulletin of Economic and Social Intelligence. The Canadian correspondent, T. K. Doherty, also sends to the Institute reviews of Canadian agricultural publications.

J. B. SPENCER.

A Double Advantage.

Editor "The Farmer's Advocate":

In an article entitled "After Harvest Cultivation," in the issue of July 27th, "The Farmer's Advocate" has served its constituency most helpfully by calling attention to the necessity of stirring the soil in order to conserve soil moisture and to start the germination of noxious weed seeds. There is nothing like killing weeds by wholesale, and the destructive drouth of this season makes provision against a lack of moisture next year a matter of grave importance. In addition to the cultivation suggested in the article referred to, it is important to go one step further. When the ground has been plowed and cultivated, it is well to sow rape or hairy vetch. These seeds germinate rapidly, and before snow falls they give a fine growth. In this way a fine fodder crop is provided for hogs, sheep or young cattle. Some farmers have in this way been able to reap what is of great value to them, a second profit from their fields. This plan is particularly valuable should the field be infested with weeds. The first cultivation destroys the early summer weeds. The sheep and cattle keep the growing weeds closely cropped, and the fall plowing means the extinction of the majority of weeds that remain. In the case of the weedy field, the sheep are the most effective grazers. In addition to the good work done in the way of cleaning the field, much good accrues from saving moisture for the following crop. The manure of the grazing animals, together with the roots, will in the following spring be one of the best forms of humus for the soil, and will serve to fortify the land against the drouth that seems inevitable in July or early August. Fields treated in this way last year gave results which abundantly recommend similar husbandry for this year.

York Co., Ont.

Silo Building and Filling.

Editor "The Farmer's Advocate":

It will soon be time to fill the silo again, and a few hints as to the building and filling of it are in order. We always build the load of corn with the sheaves standing straight up on end. Loading is started at the back of the rack, where the sheaves are stood straight up against the rear ladder. We can put on all the team can draw, and it is easier to load and far easier to unload, because, when you take hold of a sheaf, you have it at once, without having to move one or perhaps two before you can get it free.

My silo is a smaller one than any you gave estimates on in your issue of July 27th, so I will give the cost of it. It is a slop wall, plastered inside and outside, and has four doors. Its diameter is 10 feet inside, and the height is 32½ feet. The cost was as follows: 30 barrels of cement, at \$1.80 per barrel, \$54; use of rings, \$21; five men, 6½ days, \$48.75; wire, \$3.50; mason to plaster, and man to tend, \$13; cement and lime to plaster, \$7; carpenter, making door and putting on roof, \$10; shingles and lumber, \$9; nails, hinges and paint, \$1; total, \$167.25. Besides this, I furnished boy and horse to haul up grout, and worked most of the time myself. Not one of us had ever seen one built before, and we had to do considerable studying, so it took much more time than it should. But it has stood the winter, and is as good as when built, and the silage kept perfectly—just as good around the outside as in the center. The wall is 12 inches thick at the bottom, and gradually tapers to 6 inches at the top. The foundation is 18 inches. The gravel and sand was got at the lake shore. It cost nothing, but more sand was required than with sharp pit gravel. I planted seven acres of corn to fill it, but it did not take the half of this. The variety was White-cap Yellow Dent, and it was drilled in 3½ feet apart. From the remainder of the field I husked 350 bushels of ears.

PETER B. FICK.

Norfolk Co., Ont.

Brandon Inter-Provincial Fair.

The men in charge of the Brandon Show have for some years striven to make their show the best of the Canadian West series, and from an agricultural and live-stock viewpoint, they have nearly reached their goal. The classes in live stock at this year's show were all well filled and keenly contested, and the show was the greatest success in its history.

HORSES.

Clydesdales.—The Clydesdale classes were even stronger than at Winnipeg, fifteen entries facing the judge in the aged stallion class alone. Prof. W. S. Carlyle, of Moscow, Idaho, acted as judge. The awards in the aged stallion class were: 1, W. C. Van Horne, on Lord Ardwell, by Baron's Pride; 2, Brandon Horse Syndicate, on Cairnhill, by Ethiopia; 3, A. B. Mitchell, on Caliph, by Baron's Pride; 4, Samuel McLean, on Pleasant Prince, by Prince Pleasing; A. B. Mitchell, on Earl Roberts, by Hiawatha; 6, John Graham, on Mascarville, by Sir Simon. Three-year-old stallions brought out four entries, which were placed as follows: 1, Major Miller, owned by Vanstone & Rogers; 2, Baron's King, owned by Hunter; 3, Aikenhead Chieftain, owned by Vanstone & Rogers; 4, Joe Chamberlain, owned by H. H. Simpson. Stallion, two years old—1, J. Burnett, on Scotty Bryce; 2, A. Graham, on Allison; 3, Vanstone & Rogers, on Radiol; 4, A. C. McPhail, on Sir Francis Drake. Stallion, one year old—1, A. Graham, on Top Notch; 2, W. J. McCallum, on Scottish Fashion; 3, A. C. McPhail, on Baron Taurenhill; 4, McKirdy Bros., on Crown King. The class for fillies of 1908 was very strong. Miss Holly won first for the Van Horne Farm. Lady Andrew, by Baron's Pride, stood next, winning the blue ribbon for A. Graham. Third place was taken by McKirdy Bros.' mare, Countess of Rashiehall. Fourth stood Lady Chattan, the Canadian-bred champion, exhibited by David McLean. Fifth place went to McKirdy Bros., on Show Queen. The class of fillies of 1909 brought out seven animals. First went to Alex. Savage, Carman, on Darling Belle; second to McKirdy Bros., on Baroness May; third to Jas. Burnett, on Ruby Barbour, and fourth to McKirdy Bros., on Royal Princess. For filly of 1910, Jas. Tucker's Silver Queen won first, David McLean's Lady Peggy second, and J. Lyttle's Mabel Darny third. Six entries in the foal ring claimed honors. First place was captured by Andrew Graham; second, Van Horne; and third, B. H. Nevens. The awards for brood mare with foal by side were: 1, Van Horne, on Moy Jess; 2, A. Graham, on Lovely Baroness; 3, A. C. McPhail, on Lady Kitty. For yeld mare, or mare visibly in foal, first went to Van Horne, on Sylvan Queen; second, J. Graham, on Border Rosy; third, A. B. Mitchell, on Bedford Rose; fourth, Van Horne, on Lady's Pride; fifth, S. Benson, on Rosy Gem. W. McMillan won the prize for three animals the get of one sire, on the get of Silver Clink. Lord Ardwell stood first as best Clydesdale stallion, any age, while A. Graham secured the prize for mare and two of her progeny. Sylvan Queen was first in the class for best Clydesdale mare, any age. Scotty Bryce won for J. Burnett the special stallion prize donated by the Clydesdale Horse Society of Great Britain, and Sylvan Queen won the same prize for females.

Albion, owned by A. Graham, was pronounced Canadian-bred champion stallion, and Lady Chattan, owned by D. McLean, champion female.

Shires.—Competition in Shire classes was between F. Schroeder, of Midnapore, Alta.; John Graham, of Carberry, and John Stott, of Oak Lake. Acle Harold, Schroeder's Winnipeg champion, won over Stott's Handsome Prince in the aged stallion class. Schroeder also was third and fourth, with Ludham Forest Chief and Lionel V. For stallion of 1908, Schroeder won with Hempstead Champion. For filly of 1908, John Graham was first, and John Stott second. Colquhoun & Beattie won in the yeld mare class, with Lady Grey. Stott's Handsome Prince was best Shire stallion, any age, bred in Canada.

Percherons.—Following are the awards: Stallion foaled previous to 1908—1, W. E. & R. C. Upper, on Bijou; 2, Geo. Lane, on Garou; 3, Robt. Reid, on Port de Vendome; 4, Thos. Kelly, on Buisson; 5, Vanstone & Rogers, on Hiven. Stallion foaled in 1908—1, J. B. Hogate, on Ichor; 2, Lane, on Imprenable; 3, M. G. Young, on Hutton; 4, Lane, on Ilmen. Stallion foaled in 1909—1, Upper, on Romeo, by Robosse; 2, Vanstone & Rogers, on Carnot. Stallion foaled in 1910—1, Robt. Reid & Son; 2, Upper. Filly foaled in 1908—1, Lane, on Imprudence; 2, Upper, on Pearl; 3, Lane, on Alberta; 4, Upper on Belinda. Pearl was first at Winnipeg. Filly of 1909—1, Lane, on Jardonierre; 2, Upper on Verla; 3, Reid, on Jess. Filly of 1910—1 and 3, Upper; 2, Lane. Foal of 1911—1, 3 and 4, Upper; 2, Reid. Brood mare—1, 2 and 3, Upper, on Prairie Queen, Marjorie and Abella; 4,

Reid, on Lura. Yeld mare—1 and 2, Lane, on Bichette and Docile; 3, Upper, on Pauline; 4, Reid, on Soumise. Three animals, three years or under, get of one sire—1, Upper, on get of Superior; 2, Reid, on get of Port de Vendome; 3, Upper, on get of Robosse. Best three mares, any age—1, Lane; 2, Upper; 3, Reid. Best four animals, get of one sire—1 and 2, Upper. Best Percheron stallion, open—Upper, on Bijou. Best Percheron female, open—Lane, on Bichette. Best Percheron female, Canadian-bred—Reid, on Mira. Best Percheron stallion, Canadian-bred—Upper, on Romeo. Best Percheron filly, one year, Canadian-bred—Upper, on Alice. Champion stallion, any age—1, Upper, on Bijou; 2, Lane, on Garou; 3, Reid, on Port de Vendome. Best mare, any age—1 and 2, Lane; 3, Upper. Best two animals from one mare—1, Upper; 2, Reid. Stallion and four mares—1, Lane; 2, Upper.

The specials in draft classes were keenly contested. Van Horne won the challenge cup with Lord Ardwell, while Lady Grey, a Shire, won the cup for the best draft female for Colquhoun & Beattie. Van Horne also won first on heavy-draft teams. Six-horse teams were a feature, and were placed: 1, Elton Municipality; 2, Geo. Lane; 3, Oakland Municipality.

Drafters not pure-bred and light horses made a good exhibit, and keen interest was shown in them.

CATTLE.

As in all Western fairs, Shorthorns were the strongest class of cattle, three Western breeders and three from the United States competing. Captain Robson, of London, Ont., was judge. Shenstone Albino, owned by Carpenter & Ross, was made senior and grand champion, beating Uxor Prince, the Winnipeg champion. Gloucester's Fashion, owned by F. W. Harding, of Waukesha, Wis., was junior champion. Dale's Gift 2nd, Carpenter & Ross' grand two-year-old, was senior champion female, while Van Horne's Roan Queen was junior champion. Besides the three breeder's mentioned, R. Caswell won many prizes.

Herefords.—This breed was upheld by some fine animals exhibited by L. O. Clifford, of Oshawa, Ont.; J. A. Chapman, of Hayfield; and Geo. H. Gray, Austin, Man. Clifford's bull, Refiner, was made senior champion. Clifford also won junior and senior champion female prizes. The other prizes were well divided.

Aberdeen-Angus.—J. D. McGregor, Brandon, and Jas. Bowman, Guelph, Ont., were the exhibitors. The prizes were well divided, each exhibitor winning two championship prizes.

In the dairy cattle, three pure breeds and many grades were out. Ayrshires had but one exhibitor, P. D. McArthur, North Georgetown, Que. In Jerseys, B. H. Bull & Son, of Brampton, secured the championship prizes, twelve firsts, four seconds and three thirds; while Joseph Harper, of Kinley, Sask., got six seconds and three thirds. The Holstein competition was close, and no exhibitor had a walk-away. The exhibit of Colony Farm, Coquitlam, B. C., claimed the largest number of the prizes, with Homer Smith, of Bergen, Man., and A. B. Potter, Langbank, Sask., always close competitors.

The sheep exhibit contained practically the same flocks as were present at the Winnipeg show. Two flocks of Leicesters, two of Shropshires, one of Oxfords and Dorsets, with Suffolks, Southdowns and Hampshires shown by two exhibitors, constituted a very good show.

The exhibit of hogs far surpassed all former shows held in Brandon. T. A. Cox, Brantford, Ont.; Bowman & McGregor, Forrest; H. S. Emmert, East Selkirk; C. W. Weaver, Deloraine; Man.; Jos. Brethour, Burford, Ont.; Sir. Wm. Van Horne, and D. Douglas & Sons, of Mitchell, Ont., were the principal exhibitors.

Save Your Clover Seed.

The problem of growing clover is one that demands attention in many parts of Ontario. So serious has this problem become that, at the very moment when the value of clovers as a stock food and as a soil fertilizer is universally admitted, it has turned out that farmers find great difficulty in growing it. In Southern Ontario this year, there are whole townships where there is not a single field of really good clover. The loss ensuing from this failure no one can estimate. The situation is so grave that the Government would do well to have the whole matter investigated by a committee composed of practical farmers and experts. Clover-growing and rural prosperity go hand in hand. Whether this investigation takes place or not, one thing is clearly the duty of every farmer, and that is to save what clover seed he can. The worst thing he can do this year with his second crop of clover is to pasture it. Even if this crop be less than a quarter of a crop, he will be wise to save it for seed. If he has not enough to warrant the use of the clover thresher, it will pay him to flail it out, for the price of clover next year promises to be very high—if it can be bought at all by the farmer of ordinary means.

A. M.

York Co., Ont.

Our Scottish Letter.

THE HIGHLAND AND AGRICULTURAL SHOW.

We have just closed the annual four-days' show of the Highland and Agricultural Society. The site of the show this year was the Highland capital, Inverness, and there is no more beautiful show-ground in the country. The Society derives its name from the fact that it was originally formed to improve the condition of the Highlands. Its subsequent development is indicated by the word "Agricultural." During three-fourths of its history the society has been more agricultural than Highland, yet it has never lost touch with its original purpose, and is now, perhaps, doing fully as much for the advancement of the Highlands as at many an earlier period of its history. The show is this year held under the presidency of Lord Lovat, a descendant of the famous Simon Fraser, the Lord of Lovat who lost his life and his estates for his attachment to the cause of Charles Edward, the Young Pretender, in the '45's. The estates were afterwards restored to the Frasers when the Hanoverian dynasty was accepted by all the chiefs, as well as the people of the Highlands. The Lovat Frasers, as a family, and the neighboring clan of the Chisholms, remained Roman Catholic, and to this day they are among the leading members of that faith in Scotland. The present Lord Lovat is a comparatively young man, and distinguished himself during the South African war by raising a body of mounted infantry, known as the Lovat Scouts. They did good service in the field, and are a live element in the British Army to-day. His experiences in that connection led Lord Lovat to understand the value of the stout, active ponies upon which the Boers were mounted, and this led him to seek the improvement of the native breed of Highland ponies, which have much of the stamina of the Basuto pony on which the Boers were mounted. Others have been laboring to perpetuate this breed, and at the show which closed today, there was an exhibit of no less than forty-six brood mares of the thick, stout sort so much fancied by those who know the value of these extremely hardy animals. The championship of the breed went to a gray stallion named Skerryvore, owned by His Majesty the King, but bred by J. H. Munro MacKenzie, of Calgary, Urull, one of the most enthusiastic supporters of the breed.

A curious difference of opinion exists among fanciers of these stout Highland ponies as to what size they ought to be, and this year the Board of the Highland Society so far humored the two sides by opening two classes, one for what was called the "heavy" type, and the other for what was called the "light" type. It was left to the judge to classify them, if he was not satisfied with an owner's own effort in that direction. The judge was Lord Arthur Cecil, who now lives at the Mount Symington, Hants, in the extreme south of England, but has all his life been an eager breeder of Highland ponies. So far as one could judge by looking at the two classes, the difference between them is a matter of tweedledum and tweedledee. There is no real difference. So far as the heavier or the lighter character of the pony is concerned, the question is very much a matter of rearing. Those bred in the Outer Isles, where the conditions of existence are harder than on the mainland, are naturally not so heavy as those reared under more favorable auspices on the mainland. There is no essential difference between the real Highland ponies. There is a difference between those which have been crossed with the Arab or lighter Thoroughbred and those which have been kept pure. But the types then are of necessity different, and no one who wishes to perpetuate the genuine breed will cross them with an Eastern sire. Admittedly, sires are scarce, but with so many mares in the country, there should be little difficulty in securing sufficient sires to perpetuate the excellence of the breed. A typical Highland pony should be of a dun color, with a black stripe down the line of the backbone. This sort are proverbially hardy. One of such, owned by R. L. Thomson, who owns the Island of Eigg and the Strathaird estate in the Isle of Skye, was third in her class, and was sold for between £40 and £50 at the show. Many thought her the best in the show. They stand under 15 hands, a good useful height being 14.2 or thereby. They are thick, stout, short in the leg, and have well-laid shoulders, which enable them to trot well and carry a rider in comfort. Undoubtedly, this section made a great impression at the show this week.

Clydesdales were also phenomenally good. A better show of the breed has rarely been seen at the H. & A. S. shows. The feature was the triumph of the produce of Baron of Buchlyvie 11263, about which a costly litigation is pending before the House of Lords. He was sire of

all the four first-prizewinners in the stallion classes, and of the four, three are the property of and two were bred by his present owner, William Dunlop, Dunure Mains, Ayr. He was also the sire, and Mr. Dunlop is the owner, of the first-prize two-year-old filly, which has never yet been beaten in her class. These winning animals are, Bonnie Buchlyvie, which is owned by Robert Brydon, Seaham Harbour, and at one time owned by Mr. Dunlop; Dunure Footprint, Dunure Index, and The Dunure—stallions—with Dunure Myrene, a two-year-old filly. The championship for stallions went to The Dunure, which is without doubt one of the most phenomenal yearlings ever seen in the breed. He was bred by Messrs. Robertson, Clendrie, Kirkcolme, and his dam, Carina II., 16323, was got by the celebrated Hiawatha 10067. The Dunure was hired by the Central Aberdeenshire Horse-breeding Society for 1913, on remarkable terms, £10 10s. at service, and £10 10s. for a foal. Quite a number of the best breeding horses we have are already hired for 1913, but nothing like this hiring of a yearling has ever before been heard of. The champion female was Stephen Mitchell's Hiawatha mare, Boquhan Lady Peggie, the Cawdor Cup champion of 1910, and the reserve was J. P. Sleigh's first-prize three-year-old mare, Moira, by Baron's Pride, and the Cawdor Cup winner of 1909. The first-prize brood mare this year was J. Ernest Kerr's Cicely, by Baron's Pride, own sister to the noted champion at Peebles in 1906, Scottish Crest. She also won the Cawdor Cup, for which, as former winners, Boquhan Lady Peggie and Moira could not compete. The reserve for that coveted trophy was George Argo's fine mare, Royalette, by Royal Edward. She was first in the yield-mare class. Dunure Myrene was first two-year-old filly, and Stephen Mitchell's Nannie, by the young horse Apukwa, a son of Hiawatha, was first-prize yearling filly.

Highland Cattle, Shorthorns, and Black-face and Cheviot sheep, were other outstanding sections of this splendid show. Highland Cattle are in comparatively few hands. Their chief supporters are noblemen and land-owners in the Highlands who recognize that no other breed can, in many districts, give such a good account of themselves. One of the best folds is that of Craig Sellar, at Ardtonnish, in Western Argyllshire. They are splendid cattle, and the cow, Fuirny Queen, has been champion of the breed at the Highland three years in succession, certainly a unique record. The Earl of Southesk is also a keen patron of this most picturesque breed. His fold is to be found at Kinnaird Castle, Brechin, in Forfarshire. There the hardy breed find themselves under much more salubrious surroundings than in their moist habitat of the West Highlands. The Southesk cattle grow to a great size, and the yearlings are usually much more forward in condition and size than those bred in less favorable districts.

Blackface sheep are another striking feature of the national gathering. Mr. Horvatson, of Glenbuck, this year fairly eclipsed all his previous efforts, and showed a magnificent lot of shearlings by the Irish-bred ram, St. Columbia, for which he paid the record price of £250 at the Lanark sale two years ago. He secured champion honors with one of these, admittedly one of the greatest rams ever exhibited. The show Cheviot is still found to best advantage in the flock of John Elliot, Hindhope, Jedburgh. He secured nearly all the leading honors, and was extremely difficult to shake off. He was first in every class but one.

Canada has made a record in Ayrshire cattle, and breeders here are naturally jubilant at the results of the Maxville sale. An average of £67 5s. 5d. for 117 Ayrshires is something unheard of, and no one ever expected to see an Ayrshire bull sell for £520. These are figures usually associated with the Shorthorn, and Ayrshire men until now were content to think of them as something very far off from them. The prices for cows were surely equally noteworthy, £190, £175, £160, and £150, for Ayrshire cows, fairly makes one's mouth water. No doubt the attention now being paid to commercial value has had a sound effect in raising the value of the breed. The milk-record scheme has wrought wonders, and there can be no holding back now. Many who were lukewarm have now become enthusiastic. An Ayrshire is a dairy cow; therefore, she must be cultivated for dairy points. This is the whole philosophy of the business, and the sooner it is universally accepted, the better will it be for the breed at home, as well as abroad.

An important question has been raised here concerning the leakage in our bovine live-stock population. It is admitted that store cattle, or, as you term them, stockers, have been far too high in price, and that those who feed them for the markets as beef stand to lose a deal of money. There is no possibility of profit in cattle-feeding, when your lean cattle cost as much per pound as your fat. The leakage occurs in our calves. Mr. Gray, of Milfield, Alnwick, has proved that about half a million calves are every

year being sacrificed through being slaughtered immediately after birth. The Board of Agriculture has been approached on the subject, and the authorities admit that the situation is grave. Those who supply the public with milk do not wish to be bothered with calf-rearing. It is laborious work, and the sale of whole milk may possibly be less laborious and more remunerative. The calves are, therefore, sacrificed when four or five days old, making an unwholesome kind of cheap food which gives rise to a kind of nausea. The suggestion is that something should be done to make farmers and their wives and families and servants understand how to use milk substitutes in the rearing of calves. Many of these are on the market, and prove quite satisfactory. The saving of this half a million of calves annually would adjust the prices of store cattle and provide something like an adequate supply of these for all the feeders.

Unhappily we have again been handicapped by an outbreak of foot-and-mouth disease. The Board of Agriculture has been extremely active in stamping out outbreaks when they have appeared, but they have hitherto quite failed to discover the source of these outbreaks. And yet the average citizen has little difficulty in recognizing that the source must be found in the countries wherein the disease is never absent. The outbreaks have always taken place on the eastern seaboard, where intercourse with European countries in which the disease prevails is frequent. That the media of contagion are to be looked for in this intercourse seems undoubted, but no one is just quite sure where to lay the blame in a definite way. Helplessness in locating the source of contagion rather detracts from the zeal of the Board in stamping out the disease when it appears. Prevention is better than cure. "SCOTLAND YET."

Field Crop Competition.

OATS.—Prizewinners.

Middlesex North—Judge, I. B. Henderson, Guelph.

Name.	Address.	Variety.	Points.
1. Hughes Bros.	Falkirk	G. R. Abundance	85½
2. O'Neill Bros.	Falkirk	Hasket	82½
3. A. Stewart	Ailsa Craig	Banner	81
4. R. Cameron	Ailsa Craig	Hasket	79
5. A. E. Rosser	Ailsa Craig	Ligowa	78½
* C. Bean	Brinsley	Siberian	78
† M. Kilgus	Ailsa Craig	Great Dane	77½

* Highly commended. † Commended.

Middlesex East—Judge, R. E. Mortimer, Honeywood.

Name.	Address.	Variety.	Points.
1. K. Munroe	Glanworth	White Jewel	77½
2. Geo. Riddell	Wilton Grove	Banner	76
3. H. Wilson	Wilton Grove	White Jewel	72½
4. R. H. Harding	Thorndale	Swedish Giant	72
5. H. P. Tanton	Byron	Bumper King	71½
* Jno. Laidlaw	Wilton Grove	Irish White	71½
† D. Ferguson	Odell		70½

* Highly commended. † Commended.

Dr. Rutherford Eschews Politics.

Some of our readers may have been surprised to observe in a recent issue of a prominent newspaper a portrait of Dr. J. G. Rutherford (who recently tendered his resignation to the Minister of Agriculture), accompanied by an item stating that he was to enter politics in Alberta as leader of the opposition to the Sifton Administration. Inquiry by "The Farmer's Advocate" has elicited from Dr. Rutherford an express denial of the report that he intends to enter politics. He leaves the Federal agricultural service, however, on September 30th.

Up Goes Milk.

In consequence of short pastures and expensive cow-feeding, increasing the cost of production, milk has been advanced to nine cents for the quart bottle in Toronto, and bulk milk eight cents retail, the wholesale prices being one cent lower in each case.

The Crop-reporting Board of the Bureau of Statistics of the United States Department of Agriculture estimates, from the reports of the correspondents and agents of the Bureau, that the condition of the cotton crop on July 25th was 89.1 per cent. of a normal, as compared with 88.2 on June 25th, 1911; 75.5 on July 25th, 1910; 71.9 on July 25th, 1909, and 79.4 the average of the past ten years on July 25th.

D. A. Gordon, M. P., managing director of the Dominion Sugar Co., with factories for the manufacture of beet sugar at Wallaceburg and Berlin, Ont., announces that a 10,000-ton factory will be erected in Chatham for operation next season.

Dates of Fall Fairs, Ontario, 1911.

Following is a corrected list of Ontario fall fairs for 1911, as issued by the Agricultural Societies Branch of the Ontario Department of Agriculture, J. Lockie Wilson, Superintendent:

Aberfoyle	Oct. 3
Abingdon	Oct. 13, 14
Alfred	Sept. 26, 27
Alliston	Sept. 20, 21
Almonte	Sept. 5, 6, 7
Alvinston	Sept. 3, 4
Amherstburg	Sept. 20, 21
Ancaster	Sept. 26, 27
Arnprior	Sept. 7, 8
Ashworth	Sept. 29
Astoria	Sept. 20
Atwood	Sept. 21, 22
Aylmer	Oct. 4, 5, 6
Bancroft	Sept. 28, 29
Barrie	Sept. 25, 26, 27
Bayfield	Sept. 28, 29
Baysville	Oct. 4, 5, 6
Beachburg	Oct. 4, 5, 6
Beaverton	Oct. 3, 4
Belleville	Sept. 12, 13
Berwick	Sept. 21, 22
Bethel	Oct. 14
Blenheim	Oct. 2, 3
Blenheim	Oct. 5, 6
Blackstock	Sept. 26, 27
Bobcaygeon	Sept. 26, 27
Bolton	Oct. 2, 3
Bothwell's Corners	Sept. 28, 29
Bowmanville	Sept. 19, 20
Bradford	Oct. 17, 18
Brampton	Sept. 19, 20
Bridgen	Oct. 3
Brighton	Sept. 28
Brinsley	Oct. 6
Brockville	Sept. 5 to 8
Bruce Mines	Sept. 27
Brussels	Oct. 5, 6
Burford	Oct. 3, 4
Burlington	Oct. 5
Caledon	Oct. 5, 6
Caledonia	Oct. 12, 13
Campbellford	Sept. 26, 27
Carp	Oct. 4, 5
Castleton	Sept. 29, 30
Cayuga	Sept. 28, 29
Centreville	Sept. 16
Charlton	Sept. 19, 20
Chatsworth	Sept. 14, 15
Chesley	Sept. 19, 20
Clarksburg	Sept. 21, 22
Cobden	Sept. 28, 29
Coa Hill	Sept. 25, 26
Colborne	Oct. 3, 4
Collingwood	Sept. 27 to 30
Comber	Oct. 10, 11
Cookstown	Oct. 3, 4
Cooksville	Oct. 4
Cornwall	Sept. 7, 8
Delta	Sept. 25, 26, 27
Delaware	Oct. 4
Demorestville	Oct. 14
Desboro	Sept. 21, 22
Dorchester	Oct. 4
Drayton	Oct. 3, 4
Dresden	Sept. 28, 29
Drumbo	Sept. 26, 27
Dundalk	Oct. 12, 13
Dunville	Sept. 19, 20
Durham	Sept. 26, 27
Elmira	Sept. 26, 27
Elmvale	Oct. 2, 3, 4
Embro	Oct. 5
Elmsdale	Oct. 4
Elmo	Sept. 21, 22
Erin	Oct. 12, 13
Essex	Sept. 26 to 28
Exeter	Sept. 18, 19
Fenelon Falls	Oct. 4, 5
Fenwick	Oct. 17, 18
Fergus	Sept. 28, 29
Feversham	Oct. 3, 4
Florence	Oct. 5, 6
Fort Erie	Sept. 26, 27
Fort William	Sept. 12 to 15
Frankford	Sept. 14, 15
Frankville	Sept. 28, 29
Freelton	Oct. 4, 5
Galetta	Sept. 26, 27
Galt	Sept. 22, 23
Georgetown	Oct. 4, 5
Glencoe	Sept. 28, 29
Gordon Lake	Sept. 29
Gore Bay	Sept. 26, 27
Gracie	Oct. 7
Grand Valley	Oct. 17, 18
Gravenhurst	Sept. 14, 15
Guelph	Sept. 19 to 21
Hallburton	Sept. 28
Hamilton	Sept. 14 to 16
Harvey	Sept. 12, 13
Harriston	Sept. 28, 29
Harrow	Oct. 10, 11
Harrowsmith	Sept. 14, 15

Holstein	Oct. 3
Huntsville	Sept. 26, 27
Ingersoll	Sept. 19, 20
Inverary	Sept. 13
Jarvis	Oct. 3, 4
Kagawong	Sept. 28, 29
Keene	Oct. 3, 4
Kemble	Oct. 4, 5
Kemptville	Sept. 21, 22
Kilsyth	Oct. 5, 6
Kincardine	Sept. 20, 21
Kingston	Sept. 27, 28
Kinmount	Sept. 14, 15
Kirkton	Oct. 5, 6
Lakefield	Sept. 19, 20
Lakeside	Sept. 29
Lambeth	Oct. 3
Lanark	Sept. 7, 8
Langton	Oct. 14
Lansdowne	Sept. 21, 22
Leamington	Oct. 4, 5, 6
Lindsay	Sept. 21, 22, 23
Listowel	Sept. 19, 20
Lombardy	Sept. 16
London (Western Fair)	Sept. 8 to 16
Loring	Sept. 29
Lyndhurst	Sept. 14, 15
Maberly	Sept. 26, 27
Madoc	Sept. 27, 28
Magnetawan	Sept. 26, 27
Manitowaning	Oct. 2, 3
Matatawa	Sept. 27, 28
Markdale	Oct. 3, 4
Marmora	Sept. 18, 19
Markham	Oct. 4, 5, 6
Massey	Sept. 29
Maxville	Oct. 3, 4
Meaford	Sept. 28, 29
Merlin	Sept. 28, 29
Merrickville	Sept. 14, 15
Metcalfe	Sept. 19, 20
Middleville	Oct. 6
Midland	Sept. 28, 29
Mildmay	Sept. 25, 26
Milton	Sept. 26, 27
Milverton	Sept. 28, 29
Mitchell	Sept. 19, 20
Morrisburg	Aug. 30, 31, Sept. 1
Muncey	Oct. 5
McDonald's Corners	Sept. 28, 29
McKellar	Sept. 25, 26
Mt. Brydges	Oct. 6
Mt. Forest	Sept. 14, 15
Neustadt	Sept. 21, 22
Newboro	Sept. 2 and 4
New Hamburg	Sept. 14, 15
Newington	Sept. 18, 19
New Liskeard	Oct. 5, 6
Newmarket	Oct. 24, 25, 26
Norwich	Sept. 19, 20
Norwood	Oct. 10, 11
Niagara Falls	Sept. 28, 29
Oakwood	Sept. 25, 26
Odessa	Oct. 5
Oshweken	Oct. 4, 5, 6
Onondaga	Oct. 2, 3
Orangeville	Sept. 14, 15
Oro	Sept. 19
Orono	Sept. 14, 15
Oshawa	Sept. 11, 12, 13
Otterville	Oct. 6, 7
Owen Sound	Sept. 12, 13, 14
Paisley	Sept. 26, 27
Pakenham	Sept. 18, 19
Parham	Sept. 21, 22
Palmerston	Sept. 26, 27
Paris	Sept. 28, 29
Park Hill	Sept. 28, 29
Parry Sound	Sept. 20, 21, 22
Perth	Sept. 4, 5, 6
Peterboro	Sept. 14, 15, 16
Petrolia	Sept. 21, 22
Pinkerton	Sept. 22
Picton	Sept. 21, 21
Port Carling	Sept. 21
Port Elgin	Sept. 28, 29
Port Perry	Sept. 14, 15
Powassan	Sept. 27, 28
Prescott	Sept. 12, 13, 14
Providence Bay	Oct. 6
Queensville	Oct. 11, 12
Rainham Centre	Sept. 26, 27
Ramona	Oct. 4
Renfrew	Sept. 20, 21, 22
Richard's Landing	Sept. 28
Richmond	Sept. 29, 30
Ridgetown	Oct. 10, 11, 12
Ripley	Sept. 26, 27
Ripley's Mills	Oct. 7
Rocklyn	Oct. 5, 6
Rockton	Oct. 10, 11
Roseneath	Sept. 28, 29
Sarnia	Sept. 26, 27
Sault Ste. Marie	Sept. 20 to 22
Seaford	Sept. 21, 22
Shannonville	Sept. 16
Shequindah	Oct. 4, 5
Shelburne	Sept. 26, 27
Schomberg	Oct. 12, 13
Simcoe	Sept. 17 to 19
Smithville	Oct. 5, 6

South Mountain	Sept. 7, 8
South River	Sept. 26, 27
Spencerville	Sept. 26, 27
Springfield	Sept. 28, 29
Sprucedale	Sept. 26, 27
Stella	Sept. 26
Stirling	Sept. 21, 22
St. Mary's	Sept. 26, 27
Stratfordville	Sept. 20
Stratford	Sept. 14, 15
Sturgeon Falls	Sept. 22, 23
Strathroy	Sept. 18, 19, 20
Streetsville	Sept. 29
Sunderland	Sept. 19, 20
Sundridge	Oct. 3, 4
Sutton West	Sept. 28, 29
Tara	Oct. 3, 4
Tavistock	Sept. 18, 19
Teeswater	Oct. 4, 5
Thamesville	Oct. 2, 3, 4
Thedford	Oct. 3, 4
Thessalon	Sept. 26
Thorndale	Sept. 25, 26
Thorold	Sept. 19, 20
Tillsonburg	Sept. 13, 14, 15
Tiverton	Oct. 3
Toronto (Can. Nat.)	Aug. 26 to Sept. 11
Tweed	Oct. 4, 5
Underwood	Oct. 10
Utterson	Oct. 3, 4
Vankleek Hill	Sept. 19 to 21
Verner	Sept. 19, 20
Walkerton	Sept. 13 to 15
Wallaceburg	Sept. 26, 27
Wallacetown	Sept. 28, 29
Walter's Falls	Sept. 26, 27
Walsh	Oct. 20
Warford	Oct. 5, 6
Watford	Sept. 20, 21
Waterford	Oct. 5
Welland	Oct. 3, 4
Wellandport	Sept. 29, 30
Wellesley	Sept. 12, 13
Wellington	Sept. 29, 30
Wheatley	Oct. 2, 3
Wheatley	Oct. 26, 27
Williamstown	Sept. 20, 21
Winchester	Sept. 5, 6
Windsor	Sept. 25 to 29
Wingham	Sept. 28, 29
Woodbridge	Oct. 17, 18
Zephyr	Oct. 10
Zurich	Sept. 20, 21

A. W. Smith, Maple Lodge, Ont., whose advertisement runs in this paper, writes: "I have a grand lot of Lincolns this year, several of them in good show fit, both rams and ewes. Have sold several small bunches, and full flocks, to parties in different parts of Canada and the United States. Have a very fine lot of young rams and ewes for sale yet. The young Shorthorn bulls are doing splendidly. Will tell you about them later."

An interesting feature of the after-lunch programme at the thirteenth annual sale of Lincoln rams, from the Ribby Grove flock of Henry Dudding, of Lincolnshire, was the presentation to Mr. Dudding of his portrait in oils, by his fellow breeders, in recognition of his fifty years work as a tenant-farmer live-stock breeder. Another presentation followed, which showed the good nature of Mr. Dudding, who, when asked to sit for his own portrait, made it a stipulation that Richard Aves, the shepherd, should also sit for his. Dick, in acknowledging the presentation, said it was his master's fiftieth year of farming, and his own fifty-sixth year of showing, and only once during that period had he come from the Royal Show without a first prize.

The Society of British Border Leicester breeders were to have an important question about names before them at their annual meeting. It is proposed by the Council that where a territorial or local name be given to a ram, it shall be that of his breeder, and not that of his present owner. There can be no doubt that this is, in the main, a sound proposition. A ram, like a "cut" of ewes or ewe lambs, derives a large part of his value from the character of the flock out of which he has come, and his name should indicate the place or flock of his birth. The question of nomenclature is a puzzling one in all breed societies. The system of local prefixes or affixes adopted in the Shire and Hackney Societies is not altogether happy. Some place-names are all right as parts of a name, but all are not so, and one sympathizes with the owner of an unfortunate stallion or mare compelled to bear through life the somewhat unpropitious title derived from the place of its birth. Still, the Border Leicester men are on safe ground when they propose that when such names are given, they must indicate the flock of birth rather than the accident of ownership.

GOSSIP.

SALE DATES CLAIMED.

Sept. 7th.—At Union Stock-yards, West Toronto, Thompson Porter, 1520 St. Clair avenue, Toronto; Jerseys.
Sept. 20th.—Combination sale of Short-horns, at Woodstock, Ont.

Goodfellow Bros., Macville, Ont., report their Oak Lane herd of Shorthorns in nice condition though pastures are not very good. Their hay crop, on under-drained land, after fall wheat and roots, cut off about 2½ tons per acre, the rest of their hay about 1½ tons.

Robert Graham, of the Graham-Renfrew firm of importers of Clydesdale and Hackney horses, at Bedford Park, Toronto, is now in Scotland making selections for a new importation. They report having had a good year, and are practically sold out of Clydesdales, but have a few ponies yet on hand. On Mr. Graham's return, information regarding the new importation may be found in these columns.

Attention is called to the advertisement in this issue of the dispersion sale by auction of the Blackhall Clydesdale stud of the late David Riddell, to take place on August 31st, at Blackhall, Paisley, Scotland, when over 90 head of stallions, mares, colts and fillies will be disposed of. Judging from the reputation and record of Mr. Riddell, this sale should furnish a rare opportunity to secure high-class Clydesdales.

DEATH OF DR. WM. MOLE.

Dr. Wm. Mole, M. R. C. V. S., of Toronto, died on Sunday, August 6th, from arterial disease and nervous breakdown, his illness being very brief. He practiced originally in London, Eng., but located in Hamilton, Ont., in 1890, and in Toronto in 1892. He rendered valuable services to the Dominion Veterinary Department, the Humane Society, and other organizations, and for several years contributed to "The Farmer's Advocate," and other publications on professional subjects.

PROLIFIC DORSETS.

A correspondent, A. S. Forster, Halton Co., Ont., writes: "Some persons rather laugh at the idea of even Dorset Horn ewes having lambs twice a year in Canada. It is a common thing in England, and experience proves that a few Dorset ewes will give birth to lambs twice a year here. On the Forster Farm, at Oakville, Ont., a ewe lambed four times in two years, but the dates were not kept in all cases owing to the lambs being sold at Easter and Christmas. Here are two cases that can be proven by dates: On May 18th, 1910, a ewe had a single lamb, and another on November 13th, just five days less than six months later. This ewe dropped another lamb on May 11th, 1911, being two days less than six months from the last yearling. This was three lambings in seven days less than a year. There was a single lamb each time. Another Dorset ewe gave birth to twins on November 4th, 1910, and to another pair on May 5th, 1911, being one day over six months later. She raised both pairs of lambs. Other ewes lambed seven and eight months apart, and some three times in two years. The three ewes referred to above kept in fair field flesh all the time."

TRADE TOPICS.

A farm consisting of eighty-six acres of good clay loam soil, and on which are two good houses, large bank barn, with good stabling and other outbuildings, together with seven acres of hardwood bush, is advertised for sale in this issue. This farm is situated adjoining the town of Preston, Waterloo County, and will be sold by tenders, to be in by October 1st. For particulars, apply to Box 105, Preston, Ont.

THE CANADIAN BANK OF COMMERCE

ESTABLISHED 1867.

Capital paid-up, \$10,000,000.
Reserve, \$8,000,000.

The Canadian Bank of Commerce extends to farmers every facility for the transaction of their banking business, including the discount or collection of sales notes. Blank sales notes are supplied free of charge on application.

Accounts may be opened at any branch of The Canadian Bank of Commerce to be operated by mail, and will receive the same careful attention as is given to all other departments of the Bank's business. Money may be deposited or withdrawn in this way as satisfactorily as by a personal visit to the Bank.

MARKETS.

Toronto.

LIVE STOCK.

At West Toronto, on Monday, August 7th, receipts of live stock numbered 132 cars, consisting of 2,500 cattle, 484 hogs, 496 sheep, 41 calves; quality of cattle was medium to good; trade steady, at last week's prices. Exporters, \$5.80 to \$6.25; prime picked butchers', \$5.80 to \$5.90; good, \$5.50 to \$5.75; medium, \$5.25 to \$5.40; common, \$4.50 to \$5.25; cows, \$2.75 to \$4.80; milkers, \$4 to \$60; veal calves, \$4 to \$7 per cwt. Sheep lower, \$3.50 to \$4.25; lambs, \$5.50 to \$6.50 per cwt. Hogs, \$7.75 fed and watered, and \$7.40 f. o. b. cars.

REVIEW OF LAST WEEK'S MARKETS

The total receipts of live stock at the City and Union Stock-yards for the past week were as follows:

	City.	Union.	Total.
Cars	229	321	550
Cattle	2,559	4,797	7,356
Hogs	4,676	5,082	9,758
Sheep	4,282	2,453	6,735
Calves	792	162	954
Horses	45	89	134

The total receipts of live stock at the two markets for the corresponding week of 1910 were as follows:

	City.	Union.	Total.
Cars	128	152	280
Cattle	1,193	2,495	3,688
Hogs	2,224	1,754	3,978
Sheep	2,028	909	2,937
Calves	493	161	654
Horses	—	79	79

The combined receipts for the past week at the City and Union Stock-yards, show an increase of 270 car loads, 3,668 cattle, 5,780 hogs, 3,780 sheep and lambs, 300 calves, and 55 horses, when compared with the corresponding week of 1910.

All classes of live stock were well represented on both markets as regards numbers. Trade for the best butchers' and exporters was steady to firm, but the common and medium in both classes were easy, at 10c. to 15c. per cwt. lower, and cows were from 15c. to 30c. per cwt. lower.

Exporters.—Steers for London market sold at an average of about \$6, and a range of \$5.90 to \$6.25. Liverpool steers sold at an average of about \$5.90, or a range of \$5.75 to \$6. There would be about 1,200 cattle bought for export.

Butchers'.—Prime picked butchers' sold from \$5.90 to \$6; good, \$5.65 to \$5.85; medium, \$5.30 to \$5.60; common, \$5 to \$5.25; cows, \$2.50 to \$5; bulls, \$3.75 to \$5.

Stockers and Feeders.—Receipts light, but quite equal to the demand. Stockers sold at \$4.25 to \$4.50, and feeders at \$4.75 to \$5, for steers 800 to 900 lbs.

Milkers and Springers.—Trade dull for milkers, while choice early springers were in fair demand. Prices ranged from \$35 to \$65 each.

Veal Calves.—Prices for veal calves were from 25c. to 50c. per cwt. lower at the close than they were at the beginning of the week. Prices ranged from \$4 to \$7.50 per cwt. Receipts were liberal.

Sheep and Lambs.—Receipts of sheep and lambs were large, of which 1,426 were brought in from Chicago and Buffalo. Ewes sold at about \$4 to \$4.25 for light, and \$3.50 to \$3.75 for heavy; rams, \$3 to \$3.25. Yearling American wethers sold from \$5 to \$5.50.

Hogs.—As a rule, hogs have been sold about 10c. per cwt. lower than last week. The Swift Canadian Company paid \$7.75 for hogs fed and watered. The other firms paid \$7.35 to \$7.40 for hogs f. o. b. cars at country points, and \$7.60 to \$7.65, and in some instances \$7.75 per cwt., for hogs fed and watered at the market.

BREADSTUFFS.

Wheat.—No. 2 red, white or mixed, 80c. to 81c., outside points. New wheat, 78c. Manitoba No. 1 northern, \$1.01; No. 2 northern, 99c.; No. 3 northern, 97c., track, lake ports. Rye—No. 2, 68c. to 70c., outside. Oats—Canadian Western oats, No. 2, 40½c.; No. 3, 39c., lake ports; Ontario, No. 2, 39c.; No. 3, 30c., outside. Barley—For malting, 67c. to 68c.; for feed, 50c. to 56c., outside. Buckwheat—51c. to 53c., outside. Corn—No. 2 yellow, 66½c., on track, bay ports. Peas—No. 2, 78c. to 80c., outside. Flour—Ontario ninety-per-cent. winter-wheat flour, \$3.30, seaboard. Manitoba flour—Prices at Toronto: First patents, \$5.10; second patents, \$4.60; strong bakers', \$4.40.

HAY AND MILLFEED.

Hay.—Baled, in car lots, track, Toronto, No. 1, \$13.
Straw.—Baled, in car lots, \$6 to \$6.50, track, Toronto.
Bran.—Manitoba bran, \$21 per ton; shorts, \$23; Ontario bran, \$22 in bags; shorts, \$24, car lots, track, Toronto.

COUNTRY PRODUCE.

Butter.—The market continued firm. Creamery pound rolls, 23c. to 24c., with Locust Hill leading, at 27c.; creamery solids, 24c.; separator dairy, 22c. to 23c.; store lots, 17c. to 18c.
Eggs.—Market firmer, at 24c. per dozen for case lots.
Cheese.—Large, 13c.; twins, 13½c.

Honey.—New honey is beginning to come on the market, and extracted sold at 11c. to 12c. per lb.
Beans.—Broken lots, \$1.85 to \$1.95 for hand-picked.

Potatoes.—American potatoes, wholesale, \$4.40 per barrel. Farmers sold potatoes on the Toronto market at \$1.50 per bushel.
Poultry.—Chickens alive, 18c.; dressed, 22c.; hens, 12c. alive; dressed, 14c.; ducks alive, 13c. to 14c., and 16c. to 18c. dressed. Receipts moderate.

HIDES AND SKINS.

E. T. Carter & Co., 85 East Front street, have been paying the following prices: No. 1 inspected steers and cows, 12½c.; No. 2 inspected steers and cows, 11½c.; No. 3 inspected steers, cows and bulls, 10½c.; country hides, cured, 11½c.; green, 10½c.; calf skins, 12c. to 15c.; lamb skins, 35c. to 50c. each; horse hides, No. 1, \$3; horse hair, per lb., 33c.; tallow, No. 1, per lb., 5½c. to 6½c.; wool, unwashed, per lb., 11c. to 14c.; washed, 18c. to 20c.; rejects, 14c. to 15c.

FRUITS AND VEGETABLES.

The Dawson-Elliott Company, wholesale fruit, produce and commission merchants, corner West Market and Colborne streets, week prices declined and have remained about as follows: Raspberries, 14c. to 15c.; Lawton berries, 13c. to 18c.; gooseberries, \$1.50 per basket; red currants, \$2 per basket; black currants, \$2; watermelons, 45c. to 50c. each; cucumbers, 30c. per basket; tomatoes, \$1.25 to \$1.75 per basket; cabbage, crate, \$2.25; apples, per basket, 30c. to 50c.

Montreal.

Live Stock.—Exports of live stock from the port of Montreal amounted to 925 head of cattle during the week ending July 29th, being a falling off of 1,112 head for the week. Northwest ranch cattle are beginning to arrive on the local market. They are in good condition, everything considered. The market, too, has been holding fairly firm, in view of good offerings and hot weather. Some choice steers sold up to 6½c. per lb., but the bulk of the trading was at 6c., fine being about 5½c. to 6c., good 5½c. to 5¾c., medium being 4½c. to 5c., and com-

mon down to 3½c. per lb. There was a fairly good demand for small meats, and prices held steady, being \$4.50 to \$6 each for sheep, and \$3.75 to \$5 for lambs, while calves were from \$3 to \$9 each. Hog prices have been higher, and sales of selects have been made at 8c. per lb., although afterwards 7½c. was the best that could be done, and only 7½c. was being offered by some.

Horses.—Heavy draft horses, weighing from 1,500 to 1,700 lbs., \$300 to \$350; light draft, 1,400 to 1,500 lbs., \$225 to \$300; light horses, 1,000 to 1,100 lbs., \$100 to \$200; inferior, broken-down animals, \$50 to \$100; choicest carriage and saddle animals, \$350 to \$500 each.

Dressed Hogs.—Abattoir-killed hogs, 10½c. to 10¾c. per lb.

Eggs.—Dealers still pay 14½c. in the country, plus ½c. to buyers, and the loss on the bad and cracked stock is sometimes very large. The eggs seem now to be divided into two classes, No. 1 candled, or cooking eggs, which sell to grocers at 20c. per dozen, and selects, which sell at 24c. per dozen.

Butter.—Market held very firm, as high as 23½c. per lb. having been paid in the Townships this week. Dealers report finest at 24c., and some say 24½c., wholesale, for export, and at 25c. in single packages.

Cheese.—Shipments of cheese for the season, to date, amounted to 863,000 boxes, or 15,000 more than a year ago. Those for the week amounted to 69,000 packages, or 3,000 less than for the corresponding week of last year. Finest Westerns quoted as high as 12½c. per lb., although 12½c. is said to be more general. It is likely that sellers would not want to part with much at the latter figure. Easterns are ½c. to ¾c. less than Westerns.

Grain.—No. 2 Canadian Western oats quoted at 42½c. to 43c. per bushel, car lots, ex store; No. 1 feed, extra, 42c. to 42½c.; No. 3 Canadian Western, 41½c. to 42c. per bushel.

Flour.—Manitoba spring wheat patents quoted at \$5.30 per barrel, for firsts, and \$4.80 for seconds, and \$4.60 for strong bakers'. Ontario patents sold at \$4.50 to \$4.75 per barrel, and straight rollers at \$4 to \$4.10.

Millfeed.—Manitoba bran quoted at \$20 to \$21, shorts being \$23 per ton, in bags. Ontario middlings were \$22.50 to \$23, pure grain mouille being \$30 to \$31, and mixed mouille being \$25 to \$28.

Hay.—No. 1 hay sold at \$13 to \$14 per ton, No. 2 extra hay being \$12 to \$12.50 per ton, No. 2 ordinary being \$10 to \$10.50, No. 3 being \$9 to \$9.50, and clover mixed \$8 to \$8.50.

Hides.—Dealers quote 9c., 10c. and 11c. per lb. for Nos. 3, 2 and 1 hides, respectively, and 13c. and 15c. for Nos. 2 and 1 calf skins, and selling to tanners at ½c. advance. Lambskins were quoted at 30c. each, and horse hides at \$1.75 and \$2 each, as to quality. Tallow, steady, at 6½c. to 7c. per lb. for rendered, and 1½c. to 4c. for rough.

Cheese Markets.

Watertown, N. Y., 11½c. to 12c. Montreal, Que., butter, 23½c. Campbell, Ont., 12 3-16c. to 12½c. Sterling, Ont., 12½c. Madoc, Ont., 12½c. to 12 5-16c. Peterboro, Ont., 12 5-16c. Vankleek Hill, Ont., 12½c. to 12 5-16c. Brockville, Ont., 12½c. Kingston, Ont., 12½c. to 12½c. Ottawa, Ont., 12 5-16c. Napanee, Ont., 12½c. to 12 5-16c. Winchester, Ont., 12 1-16c. Picton, Ont., 12 5-16c. to 12½c. Brantford, Ont., 12 1-16c. to 12½c. Victoriaville, Que., 11½c. Kemptville, Ont., 12½c. Cornwall, Ont., 12½c. to 12½c. London, Ont., 11½c. to 12 3-16c. Cowansville, Ont., 12½c.; butter, 24c. Canton, N. Y., 12½c.; butter, 26c. Belleville, Ont., 12½c., 12 5-16c., 12½c. St. Hyacinthe, Que., 11½c.; butter, 23½c.

Chicago.

Cattle.—Beeves, \$5 to \$7.35; Texas steers, \$4.40 to \$6.10; Western steers, \$4 to \$6.10; stockers and feeders, \$3 to \$5.35; cows and heifers, \$2.10 to \$5.85; calves, \$5.50 to \$7.75.
Hogs.—Light, \$6.95 to \$7.55; mixed, \$6.85 to \$7.52½; heavy, \$6.60 to \$7.45; rough, \$6.60 to \$6.85; good to choice hogs, \$6.85 to \$7.45; pigs, \$5.70 to \$7.30; bulk of sales, \$7 to \$7.35.
Sheep and Lambs.—Native, \$2.25 to \$4; Western, \$2.50 to \$4.10; yearlings, \$3.75

A Savings Account in the

BANK OF TORONTO

is both safe and profitable, and in addition is a very great convenience and help to all who are trying to live on less than their income.

This Bank's large resources ensure safety, and careful attention is given to the business of all customers.

Interest paid on all balances twice a year.

THE BANK OF TORONTO

Head Office: Toronto, Can.

Capital, \$4,000,000
Reserved Funds, \$4,944,777
Assets, \$50,000,000

Incorporated - - - 1855

to \$4.80; lambs, native, \$8.75 to \$6.90; Western, \$4.25 to \$7.

Buffalo.

Cattle—Prime steers, \$6.90 to \$7.25; butcher grades, \$3 to \$6.50.
Calves—Cull to choice, \$5 to \$9.
Sheep and Lambs—Choice lambs, \$6.35 to \$6.50; cull to fair, \$4.50 to \$5; sheep, \$2 to \$4.25.
Hogs—Yorkers, \$7.80; pigs, \$7.70 to \$7.75; stags, \$7.80; mixed, \$7.65 to \$7.70; heavy, \$6 to \$6.50; roughs, \$5 to \$5.50.

British Cattle Markets.

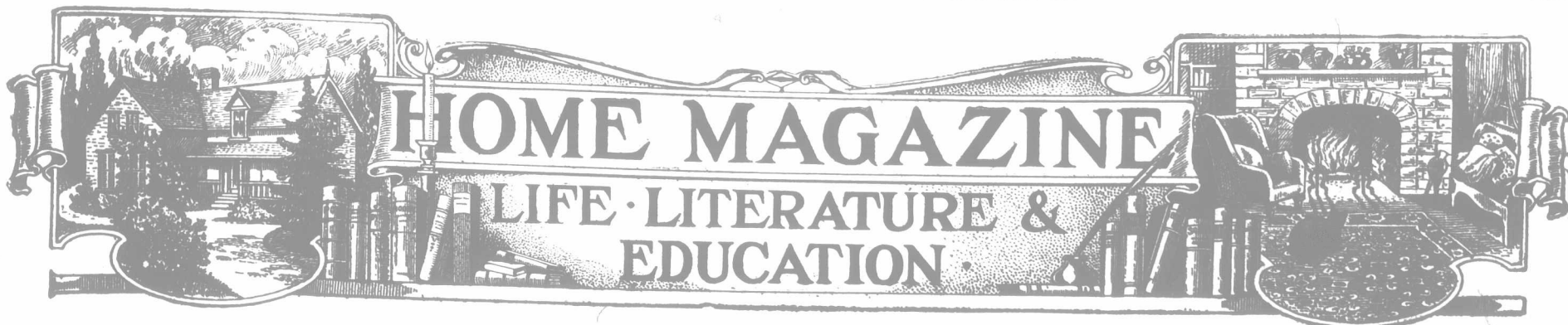
John Rogers & Co., Liverpool, cable States steers making from 12½c. to 13½c., and Canadians from 12½c. to 13c. per pound.

At a sale of Shorthorns on July 20th, from the Holme Pierrepont herd, Nottingham, England, 52 head sold for an average of \$405. The highest price, \$2,500, was paid for the cow, Adolfin Regal Mary, purchased by McClymont Reid. The second highest price was \$1,600, for Lady Millicent, taken by Captain Behrens. Her bull calf, by Duke of Kingston 2nd, sold for \$1,000.

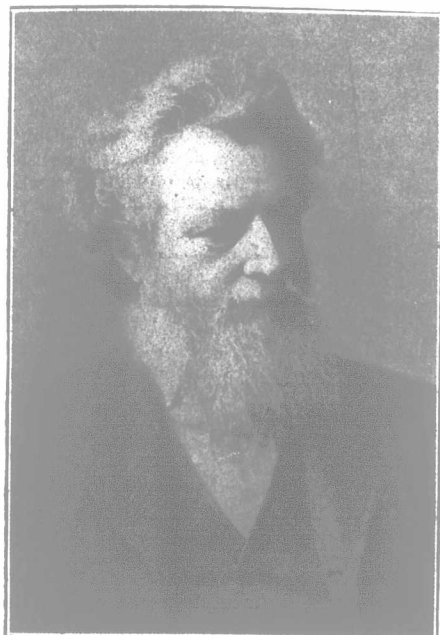
J. B. Hogate, of Weston, Ont., who is now in France, writes that he has succeeded in buying one hundred head of high-class Percherons in that country. These horses range in age from four months to five years, and a number of them weigh a ton each. Fifty head of them were shipped from Havre on August 6th, and are expected to be in the stables at Weston about August 15th. Mr. Hogate purposes showing thirty head of these horses at Toronto Exhibition, also at Ottawa and London. This will be an attractive exhibit, and horsemen should not fail to see it. The remaining fifty will arrive later, along with some Clydesdales which Mr. Hogate is importing.

About two thousand dollars will be spent in building a concert hall and enlarging the class rooms and sleeping accommodation at Balm Beach College in Toronto. Each pupil is to have a private room, and every attention is given to hygienic and homelike living. This school for young ladies is one of the youngest in Toronto, and has established a reputation which justifies the expansion now in progress. The college is situated near the lake, and away from the center of the city, and with its pleasant surroundings, up-to-date improvements, and efficient staff, with Mrs. Curtice the Directress and founder of the school, who has high ideals of womanhood, and is an experienced educationalist, this school has many attractions for young girls.

O what a glory doth this world put on For him who with a fervent heart, goes forth Under the bright and glorious sky, and looks On duties well performed, and days well spent! —Longfellow.



Little Trips Among the Eminent Writers.



William Morris.

Perhaps no name is more familiar to the furniture-dealer or the furniture-buyer than that of William Morris, chiefly because of the supposition that he was the inventor of the well-known "Morris" chair. As a matter of fact, Morris had nothing to do with this chair, which has been given his name, merely because it was said to be designed in recognition of his principle that everything we use should be "useful and beautiful, strong and true." Even had he designed the chair, the thread must surely have been a slender one upon which to hang the fame of a man whose influence has already affected many of the homes of two continents, and is likely, in time, in its ever-growing progress, to creep across every threshold where civilization reigns. Although he received his inspiration from the teachings of Ruskin, William Morris was practically the father of a school of good taste, which has ever since sought to promote honesty and beauty in commonplace things. His life was devoted, in short, to the founding of true art in the home, yet he was also an apostle of a message deeper, if less immediately evident—an apostle who was to show by actual work the value of much that Ruskin had had time to advance only in beautiful theory.

William Morris was the third of nine children, and was born at Walthamstow, Essex, England, on March 24th, 1834. He appears to have shown remarkable mental ability even from babyhood, for we are told that at four years of age he was already "deep in the Waverley novels." In his case, also, was the truth of the adage, "The child is father of the man," very strikingly exemplified. Even in the early years of his life, while still but a very small boy, he was much given to rambling about among the many old churches of Essex, dreaming over the old Norman masonry of which parts of many of them are composed, and learning to love the Medieval ages, to which, all his life, he looked back as the golden era of England. From these ages, at a later day, he took many of the ideas which he utilized in modern design.

In 1848 he went to Marlborough College, but was by no means an

ideal student, choosing to spend what seemed far too much of his time "idly" in the forests of Savernake and Epping. Possibly even to himself these seemed idle days, and yet here, perhaps, he learned much of the forms of tree, and vine, and flower which came so readily to his fingertips in later life.

On leaving Marlborough College, he went up to Oxford, with the intention of taking holy orders, but was from the first disgusted with the morals and methods of the great University, then, perhaps, in urgent need of reform. While there, however, he fell in with that coterie of young artists and literary men with whom (notably Burne-Jones) he formed such strong personal friendships, and who were destined to exert so great an influence over his life. He was described at this time as being handsome, erratic, passionate, with a tremendous capacity for the sort of work which suited him, and a strong distaste for that which did not. All his life, indeed, he held it as a settled tenet that people should only work at "what they had a turn for."

After spending some time at the University, he and Burne-Jones decided to leave it. Burne-Jones to enter on his career as a painter, Morris to throw up his intention of taking holy orders, and become an architect. With characteristic impulsiveness, the latter at once communicated his resolution to his family, who, by no means democratic in sympathy, received his intimation with an outcry of indignation. "I do not hope to be great at all in anything," he had written, "but think I may look forward to reasonable happiness in my work." He had, moreover, referred to this work as a useful "trade"—insult upon injury!

The result of the storm was that Morris decided to finish his course at Oxford. Before leaving it he became instrumental in founding the Oxford and Cambridge Magazine, to which he contributed much both in prose and verse—wield, medieval romances for the most part, a series of pictures like mystic and gorgeous embroidery, filled with the glint of "red" and "gold," and containing but little philosophy. Morris was at no time, indeed, a philosopher, in the ordinary sense of the term. He was erratic, impulsive, versatile, positive. Things came to him by a sort of instinct, rather than by the slower process of balancing and reasoning. He was never greatly given to probing either his own mind or the minds of others; it was enough for him to enjoy life, to be generous, to think nothing at all of himself and much of the welfare of others; to exult in the beauties of literature and of art, especially of that art of which he became practically the creator.

During this last period at the University, he and Burne-Jones made several trips to the Continent, where they gloried in studying the grand old cathedrals and great specimens of art in Belgium and France. The longest of these trips was essayed, we are told, on foot, for the purpose of minimizing expenses, Morris, with a fine delicacy, embracing poverty because his friend was poor. At Amiens, however, he went lame, and, after gaily attempting to continue the journey in carpet-slippers, was compelled to urge that the way to Chartres be completed in the ordinary manner, but furiously contending that Paris should be skirted, "so as

not to see the streets of it." On this trip the young students became deeply immersed in the study of Ruskin, and Morris, in particular, became steeped in the ideas of art as the expression of man's pleasure in his toil, and of beauty as "the natural and necessary accompaniment of productive labor," which exercised so strong an influence over his life.

Shortly after their return, Burne-Jones fell under the influence of Rossetti, then in London, and soon afterwards he and Morris took rooms at 17 Red Lion Square, giving up all of their time to studying painting under the illustrious Italian. Of their life here, Burne-Jones wrote: "Topsy and I live together in the quaintest rooms in all London, hung with brasses of old knights and drawing of Albert Durer." The furniture was, for the most part, made to the order of Morris, and was heavy and massive, with broad spaces, upon which he, Rossetti and Burne-Jones painted scenes from Chaucer, Dante, and the Arthurian legends. . . . In London, Burne-Jones had found his work, but Morris not yet.

Of the enthusiasm and impulsiveness of the young artists at this time, the following incident is an example: On making an excursion to Oxford, Rossetti and Morris were shown a new Debating Room which had been built as an annex to one of the University buildings. Immediately they were fired with an inspiration to donate a decoration for the room, and, without considering the practicability of the scheme, devised a plan for illuminating a blank space around the gallery with scenes from Morte d'Arthur. Several other young artists became interested in the scheme, and soon all were engaged in the work, which progressed gaily, but, alas, upon a surface which had been smeared with a lime-wash. As a result, the water-colors faded within a very few weeks to an indistinguishable blur.

Morris' stay in Oxford was not, however, to be void of importance to him, for it was during this time that he met Jane Burden, who afterwards became his wife, and whose "tragic, mystic, passionate, calm, beautiful face" became a favorite model for both Rossetti and Burne-Jones. She and Morris were married in 1859, and went to live in the beautiful "Red House," with which their name was for several years associated. It was built of red brick, was distinctively Gothic, with narrow, small-paned windows, "which made you think that you were at least indoors on a cold day," and was surrounded by a quaint old garden filled with trees and flowers. The furniture was all designed by Morris—strong, yet light and beautiful chairs, "which could be moved," and massive tables, "that will keep steady when you work on them." The walls were covered with paper and tapestries, also made to order: on some of them were painted scenes from the life of Sire Degravant, while up the stairway ran a series representing incidents in the War of Troy.

Shortly after Morris' marriage, the firm of "Morris, Marshall, Faulkner & Co."—destined to be later the firm of "William Morris"—was originated. It was proposed, almost as a joke, at one of the evening meetings which these erratic and talented young men were wont to hold for conversation and enjoyment, but presently took actual form in a "shop," at which it was proposed not only to "give

real good taste," but at the price, "as far as possible, of ordinary furniture." The firm consisted of those mentioned, and, of course, Rossetti and Burne-Jones; Morris, having more money and time than the rest, was appointed manager.

The experiment soon proved, however, that to Morris, at least, it was by no means to present the face of a joke. With his passion for beauty and sincerity, he saw more clearly than the others—who were more interested in purely pictorial art—the ugliness in the homes and lives of the people, and recognized in this "shop" an opportunity for warfare against it. He had found his work. He would create in the people a taste for the beautiful, and then strive to satisfy that taste by actually manufacturing those things which must appeal to it. Incidentally, in connection with this ideal, became embodied the great underlying principle of which he was to become, later, the apostle.

Mural decorations, carving, stained glass, metal work, furniture, embroidery, stamped leather, tiles, carpets, wall-papers and tapestries, were all to be designed at this "shop," which, almost from the beginning, proved a financial success, and speedily developed into an extensive manufacturing establishment. Its popularity was, in fact, assured from the great exhibition of 1862, at which several examples of work were shown, "at the cost," as Faulkner wrote, "of more swearing and tribulation to Topsy than three exhibitions will be worth," but with the result that medals were won by the Morris Company in almost every department.

The designs for everything produced were made by the members of the company, and were exclusive of their kind, created to suit the rooms in which the articles were to be used. Everything was constructed for real beauty and durability, not merely with a superficial quality which might attract "sales." Morris, however, was the only one of the firm who took actual part in the handling of the establishment. His tremendous vitality would not permit him to be idle, and when not busy at drawing or painting designs, it was his habit to plunge into any work whose interest was at that moment paramount in his mind. He made himself, in fact, master of every craft (save designing for stained glass, which he left chiefly to Rossetti and Burne-Jones) undertaken in the establishment. Interest in the work, indeed, became an obsession with him, and he was often to be found at the looms exultantly bringing out a new pattern, at five o'clock in the morning. It is told of him, also, that he was quite in the habit of presenting himself at any hour at the houses of his friends, with hair awry, and wearing his workman's blouse steeped in indigo, but with a face full of the most cheerful self-forgetfulness in the world.

Out of this enjoyment in his work there grew his message, THAT PLEASURE IN ONE'S WORK IS THE TRUE SECRET OF HUMAN HAPPINESS. This creed he preached by example, by pamphlet, and by lecture, at every opportunity, for the rest of his life. Men should take pride in their work, and make it the best of its kind; they should only labor at that in which they can find enjoyment. Hand-work should not be confined to certain classes, but every artist should be a workman,

and every workman an artist. Machine work should be superseded, as far as advisable for the individual, by hand-work. Men's hands should ever be guided by their brains, and every article for clothing or household furnishing should be an expression of the personality of the man who made it. "Piece-work" he did not favor. It was, he thought, with Ruskin, a workman's right to see an article grow into completion under his own hands, and it should be his joy to recognize it, in some way, as an expression of himself. . . . Above all things, the workman should be honest. Veneered furniture, cheap, machine-made designs plastered in unadulterated ugliness upon plain surfaces, which might otherwise have possessed at least the virtue of dignity, were an especial abhorrence to Morris; but he hated these things, perhaps, more for their effect upon the men who made them than upon those who bought and used them. Aniline dyes, too, he would not tolerate in his mills. They were to him "dishonest," and ruinous to art, so he used, instead, soft vegetable colorings which could not look ugly, even when faded. Honesty, simplicity, repose, were the creeds that he preached, both by word and by example, in the things that left his workshops; yet he was by no means the exponent of such an absolute severity as has been popularly ascribed to him; indeed, some of his designs for wall-papers, etc., have been criticised for excessive intricacy, although for no lack of beauty.

Hearty manual labor, thus invested with individual interest, was to Morris, in short, the most interesting and most pleasant thing in the world. No such labor could be to him dull. He felt this and acted it, and to this attitude, no doubt, may be attributed much of the success of his manufacturing. Merely to be with him was an inspiration which brought out the best efforts of his employees. He believed, too, in giving workmen beautiful buildings to work in, pleasant homes, and working hours short enough to leave time and inclination for recreation and mental improvement, and proved that his belief was no mere sentiment by removing his mills, just as soon as the business came into his own hands, to a pleasant situation on the banks of the Wandle, where there was "water fit to dye with," a walled garden with flowers, and cottages where his employees might breathe good fresh air.

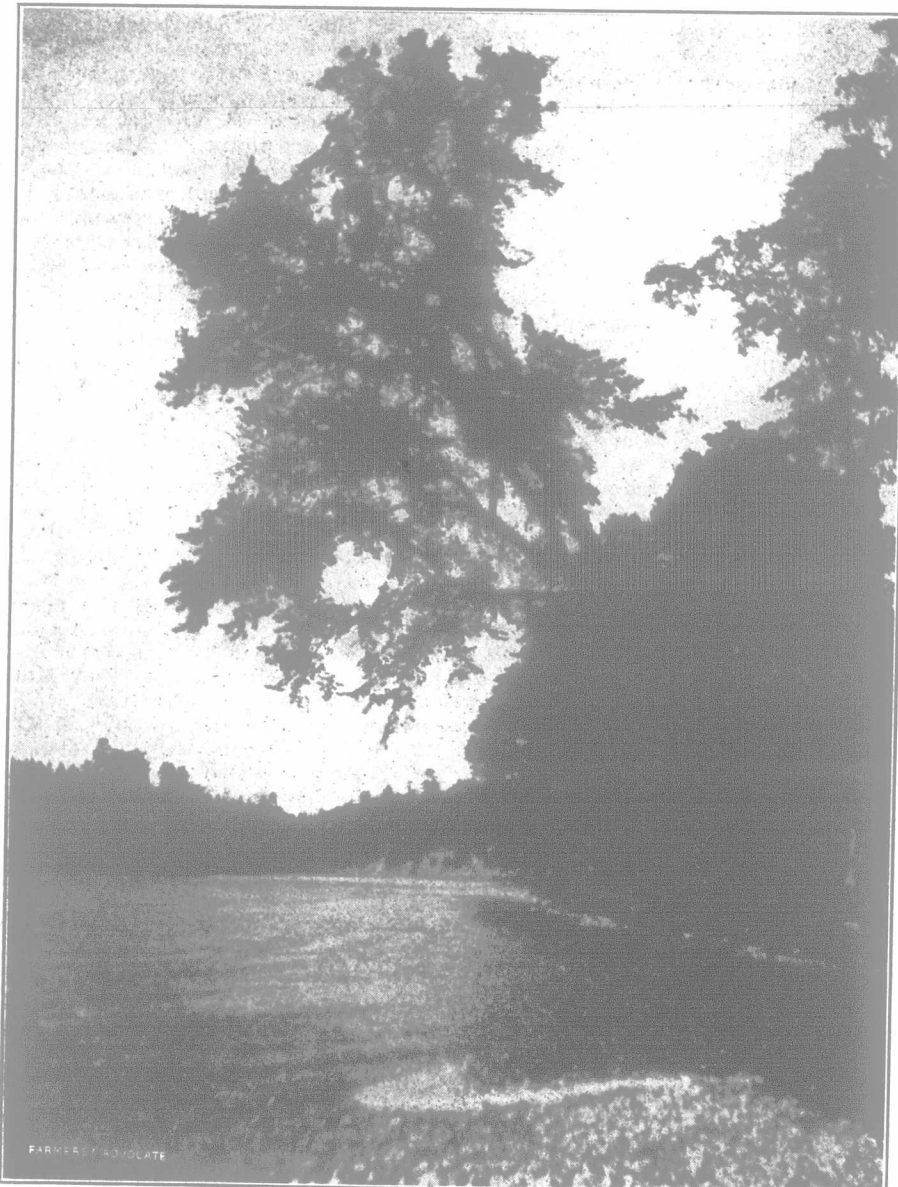
Toward the end of his life, Morris became involved somewhat in a Socialist movement that brought him little happiness. The non-productiveness of the upper classes he could not understand; as little could he understand the readiness with which so many of the laboring classes toil at work which is merely tolerated that a succeeding leisure may be enjoyed. The Socialist platform, always so reasonable in theory, so difficult to work out in practice, appealed to him. He felt that, under different social conditions, mankind, as a whole, should be happier, and that an age might come in which art might continually be associated with handicraft. Throwing himself with all the fervor of his nature into the movement, he lectured, and wrote pamphlets, and on "Bloody Sunday" was the leader of one of the contingents to Trafalgar Square. But he found himself preaching, as a rule, to those who could not understand his ideals—neither those above him in the social scale, nor yet those below—and so he was glad enough to go back once more to his quaintly beautiful home at Kelmscott, to his mills and his writings, his poems and his translations from the Icelandic Sagas. During his later years he became much interested in beauty of type, and invented and used in his publishing house—for he had now become a publisher, also—many beautiful letterings, very similar to those now adopted by the Roycrofters, which have, indeed, been modelled upon them.

Morris died at his city home in October, 1896, and never, perhaps,

was there a more characteristic funeral. His body was taken to the little Kelmscott churchyard in a strong oak coffin, with iron handles wrought by his own workmen, and covered by a pall of rich Anatolian velvet from his own collection. From the station to the church, it was conveyed, as he had wished, in an open hay cart, with bright wheels of the cheery red which he loved, and draped with vines and alder and bulrushes. Along the way, the farmers of the neighborhood joined with the workmen from the mills to pay the last honors to their "dear good friend."

Morris had the satisfaction before he died of seeing his ideas establish themselves at least in England, and the hope of their ultimate extension through the Arts and Crafts societies which he was instrumental in establishing. To-day, were he alive, he might be glad to see the influence of the Arts and Crafts guilds penetrating almost every part of the civilized world.

But Morris exercised a still greater, if less evident, influence, which may not be so easily measured. His



Beauty Spots of Canada.
View on the River Maitland, Ontario.

philosophy of pleasure in work, his efforts to impress upon mankind that there may be happiness in work; that in all handiwork there may be, should be, beauty and honesty and dignity, have not died with him. The message still goes forth, impressing its sanity upon many who have hitherto blindly regarded work as a curse from Eden, a thing to be endured simply because unavoidable; and where it takes hold it instills a new interest and purpose in life. Perhaps, too, some day his conception of art as "the beauty produced by humble workers as an everyday occurrence and for every day's enjoyment," shall obtain. Then indeed may all men remember William Morris.

Be a man!
Bear thine own burden, never think to thrust
Thy fate upon another!
—Robert Browning.

Hope's Quiet Hour.

What is That to Thee?

"Lord, and what shall this man do?"
"What is that to thee? Follow thou Me."—(From S. John XXI.)

"I exult
That God, by God's own ways occult,
May—doth, I will believe—bring back
All wanderers to a single track.
Meantime, I can but testify
God's care for me—no more, can I—
It is but for myself I know.
So viewed,
No mere mote's breadth but teems immense
With witnessings of providence:
And woe to me if when I look
Upon that record, the sole book
Unsealed to me, I take no heed
Of any warning that I read!"

—Browning's "Christmas Eve."

St. Peter had been told something of God's plans for himself, had received from his Master the assurance that—in spite of his terrible fall—he should

If God's way of judging men were like that Heaven would not need to be very spacious; and there would be no need for three gates on the east, three on the north, three on the south and three on the west—gates which are flung wide open always.—Rev. XXI: 25.

"Lord, and what shall this man do?" we ask, as we see a brother who does not think as we do, yet who claims to be a follower of our Master.

And the answer is decided: "What is that to thee? Follow thou Me."

God is speaking to us daily, and our business is to follow in the path He has marked out. Is it probable, or possible, that He is forgetting to guide and warn that other person who is no less dear to His heart? When I hear a sermon that comes as a message from God to me, will He be satisfied if I say: "I hope Miss Z was listening, that sermon would do her good?"

In Browning's "Christmas Eve" is described a man who is trying to cling to the garment of Christ and at the same time hold tightly to the prejudices which separate him from his fellows. The rain drives him to take shelter in a little chapel where the congregation and the preacher are not to his taste. He prefers the rain to the company, and goes away in disgust. Then Christ is revealed standing on the pathway, and he understands that the "two or three gathered together in His Name" could not fail to have Him in the midst of them:

"Certainly He was there with them!" is his first joyful thought. Then comes the dismayed conviction:

"It cannot be
That Thou, indeed, art leaving me—
Me, that have despised Thy friends!"

Clinging to the hem of the Saviour's robe he is carried from one place of worship to another, and even into a lecture-room, where a professor declares that the story of the first Christmas is a myth, and yet tells his pupils to "go home and venerate the myth."

It is right to make our religion an intensely personal thing, to realize that everything that comes to us each day is providential—

"So viewed,
No mere mote's breadth but teems immense
With witnessings of providence."

Yes, but God has His secret dealings with other souls, too. We must not interfere, but must stand aside reverently while He gives to that other friend of His a shining jewel, inscribed with a mysterious message which we are not able to read.—Rev. II: 17.

Perhaps we look down on someone, with pity which is stained with contempt, because we feel that he is ignorant or degraded. Yet our Master sternly rebuked the self-satisfied Pharisee, while He tenderly instructed the ignorant and degraded Samaritan woman. Spiritual sins—such as pride, envy, covetousness or selfishness—may be more loathsome in His sight than sins of the flesh.

The prophet Elijah was disheartened and ready to give up the fight. Why? Simply because he thought that he only was faithful to God in the midst of a Godless people. He did not know of any other faithful servants of the Lord God of Hosts—but God knew personally each one of the seven thousand in Israel, all the knees which had never bowed unto Baal and every mouth which had not kissed him.

In all ages there are a few prophets who can be easily distinguished from the crowd. Like Elijah they are very jealous for God's honor, and like him they may become discouraged by fancying that they have to stand alone. But the Lord knoweth them that are His. He smiles down into eager eyes upturned to Him, in grand mansions and in commonplace houses. He touches the hand of a farmer who is busy with his chores, and makes the heart of a mill-girl throb with sudden gladness by the music of His still small voice in her heart.

Never speak or think as though you were the only person who cared about Christ. Your neighbor—who talks to you only about the crops or the weather—can speak to God about greater matters, and probably does speak to Him

far oftener than you imagine. Once a candidate for the ministry was especially distinguished for his bodily strength and a companion was noted for his "Godliness." In a very few years the man from whom great things were expected, because of his strong physique, broke down and had to give up his work; and the man who was expected to be a great power for God because of his Godliness, was disgraced and openly dishonored.

We are afraid that another man may not find Christ; and, instead of trusting the Master in His dealings with that other person and being careful to follow Him ourselves, we become careless and slothful in our prayers, selfish in our daily lives, covetous or worldly in our aims. Why? Because we are so comfortably satisfied that we are on the right road and are quite safe.

We pride ourselves on our "orthodoxy," perhaps, forgetting that both God and man look especially to "Love" as the great proof of Godliness. God is LOVE, and one who does not share to some extent in the Spirit of Christ can be none of His. Our prayers may be eloquent and beautifully worded, yet they may fail to carry a single desire to God's heart.

We may find fault with one person for selfishness, with another for conceit, with another for a bad temper, with another for worldliness or covetousness. Is it any business of ours to judge one who is the servant of Another. To his own Master he standeth or falleth. Let us come to the Good Physician for the healing of our own leprosy of sin, before we dare to draw away in loathing from another's sores.

"But So-and-so is dishonest and untruthful," we say. Let us mark well our Lord's answer: "What is that to thee? Follow thou Me!"

Are we following Him? He pleased not Himself, but went about doing good. He cheered the sorrowful, strengthened the weak, lived a life of spotless holiness and died praying for those who hated Him. How ashamed we must feel as we face our vain desire for admiration, our struggles after earthly advantages, our vexation over trifling annoyances, our anger at the smallest affront, our impatience when we have any pain to endure. It is so easy to find fault with other people, it is so difficult to follow in the steps of Love ourselves. There are many gates opening into the New Jerusalem, and our Father can be trusted to lead His own children safely home.

"My Father's house has many rooms, and each is fair; And some are reached through gathered glooms By silent stair; But He keeps house and makes it home. Whichever way the children come."

DORA FARNCOMB.

The Beaver Circle.

OUR SENIOR BEAVERS.

[For all pupils from Senior Third to Continuation Classes, inclusive.]

Dolly Bly's Mean Trick.

"You're a beauty, Dolly Bly, a regular beauty! That's what you are!" The pretty bay mare cocked an ear knowingly at the speaker, a stout boy of fifteen.

"If 'twasn't for your one mean trick!" continued the boy, caressing the glossy neck. "It's a dreadful pity, Freem!"

Freeman Baker looked at the handsome bay with all the critical keenness of the born horseman.

"I don't know that it is, Dave. In fact, I rather think it isn't. We never should have owned her if she'd been all right. The price would have been beyond father."

"I guess that's right, Freem," said the younger boy, slowly.

"I know it is. There's good blood in that mare. We needn't mind her one failing, now that we've learned what is is. But wasn't father surprised—weren't we all surprised, the first time she pulled at the halter!"

"Never saw anything like it," said David. "I'd heard of 'puller' before, and thought I'd seen some, but I found I

didn't know anything about it—not a thing."

"Father says she can pull more at the halter than she can with collar and traces, and I believe he is right. I never saw such downright vengeful pulling before," added Freeman. Presently he continued: "I think, though, I surprised Mert Edsen somewhat one evening a week or so ago." He chuckled softly.

"How?" questioned David.

"It was the first time I'd driven Dolly. Mert came tearing along as he always does—it was pretty dusty—and he drew out to go by, the first thing. I suppose he thought I had old Samson, as usual, and he slashed up abreast with the roar that he thinks is so fast. I waited till he'd got fully abreast, and then I pulled up a little sharp on the lines and clucked—just once—to Dolly."

"What happened?"

"Nothing much—only—well, the mare had begun to fret when she first heard them coming, and when I clucked I felt something of a jolt. Dolly Bly had lifted the front wheels clear of the ground at the first stride; in a precious few seconds somebody dropped behind—and I tell you it wasn't Dolly Bly."

David grinned in huge delight. Presently both boys turned to look towards the house, where, on the shaded porch, a slender, palefaced woman was sitting. After a little interval David said, wistfully:

"Mother doesn't get strong as fast as she ought to, Freem."

The shadow that had formed on his brother's face deepened. "She ought to be more in the open air, with change of scene, the doctor says, she's been sick so long. I wish we had a phaeton, Dave, and a decent harness, now that we have Dolly. I don't wonder mother hasn't wanted to pound along with old Samson and this rickety old democrat."

He glanced with an air of extreme discontent at the old wagon and shabby harness.

"She's always worked too hard—she's such a slender little mother!" Freeman's voice took a sudden gruffness at the last words.

"I've got ten dollars," said David suddenly.

"And I've got twenty-five," said Freeman. "But what's that toward a harness and phaeton?" He pulled off the rusty old harness. "You'll have to wear the old traps, Dolly, for all I see," he said, as he led the mare into her stall.

Daniel Baker, father of the two boys, had not prospered. He had, like many another, bought his farm when values of all kinds were high, and for years he had

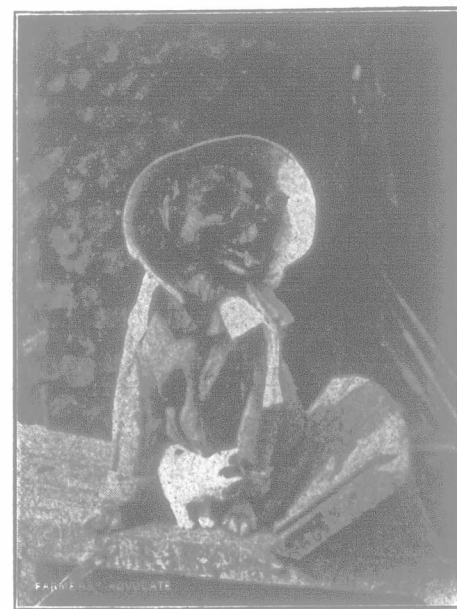
made a sturdy fight against heavy odds. He was still in debt, but lately, with the help of his boys, was gaining ground.

One morning early in August Mr. Baker said, at breakfast: "I've been thinking, boys, about that seed wheat over at Marshall's. It's a very fine variety, and I'm anxious to get some. I hear he has threshed, and there will be quite a call for it. I guess, Dave, you had better go over to-day and get it; four bushels will do."

"May I have Dolly?" the boy asked.

"Yes—unless you prefer Samson," said his father, dryly.

"I might go up on to Devil's Wen and get some huckleberries. The road goes



A Safe Refuge.

past there, and there'll be time. Can't you go, too, Freem?"

"Take a day off and go if you like, Freem," said his father.

"Get the pails and we'll be off," said Freeman, briefly.

Devil's Wen lay wild and rugged in the August sun. It was a lonely enough place, with no human habitation within several miles. The Wen was a moderately steep hill, covered with scrub-pine and 'silver-pop,' and forming a part of a vast reach of wild country stretching back well toward the Canada line. Here and there in sheltered places huckleberries thrived and ripened to perfection; but by far the greater part of the whole section was covered with thin soil, through which "hardheads" and ledge rock cropped up plentifully.

It was not yet noon when the two boys

turned into the narrow, grass-grown cross-road that led up past the Wen and over into the river road some miles beyond. Safely stowed in the body of the democrat were two clean bags of fine seed wheat, as also the lunch-basket and a bag of provender for the mare.

"There's the Wen!" cried David, suddenly pointing. "We'll get a lot of berries, Freem. The weather has been just right for them."

"I don't like the looks of that fellow," said his brother, irrelevantly.

David turned in surprise. "Who? Oh, that fellow we passed just as we took the cross-road? He did look at us pretty sharp."

"Not at us," said Freeman. "But he did look mighty sharp at the mare; and if he didn't have an evil eye, I hope I'll never see one! Dave, sometimes I almost wish Dolly weren't quite so handsome."

"Pshaw!" said the boy, regarding the mare complacently. "I don't, then. I s'pose you're thinking of horse-thieves. I don't take any stock in what we hear about them; it's always away off somewhere." He spoke with youthful assurance.

"Not so far off as it might be just now," said his more thoughtful brother. "Twice in this county and two or three times in Broome—that's the last report. There's truth in it, too, for the county has offered two hundred and fifty dollars for Trawney—he's the head man—or for information that shall lead to his capture; and they say a wealthy stock-owner in Broome, who lost a fine horse, has offered to duplicate the reward to anyone who shall actually deliver the fellow—'Trawney Joe' they call him—over to the authorities. His picture is in the papers."

"If they've done all that, there may be something in it," said David, somewhat impressed by his brother's earnestness.

"I shan't turn Dolly out to pasture any more nights, and—there's a good place to stop, Dave, by those scrub-birches. There are berries beyond."

David, who was driving, turned from the road and soon drew up at the place indicated. The boys ate their lunch leisurely, while the mare stood hitched to the wagon. She was never tied, for she would not try to run away when harnessed to anything.

The berries were fine that day on the Wen, and the young fellows were soon deep in the heart of the first big "patch." They picked steadily for perhaps an hour, and had nearly filled their pails, when David moved over toward his brother and said, uneasily: "It seems to me Dolly acts curiously, Freem. She has quit



Beauty Spots of Canada. Evening on the St. Clair River.

browsing the birches; and see how she stands with her head up!"

Freeman looked sharply. "I guess she's all right," he said, after a moment. "I've watched all the while. She's probably had all the leaves she wants. Let's get two or three quarts more and then go home."

A few minutes later they looked up together, and instantly both sprang to their feet. The mare was going off toward the cross-road at a swift walk.

"Quick, Dave! We must head her off or she'll go home!" shouted Freeman, and both set off at a run. "It's queer what started her. Cut across south, Dave! I'll take her if she turns north!"

The mare did not turn south toward home. As she struck the cross-road she turned squarely north toward the river road, and now at a smart trot. Freeman Baker was a runner of no mean powers, and he had nearly succeeded in intercepting the runaway, when, before his astonished eyes, there rose from the bed of the wagon the figure of a man.

Freeman knew instinctively, and before the hard, determined face was turned toward him, that it was the fellow they had passed that morning, of whom he had spoken—the fellow with the evil eyes. Leaning forward in the wagon, the rogue slapped the mare sharply with the lines. Instantly she sprang into a run, and Freeman reached the road some rods behind. The wagon presently disappeared behind a jutting point of scrub-pine.

David came panting up, his eyes round with excitement and alarm. "She's stolen, Freeman, she's stolen! We never shall see Dolly Bly again, never!" he cried. His face was pale, but he gulped down his distress manfully.

Freeman's face took on an expression of quick determination. "Yes, she's stolen, fast enough, but come on. Let's make a run for the river road. He can't make fast time on this rough cross-road."

They started off at a steady lope, and reached the river at last, hot, tired and dusty. For nearly a mile in either direction they could see the long line of yellow road, silent and deserted. Nothing was visible. Not a sound was to be heard.

"Too late!" muttered David; but both examined the tracks critically.

"I'm sure, almost, he's gone up the river," said Freeman. He drew a long breath. "Well, I suppose it's useless to follow; we can't catch him. If we did, he'd be too much for us. He'd probably shoot. But, Dave, this thing ought to be telegraphed right away, and—hark!" There was a sound of wheels, and directly a team turned into the road below them, evidently from one of the river-flats. It was driven by a stout farmer. The young fellows hailed him and eagerly explained.

"Sho, now, shel!" he said. "Took right in broad daylight, hey? Dretful bold that was—dretful." He glanced up the Wen road, apprehensively. "No," he continued, "hain't heard nor seen nothin'. Course ye must telegraph. Turner's Station's th' highest office—kind o' one-hoss, but it'll do. 'Bout five miles to Turner's. Tell ye what, get right in; I'll take ye there—goin' part way, anyway. We got to look out for these fellers, or we sh'll be et up by 'em—plumb et up!"

Freeman looked at his brother's flushed face. "You'd better go home, Dave," he said. "You'll be tired enough. It's far enough to hoof it from here, and I can see to it, you know."

"I'm going with you," said David.

The farmer's stout horses forged along smartly, and in less than an hour Freeman's message was going over the wires to reach, ere long, every town and hamlet in that part of the country. The trip to the station had disclosed no trace of the mare.

Freeman went into the one little store in the place and secured a supply of doughnuts and cheese. It was then five o'clock. "Now for a fifteen-mile tramp, Dave!" he said. "We can cut off several miles by taking a bee-line for the Wen."

"All right. Go ahead," said his brother, gloomily. The boy's heart was sore over his loss. The little mare had been his pride.

The shadows were long on Devil's Wen, and in the lonely, bush-lined gully of Little Eagle Creek it was almost dark when the boys stopped for a moment to rest and get a drink from a cool spring in the gully. The walking, except for occa-

sional thickly overhanging bushes, had not been bad since they struck the lonely creek. Very little had they said, each being busy with his own gloomy reflections.

They were about to go on, when a curious sound close at hand startled them. It seemed to come from the creek above.

"What's that?" said David, in a low tone.

Freeman shook his head. "Too heavy for a dog or fox," he said. "Hark! It's coming nearer."

Presently they saw the thick boughs of a low evergreen near at hand move gently aside; then a man stepped into view, and close behind him an animal of some kind. The man was a big bewhiskered fellow, but the animal—the hearts of both boys gave a great thump. Ah! that long, silky mane, those small, alert ears, the big eyes, wide apart, and the white crescent in the forehead could belong to none other than their own Dolly Bly.

A second glance at the man, and Freeman had recognized, despite the big false whiskers, the rogue of the cross-road. With the halter looped around his waist, thus leaving his hands free to part the

laid back close to the head, the broad teeth showed white, and her head seemed to cut the air with vengeful, twisting jerks. Taken by surprise and totally unprepared, the fellow was hurled to the ground with savage force. There was a loud report as the weapon, jerked violently from his hand, fell to the ground.

Excited by her strange surroundings, the report of the revolver, and perhaps by the sprawling figure pitching grotesquely toward her, the mare fairly outdid herself. The buggy was overturned, and both thills were snapped short off as she flew backward in zigzag curves and erratic wrenches to bring up at last fifty feet from where she started. There, the halter rope broke, and the paroxysm ended. She stood panting and trembling violently.

The desperado, bruised and nearly breathless, tried dizzily to rise. But Freeman Baker, dazed only for an instant, was quick to see his advantage and seize it. Picking up the smoking revolver, he thrust it into his pocket, then hurled himself upon the burly villain and bore him again to the ground.

"Quick, Dave!" he shouted. "Jerk out the check-rein and tie his arms before he

him on the mare's back. And hurry! We must get out of here; it is getting dark. I'm going to stay with this gentleman."

Farmer Baker and his wife had great confidence in their boys, and in their ability to take care of themselves, but the mother grew worried as the hours went by that dark August evening. Over and over again the father reassured her, carefully hiding his own anxiety. It was so unlike his boys! He wished they had taken old Samson.

A great throb of relief stirred his heart when, shortly after eleven, he heard the sound of wheels. Lantern in hand, he hurried to the door and threw it open. The big eyes of the bay mare blinked at him wisely in the sudden light. David sat on the seat—alone.

"Is that you, Dave? Why, where's Freeman?" the father asked anxiously.

"Here, father!" came sturdily from the darkness behind. Raising his light and peering anxiously into the long body of the wagon, the astounded father beheld his eldest born calmly sitting astride the legs of a man who lay bound and prone, the boy held in his hand a big revolver, the barrel of which glimmered dusky in the lantern light.

"What are you doing, Freeman? Who is that?"

"Holding down five hundred dollars, father," replied Freeman. "That we found up Little Eagle Creek. This is a chap they call Trawney Joe!" Again he disclosed the telltale scar.

"By George, Freeman!" was the father's brief comment. He looked at both sturdy sons with a glance in which there was no small measure of proud respect.

"It was Dolly Bly, father," said David; and then followed questions and answers.

"And, now, father," Freeman said at last, "I wish you'd harness old Samson. This fellow is going behind iron bars before I sleep again."

The capture of Trawney Joe practically broke up horse-stealing operations in that section. A short time afterward the Baker boys received the rewards that had been offered.

The next day but one after that event, a handsome bay mare, wearing a fine, nickel-trimmed harness and drawing a phaeton that shone with all the pride of newness, might have been seen standing in front of the Baker homestead. The little, slender woman was again on the porch; but now in the pale face there was a faint flush, surely prophetic of health. Freeman helped his mother into the pretty carriage.

"Just for you," he said, gaily. And David, twisting one hand caressingly into the mare's silken mane, whispered into her ear confidentially, "That failing of yours, Dolly Bly, that one trick, we'll never, never call it mean again."—Youths' Companion.

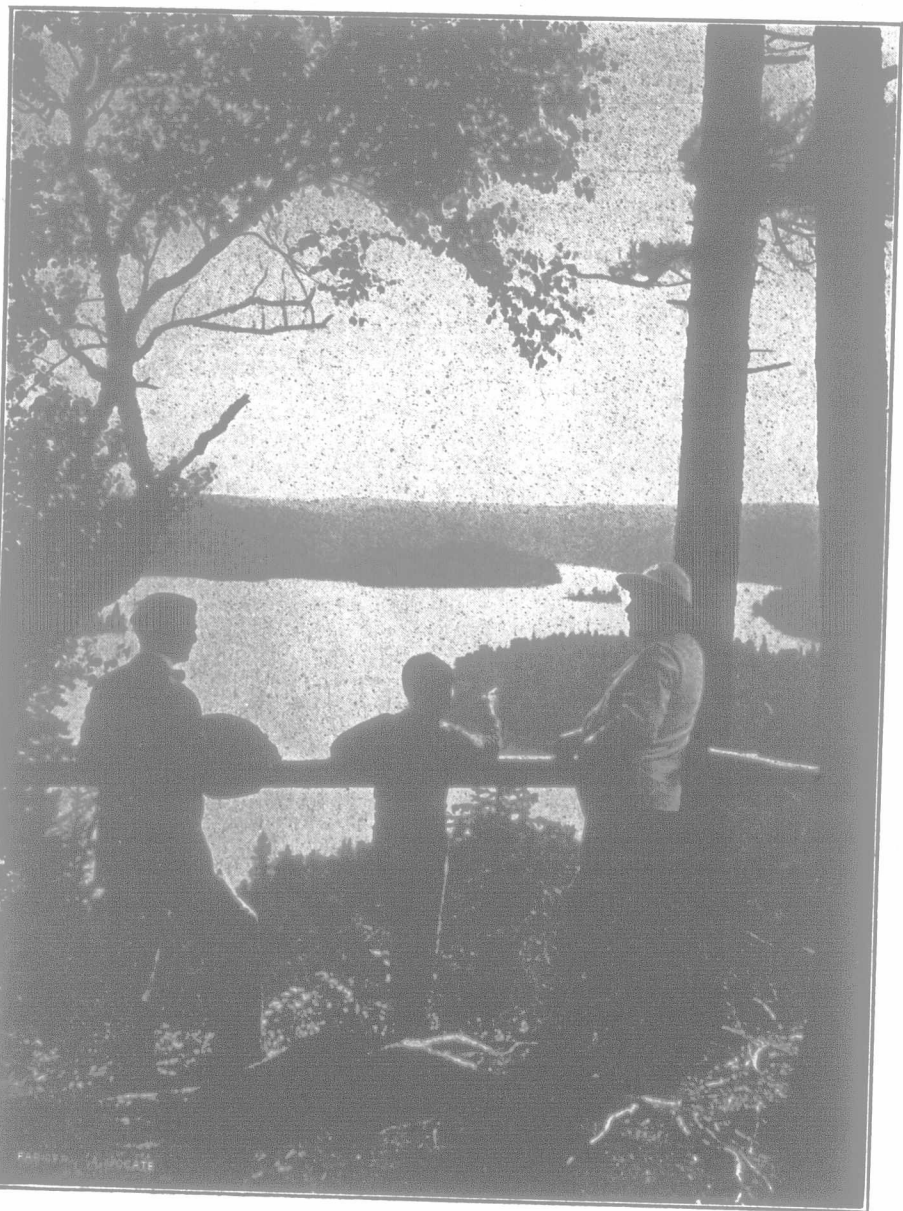
The Letter Box.

Dear Puck and Beavers,—My father has taken "The Farmer's Advocate" for a number of years, and thinks it a good, helpful paper. This is my first letter to your Circle. We have a few pets. Our dog, Ruff, is the best one. How he came to get his name is that when a little pup, he was very rough. The little duck comes next. It will follow us all over, and cry when we are not in sight. We have many kittens. I am a great lover of pet animals. We have two little colts. One day last summer my brother found a highholder's nest in our orchard. The little birds were growing fine until one afternoon when I went to see them, a large snake was curled around the nest. I got the snake out, but the little birds soon died, because their mother never came back. Wishing the Beaver Circle much success, I will close.

GRACE ROSEBRUGH
(Age 12, Book Sr. IV.)
St. George, Ont.

Dear Puck,—This is my first letter to the Beaver Circle. I live on a farm, and go to school nearly every day. I just passed into the Senior Fourth class before holidays. I am going to tell you how we celebrated Empire Day.

One day, a while before, our teacher told us what we would do, and gave some of us subjects to prepare speeches on for that day. However, when the twenty-third of May came, there was a



Beauty Spots of Canada.

Group on Sky Mountain, Algonquin Park, Ont.

heavy boughs, he was leading the mare, harnessed to a buggy, carefully along the run.

For a few seconds the three stared at one another without moving a muscle, the boys almost too astonished to breathe, and the man still holding the bough he had just carefully lifted.

Suddenly the man's hand shot with a quick motion behind him, and a second later Freeman caught the glint of a shining barrel; the heavy revolver rose to a level with his breast. For an instant Freeman's head swam dizzily.

But the desperado had reckoned without Dolly Bly. The sudden release of the bough and the quick motion of the fellow's arm almost in her face startled the sensitive mare, and she started back. The thief heard the motion, and even as he raised the weapon, threw himself forward to counteract it. As the halter tightened with a sharp, savage jerk, a lightning change came over the mare.

She threw herself back, filled with the old, insane fury. The small ears were

comes to, and cut away those broken thills before the mare jumps again; lively now!"

David needed no bidding. Already with quick, sure fingers, he was securing the long, pliant strap. The thief lay quite still, but he was rapidly regaining both his wits and his breath. It was then the boy blessed the day he had learned to tie "Injun knots."

Freeman went to the overturned buggy, searched it, and returned with a halter and hitching strap, with which he rebound the fellow thoroughly. Then he turned him over and pulled the hair back, disclosing a big, livid scar just above the right ear. That scar had been described in many a newspaper.

"Trawney Joe!" shouted David, excitedly.

"That's the size of it, Davy!" said Freeman. "He's going with us. Take Dolly up the creek and look for our wagon. It can't be far off. If you can't find it, we must fix this buggy somehow. If we can't do that, we'll tie

person dead in the section, and our teacher's aunt was not expected to live, so she didn't feel much like celebrating, and our celebration was postponed until the first Friday in June.

That day we all brought a few extra goodies in our dinners, as we were to have it all put together and then all have our dinners together. Some of the little brothers and sisters who had not yet started to school, and one girl who had quit school, also came. We had school until half-past eleven, when the Fourth-class girls who were to act as waiters went out to prepare the dinner, and the others started to practice some songs for the afternoon. We had lemonade, candy, bananas, and all kinds of goodies for dinner.

After dinner some of the scholars were appointed to clear away things, and the rest played Jacob and Rachel until we were called in to begin our concert. Some of the subjects spoken on were: "The Flag," "The Coronation," "The Navy," "The Colonies," etc. Wishing the Circle every success; good-bye.

PEARL ASHWORTH (age 11).
Maple Grove, Ont.

Dear Puck and Beavers,—I have written to your Circle before, so I thought you would not mind me writing to you again. I am going to tell you about a caller I had yesterday afternoon. As I sat alone on the veranda reading I had my caller. When I was deeply interested in the poem I was reading, I suddenly heard a familiar humming, which I knew was the whirring of a humming-bird's wings.

Almost as soon as it was heard it dashed into view, hither and thither, but always nearing the sweet pea flowers, which are special favorites of this little honey-seeker. It was very evident that he resented my presence, but I stubbornly refused to withdraw, settling myself, instead, in a position in which I could watch his movements to the best advantage. He soon left the sweet peas and came to the Trumpet flowers, which are also special favorites of his. Soon he was on the wing again, and this time advanced from the other side of the wire netting on which the vines were climbing, but the leafy screen was too thick for even his tiny self to penetrate. Then he grew bold, and after darting back and forth past me several times, he decided to come in. Straight to the scarlet trumpets he went and buried his long bill in one of the flowers. The sun shone on him, making his green feathers glow with a strange metallic lustre. He stayed for several minutes, then, without a note or nod of acknowledgment, he was away, lost in an instant among the trees across the lawn. It was my good fortune another season to see the nest of a pair of these smallest bird neighbors. The size was no larger than an English walnut, and was woven with a compactness and neatness that human invention could not rival.

Well, as my letter is getting long, I must close, wishing the Circle ever success.
WINNIE HARPER (age 13).
Warwick, Ont.

I think this composition is very well worth the prize we are sending you, Winnie.

Beaver Circle Notes.

Veronica Farrell (age 8, Sr. Third Book), Linwood, Ont., would like some of the Beaver girls to correspond with her.

Some of the Third Book Beavers are forgetting to state whether they are in Junior or Senior class.

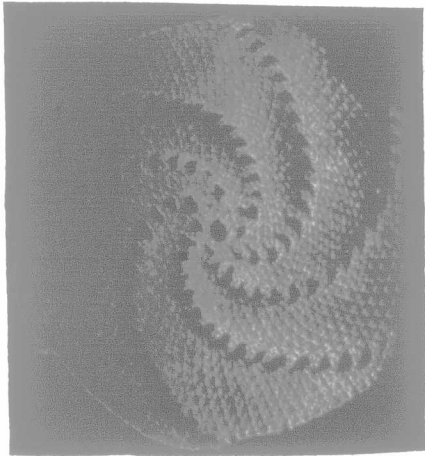
A Thought for the Week.

It is just as easy to go through life looking for the good and the beautiful, instead of the ugly; for the noble, instead of the ignoble; for the bright and cheerful, instead of the dark and gloomy; the hopeful, instead of the despairing; to see the bright side instead of the dark side. To set your face always toward the sunlight is just as easy as to see always the shadows, and it makes all the difference in your character between content and discontent, between happiness and misery, and in your life, between prosperity and adversity, between success and failure.—Orison Sweet Marden.

The Ingle Nook.

[Rules for correspondents in this and other Departments: (1) Kindly write on one side of paper only. (2) Always send name and address with communications. If pen-name is also given, the real name will not be published. (3) When enclosing a letter to be forwarded to anyone, place it in stamped envelope ready to be sent on. (4) Allow one month in this department, for answers to questions to appear.]

"There are men whose lives have been given to making a model currant"—the statement appeared in an article entitled "July and Currants," which appeared in an issue of the New York Independent. Perhaps it is true; perhaps it is only a bit of the poetical license with which the disciples of Thoreau, the men who find shrines in woods and altars by running brooks, love to embellish their interpretations of Nature. At all events it sets reflection a-wandering, and one thinks



Section of Table Mat.

first of the assiduity with which these workers with natural productions apply themselves to their self-appointed work of coaxing and tricking Nature into surpassing herself; then of the interest, to the absorption of self,—the spirit, perhaps, of service,—which characterizes such workers. A man may devote his life to making a model currant,—needless to say he is overwhelmingly absorbed in the task; needless to say, also, that he hopes to benefit a million homes in so doing. A million tables supplied with the cooling, refreshing fruit during the hot, sultry days! A host of nurserymen and gardeners and retail men pro-

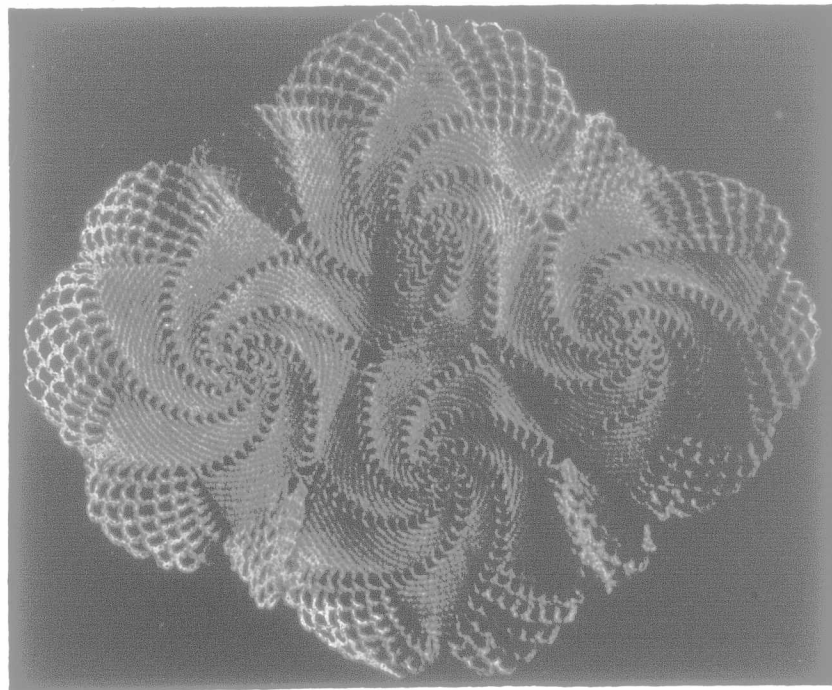


Table Mat.

vided with a new demand which may mean to them not currants only, but so much bread and butter! Perhaps the experimenter thinks of these things,—and so Burbank originates his curious fruits, and our own Mr. Groff, of Simcoe, creates a flower like none other that has ever been seen. Ask him what means the Chinese proverb, "If you have two loaves sell one and buy a lily." He understands, and so do many others who have looked into the depths of his marvellous hybrid gladioli. Not long ago an astute observer of college men and college life affirmed that at no period for many years has the dis-

position to render service to mankind been so strong among college students, as at the present time. What hope for the old world, as these students, with their broadened ideas of things, go out broadcast, not solely to rake gold into coffers —although they will expect adequate pay for their services—but with the primary object of being of use to their fellow-men!

There are many "model currants" to be evolved from this world's chaos, and the task is not all to the college man, whose disposition for service is, it is to be hoped, but an expression of a more universal tendency heralding a "good time coming," and coming quickly. Whether the "model currant" be the redeeming of a field, or the training of a child, or the actual evolution of a new production from the bosom of the earth, what are the necessary qualifications for success? Imagination, calculation, a logical grasp of cause and effect, patience, a warm heart, a boundless unselfishness,—and, above all things, assiduity. Genius, it is very true, is very largely the power for concentration and hard work.

Does this all sound preachery? Well, you know, I don't want to be preachery. I am not qualified for that, but often I just tell you things that I have learned or realized through my own failures and my own shortcomings. If there is a lesson or a spur in them for me there may be for you also. D. D.

Table Mats.

Dear Dame Durden,—Could you please send me, through your valuable paper, a pattern for making crocheted dinner mats? They are an oblong shape, with a tight crocheted center, and then a different pattern around the outside. You also spoke of a valuable book in last week's "Advocate," viz.: The Corticelli Home Needlework Booklet. Could you kindly tell me where I could obtain such a book, and also the price? Hoping I am not bothering you too much, and would like to see the above pattern published as soon as possible.

York Co., Ont. A MAIDEN.

I hope the accompanying pattern will suit you. I think it is the prettiest I have seen. The directions are given by Miss E. Irwin, of this city, as follows: Use No. 3 D.M.C. cotton and a steel crochet hook medium size, working with a firm even stitch. Ch. means chain, s.c. single crochet one thread over needle.

needle and strong thread to form an oval. The mat is ready now to complete by working the border. Fasten your thread at right-hand side where two sections are joined, ch. 4, s.c. in 2nd s.c. and a s.c. in each s.c. until you have fifteen; repeat all round; next row you will have thirteen s.c., and decrease by two s.c. each row and increase the number of loops of four ch. until you have but one s.c. left and the mat is finished.

One mat this size, two with 15 s.c. and one 13 s.c. makes a set that will be found very useful for placing under hot dishes, as well as adding to the appearance of the dinner table.

The address for the Corticelli Home Needlework book is: "The Corticelli Silk Company, St. Johns, P.Q."

Walnut Wafers—Tomato Marmalade.

Dear Dame Durden,—We have long been readers of "The Farmer's Advocate," and find it as much help in the house as the men do on the land. Have tried several of the many suggestions in it. The cottonade hammock is fine, so light and easy to handle and put up. When we try a recipe and like it, we cut it out and paste in a book. The Brooklyn Biscuit, Banbury Tarts and Ribbon Cake are all fine. They were given at different times two or three years ago. The story of the willow pattern on dishes was very interesting, as we have some of them. Can you tell us the story of the Watteau pattern and the Pomerania pattern on dishes? Should be so glad to see them too.

Will send recipe for walnut wafers:— 3 cups rolled oats, 1 cup sugar, 2 eggs, 2 tablespoons butter, 2 teaspoons baking powder. Mix all together and form into wafers with the fingers and bake in a hot oven, on a greased tin.

Here is a splendid recipe for marmalade:—8 lbs. green tomatoes, 6 lbs. white sugar, 6 lemons. Chop tomatoes fine; slice lemons, remove seeds, chop fine and add sugar. Let stand an hour, and cook until thick.

How many of the readers have ever written Lankshire Lass? Was so pleased with her reply to my letter, and she seems very grateful for picture post cards and any little thing done for her.

The crochet patterns are so nice. The Irish crochet Jabot is quite easy and very pretty when made. I have made two of them since the pattern was given.

Here is another new wrinkle: When making icing, put 4 tablespoons syrup in a teacup, stir in enough icing sugar to make it thick, and flavor; spread over the cake. This will not be sticky or crack off.
BLUE BONNETT.

Blue Bonnett, I spent two hours yesterday afternoon in the city library looking through books on china, porcelain, and pottery, and I could not find a single reference to either the Watteau or Pomeranian patterns. Watteau, of course, was a French artist, and I suppose the Watteau design is one adapted from some of his paintings. I am genuinely interested now, and should like if you would describe each of these patterns so that I can try again. Or perhaps some of our readers already know the stories and will come to the rescue. I was just wishing, while burrowing through the books yesterday afternoon, that every one of you could have access to a really good library. What a blessing and inspiration it is! I think if I went back to live in the country I should never give up the struggle to have such a one in my vicinity,—not a library filled up with recent fiction, although fiction should have its place—but one with illustrated books on flowers, and birds, and butterflies, and moths, and beetles, and flies, and fungi, and far-distant countries, and artists and their work, and ceramics, and arts and crafts, and famous men, and—. Oh dear, how many things there are that one wants to know about! . . . We really have a very fine library in London, so if any of you ever want advice in regard to books which you would like to buy, either for your own private library or for a district one, I shall be delighted to help you out as well as I can. It would only be a delight to go down to our library and "rummage" for you, at any time.

Buffalo Moths.

Could you please give me information, through the columns of your paper, of

COLGATE'S RIBBON DENTAL CREAM



Your children have what you lacked—a dentifrice as delicious as it is efficient.

One inch twice a day keeps the teeth from decay

"We must look to the mothers to inaugurate preventive measures in the care of children's teeth," says a writer in the Dental Digest.

The delightful flavor of Colgate's Ribbon Dental Cream makes it a treat, not a task, to use it night and morning. It not only thoroughly

CLEANS—PRESERVES—POLISHES

but its wonderful antiseptic qualities keep the mouth in that sweet, clean, non-acid condition that is a safeguard against the growth of decay-germs.

Colgate's is the antiseptic, anti-acid cream that is delicious without the presence of sugar, an efficient cleanser without "grit," and all that is beneficial without any injurious effect.

Act to-day. Delay means decay. Supply Colgate's and a good tooth-brush to every member of the family.

42 inches of Cream in Trial Tube sent for 4 cents.

COLGATE & CO.

Dept. A Coristine Bldg., Montreal
NEW YORK, LONDON, PARIS, VIENNA, SYDNEY
W. G. M. SHEPHERD, Montreal, Sole Agent for Canada.

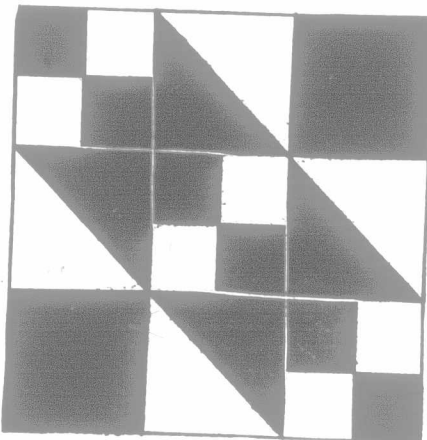
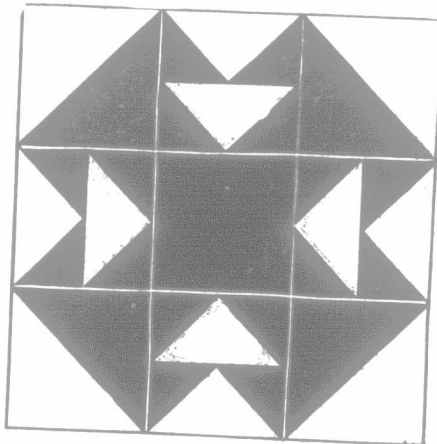
121

How to destroy buffalo moth? Will hanging clothing and carpet in the fresh air and sunlight kill the moths in them? Would be pleased to have an answer soon. Thanking you in advance, I remain,
A SUBSCRIBER'S WIFE.
Huron Co., Ont.

Hanging clothes, etc., in the sunlight and beating well will not kill the moths, but will help to dislodge them, and so is useful. It is not the moths themselves that do the mischief, but the larvæ or little woolly bugs that hatch out of the eggs that the moths lay. These bugs, in turn, pass through a pupal stage and finally become moths themselves. While in the larval stage they are very destructive, attacking woollen goods of all kinds, feathers, etc. The best way to get rid of them is to soak everything they infest with gasoline, which kills them. Of course you understand that, since gasoline is very volatile and inflammable, you must use it while doors and windows are open, seeing that no fire or lamp is in the room, and that not even a match is struck near while you are using the gasoline; or, indeed, until it has completely evaporated and the vapors have passed out through the windows. Any carelessness about this may be dearly paid for by fire or explosion. With care, however, gasoline may be used with perfect safety.

Repeat the treatment at intervals of about a week, once or twice, to catch any bugs that may hatch out of the eggs later.

Two More Quilt Patterns. [Sent by "Grandma," Elgin Co., Ont.]



Recipes.

Dear Dame Durden,—Would you kindly print in your valuable paper tested recipes for the following: Blueberry wine, marble cake and meat pie? Am enclosing two recipes which I think are very good.

Soft Pound Cake:—1 lb. flour, ½ lb. butter, 1 lb. sugar, 6 eggs, 1 cup milk, 2 teaspoons baking powder, essence to taste. Bake about 1½ hours.

Salad Dressing:—Beat 4 eggs very light, then add 1 cup milk; put in a separate cup 2 level teaspoons each mustard and salt, 3 level tablespoons sugar, pinch Cayenne pepper. Fill cup up with vinegar; stir all well together, and add slowly to first part, then put in 2 tablespoons melted butter. Cook until as thick as custard, stirring all the time. Do not let it boil.

N. S. SUBSCRIBER C.'S WIFE.

Blueberry Wine:—To 1 peck of the berries take 2½ gals. water, ½ lb. sugar, ½ pint hop yeast, or its equivalent. First bruise the berries, then add the water and boil until the berries are soft enough to extract all the juice. Strain through a thin bag, add the sugar and yeast while the liquid is still warm. Set in a warm place for 10 days to ferment, then cork tightly, and let stand for 3 months before attempting to draw it off and put into bottles. The same method may be used for black elderberries.

Marble Cake:—White part—½ cup butter, ½ cup sugar beaten together to a cream; add ½ cup sweet milk, the beaten whites of 2 eggs, and 1 cup flour, with which has been sifted 1 teaspoon baking powder. Beat quickly. Dark part—½ cup butter and ½ cup brown sugar creamed together, ½ cup molasses, ½ cup milk, yolks of 2 eggs, ½ teaspoon each of ground cloves, cinnamon, nutmeg and mace, 1½ cups flour, ½ teaspoon soda mixed with the molasses, 1½ cups flour. Drop the light and dark in alternate spoonfuls into a well-greased loaf tin, and bake in a moderate oven. This cake will keep well in a cool place.

Beefsteak Pie:—1 lb. beefsteak, from the round (any scrappy meat will do), 1 dessertspoon flour, pepper and salt. Cut the meat in strips about 1 inch wide and 2 inches long; mix together the flour, pepper and salt; dip each strip of meat in the seasoning, roll it up with a bit of fat in the center. Fill up the pie-dish with these rolls, and pour in as much water as will come half-way up the dish. For the crust—Take ½ lb. flour, ½ teaspoon salt, 2 dessertspoons butter and 2 of lard or dripping. Mix the flour and salt; make a stiff dough with cold water and work it till quite smooth, then roll it out on a floured board to be not quite ¼ inch thick. Spread over it half the lard and butter, double it up, roll out again; spread over the other half of the shortening, double it and roll out again; then fold it in three and roll out again, making three rolls altogether. Now wet the rim of the pie-dish, cut off a strip of paste and lay around the rim; wet that again and put on the top crust. Mark around prettily with a knife, and make a hole in the center to let out the steam. Brush over the pie with water or egg, and bake 1½ hours in an oven, very quick at first, then of only moderate heat. This makes a pie with a crust resembling puff-paste.

An Easier Pie:—Cut ½ lb. lean beef in bits, and drop them into a saucepan in which a dessertspoon of dripping is smoking hot. Let them sear on all sides, and add a sliced onion. Next shake in 1 tablespoonful of flour and brown it also. Now add 1 quart cold water, 1 tablespoon vinegar, pepper and salt to taste, and simmer for nearly 2 hours. You may add bits of carrot, potato, a sage leaf and a little more water if you choose. Finally put on a top crust made like short biscuit dough and bake. As the dough may soak up some of the gravy, add a little hot water to the stew before putting on the top. A very nice way is to make biscuits separately instead of putting the dough on as a top. When serving, split the biscuits and place them on a platter, then pour the stew over.

A very good pastry either for biscuits or for the top of the pie is made as follows: Rub 1 dessertspoon butter (heaped) into 2 cups flour until it is like fine breadcrumbs; add ½ teaspoon salt and 1 teaspoon baking powder, mix-

ing well. Make into a light dough with milk—about ¼ cup. Cut into biscuits, brush the top with milk, and bake in a sharp oven for 15 minutes.

"The Farmer's Advocate" Fashions.



7030 Child's Coat, 2, 4 and 6 years. 7041 Girl's One-Piece Bloomers with Under Body, 4 to 12 years.



7040 Surplice Peasant Waist, 34 to 42 bust

Please order by number, giving age or measurement, as required, and allowing at least ten days to receive pattern. Price, ten cents per pattern. Address, Fashion Dept., "The Farmer's Advocate," London, Ont.

On Making Scrap-books.

Do you know the pleasure of making a scrap-book? If not, you are not too old to learn, even though you be seventy. Pleasure?—Yes, and the profit, too, for there is nothing, perhaps, that gives more satisfaction and more help in time of need than a well-filled, well-indexed scrap-book.

The book itself may be made of sheets of stiff silesia stitched together, with stiff pasteboard covers neatly covered with canvas, or linen, or with thin oil cloth, if it is to hold cookery recipes. This makes a strong and durable book. Old "monster" scribblers, however,—in fact, absolutely useless books of any kind, may be used, provided some of the leaves are cut out in bunches here and there to make room for the clippings that are to be pasted in.

The next step is to page the book all through, and provide a small blank book, which may be divided under different heads, then subdivided alphabetically, so that entries and pages may be conveniently written in. For instance, under the Division "Cakes," may come "A"—Apple Cake, etc., see page —; "B"—Black Cake, see page, etc. Be sure to leave a good space under each letter for future entries.

Now, whenever you see a valuable recipe or hint that you are perfectly sure will be of use to you, copy it, or clip it out if you do not want to save the paper. Keep the clippings in a box, and some day when you have time paste them all into your book with thin paste, indexing them in your index book as you go. Repeat this operation at leisure, and presently you will find that you have a scrap book in which you can find anything that you want on a moment's notice.

Most women start on a household scrap book, but some extend the good work, making also biograph books, etc., and books for humorous selections, a very

convenient species, by the way, to give to a guest while one is too busy at housework to spare the time for "entertaining."

If you have not already a book for clippings, try one. Even if you do become possessed of a mania for making more, do not be alarmed. There are more foolish fads by far than scrap-bookitis.

Potatoes and Other Vegetables as Food.

(Condensed from Farmers' Bulletin 295, issued by the U. S. Dept. of Agr.)

Although the cereals, being richest in protein, are the most valuable plant foods, the vegetables also hold an important place, as in general they are rich in carbohydrates. Roughly, they may be divided into two classes; (1) the starchy roots, tubers, etc., such as potatoes; (2) the group in which a comparatively large proportion of the carbohydrate is in the form of sugar, or some other non-starchy soluble bodies.

Of the starchy group, the common potato is the most important, both as regards its nutritive value and the extent of its cultivation. It is supposed to be a native of Chile, as when Europeans first visited that country, they found the Aborigines cultivating it, as they had apparently long done. It was subsequently introduced into Europe by the Spaniards, and somewhat later brought to the British Isles by the English, about the time of the Raleigh expeditions.

The potato is particularly rich in carbohydrates, which in it take the form of starch. Its composition is as follows: Water, 78.3 per cent.; starch, 18 per cent.; protein, 2.2; fat, .1; ash, 1 per cent. [From this it will be apparent that as potatoes are very poor in protein and fat, the custom of good cooks of serving potatoes with meat, or preparing them as supper dishes with butter, milk, cream or cheese, is founded on a good scientific reason, the added constituents supplying the fat and protein necessary to good food.]

When peeled, potatoes should be at once put into cold water to prevent them turning brown, but they should not be allowed to stand long in it, as by so doing some of the soluble, nutritive constituents are lost. A similar loss is occasioned by boiling when peeled, especially if the water is cold to begin with. Hence the most economical ways of cooking potatoes are to bake or boil them in their skins. If steaming is practicable, it is also a good method. After boiling, take off the skins at once and serve hot. Served baked potatoes at once, or, if they must stand for a time, break them, to allow the escape of steam, and so prevent soggy.

Potatoes should be stored in a dry, well-aired place, and kept at a temperature of from 32 degrees to 50 degrees F. Very old, shrivelled and sprouted potatoes, and those which have turned green by exposure to the light, should not be used, as they have developed an abnormal amount of a poisonous substance called solanin.

SOME OTHER VEGETABLES.

Jerusalem Artichoke.—This plant, which belongs to the sunflower family, did not get its name from Jerusalem, but as a corruption of the word "girasole," the Italian name for sunflower. The composition of the tuber is very similar to that of the potato. It contains 78.7 per cent. water; 2.5 per cent. protein; 0.2 fat; 17.5 carbohydrates, but in the artichokes the carbohydrates, instead of being starchy, consist of two substances called inulin and levulin. For this reason, this vegetable is permitted in the diet of patients suffering from diabetes.

The common "succulent" roots, tubers and bulbs, viz., beets, parsnips, carrots, salsify, onions, etc., are all less nutritious than the above-mentioned, but are still valuable additions to the diet, supplying as they do, mineral salts, while contributing to the bulkiness necessary for normal digestion, and for the prevention of constipation. They are, then, medicines rather than foods, as they are relatively low in protein and carbohydrates. When cooking them, steaming is preferable to boiling, as occasioning less loss of nutrients. The addition of butter, cream, or milk sauce, of course, adds to the nutritiousness of all such vegetables. Turnips and onions are both rich in sulphur,

therefore useful, especially the latter, for prevention of constipation. Radishes are often supposed to cause digestive disturbances, but more thorough mastication would probably do away with this trouble, and render this crisp and appetizing vegetable possible for many who like it, but are afraid to partake of it. Onions, by the way, are usually among the foods allowed to diabetics, as is also black salsify, in which carbohydrate is chiefly inulin instead of starch.

Oh What's Cam Ower the Auld Hoose.

Oh, what's cam ower the auld hoose?
There's sic a fearsome din;
There's sic a paidlin' but an' ben,
An noise baith out an' in.
There's a bairnie in the cradle,
Anither on the floor,
While a toddlin' man wi' curly pow
Keeks in at the door.

There's lassies in the orchard,
There's laddies by the brook;
The peacefu' fish that's swimmin' there
Ha'e learnt tae fear the hook.
The sun seems fairly dancin',
Sae blithe, sae bright an' gay,
Oh, what's cam ower the auld hoose?
It's surely changed the day.

The last time I ganged by it
The door was shut up tight,
The window blinds were a' pu'd doon,
The floor was unco white;
'Twas owned by maiden ladies,
Both prim and grim and gray,
Noo bairnies sweet hae ta'en their place,
An' they hae gane away.

Now thro' the open doorway
I see the print o' feet,
And blossoms strewn by baby haunds
Hae made the place sae sweet;
The place is nae sae clean noo,
But happiness is there,
An' love fills up the auld hoose,
An' sanctifies the air.
Quebec. JUANITA.

Little Queen.

She was as beautiful and graceful as a deer—the most beautiful Jersey heifer ever raised at the old farm. Indeed, she greatly resembled a deer in her markings, her movements, and many of her traits. Nor is it wonderful that the belief prevails among country people, despite all that the stock books say to the contrary, that Jersey cattle are descended from a mixed breed in Europe, which centuries ago interblended with the red or fallow deer of that continent. Little Queen—that was what our girls called her—was a true Princess of Jerseys, the daughter of Molly 2nd, which was the first Jersey cow we had at the old squire's, and the first one brought into that town.

This was in 1867. Our Jerseys are now well-nigh as quiet and easily controlled as Durhams or Holsteins; but a wilder, more skittish creature than Molly 2nd was never kept in a barn. She was the daughter of Molly 1st, which was imported direct from either Guernsey or Jersey.

Every one knows how a pretty Jersey heifer looks, and I will not stop to describe Little Queen further than to say that in her case all the Jersey markings were strongly accentuated: the slim, straight legs, the delicate light fawn shades about the eyes, nose and ankles, the alert, sensitive ears, curved, clean, black-tipped horns, and lovely clear, full, limpid eyes.

She ran with the other young cattle till the spring when she was three years old. Then one night in May Little Queen failed to come home with the rest. We guessed the cause, but were unable to find her that evening; nor did a careful search of the pasture the next day result in discovering her whereabouts. On the day following, Addison, Halstead and I looked for her through the woods adjoining the pasture, with no better success.

At that particular time we were very busy with our farm work. Three or four days passed, and then Willis Murch, one of our young neighbors, came to us with a rather improbable story of our missing heifer. Willis had been trout-fishing up the brook which flowed down through "the great sheep pasture," a partly cleared tract of a hundred acres or more to the north of the old squire's

Our August Sale is Your Piano Opportunity

You can get that long-desired piano for much less money during our Midsummer Special Sale than you expected to pay for such value. Just suggest that we tell you which reliable dealer near you can show you these superb instruments.

See Our New Designs



Ask for Catalogue

Catalogue "G" (which please ask for) shows several handsome designs besides this beautiful Louis XV model. Let us prove to you that the SHERLOCK-MANNING has merits exclusive to itself—and yet costs less. Hear the exquisite tonal quality of the SHERLOCK-MANNING, and you will never be satisfied with an ordinary piano. Learn now how much of a saving our August Sale can make you. Write to:

The Sherlock-Manning Piano & Organ Co.
LONDON, ONTARIO. No street address necessary.

EVENTUALLY

The "PREMIER"

CREAM



SEPARATOR

LET IT BE NOW AND SAVE EXPENSE

WRITE FOR FULL INFORMATION

The Premier Cream Separator Co.
Winnipeg, Man. TORONTO. St. John, N. B.

cattle pasture. He had his dog Jack with him; and the dog, questing about, ran snuffing into a thicket of low hemlock a few rods back from the brook. Suddenly Willis heard a crash and a rumpus among the hemlock. Jack barked, then yelled; and turning, Willis saw his dog in the air, fung from out of the thicket! A wild-looking Jersey heifer, whose movements, he said, were "quicker than lightning," dashed out in pursuit, and actually tossed the dog again, this time into the brook, before it could escape her. Willis himself was standing beside a bush, fishing, a little farther up the brook. He watched till the heifer had gone back into the thicket; then stealing silently round to the other side, he parted the boughs slowly and peeped in.

BOVRIL

is appreciated by the house-wife on account of the delicate flavor and aroma it gives to all dishes with which it is used. It also makes them more nourishing and is a great aid to digestion.

GOITRE CURED

A thick neck is not only unsightly but most uncomfortable as well as unhealthy and dangerous. Our

GOITRE SURE CURE

is recommended highly by our numerous patrons as a most satisfactory home treatment. A gentleman in an Eastern Ontario town writes: "My wife used half a bottle of the external and one bottle of the internal treatment and reduced her neck three inches. Send another bottle of the internal remedy, which will be sufficient to cure, as there is only a very small lump left. I am writing to some friends recommending your cure." This is only one of many cases we could mention. If you have goitre send \$2.00 and get our treatment. Expressage paid.

Superfluous Hair

Moles, Warts, Red Veins, etc., always eradicated permanently by our very reliable method of antiseptic Electrolysis and satisfaction assured in each case. Come during the Exposition for treatment if you live out of town and can't come earlier. Treatment and remedies for all facial blemishes and skin troubles. Booklet "E" and sample of toilet cream mailed free.

Hiscott Dermatological Institute
61 College St., Toronto Estab. 1892

A DAY STARTED

on Cowan's Cocoa, is a day with clear head and steady nerves—a day full of snap and life.

DO YOU USE

COWAN'S PERFECTION COCOA

(MAPLE LEAF LABEL) 199

Balmy Beach College
AND SCHOOL OF MUSIC AND ART
Toronto, Ontario

A Residential School for Girls.
Beautiful and healthy location.
General course of study from primary to 2nd year Collegiate.
Special departments of Music, Art, Physical Culture and Expression, Domestic Science, Dress Design and Commercial Subjects.

School re-opens Sept. 12, 1911
MRS. A. C. COURTICE, Directress
Beech Ave. E., TORONTO

At the very thickest part of the ever-green he presently caught sight of the heifer, standing on the alert, listening intently; and close beside her, under the green boughs, lay a little Jersey calf of which she was evidently the anxious mother.

Willis guessed at once that it was our lost Jersey. He called "Co-boss, co-boss!" to her, and thought he would drive her out and start her for home. He had no sooner stirred and spoken than she whirled and charged him. He declared that he had to run for his life, and that he only escaped her by scudding across the brook on a fallen tree trunk.

We thought Willis' account a highly-colored one. It was the dog, the old squire said, running in where her calf was, that had made Little Queen behave so savagely; and he bade Asa Doane, one of our hired men, go with Addison and me and get her home.

"Be gentle with her, boys," he said. "Take a halter and some nubbins of corn. Call to her, and do not offer to lay hands on the calf at first."

We proceeded to the pasture and searched the thickets along the upper course of the brook for an hour or more, without discovering a trace of either heifer or calf. Finally, at the extreme upper corner of the pasture, where low hemlock was growing among large rocks, Asa came upon her suddenly, lying hidden in a little hollow under thick boughs.

Instead of speaking softly to her, he turned and shouted, "Here she is!" The next instant he had to flee for his life.

Nor did he escape her. Just outside the thicket Little Queen overtook him. He turned and grabbed her by one horn. She threw him to the ground, caught her horn in his drilling frock, tore it off him, and tried to gore him. It was a fight for life. He seized her by the horn again, and fastened the fingers of his other hand in her nostrils. She dragged him fifty yards or more, wrenched herself free, and tossed him violently over a log.

By this time Addison and I had run to his assistance. We tried to catch the heifer about the neck and by the horns. She flung us aside as if we had been puff-balls, then charged Addison. He ran round a rock, and by a quick dash, escaped across the brook into another thicket. Losing sight of him, she whirled on me, and I climbed the hemlock that was handiest.

She now ran back where her calf was hidden, to make sure it was safe, and we stole away as softly as possible. We had had enough. There was a swift fury in her movements which made us aware that we had better stop. Asa had been in grave danger. He was somewhat bruised and in a towering passion. "I'll shoot that brute as quick as ever I can get a gun!" he exclaimed, and went raging home, bent on loading an old rifle we had at the farmhouse.

But the old squire forbade it. "She is only defending her calf according to her lights," said he. "There has been mismanagement. It's a pity she's got into such a way, but I will not have her shot down."

"What will you do with such a critter?" Asa retorted, angrily.

"I don't quite know myself," the old squire replied, smiling. "Leave her there a while, till the calf is a little older."

Theodora and Ellen believed that they could go up to the pasture and call Little Queen out of her covert with nubbins of corn, of which she had always been very fond; but we dissuaded them from attempting this. The heifer had now gone too far wrong to make such tactics safe. "Let her alone a while," the old squire said to us all.

This plan, however, did not prove wholly practicable. Certain idle fellows in the vicinity, who had heard from Willis and Asa that one of our Jerseys had run wild, began going to the pasture on the sly, some of them with dogs, to see what Little Queen would do, and have some sport with her. We heard that several of them had narrow escapes. They went there for sport, but had more "sport" than they wanted, and were so unsportsmanlike themselves afterward as to raise a clamor to have Little Queen slaughtered. Even some of our staid farmer neighbors remonstrated with the old squire. "That heifer of

yours is liable to kill somebody," they said.

"Not if people keep out of my pasture," the old gentleman replied, grimly. "They shall have legal warning." Thereupon he had five large trespass notices prepared and set up conspicuously round the pasture fence. I remember those notices well; Theodora and I printed them in large black-ink letters, on pine boards.

WARNING.

DAINGEROUS HEIFER HERE.
All Persons are Forbidden to Enter this Pasture with Dogs or Guns.

There was a flock of nearly a hundred sheep in this pasture, and some of us had to go there with salt for them once a week. For a long time, however, we rarely saw Little Queen. Probably she fed in the early morning hours, then retired to the thickets along the brook, where she kept her calf hidden.

Those hemlock thickets were her small kingdom. She was queen of that part of the pasture. It was hers; and for weeks neither dogs nor boys dared to go there, or if they did, they had to leave in haste.

A curious thing about Little Queen was that she never bellowed, pawed the earth, or uttered a sound of any sort. With her it was all action and no waste of breath—one straight, sudden rush at the intruder, with well-nigh incredible vim and swiftness.

During all this time, too, no one had actually seen that calf of hers. It was not till August that we began to catch sight of him out in the open pasture, grazing near his mother. Even at a distance we could see that he was a handsome little chap, plump, sleek and glossy. Evidently he had fared well.

The life which Little Queen now led appeared to have sharpened all her senses. Let one of us approach the pasture fence a hundred rods away, and she was almost certain either to see or scent us, and would then beat a rapid retreat to the thickets with the calf at her side.

Several times that summer grandmother asked the old squire what he expected to do with that Jersey when housing-time came; and I remember that the old gentleman laughed and said:

"Ruth, I don't know yet. She has renounced her allegiance to me," he added, still laughing. "She has declared her independence and set up for herself."

One day in October three hunters from Portland went up the valley of the brook, and regardless of the trespass notices, fired repeatedly in the pasture at partridges or deer. Halstead and I heard the guns, and went up there to see what effect it was having on Little Queen. We made a circuit of the pasture fence, but could see nothing of her. The next day the old squire and Addison searched, and discovered that she had left the pasture. On the north side they found where two cattle, one having little hoofs, had jumped the fence and taken to the forest. The reports of the guns or the smell of gunpowder had impelled Little Queen to decamp with her calf to the great woods. "It is doubtful if we ever see her again," the old squire said. "Probably she is miles away, hiding in the depths of some swamp."

There was a snowfall of six or eight inches on one of the early days of November. Very cold, frosty nights followed, and we wondered how the runaway was faring. Theodora and Ellen spoke of her several times; they thought she must miss her warm pen at the barn and her provender night and morning. Vagrant young cattle have sometimes wintered out in the woods of Maine, but after the deep snows come, it is a desperately hard life for them, with nothing but frozen browse to eat and snow for drink. Addison thought that she would join a herd of deer or moose, or possibly find shelter in some old logging-camp.

Other snows followed, and about November 20th there came a severe north-easter. It began about three o'clock that afternoon, and by evening became very violent. The cattle and sheep were now all at the barns for the winter, and were fed at regular hours. At nine o'clock Addison and Halstead, with a lantern, went out through the wood-house and wagon-house to the east barn, to give the cows and horses their provender for the night. While inside they

METALLIC CEILINGS

Both clean and fire-proof—no dust and dirt falling, as from plaster ceilings. Costs no more, but looks thrice as artistic. The life of a plastered or papered ceiling is short and nearly every year needs repairs. Our **Metallic Ceiling** will last as long as the house—always fresh and clean. We can send you hundreds of pretty designs to select from for both **ceilings and walls.**



Our beautiful free booklet tells you all about Metallic Ceilings and Walls. Send for one.

"Really I don't know how people can stand the constant drudgery necessary to keep the ordinary ceilings and walls clean. Metallic is so clean and sanitary."—The Philosopher of Metal Town.

MANUFACTURERS 1749

The Metallic Roofing Co. Limited
TORONTO & WINNIPEG

DISPERSAL SALE

Blackhall Clydesdale Stud

at BLACKHALL, PAISLEY, on

Thursday, 31st August, 1911

MESSRS. ROBERT WILSON, SON & LAIRD have received instructions from the Trustees of the late Mr. David Riddell to sell, by Public Auction, viz.:

- 15 PEDIGREED STALLIONS, Four Years and over.
- 6 PEDIGREED STALLIONS, Three Years and over.
- 8 PEDIGREED STALLIONS, Two Years and over.
- 15 PEDIGREED STALLIONS, One Year and over.
- 7 GELDING COLTS.
- 9 PEDIGREED BROOD MARES and FOALS at foot.
- 16 PEDIGREED BROOD MARES, Yeld.
- 15 PEDIGREED BROOD MARES, Three, Two, and One Year Old.
- 4 FARM GELDINGS and several DRIVING PONIES.

Further particulars later. Catalogue in course of preparation.
97 High Street, Paisley, Scotland.

NO LEAK-NO RUST

STEEL TANKS V. WOODEN

The steel tank for water storage is as much superior to wooden tanks as modern steel farming implements are to the crooked sticks of our ancestors in early ages. Wooden tanks are unsanitary and liable to leak. Our steel tanks are all steel of the finest quality—self supporting—surrounded by an iron angle framework with braces added according to size of tank. The angle iron framework ensures absolute rigidity, and the braces added give the tank a strength four times in excess of any strain that may be applied.

Guaranteed for ten years but will last a lifetime.
STEEL TANK CO., TWEED, ONT.
AGENTS WANTED EVERYWHERE

Farm for Sale

There will be offered for sale by tender a farm of eighty-six acres, adjoining the north-western limits of the town of Preston, Waterloo Co. Farm in good state of cultivation; soil clay loam; seven acres hardwood bush; no waste land; two good houses; large bank barn, with good stabling, and all necessary outbuildings.

For marketing any kind of farm produce this locality is unexcelled.

Tenders to be in by October 1st.

For particulars apply to:

Box 105, Preston, Ont.

Highest or any tender not necessarily accepted.

"PUT YOURSELF IN HIS PLACE."

"Joseph, I should think you'd be ashamed to be in the same class with boys so much smaller than yourself."

"Well, mother," replied Joe, "I look at it in a different way. It makes me feel fine to see how proud the small boys are to be in the same class with a big boy like me."—The Delineator.



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

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

FARM FOR SALE—100 acres, Innisfil Township; good grain farm; 1 mile from Cookstown; good buildings. Further particulars apply to Box 31, Cookstown.

FARM FOR SALE—200 acres, in Elma Township, near Listowel; good buildings; land clean and in excellent state of cultivation; in good dairy section; will sell on easy terms, as owner wishes to retire. Apply to Wm. Burnett, Britton, Ontario.

ONTARIO VETERAN GRANTS WANTED—Located or unlocated; state price. Box 35, Brantford.

ONE-QUARTER SECTION, 45 miles north-east of Saskatoon, 8 miles from C. N. R. 95 acres broken, good barn and furnished shack; also implements cheap for cash. For full particulars apply: Heary Hill Hyslop, Teeswater, Ontario.

SEED WHEAT FOR SALE—American Banner, White, Bald, grown on new land; splendid yield; tested 60.8 bushels per acre at Guelph (see last report); strong straw. Send for sample. Price, 90c. per bushel; bags, 25c. each. Prompt shipment. Yorkshire swine. W. T. Davidson & Son, Meadowdale, Ontario.

VANCOUVER ISLAND, British Columbia, offers sunny, mild climate; good profits for men with small capital in fruit-growing, poultry, mixed farming, timber, manufacturing, fisheries, new towns. Good chances for the boys. Investments safe at 6 per cent. For reliable information, free booklets, write Vancouver Island Development League, Room A, 23 Broughton Street, Victoria, British Columbia.

WIRE FENCING FOR SALE—Brand new, at 20 to 50% less than regular price. Write for price-list. The Imperial Wire & Metal Co., Queen St., Montreal.

WANTED—Situation as farm hand; married man; 28 years; life experience; 8 years in Canada; separate cottage, fuel, milk and potatoes; current wages. Arthur Allen, 12 1/2 Blong Ave., Toronto.

220 ACRES—Township of Markham, County of York; 1 mile from Locust Hill station, C.P.R., 20 miles from Toronto. 2 good houses, modern outbuildings; silos, wind-mills, etc. 20 acres bush; stream through farm. One of the best farms in township. Very reasonable price for quick sale. F. E. Resor, Locust Hill, Ontario.

Notice to Reeve and Councillors

New Patent Snow Plough, can do the work of 50 men; Stone and Stump Puller; Silo for green corn. Come and see me at Sherbrooke, Toronto, Ottawa, and Quebec Fairs.

A. LEMIRE, Proprietor, Wotten, Que.

Registered Seed Wheat for Sale

Dawson Golden Chaff Variety, grown according to the rules of the Canadian Seed Growers' Association for the last 11 years. Scored 97 3/4 out of the possible 100.

C. R. GIES, Heidelberg, Ont



PURE-BRED Pekin and Rouen Ducks; Wyandotts Rocks; Leghorns, trios, not related, \$2.40. Satisfaction guaranteed. Wade & Son, Sarnia, Ontario.

S.-C. White Leghorns Great layers and prize-winners. Eggs, \$1.00 per 15; a hatch guaranteed. **Geo. D. Fletcher, Binkham Ont**

A Paper of Tacks.

You can't civilize the fellow who doesn't care.

The best advice some of us can give is, "Do as I don't."

The goodness of the untempted is as flat as eggs without salt.

The more brains under the hat the less jewels hanging to the clothes.

Some folks ought to take their consciences out once in awhile for exercise.

Being ahead of time may spoil a minute; being behind time may waste a day.

Silence isn't always golden. The talker with something to say is worth a dozen keep-stills.

The school is the present's birthplace of futures, and when we shorten its usefulness we rob ourselves and we steal from the future.—Hayfield Mower.

heard a muffled tramping of hoofs on the driveway outside the great barn doors, and thought some neighbor had driven in. Addison slid one door back a few feet, and holding up the lantern, looked out into the storm.

There, close to the door, stood the truant Jersey, her back covered with snow, and by her side the precious calf, his little back also coated white and even his ears full.

Addison was so surprised he stepped back—when he marched Little Queen, and went along the barn floor toward the pen where earlier in life she had spent her first winters. With every step the calf snuggled so close to her as to crowd against her side. She had him beautifully trained to heel.

I have no doubt it was maternal solicitude which led her to come back to shelter and food. When that bitter storm came on, she realized that she could no longer care for her calf and keep him from suffering. She had therefore put her pride in her pocket, so to speak, and come home with him.

The boys opened the gate of the pen, and in she went as familiarly and docilely as need be. They fed her there with hay and a ration of meal, then came hastening in to tell us what had happened.

I remember that we all went out to the barn to see the returned prodigal, and there was a good deal of merriment. So far from evincing either wildness or fierceness, Little Queen behaved quite as she had done formerly when at the barn. Apparently she was ready to let bygones be bygones. She had had one glorious summer of liberty; but now, in her little Jersey mind, she had decided that domestication was best, after all, particularly in hard snow-storms.

I never saw the old squire more pleased by any incident of our farm life than over the voluntary return of Little Queen with her calf. Nearly every time he went to the barn he would pat her head over the pen railing and give her an apple or a nubbin of corn.

We thought it likely that when spring came and the cattle were turned out to pasture, Little Queen might attempt to run wild again, but she never did; and really the old squire's forbearance with her in that one escapade of her youth was not only humane and wise, but profitable to him as a farmer. Little Queen made one of the best cows, if not the very best, we ever had in our herd. She was kept at the farm for sixteen years afterward, and over and above all expenses of fodder and care, was worth fully a hundred dollars a year to us. Nothing ever ailed her. Her milk was rich in butter-fat, and the butter itself yellow as gold. Some of her granddaughters are still in our dairy herd; they are all prime cows. Actually, judged by her whole record, that heifer was worth more than a thousand dollars the night she came home in the storm with her calf.—C. A. Stephens, in Youth's Companion.

Peace Treaties Signed.

On August 3rd, in the White House at Washington, occurred one of the most important events in the history of humanity. The simplicity of the ceremony added to its impressiveness. Three great nations, France, Great Britain and the United States, by formal treaties, pledged their faith in the substitution of arbitration for bloodshed in the settlement of all international disputes, including questions of national honor and vital interest hitherto considered excepted in arbitration conventions. The names attached were President Taft, Jas. Bryce, the British Ambassador; U. S. Secretary Knox, and Viscount De Saint Phalle, and Second Secretary, Ovey of the British Embassy. Subjects in dispute are to be submitted to The Hague Tribunal, unless, by special agreement, some other tribunal is created or selected. In connection with this treaty, the Alliance between Great Britain and Japan was some time ago modified to exclude the United States from the possible enemies of Britain, and the life of it was extended nearly six years. This new convention was signed in London by Sir Edward Grey, British Secretary of Foreign Affairs, and Count Kato, Japanese Ambassador. The world is thus moving on in the direction of

peace. These great treaties do honor to the high contracting powers, and make auspicious the early decades of the Twentieth Century.

City Boy: "What makes a horse act naughty when he sees an auto?"

Country Boy: "It is this way: Horses is used to seein' other horses pull wagons, and they don't know what to think of 'em goin' along without a horse. Guess if you saw a pair of pants walkin' down the street without a man in 'em, you'd be scared, too."

Live peaceably with all, so shalt thou lead
A happy life thyself. —Goethe.



It is most important to use THE BEST SUGAR for PRESERVING

Make YOUR preserving a certain success by using

The 20 pound bags are convenient—also sold in 100 pound bags and barrels; as well as by the pound.



The St. Lawrence Sugar Refining Co. Limited, MONTREAL.

THE WORLD'S BEST Cream Separator

is bound to be simplest and have the greatest skimming force. Simplicity means durability, ease of cleaning, superior cream. Greatest skimming force means cleanest skimming, most butter.

The only simple separator is the

SHARPLES Dairy Tubular

It contains no disks or other contraptions. It has twice the skimming force of others, and therefore skims faster and twice as clean. Wears a lifetime. Guaranteed forever by the oldest separator concern on this continent. These are simple, plain, easily proven facts. If you heed them, you will get a Tubular in the first place. It repeatedly pays for itself by saving what others lose.

Why bother with any complicated or cheap machine? You don't want a separator that the patented Tubular put out of date over ten years ago. The fact that others have finally bought Tubulars means "Finally a Tubular for you."

Our local representative will show you a Tubular. If you do not know him, ask us his name. Write for catalog 193.

THE SHARPLES SEPARATOR CO.,
Toronto, Ont., Winnipeg, Man.



MAKE YOUR OWN TILE

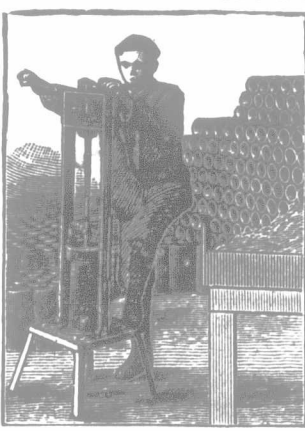
One man can make 300 to 600 perfect tile a day with our

Farmers' Cement Tile Machine

At a cost of \$4 to \$6 per 1,000. CAN YOU AFFORD TO BE WITHOUT IT? The only farm tile machine that does not require hand tamping; the only farmers' machine operated by either hand or power. Machine makes 3, 4, 5 and 6 inch tile. Our Waterproof FLEXIBLE CASING holds tile in perfect shape till set. NO PALLET.

TEN DAYS' FREE TRIAL. If after 10 days' trial it does not meet with entire satisfaction, return at our expense. Write to-day for illustrated catalogue.

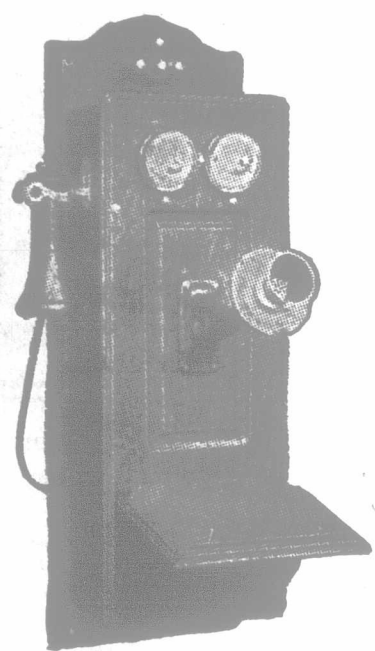
Farmers' Cement Tile Machine Co.,
WALKERVILLE, ONTARIO.



The Use of Life.

My life is what I make it. I am I, A spark of God, to cherish or let die. I breast no wave, but drift to sea, a weed,
Or shape myself into a tuneful reed.
Or else I lie and grovel in the dust, For ever murmuring, "What must be, must!"
Or work with every fibre, till I stand A beacon, shedding light throughout the land.
—Eleanor Gray, from "Eos" and other poems.

Choose Good 'Phones



FREE TRIAL

Write to-day for particulars regarding our Free Trial Offer.

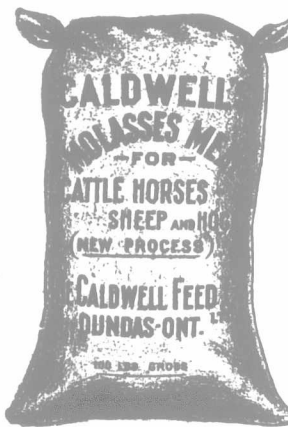
You want telephones that will give continuous service at the minimum expense. You want telephones constructed of the very best materials in the very best way—Canadian Independent Telephones.

Everything we make is guaranteed, and we stand behind every guarantee to the last letter. We hold the confidence of between 400 and 500 independent Canadian telephone lines, and furnish them with their supplies. The proof of the superiority of our equipment lies in the fact that our business doubled in volume last year.

Canadian Independent Telephone Company, Limited

20 Duncan St., TORONTO, ONT.

For "Show" Animals



If you are going after prize money this coming summer and autumn, Caldwell's Molasses Meal will go a long ways towards helping you get a big share. Feed a few pounds daily to your stock in place of an equal amount of grain.

Caldwell's Molasses Meal

will give your stock sound digestion, round them out, make them clear-eyed, sleek, prize-looking. It is a health-food, a fattening-food, a show-food, containing over 80 per cent. Pure Cane Molasses—but no beet sugar refuse or drugs. A high-quality food, yet an economical one. Write us for pointers on feeding for show purposes. Order from your dealer, or direct from

The CALDWELL FEED CO., Limited
Dundas, Ontario.

SIXTY-TWO PAGE CATALOGUE FREE

WATCHES

LEATHER GOODS
EXPERT WATCH REPAIRING
TORONTO'S BIGGEST MAILORDER HOUSE

SUIT CASES
HAND BAGS
TRUNKS

WEDDING RINGS
NECKLACES
GIFTS

PHOTOGRAPHS
AND SUPPLIES

DIAMONDS

UNITED WATCH & JEWELRY CO. TORONTO.

FARMS WANTED—We have direct buyers. Don't pay commissions. Write describing property, naming lowest price. We help buyers locate desirable property free. American Investment Association, 29 Palace Bldg., Minneapolis, Minn.

Your Daughter's Future

depends to a great extent upon her education. Send her to

Alma (Ladies) College

ST. THOMAS, ONTARIO

a well-managed residential school. Large and efficient staff; extensive campus for recreation; seven courses of study.

Full information on request. Handsome, illustrated catalogue FREE.

FALL SEMESTER BEGINS SEPT 11th

The Child's First Teeth.

In the ordinary course of life, man is provided with two sets of teeth in early life—a temporary set which are rather frail, and, later, permanent and stronger ones, which replace these. The strength, as well as the regularity and beauty of the latter, depends very much upon the preservation of the first ones. The temporary teeth, which are also called milk teeth, are twenty in number. There are ten in each jaw, and they are usually cut between the sixth and twenty-fourth or thirtieth months. These teeth are in service until the seventh year; then the front teeth, the first which were cut, are replaced one by one by similar teeth, which are permanent. It takes four or five years for the second teeth to replace the first ones. In the meantime, others of the permanent set are coming through and finding a place.

Teeth are the mechanical instruments provided by nature to render food digestible by dividing and grinding, thus making it fit to enter the stomach; in fact, the first process of digestion commences in the mouth, where the saliva dissolves part of the finely divided food into fluid. Each tooth has its own peculiar duty to perform, and is placed in the mouth according to the work that is required of it. The eight front teeth, four on either jaw opposite each other, are called incisors, on account of their broad cutting blade and scissors-like action in biting off food and cutting it up. The next teeth, four in number, one at each side of the incisors, are called canines, because in shape they resemble the teeth of dogs; they are also called eye and stomach teeth. In action and use they are like the incisors, but have larger roots and are much stronger. The next teeth, eight in all, complete the temporary set. These are called first molars, and when replaced by permanent ones, the names are changed and they are known as bicuspids. These teeth are commonly called double teeth; they have a broad, flat surface, and their use is to grind the food into a pulpy mass.

At the sixth year, four large double teeth called molars come in, and four more of the same kind at the twelfth year. All of these are permanent, and, as has been said, occupy a space back of where the temporary set are or were; these are the last teeth except the wisdom teeth, which are not cut until maturity—anywhere between the seventeenth and twenty-fourth years.

Teeth are composed of three substances—enamel, dentine, and nerve pulp. The last is extremely sensitive, as most of us have cause to know. The sensitive tissue nature has carefully encased in dentine, which is sometimes called ivory, and is next to the hardest substance in the body; this in turn is carefully covered with shining white enamel, which is the hardest substance in the body. So we see that nature has certainly done her part in the construction of these most useful members. Where pressure and grinding are to be the work the enamel is thickest; wherever there is friction—as with the front teeth in biting—there we find the enamel not only a little thicker, but so highly polished and smooth that the teeth can rub back and forth against each other almost constantly with little danger of wearing away. The enamel is, in fact, so hard and smooth that it is said that the hardest and sharpest steel instrument can be firmly drawn across it without leaving the slightest scratch. But, while enamel is so very hard, it is also very brittle, and a sudden contact with a much softer substance than steel, or the forcing of some small, hard article—such as the point of a pin or needle—between the teeth, will cause the enamel to crack and chip off. Constant friction of a very small particle, even though its composition may be fairly soft, will cause the enamel to wear away; also the action of certain acids, chiefly lactic acid, caused by the fermentation of food in the mouth, will eat a hole through this hard substance. Wherever the enamel is destroyed, whether from friction, clipping, or the action of fermenting acids, no matter how small the spot may be, it leaves the dentine exposed; and, while dentine is a very hard substance, it rapidly crumbles away when exposed to moisture. Thus a little cavity is formed which becomes filled with particles of food, which cause the dentine to soften still more, and a larger cavity forms, and so on,

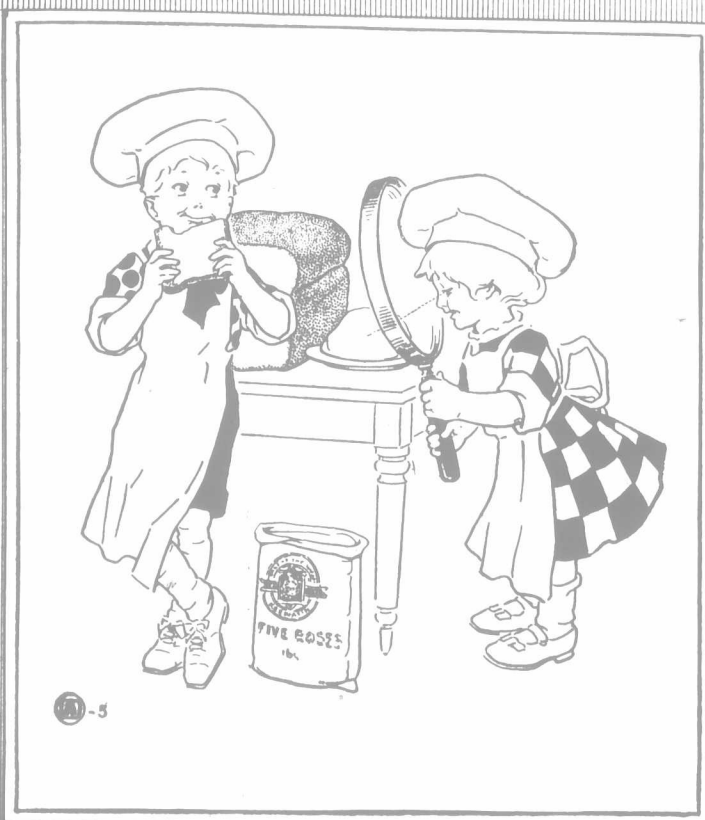
until it is not long before the sensitive nerve pulp is reached.

There are three distinct parts to the tooth—the crown, which is the part exposed above the gums; the neck, a narrow band which lies just beneath the thin part of the gum; and the root, which is a long prong extending downward and firmly embedded in the jaw. The more pressure that is brought to bear upon a tooth the stronger and larger is the root. Just as soon as the first teeth appear through the gums, the crowns of the permanent teeth commence to push up and against their roots, grinding them away atom by atom until the entire roots are absorbed and the teeth held in place only by the narrow neck, and it takes but little effort to detach the crown. It is very essential that these first teeth should remain in the jaw until they are replaced by the second ones; they should be well cared for, and not lost through decay, as their retention is necessary to secure space for the new ones which are to take their place. If the first ones are lost, the new ones are apt to come in irregularly, robbing the jaw of a tooth, or two growing in the same space, one overlapping the other. This irregularity seriously interferes with mastication, as the teeth of both upper and lower jaw are intended to fit with a certain exactness, and when this symmetry is broken, if by only a very slight misplacement, pressure is brought to bear on points where it should not be, and in time the enamel is worn away. Then again, if each tooth does not occupy the space naturally intended for it, the shape of the jaw is more or less altered. This is especially so when the eye teeth are lost at an early age, as they are most useful in preserving the shape of the angle of the jaw. Perfect articulation is also seriously interfered with by irregular or crowded teeth.

The normal child usually cuts his first teeth, the two central lower incisors, between the sixth and seventh months. With the cutting of teeth it is not at all uncommon for babies to be restless, and oftentimes feverish for some days, or even weeks, before the teeth appear. The common signs of teething are an increased flow of saliva and the eager biting of nipple, fingers, or any resisting substance the child can place in the mouth. Teething is also occasionally accompanied by more serious symptoms, such as diarrhea, or, just the opposite, stubborn constipation; or severe colic right after feeding, and eruption on the skin, particularly around the mouth. Sometimes when a number of teeth are all trying to crowd through at once, there are convulsions more or less severe.

While the teeth are cutting their way through the gums, a boric-acid mouth wash should be used at least twice a day. If the gums are swollen and bluish in color, the colder the mouth wash the better, as cold applications give relief. Teething-rings of soft rubber may be used, but they should be kept scrupulously clean, and not allowed to lie around on chair, table, or shelf, or to drop on the floor and then be put into the baby's mouth. When not in use, they should be kept in a solution of boric acid, or a cup of water containing a pinch of borax or soda bicarb. Sometimes, when the tooth is seen just under a thin layer of gum, it will ease the child greatly to have the skin broken by friction. In such a case, cover the finger with a clean piece of gauze, and rub the spot gently with a firm pressure until the gum bleeds and you can feel the edge of the tooth. If small ulcers should appear in the mouth during the teething period—and this is not uncommon—they will soon yield to treatment if touched with a powder composed of equal parts of powdered bismuth and burnt alum. In addition to this, spray the mouth three times a day with a solution of fifteen grains of chlorate of potash to one ounce of water.

From the time that the first lower tooth appears, up to the first year, the mouth should be well rinsed or sprayed with a solution of boric acid or boiled water twice a day; more often than this is not necessary, as at this age the child secretes enough saliva to carry off any residue of milk left in the mouth after feeding. The best time for using a mouth wash is night and morning, for this reason: after the evening meal the child is put to bed, and presumably sleeps the rest of the night; while unconscious with sleep, the saliva does not gather as freely in the



Note the Color of *your* flour—
And the Bread it makes for you.
Delicately *creamy* is FIVE ROSES flour.
Because it is *not bleached*, don't you see.

Clear—Immaculate—Desirable.

A *pure* Manitoba wheat flour—FIVE ROSES.

And the healthy sun-ripened spring wheat berries are *naturally* of a golden glow.

And the meaty heart of the polished kernels is *creamy*.

Milled from *this* cream, FIVE ROSES is delicately "creamy."

The only *natural* flour from Manitoba's prime wheat.

Which gets whiter and whiter as you knead it.

And *your* bread is most appetizing, *unusually* attractive in appearance.

Looks good.

And is good.

Bake this *purest unbleached* flour.

Five Roses Flour

Not Bleached



Not Blended

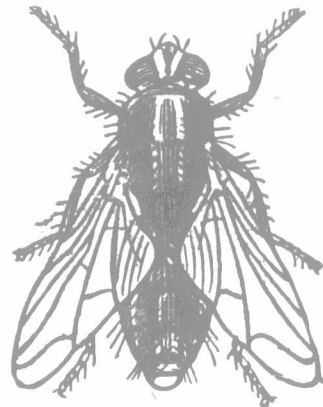
LAKE OF THE WOODS MILLING COMPANY, LIMITED, MONTREAL

mouth, neither does the child swallow as often, consequently any milk that remains in the mouth after this meal stays there during the night, to ferment and turn acid, which is bad for the teeth. In the morning, the cleansing of the mouth is also necessary on account of the accumulation of mucus and mouth bacteria which the warmth of the mouth causes to grow in large numbers. As the child grows older the number of teeth increases, and some solid food in the shape of cereals, toast, crackers, eggs, etc., is given to the child. Now the teeth will require a little more attention, as these foods are more or less pasty and will lodge in the crevices between the teeth or near the gums. If these small particles are allowed to remain long in the mouth they decompose. Several swallows of water after meals will greatly aid in loosening the food remaining in the mouth.

The eight incisors are the first teeth to appear, the four molars come next, then the canines, then four more molars. As soon as the first molars are well through, meat and food of a more solid character are usually given—food which requires chewing and grinding. This hard chewing will often force particles of food firmly between the teeth, and it should be removed; if the meat contains much fat, the fat will harden between teeth or near the gum, which makes it necessary, as soon as solid food is given, to use a tooth-brush. Small, soft brushes, with but one row of bristles, are made for very young children; with these small brushes the teeth should be carefully gone over inside and outside, between the teeth and over the grinding surface. After brushing, by means of a small syringe, tepid water should be forced between the teeth and the mouth thoroughly rinsed. Brushes with two rows of bristles are made for children a little older. Tooth-brushes should never be very wide or stiff, as the constant friction of a stiff brush will soon cause abrasions of the

When you want to clear your house of flies, see that you get

**WILSON'S
FLY PADS**



Imitations are always unsatisfactory.

enamel of the first teeth, as well as cause the gums to recede from the neck of the tooth; it is not necessary to use tooth powders or pastes until the children have reached the meat age; then it is useful, as it removes fat or grease which adheres to the teeth. The use of cold or lukewarm water is not sufficient to do this. An excellent powder for children is made of equal parts of precipitate of chalk and orris root; this makes a very smooth, soft powder. If desired, a little saccharin may be used to sweeten it. Sugar should never be used, as it ferments in the mouth.

On the teeth of delicate children, and

those whose teeth are neglected, there is frequently found a rough, greenish deposit close to the gum; this deposit has a rough surface, which catches and holds tiny particles of food, especially those of a pasty nature, such as cracker, bread, cereal, etc. These decay, filling the mouth with bacteria; the gums are infected and soon become tender and bleed easily; ulcers will form inside the mouth, sometimes extending to the lips and the area surrounding them, especially the corners of the mouth. As soon as this greenish deposit is noticed, it should be removed by the use of a little powdered pumice and glycerine; take a toothpick

and wind tightly around it a tiny bit of absorbent cotton, then a gentle rubbing and time will accomplish its removal; during this process, however, take care to irritate the gums as little as possible. After the deposit is removed, it is well to use the chloride-of-potash mouth wash for a while; this, and the daily care of the teeth as suggested, will, in all probability, prevent another like deposit from forming.

Careful rinsing of the mouth is almost as important as the use of the brush. The addition of some good antiseptic mouth wash is desirable for rinsing purposes.

The nerve pulp of the temporary set of teeth is not nearly so sensitive as that of the permanent set, consequently decay may become well advanced without being discovered or causing the child the slightest pain. This fact makes it desirable to examine the child's mouth occasionally, otherwise large cavities might form before any defect is discovered. Children who are very anemic, who are rachitic, afflicted with any constitutional disease, or those whose heredity shows a predisposition to unsound teeth, need especially to have their teeth examined often; they also require the best care to preserve them. It is a common fallacy that indigestion and stomach trouble are the cause of early decay in the teeth of children. This is not so; in fact, quite the opposite is true. When the teeth, from lack of care, become incapable of performing their work properly and the food is allowed to go into the stomach totally unfit for that organ to receive it, it is then that the stomach rebels, and indigestion comes.

As good digestion depends almost entirely upon perfect mastication, all food should be chewed and chewed over and over again until it is ground so fine and so thoroughly mixed with the saliva that a certain portion of it is dissolved and partly digested before it goes into the stomach.—Harper's Bazar.

He's bought a Tobin Simplex

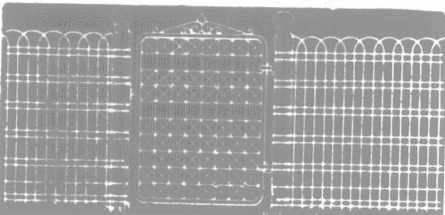
The simple announcement means that someone has at last found his way into the "Man's Class" of sportsmen and that his friends realize it. You may shoot well with a poor gun, but it is reasonable to suppose that your scores will pile up at the traps with greater regularity and your bag be better filled in the field, if you use a gun that is of the dependable kind. This apparent ideal is a tangible reality in the

Tobin Simplex Gun

And the "why" of it is that we have spent years and years in perfecting the manufacture of this gun—years of painstaking, exacting care in selecting the materials that go into each part—years in perfecting a mechanism that produces the best working action ever constructed in a gun of hammerless type—guaranteed as very few guns are guaranteed. With each Tobin Simplex or we undertake to give one hundred per cent. satisfaction, or you may have your purchase money back—every cent of it without question. You cannot lose on a Tobin Simplex—it must please you.

Priced from \$20.00 to \$210.00. Send for our new catalogue.

The Tobin Arms Mfg. Co., Limited
Woodstock Ontario



Better, Cheaper, Stronger Than Wood

You can't put a better fence around your property than the Peerless Lawn Fence. It is neat and attractive—strongly and staunchly built. Made from heavy, No. 9 steel wire, well galvanized and coated with white enamel—will stand for years and cannot rust.

Peerless Lawn Fence

is handsome enough for city property and is strong and cheap enough for the farm. It will keep cattle out and stand up under the heaviest snow drifts.

Peerless gates are made with an electrically-welded, solid frame—last a lifetime and always look and work well.

We make a full line of poultry and farm fences and gates.

Agents wanted. Write for particulars.
THE BANWELL HOXIE WIRE FENCE CO., Ltd.
Dept. B, Winnipeg, Man., Hamilton, Ont.

ATTENTION Talking-Machine Owners!

We want to send to every owner of an Edison, Victor or Columbia Talking Machine a complete record catalogue free of any cost.

We ship records anywhere by next mail following order received.

Order records by serial number, and enclose Post Office order for amount of purchase. Phonograph catalogue sent on request.

WILLIAMS PIANO CO'Y
Limited
194 Dundas Street, London, Ont.

Don't Throw It Away

Does Your Dish or Hot Water Bag Leak?

USE **MENDETS**

They mend all leaks in all utensils—tin, brass, copper, granite ware, hot water bags, etc. No solder, cement or rivets. Anyone can use them: fit any surface, two million in use. Send for sample pkg., 10c. COMPLETE PACKAGE ASSORTED SIZES, ETC., POSTPAID. Agents wanted. Collette Mfg. Co., Dept. K, Collingwood, Ont.

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.
2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.
3rd.—In Veterinary questions the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.
4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

Miscellaneous.

CELLAR FLOOR.

Can you tell me if a cement floor is a good one to put into a cellar used for keeping potatoes?
H. S.

Ans.—Yes, probably the best and most economical that could be laid.

BUCKWHEAT FOR HAY AND FODDER.

1. How would buckwheat do for green feed for cows?
2. How would buckwheat hay do for feed?

3. How should the land, after buckwheat, be managed, so as not to have the buckwheat in the next year's crop?
H. R. P.

Ans.—1. Some favorable reports have been made on buckwheat as a soiling crop, but its use for this purpose has not been sufficiently extended to establish its value. The stock is rather coarse and fibrous, but is relished by some cattle.

2. Buckwheat would make a very coarse and fibrous hay, difficult to cure, and of doubtful palatability and feeding value.

3. To keep the buckwheat from appearing in the next year's crop, it would be necessary to get it to sprout the fall before by cultivation. This is difficult, owing to the late season in which the buckwheat is harvested. A hoed crop the next year would solve the difficulty. Some favorable reports of seeding clover with buckwheat have been received. This would likely be a solution of the trouble.

STOOK THRESHING.

A correspondent of "The Farmer's Advocate" refers to "stook threshing." The plan has not been in vogue in our district. Is it a good one?

MARITIME.

Ans.—Threshing grain from the stook is in favor in dry climates where labor is scarce, but is not regarded as a commendable practice in areas favored with humid climatic conditions like Eastern Canada, though it reduces the labor and dirt of threshing time. There is always the risk from showers once the grain is dry when waiting for the mill engaged at a neighbor's, and much grain has been rendered musty, and sometimes spoiled, from heating in the bins. If one has plenty of room, the safer plan is to store the grain for threshing later, which gives it time to "sweat" or cure in the mow, during which the straw absorbs the moisture. Great care has to be taken to prevent the heating of stook-threshed grains in the granary. It is also advised that grain should be well ripened before being cut, and not threshed if wet.

OAT AND SUGAR CANE HAY.

1. How much sugar cane seed is mixed with a bushel of oats when growing for summer feed?

2. Can sugar cane and oats mixed be cured for winter feed, and, if so, how should it be cured?
G. S.

Ans.—1. The usual amount of sugar cane used with oats and clover is 30 pounds per acre. The mixture is oats 51 pounds Early Amber sugar cane 30 pounds, and Common Red clover 7 pounds.

2. Sugar cane and oats are better used as an annual pasture crop than to be cured for winter feed. Oats alone can be very well cured by the same process as that for ordinary hay, if they are cut in the milk stage. A little more sun is necessary than for hay. The oats would be too far advanced for cutting for hay before the sugar cane would be ready to cut. The oats are rapid in growth, and come on early, while the sugar cane is later, and thrives best in the warm weather. Sugar cane would also make rather coarse dry fodder, and would need cutting for best results. Would advise sowing the oats alone if an annual crop for hay is needed.

INEXPERIENCED YOUTH ON FARM.

What should a young immigrant, 26 years old, weight 116 pounds, who has had no experience in farming, get for the first year, board and washing included?
SUBSCRIBER.

Ans.—If his employer were an experienced farmer who took pains to give him instruction, he would probably be sufficiently repaid the first year with board and washing. In cases where such a young man proved himself to be exceptionally apt and willing, he might be worth as much as \$15 per month.

BEE QUERIES.

1. Would you kindly inform me, through your paper, how I could build a good hive for bees? I have a colony of bees, but haven't a hive to keep them in.

2. Could you describe the wintering of bees?

3. Should the queen be clipped, and how could she be told from the other bees?
J. B.

Ans.—1. It would be better for the beginner to buy a few good hives, which would serve as a pattern in case more were needed and he wished to make them or have them made. These first hives can be bought from a regular manufacturer of bee supplies, and for a beginner it might be advisable to have one of them made up at the factory so that he can see just how the parts go together. After the business is learned, if handy with the saw and plane, he may make the hives himself. The Langstroth hive is generally recognized as the standard, and is a safe hive for the beginner to adopt. There is no patent on this hive.

2. Bees are usually wintered in a cellar. The cellar should be dry. Place them in the cellar just after a day's flight at the opening of cold weather. Plenty of food must be present in each hive. Each hive should be weighed, and, if light, the bees should be fed either sugar or syrup, or have full combs added. Keep them in quietness and darkness, at a temperature of from 42 to 45 degrees. Bees wintered in cellars should be taken back to their former location in the spring.

3. Some beekeepers clip the wings of the queens as soon as they are found laying, while others do not favor the practice. If the hives are in a grass plot, there is some danger of the queens getting out and being lost in the grass through not being able to fly. Clipping is advisable in introducing queens into a new hive. It prevents their flying away. The queen is not so large as the drone, but her body is longer. She has a wasp-like appearance, and is more tapering than a worker. Her wings are shorter in proportion than those of either drone or worker bees. Her body is darker on the upper part than other bees, while the under part is a golden color. She usually moves slowly. It requires experience to be able to detect the queen in a hive, but when once accustomed to it, it is quite an easy matter. Would suggest that you get a book on bees if you wish to make the production of honey a business. "A. B. C. of Bee Culture," and "Langstroth on the Honey Bee," are good books, and may be had through this office.

TRADE TOPIC.

H. Brown & Son, of Glasgow, Scotland, have an "All Scotch" boot advertised elsewhere in this issue. This boot is made from a special Scotch-tanned leather, with small steel studs in the sole and heel, and is light and serviceable. Their fine Colonial catalogue may be had free on application.

GOSSIP.

B. H. Bull & Son, Brampton, Ont., last month shipped 75 head of Jersey cattle to the Canadian West, including a full car load previously sold to the Government Experimental Farm at Medicine Hat. The senior member of the firm has recently visited the Island of Jersey with a view to selecting a fresh importation.

A young theologian named Fiddle refused to accept his degree. For he said, "Twas enough to be Fiddle. Without being Fiddle, D. D."

A Guid Scotch Boot



THAT WILL GIVE HONEST VALUE IN WEAR AND COMFORT—

THAT IS THE ALL-SCOTCH

It is made from a special Scotch-tanned leather, in black or brown; has double water-tight tongue, stitched welt. The small steel studs in the sole and heel are flush with the leather. A serviceable, light boot, eminently suited for Canada, as numerous testimonials can show.

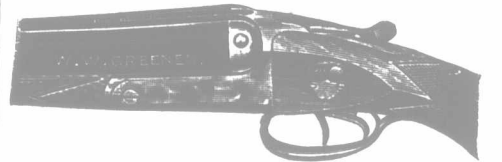
SENT POST FREE to your OWN DOOR and CUSTOMS DUTY prepaid BY US, on receipt of Money \$5.30 Order for.....

We guarantee what we say, or refund the money in full.

Write for our Colonial Catalogue, which shows a wide selection of boots and shoes for colonial wear, and gives the prices, post free and customs duty included, for delivery to your door.

H. BROWN & SON
313 Argyle St. Established 1835. GLASGOW, Scotland.

GREENER'S BRITISH EMPIRE GUN



Here's the World's Best Gun—a Greener Hammerless—at a price within the reach of all sportsmen; its got all the Greener features—hard hitting, far shooting, lasting wear; there's nothing better at the price. **\$63**

CATALOGUE K7 FREE.

W. W. GREENER

63 and 65 Beaver Hall Hill, MONTREAL, P. Q.

160 Acres of Land for the Settlers

Large areas of rich agricultural lands, convenient to railways, are now available for settlement in Northern Ontario. The soil is rich and productive, and covered with valuable timber.

For full information regarding homestead regulations and special colonization rates to settlers, write:

The Director of Colonization,
DEPARTMENT OF AGRICULTURE,
TORONTO.

DR. J. M. STEWART'S LIGHTNING COLIC CURE

Is the result of thirty years of careful study of the causes and effects of colic. Colic kills more horses than all other diseases combined. Our remedy stimulates and relieves affected parts immediately, and by its laxative properties cleanses and removes the cause.

Absolutely no bad after effects, as is the case with ninety-five per cent. of the cures on the market.

Colic may kill your horse or cow within one hour, unless you have this remedy for instant use. Why risk the loss of a valuable animal when you can have this remedy at hand. Cost per bottle containing two doses only 75 cents. We refund your money if it fails. Write the

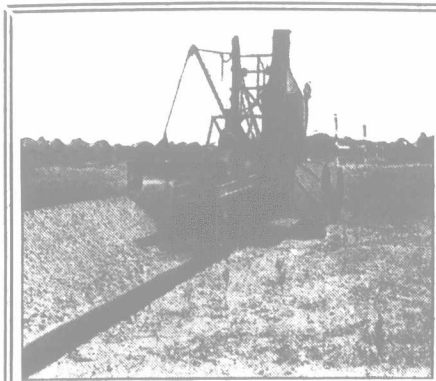
PALMER MEDICAL COMPANY, LIMITED
Windsor, Ontario.

Suffered From Her Heart, Could Not Stand Hard Work

Mrs. Harry Smith, 31 Eagle Ave., Brantford, Ont., writes:—"I have suffered with my heart a great deal, and could not stand any hard work. I was doctoring with the Doctor and he told me I had to stop doing anything, but, however, a friend told me about your Milburn's Heart and Nerve Pills, so I got a box and tried them. I had to take several boxes before I felt any benefit, but after doing so I found they were beginning to help me so I continued their use and am now in a position to do all my own work, which I felt I would have to give up."

Milburn's Heart and Nerve Pills are a specific for all weak run down women, whether troubled with their heart or nerves, and if you will only give them a trial we can assure you that they will have the desired effect.

Price 50c. per box or 3 boxes for \$1.25, for sale at all dealers or mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.



We Want to Start a Few Good Hustling Men in a Paying Business

WE want to get in touch with a few good hustling men who want to earn from \$15 to \$20 a day from a small investment.

Cutting BUCKEYE ditches is a good staple business that can be worked from nine to ten months of the year. Ditches cut with the

Buckeye Traction Ditcher

are from 25% to 50% cheaper than the old method. The ditches are truer, cleaner cut and better. Farmers are demanding them. A BUCKEYE TRACTION DITCHER will cut from 100 to 150 rods of ditch per day, 10 to 15 rods an hour, between 2 and 3 feet a minute. Figure the earnings for yourself at the average price paid for ditch digging in your locality.

Are you one of the men who wants to make money? Write to-day for Catalogue T.

The Buckeye Traction Ditcher Co.
FINDLAY, OHIO.

R&O ONTARIO
QUEBEC **1000 ISLANDS**

Running the Rapids
Montreal, Quebec and Saguenay River.

Steamers "TORONTO" and "KINGSTON" in daily service, leaving Toronto at 3.00 p.m.

Steamer "BELLEVILLE" leaves Toronto at 7.30 p.m. every Tuesday.

Low round trip rates, including meals and berths.

For rates, folders, etc., apply to local agents, or write:

H. FOSTER CHAFFEE, A. G. P. A.
Toronto, Ontario.

GOSSIP.

Alex. Gemmill, of Ayrshire, Scotland, has been appointed and has agreed to act as judge of horses at the Canadian National Exhibition, to be held in Toronto, August 26th to September 11th, 1911. Mr. Gemmill is a gentleman of ripe experience and independent mind.

ANOTHER HIGH-CLASS LOT OF CLYDESDALES.

John A. Boag & Son, of Queensville, Ont., is the latest arrival from Scotland with a shipment of Clydesdales, which consists of eleven fillies and five stallions, which are now at their splendid farm, Bayview, and all are for sale, a selection for intending purchasers that for the much-looked-for combination of size with quality, has never been equalled by Mr. Boag in former importations, and as the show-ring records of Canada prove he has brought over very many high-class Clydesdales. Prominent among the stallions is the 1,900 pound quality horse, Homestake (imp.), a bay five-year-old, by the renowned Royal and Highland champion, Silver Cup, dam by the famous sire of winners, Prince of Kyle. This is a right Royal horse, exceedingly smooth, with powerful back and quarters, and his underpinning is perfect. He has quality of bone and hair, spring of pasterns and big, wide feet, and is a show horse from the ground up, and at Guelph, in a very strong class, was second as a three-year-old. He is one of the country's best. Anglo (imp.) is a bay three-year-old that was first at Guelph as a yearling, sired by the great champion, Benedict, dam by the good breeding horse, Drumlanrig. This horse is one of the immensely flashy kind, not too big, but nice, smooth and natty, with quality to spare. Golden Favorite (imp.) is a black three-year-old, by the noted prize horse, Golden Pride, dam by the Highland and Agricultural Society first-prize horse, Darnley's Last. Golden Pride, the sire of this colt, is a full brother to the champion, Benedict, thus he combines the best blood of the breed, and is a right royal colt of great size, full of character, and has quality galore. He was second at Guelph last winter in a class that would be hard to beat in the world. Earl of Dunraggit (imp.) is a bay two-year-old, by the world famous champion, Hiawatha Godolphin, and dam by the great Baron's Pride, grandam by the Glasgow winner, St. Lawrence, certainly royal breeding. This colt will make a ton horse easily, and his underpinning is faultless. Another two-year-old is a bay, full brother to the two great horses, the Highland and Agricultural Society first-prize horse, Baron Bute, and the Glasgow prize horse, Baron Bute, he being sired by the invincible Baron's Pride, dam by the great Rosemount. He is Baron Mac, a right smooth, well-coupled colt of quality; a coming show horse. Prince of Lonsdale (imp.) is a bay two-year-old, by Blaccon Sensation, dam by Lord Lonsdale, grandam by Darnley's Hero. These are great blood lines for size and character, and this colt has them both. He will make over the ton, and his bone is flat and strong. The other is a yearling, Lord Gray (imp.), by the Kirkeudbright prize and good breeding horse, Iron Duke, dam by Lothian Again. This is one of the great colts, plenty of size, full of character, and on a faultless bottom; a coming champion. Of the fillies, seven are two-year-olds and four are yearlings, the get of such well-known prize horses as Baron Hopetown, Baden Powell, the sire of Memento, the great Ganymede, the Highland and Agricultural Society first-prize horse Ruby Pride, the famous sire Dunure Chief, the Kirkeudbright prize horse Iron Duke, Baron Gallaway, Lord Paget, etc. They are a big, good-legged lot, as Mr. Boag's selections always are, bred on the best blood lines of the breed, and among them are several show fillies, notably the two-year-old, Alva Mary, by Baden Powell, dam by Baron Mitchell. She is a high-class filly of quality. Flora Steel is a bay yearling, by Iron Duke, dam by Koh-I-Noor. This one will take some beating next winter. Gallaway Meg is another right good one, by Baron Gallaway, dam by Baron's Pride; a show filly. All the two-year-olds are in foal. Be sure to see this lot of stallions and fillies.

Six Months Without Darning!

It's Guaranteed



Get This Box

Here are hose for men, women and children—and six pairs are guaranteed to wear without holes, rips or tears for six months. If any pairs wear out, we give you new hose free. We give you a signed-in-ink guarantee and a return coupon for each of the six pairs. These are the famous Holeproof Hose that have sold so phenomenally in the United States. 9,000,000 pairs will be worn this year. 95 per cent of these hose, last year, outlasted the six months' guarantee.

We pay for yarn an average of seventy cents per pound. Common yarn sells for thirty cents.

\$60,000 a Year for Inspection

We spend more than \$60,000 a year merely for inspection—to see that each pair is perfectly made. These hose are light weight, soft and sheer as any cotton hose on the market. With all their advantages they sell at common hose prices. You save nothing by buying hose that wear out in one-sixth of the time "Holeproof" last. Don't darn any more when there is no need to. Get "Holeproof" today. If your dealer hasn't "Holeproof" on sale, send the money to us in any convenient way and we'll send you what you want, charges prepaid.

FAMOUS Holeproof Hosiery FOR MEN WOMEN AND CHILDREN

How to Order

Choose your color, grade and size from the list below and state clearly just what you wish. One size and one grade in each box. Colors only may be assorted as desired. Six pairs are guaranteed six months except when stated otherwise.

Men's Socks—Sizes 9½ to 12. Colors: black, light tan, dark tan, pearl, navy blue, gun-metal, mulberry. In light weight, 6 pairs \$1.50 (same in medium weight in above colors and in black with white feet, 6 pairs \$1.50). Light and extra light weight (mercerized), 6 pairs \$2.00. Light and extra light weight LUSTRE SOX, 6 pairs \$3.00. Pure thread-silk sock, 3 pairs (guaranteed three months) \$2.00. Medium worsted merino in black, tan, pearl, navy and natural, 6 pairs \$2.00. Same in finer grades, 6 pairs \$3.00.

Women's—Sizes 8½ to 11. Colors: black.

Get This Mark



Reg. U. S. Pat. Office, 1906
East Frisco, Pa.

light tan, dark tan, pearl, and black with white feet. Medium weight, 6 pairs \$2.00. Same colors (except black with white feet) in light weight LUSTRE HOSE, 6 pairs \$3.00. Light weight in black, tan, and gun-metal, 6 pairs \$2.00. Same in extra light weight LUSTRE HOSE, 6 pairs \$3.00. Same in pure thread-silk \$3.00 for 3 pairs (guaranteed three months). Outsize in black, medium weight, 6 pairs \$2.00, and in extra light weight LUSTRE HOSE, 6 pairs \$3.00.

Children's—Sizes 3½ to 10½ for boys, 5 to 9½ for girls. Colors: black and tan. Medium weight, 6 pairs \$2.00.

Infants' Sox—Colors: tan, baby blue, white and pink. Sizes 4 to 7. Four pairs (guaranteed six months) \$1.00. Ribbed-leg stockings, in same colors and black, sizes 4 to 6½, pairs (guaranteed six months) \$1.00.

Don't wait. Save the next six months of darning. Send in order now, while you think of it. Write for free book, "How to Make Your Feet Happy."

TO DEALERS—Write for our agency proposition. Excellent opportunity. Thousands of dealers in U. S. making big hosiery sales with "Holeproof."

HOLEPROOF HOSIERY CO. OF CANADA, Ltd., 46 Bond St., London, Canada

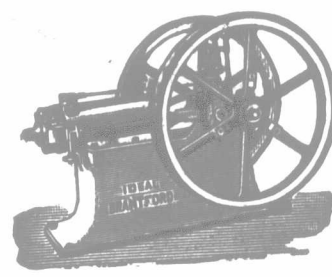
Are Your Hose Insured?

(213)

IDEAL GASOLINE ENGINES

1/2 TO 50 HORSE-POWER

Windmills
Grain Grinders
Pumps
Tanks



Water Boxes
Concrete Mixers
Etc., Etc.

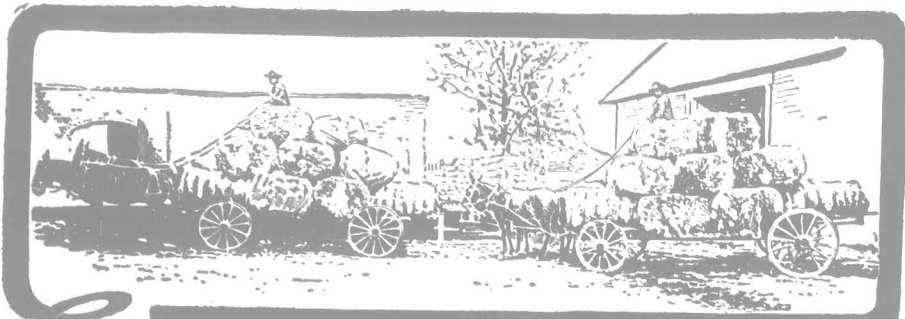
SEND FOR CATALOGUE.

Goold, Shapley & Muir Co., Limited
BRANTFORD, CANADA.

Broilers and Spring Ducklings

We are open to buy Spring Broilers, all sizes, small and large, from 1 lb. up, and Spring Ducklings, and will pay highest cash prices, according to size and quality. Prompt returns.

HENRY GATEHOUSE
348-350 West Dorchester St. MONTREAL.



IHC WAGONS HAVE STOOD THE TEST OF ALL LOADS AND ROADS FOR YEARS

THE real proof of the strength, durability, and value of IHC wagons is what they have done and are now doing for thousands of farmers throughout the Dominion. Light loads and heavy loads have been carried by IHC wagons, over good roads and bad roads, for so many years that there is hardly a farmer who is not familiar with the high quality that these names on wagons represent—

Petrolia Chatham

Either of these should be your choice if you want to be sure of lifetime service. The quality in both is the highest possible—the result of years of wagon-building experience, and the use of the best materials, shaped by skilled workmen operating with the finest manufacturing equipment.

Petrolia Wagons are constructed of the finest quality wood stock which is thoroughly seasoned by being air dried. The ironing is of the very best. The inspection of each part is most rigid. Petrolia Wagons must be made so that they will live up to the IHC standard of excellence or they are never sent out of the shops.

Chatham Wagons have a long record for satisfactory service in Canada. Made with hard maple axles, oak bolsters, sand boards, rims, and spokes, and oak or birch hubs—they represent the highest standard of wagon construction. When you buy a Chatham wagon it is with the assurance of getting the utmost service and satisfaction out of it.

Be sure to call on the IHC local agent. Get a pamphlet. Let him show you one of these wagons. If you prefer, write for literature or any other information you want to the International Harvester Company of America at nearest branch house.

EASTERN CANADIAN BRANCHES—International Harvester Company of America at Hamilton, Ont.; London, Ont.; Montreal, Que.; Ottawa, Ont.; St. John, N. B.

International Harvester Company of America

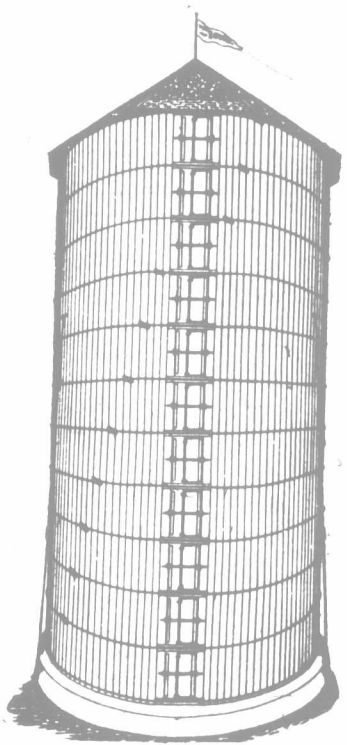
(Incorporated)

Chicago USA



IHC Service Bureau

The bureau is a center, where the best ways of doing things on the farm, and data relating to its development, are collected and distributed free to everyone interested in agriculture. Every available source of information will be used in answering questions on all farm subjects. If the questions are sent to the IHC Service Bureau, they will receive prompt attention.



Silos! Silos!

We are headquarters for silo material.

Write us for particulars and prices on shipments delivered at your station.

ADDRESS:

**The M. Brennen & Sons
Mfg. Co., Limited,
HAMILTON, CANADA**

Wholesale Lumber, Laths and Shingles.

WRITE FOR BOOKLET.

Bay View Imp. Clydesdales We have got them home, 11 fillies and 7 stallions, show horses bred in the purple, big in size, and quality all over. If you want something above the average come and see us. Prices and terms the best in Canada. On the Toronto-Sutton Radial Line.

John A. Boag & Son, Queensville, Ont.



QUESTIONS AND ANSWERS. Miscellaneous.

TANNING HIDES.

What is the proper and easiest way to tan cow hides, and can skins and furs be tanned by smoking them? Can skins and furs be tanned by oak bark? If so, what would be the proper method?

G. T.

Ans.—It is generally better not to attempt to tan hides at home. It is more satisfactory to send them to a tannery where good work is assured. It would be unwise for an amateur to attempt the oak-bark process, as he could not make a job of it, and the material would cost more than the hides would be worth. Smoking alone would not prove satisfactory. If the hide is dry, soak thoroughly until completely softened, and scrape off all flesh. Make a tan liquor of equal quantities of alum and salt dissolved in hot water, using twelve pounds of water to every seven pounds of alum and salt. Leave the hide in the tan about ten days, then stretch and scrape with a dull knife. Put into tan again for a day or two, then stretch until dry and again scrape. Now give a heavy dressing of tanner's oil, and fold and lay away in damp sawdust until dry. Scrape again and work by pulling over a pole to soften.

GOSSIP.

RECORD - OF - PERFORMANCE HOLSTEINS.

The following have been accepted for admission in the American Holstein Record of Performance:

Summer Hill Countess (9287), two-year-old class: 13,250.5 lbs. milk; 442.23 lbs. fat; average per cent. of fat, 3.33; number of days in milk, 342. Owned by C. R. Dyke, Armitage, Ont.

Helena Hengerveld Keyes (7396), three-year-old class: 13,328.27 lbs. milk; 411.61 lbs. fat; average per cent. of fat, 3.09; number of days in milk, 305. Owned by A. D. Foster, Bloomfield, Ont.

Korndyke Pietertje Keyes (7395), three-year-old class: 13,229.62 lbs. milk; 425.03 lbs. fat; average per cent. of fat, 3.21; number of days in milk, 305. Owned by A. D. Foster.

Winnie R. Calamity Posch (7221), four-year-old class: 14,324 lbs. milk; 471.31 lbs. fat; average per cent. of fat, 3.29; number of days in milk, 365. Owned by Lakeview Farm, Bronte, Ont.

Lakeview Rattler (11364), two-year-old class: 14,401.3 lbs. milk; 504.87 lbs. fat; average per cent. of fat, 3.50; number of days in milk, 365. Owned by Lakeview Farm.

Aaggie De Kol Witzde (6440), mature class: 13,709.75 lbs. milk; 446.79 lbs. fat; average per cent. of fat, 3.25; number of days in milk, 335. Owned by J. M. VanPatter, Aylmer, Ont.

Aaggie Mercedes (7667), three-year-old class: 13,443.75 lbs. milk; 475.56 lbs. fat; average per cent. of fat, 3.53; number of days in milk, 365. Owned by J. M. VanPatter.

Dandy De Kol Isabella (7695), three-year-old class: 9,783.95 lbs. milk; 281.60 lbs. fat; average per cent. of fat, 2.88; number of days in milk, 332. Owned by F. I. Burrill, Holbrook, Ont.

Polly Woodland De Kol (10390), two-year-old class: 9,433.15 lbs. milk; 302.64 lbs. fat; average per cent. of fat, 3.20; number of days in milk, 365. Owned by S. M. Peacock, Mt. Salem, Ont.

Patsy 4th's Axie De Kol (9739), mature class: 13,446.56 lbs. milk; 453.33 lbs. fat; average per cent. of fat, 3.37; number of days in milk, 315. Owned by Thos. Hartley, Downsview, Ont.

Korndyke Wayne De Kol (9609), two-year-old class: 10,932 lbs. milk; 408.70 lbs. fat; average per cent. of fat, 3.73; number of days in milk, 340. Owned by J. W. McCormick, Morewood, Ont.

Georgie (5742), mature class: 12,299.27 lbs. milk; 393.74 lbs. fat; average per cent. of fat, 3.21; number of days in milk, 341. Owned by J. B. Arnold, Easton's Corners, Ont.—G. W. Clemons, Secretary.

INTERNATIONAL GALL CURE



SOLD ON A SPOT CASH GUARANTEE

CURES While Horses Work or Rest

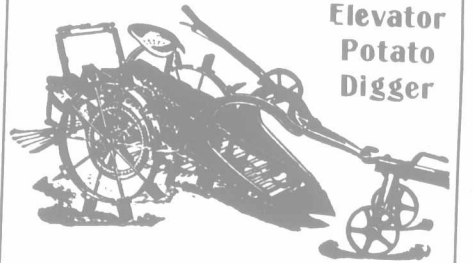
International Gall Cure is a certain, sure, quick and infallible cure for Galls, Sore Necks, Sore Backs, Sore Mouths, Cuts, Bruised Heels, etc. Will not melt and dissolve from the animal heat, but stays right where it is applied. Possesses extraordinary healing and soothing qualities. International Gall Cure is the cleanest, most antiseptic, purest and best Gall Cure on the market. We will refund your money if it ever fails to cure. Keep a box on hand as it is almost a daily need on the farm.

25c. and 50c. At all dealers.

**INTERNATIONAL STOCK FOOD CO., Limited
TORONTO, ONT.**

O. K. Canadian Two-Horse

**Elevator
Potato
Digger**



Will dig your crop with your own two horses. Write for our 1911 catalogue of prices.

**CANADIAN POTATO MACHINERY CO., Ltd.
145 Stone Road, Galt, Ont.**



NOTICE TO HORSE IMPORTERS
Gerald Powell, Commission Agent and Interpreter, **Nogent Le Rotrou, France**, will meet importers at any port in France or Belgium, and assist them to buy Percherons, Belgians, French Coach horses. All information about shipping, banking and pedigrees. Many years' experience; best references; correspondence solicited.

RUPTURE CURED

I was helpless and bed-ridden for years from a double rupture. No truss could hold. Doctors said I would die if not operated on. I fooled them all and cured myself by a simple discovery. I will send the cure free by mail if you write for it.
Capt. W. A. Collings, Box 798, Watertown, N. Y.

HE KNEW.

A teacher was trying to find out what a class of small children remembered about animals. "Let's see," said she, "what one has bristly hair, likes dirt, and is fond of getting in the mud?" Seeing a look of intelligence spread over the countenance of one boy, she said, "Can you tell, Tommie?" "Yes'm," he replied, "that's me."

GUEST AT A RESTAURANT.

"Excuse me, sir, can you let me come to the telephone?" You have been there twenty minutes without saying a word. "Sorry, sir, but I'm talking to my wife."—Pele Mele.

fistula and Poll Evil

Any person, however inexperienced, can readily cure either disease with

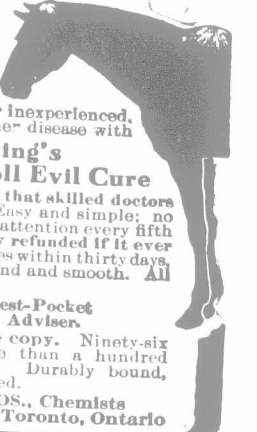
**Fleming's
Fistula and Poll Evil Cure**

—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in


**Fleming's Vest-Pocket
Veterinary Adviser.**

Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durable bound, indexed and illustrated.

**FLEMING BROS., Chemists
75 Church St., Toronto, Ontario**




Horse Owners! Use
GOMBAULT'S
Caustic Balsam
A Safe, Speedy, and Positive Cure



The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle, SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or bluish. Every bottle 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.
The Lawrence-Williams Co., Toronto, Ont.

INSURE YOUR HORSES



Your Horse Is Worth Insuring

No matter what its value. Whether it's \$50.00. Whether it's \$1,000. Our Company issues policies covering all risks on all animals at a very small cost. Also transit insurance. Write for free circular to:

General Animals Insurance Co. of Canada
Dept. D, Quebec Bank Building, Montreal.
OTTAWA BRANCH:
No. 106 York St., Ottawa.

Dr. Page's English Spavin Cure

For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hock, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle, and to remove all unnatural enlargements.



This preparation (unlike others, acts by absorbing rather than blistering). This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by **Dr. Frederick A. Page & Son**, 7 and 9 Yorkshire Road, London, E. C. Mailed to any address upon receipt of price, \$1.00. Canadian agents:

J. A. JOHNSTON & CO., Druggists,
171 King St., E. TORONTO, ONT.

ABSORBINE STOPS LAMENESS

from a Bone Spavin, Ring Bone, Splint, Curb, Side Bone or similar trouble and gets horse going sound. Does not blister or remove the hair and horse can be worked. Page 17 in pamphlet with each bottle tells how. \$2.00 a bottle delivered. Horse Book 9 B Free.

ABSORBINE, JR., liniment for man-kind. Removes Painful Swellings, Enlarged Glands, Goitre, Wens, Bruises, Varicose Veins, Varicocelae, Old Sores, Allays Pain. Will tell you more if you write. \$1 and \$2 a bottle at dealers or delivered. Manufactured only by **W. F. YOUNG, P.D.F., 258 Lyman's Bldg., Montreal, Ca.**

Messrs. Hickman & Scruby
COURT LODGE,
EGERTON, KENT, ENGLAND

Exporters of pedigree live stock or all descriptions.

GEO. CLIMIE
Canadian Horse Repository
BONDED STABLES
110 ST. ETIENNE STREET, MONTREAL.
Grand Trunk Stock-Yards

Horses of all Classes
Scotch Shorthorns FOR SALE—Three choice young Scotch bulls fit for service; two roans and one red. Bred from imp. stock, also females of all ages. Bell'phone. **A. C. Pettit, Freeman P. O., Ontario**

QUESTIONS AND ANSWERS. Veterinary.

SWELLING ON COW.

I have a cow which seemed in perfect health, and quite suddenly a swelling came on her left side, behind her front leg. It is about a foot long, extending back to the milk-vein; it is quite hard and thick. Could you tell me what is the matter with the cow, and what to do for it? **A. H.**

Ans.—Apply twice daily to the enlargement the following liniment: One ounce each of spirits of ammonia, spirits of turpentine and spirits of camphor, mixed with five ounces of water. **V.**

COW WITH NETTLE RASH.

A pure-bred Jersey cow was not milked at her usual time, and very shortly afterwards her skin became completely covered with patches resembling mosquito bites, but much larger; her ears swelled; she swelled over the eyes; skin thickened in places; her ears drooped, and she did not feel well. Please explain the cause, and give means of prevention. **J. Y.**

Ans.—Your cow has probably suffered from an attack of a skin disease commonly known as nettle rash. Give her 1½ pounds of Epsom salts, then get 1½ ounces of nitrate of potash, divide into six powders, and give a powder night and morning till done. **V.**

COLT'S KNEES ENLARGED.

Colt, one month old, has small lumps on the front knees, and appears stiff when running. His navel healed without any trouble. Have been rubbing liniment on the knees, and he seems to be getting somewhat better, although lumps remain. Is there hope of a permanent recovery? Kindly suggest treatment. **A. M. M.**

Ans.—Get 2 drams each of biniodide of mercury and iodide of potassium and mix them with 4 ounces of water. Clip the hair off the enlargements and apply just a little (just enough to nicely moisten the parts) once a day. If the skin gets sore, withhold the liniment for a day or two. The lumps will probably yield to treatment, and your colt will be all right before he is a year old. **V.**

STRANGULATION AND BLOAT.

1. What are the post-mortem symptoms of a horse killed by strangulation?
2. Also of a horse which died of bloating?
P. A. L.

Ans.—1. In the case of a horse being quickly choked to death with a rope, or in any other manner, the lungs will be a pale color, and the left side of the heart will be empty, but the right side enlarged with dark-colored blood. If the choking takes place more slowly, the heart and blood vessels will be full of blood, and the lungs appear engorged, congested and black. A post-mortem held after from 8 to 11 hours after death, could not be depended on, as great changes would take place during that time.

2. It is a question if bloating is ever the direct cause of death in a horse. Some complication usually causes death, such as inflammation or rupture of the intestines or stomach, as the case may be, or rupture of the diaphragm, which causes suffocation. **V.**

TRADE TOPIC.

COMFORT FOR STOCKMEN.—Between now and the date for closing entries to the Central Canada Exhibition, September 6th, it will be worth while for all live-stock men, whose aim is to develop their business, to secure a copy of the Ottawa Fair prize list and study it carefully. As last year the exhibits in horses and cattle outnumbered previous years, so does the coming Exhibition promise to be a record-breaker. Accommodation is ample to meet the requirement of a bigger entry list. The horse stables, if they were stretched out in a straight line, would be half a mile long. Sleeping room is provided for 325 attendants. Ample evidence is afforded already that the larger appropriation for prizes in the live-stock and poultry branches will be productive of an increase in entries. Reduced railway rates have been secured in the territory east of Toronto and Sudbury, extending to Quebec. All particulars are contained on programmes available from Secretary E. McMahon, 26 Sparks street, Ottawa.

ONE MINUTE!
It's Telephones and Switchboards
We manufacture and sell direct to the User
Do You Want to Know
HOW To Organize a Company
To Construct Telephone Lines
To Install Telephone Instruments
To Operate a Rural System



How much your proposed lines will cost?
WHEN buying TELEPHONES or SUPPLIES BUY THE BEST. QUALITY is our strong point. We manufacture only high-grade Apparatus and would like to convince YOU of the superior merit of our goods. No better TELEPHONES made anywhere. Ours are made in Canada by Canadian Experts.


WE SUPPLY poles, wire, brackets, insulators, ground rods, batteries and tools, in fact, everything necessary to build a system of any size.

OUR INFORMATION Department is at your service **FREE**.
If Interested—WRITE US TO-DAY.

DOMINION TELEPHONE MFG. CO., Ltd.
10-12 Alice Street, Waterford, Ontario

Western Branch
261 Fort St., Winnipeg, Man.

Union Horse Exchange
UNION STOCK YARDS,
TORONTO, CANADA.
The Great Wholesale and Retail Horse Commission Market.



Auction Sales of Horses, Carriages and Harness every Monday and Wednesday. Horses and Harness always on hand for private sale. The only horse exchange with railway loading chutes, both G. T. R. and C. P. R., at stable doors. Horses for Northwest trade a specialty.
J. HERBERT SMITH, Manager

Imp. Clydesdale Stallions and Fillies for Sale
Second shipment since March. Stallions from \$500 up to \$5,000. Fillies and mares in foal, from \$250 up to \$600. Don't be fooled or misled, but come here and convince yourself. 'Phone connection.

J. & J. SEMPLE, Milverton, Ont., and Lu Verne, Rock Co., Minn., U. S. A.
Ormsby Grange Stock Farm, Ormstown, P. Que., Canada
IMPORTED GLYDE FILLIES

Owing to the rough voyage experienced by my May importation only six were offered for sale, and were sold. The balance, consisting of two three-year-olds, one four-year-old, two two-year-olds and six yearlings have now completely recovered condition. These, with a few home-bred ones, including two yearling stallions of great promise, are now for sale at very low prices, considering their quality and breeding. Don't miss this opportunity of securing heavy-boned, highly-bred young ones cheaper by far than you can import them. Terms liberal.
DUNCAN McEACHRAN.

CLYDESDALES AND PERCHERONS

To all lovers of Clydesdale and Percheron horses in Canada, I wish to say that about Aug. 1st I will sail for Scotland and France for another shipment, and intend to bring a high-class lot of show horses. Wait until you see them. Look up my exhibit at Toronto Exhibition.
T. D. ELLIOTT, BOLTON, ONT.

Mount Victoria Stock Farm, Hudson Heights, P. Q.
We have for service this season the Champion Imp. Clydesdale stallions Netherlea, by Pride of Blacon, dam by Sir Everard; also Lord Aberdeen, by Netherlea, and the Champion Hackney stallion Terrington Lucifer, by Copper King. For terms and rates apply to the manager.
T. B. MACAULAY, Prop., ED. WATSON, Manager.

JUST ONE 3-year-old Clydesdale Stallion
left. A well-bred colt that will make a ton horse. Price right for quick sale.
BARBER BROS., GATINEAU PT., QUEBEC.

IMPORTED CLYDESDALE FILLIES
My latest importation arrived June 6, 1911, ranging in ages from 1 to 4 years, and are all of good quality and large type. Have also a couple of stallions for sale at right prices. Long-distance phone.
GEORGE G. STEWART, Howick, Que.


Shire Stallions and Mares, Shorthorn Cattle (both sexes); also Hampshire Swine. Prices reasonable.
Porter Bros., Appleby, Ont., Burlington Sta. 'Phone.

ABERDEEN - ANGUS
Will sell both sexes; fair prices. Come and see them before buying. **WALTER HALL, Drumbo station, Washington, Ont.**

Aberdeen-Angus Cattle—Any number of females for sale at easy prices and terms. Correspondence invited.
Glengow Stock Farm, GEO. DAVIS & SONS, Props., Alton, Ont.

Aberdeen-Angus Cattle—Stock all ages, good strains, at reasonable prices. Apply to
ANDREW DINSMORE, Manager, "Grange Grange" Farm, Clarksburg, Ont.

WILLOW BANK STOCK FARM
Shorthorns and Leicesters



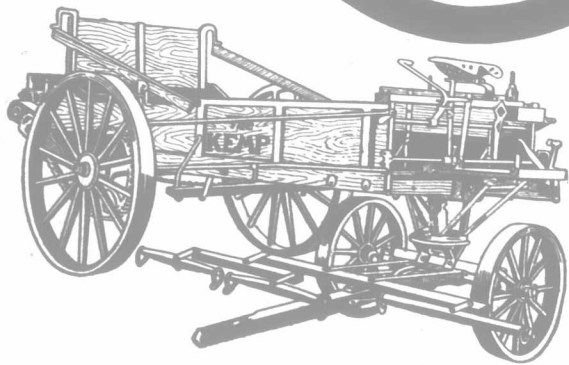
Herd established 1855, flock 1848, have a special good lot of Shorthorns of either sex to offer of various ages; also a grand lot of Leicester sheep of either sex—a few imported ones to offer.
JAMES DOUGLAS, Caledonia, Ontario.

Shorthorns and Swine—Am now offering a very choice lot of cows and heifers, safe in calf, and some choice young bulls for the fall trade; also Berkshire and Yorkshire pigs; showyard material.
ISRAEL GROFF, Elmira, Ont.

Salem Shorthorns
I am offering a number of heifers, different ages, for sale. They are bred in the purple and should interest any body in search of the right kind.

J. A. WATT, SALEM, ONT., ELORA STATION.
Scotch Shorthorn Females for Sale I am offering, at very reasonable prices, females from one year to five years of age. The youngsters are by my grand old stock bull, Scottish Hero (imp.) = 55042 = (90065), and the older ones have calves at foot by him, or are well gone in calf to him. Their breeding is unexcelled, and there are show animals amongst them. **A. EDWARD MEYER, Box 378, GUELPH, ONT.**

Springhurst Shorthorns and Clydesdales
I am now offering a number of heifers from 10 months to 3 years of age. Anyone looking for show material should see this lot. They are strictly high-class, and bred on show lines. Also several Clydesdale fillies, imp. sires and dams, from foals 2 years of age off. **Harry Smith, Hay, Ont., Exeter Sta.**



At least one-third lighter draft Genuine Kemp Manure Spreader

You can only buy one manure spreader with the Reversible, Self-Sharpening, Graded Flat-Tooth Cylinder—and that is the Genuine Kemp. Because of this Graded Flat-Tooth Cylinder the Genuine Kemp is at least one-third lighter draft than any other spreader.

There is less friction on the Flat-Tooth Cylinder, because the teeth are wide and graded. On that account only one-third as many teeth are required, which reduces the friction when the manure is passing through the cylinder.

The square or round teeth on ordinary cylinders are not wide enough apart and the manure backs up, chokes cylinder, causing heavy draft.

The manure cannot back up against the flat teeth, and because the flat teeth are graded they will handle and thoroughly pulverize all kinds of manure from the clear gum to the strawy material.

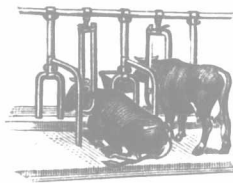
There are many other exclusive improvements on the Genuine Kemp. Our big catalog describes and illustrates them fully. Send for a copy and learn some new facts about manure spreaders.

There would be twenty times as many manure spreaders in use in Canada today if farmers realized the economy of spreading manure with the Genuine Kemp. The Genuine Kemp will pay for itself faster than any other farm machine.

But send to us for catalog F62 That's your first step. We are sole selling agents for Eastern Canada.

FROST & WOOD CO., LTD. SMITH'S FALLS, CANADA

O.K. Canadian U-Bar Patented Steel Stanchions



Are free and easy on the cattle, but strong and durable, being made of high carbon U-Bar Steel it is impossible to break or twist them out of shape. The swing bar will not sag and guaranteed not to be opened by the cattle.

Write for our prices and circulars on Sanitary Stall and Stanchions.

Canadian Potato Machinery Co., Ltd.
145 Stone Road, GALT, ONT.



Scotch-bred SHORTHORNS!

During the present month am offering four very choice young bulls, ready for service, of the best breeding and quality, at very reasonable prices. Also some good young cows and heifers, with calves at foot

H. J. Davis, Woodstock, Ontario
Long-distance Bell phone.

OAKLAND SHORTHORNS

Our herd, numbering about 50 head, should be inspected by any intending purchasers. Many of the cows are excellent milkers and grand breeders. Many young heifers and a few bulls for sale. Scotch Grey = 7262 = at head of herd, is one of the best bulls in Ontario. Prices reasonable.

JOHN ELDER & SON, HENSALL, ONT.

Maple Lodge Stock Farm 1854-1911

A splendid lot of Leicesters on hand. Shearlings and lambs sired by imported Wooler, the champion ram at Toronto and London, 1910. Choice individuals and choice breeding.

A. W. SMITH, Maple Lodge, Ont.



Glenburn Stock Farm
A few Shorthorn heifers about a year old; good colors and individuals. Berkshire pigs of the Large English sort.

JOHN RACEY, Quebec
Lennoxville.

"The Manor" Scotch Shorthorns

Present offering: 1 choice yearling bull, an "Undine," g. dam imp. Young cows in calf. Yearling heifers; Clippers, Minas, Wimples, Julias, etc. Inspector solicited. Prices moderate. Phone connection.

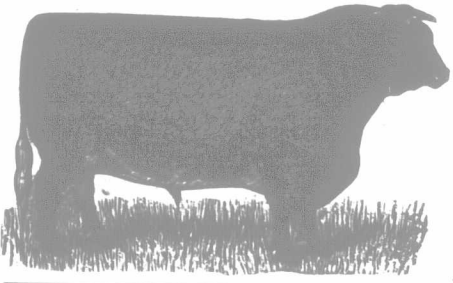
J. T. GIBSON, DENFIELD, ONTARIO

Shorthorns

Choice selections of bulls and heifers at all times for sale at very reasonable prices. Robert Nichol & Sons, Hagersville, Ont.

Fletcher's Shorthorns and Yorkshires
Stock for sale of either kind or sex.

GEO. D. FLETCHER, Binkham P.O.
Erin Station C. P. R.



ARTHUR J. HOWDEN & CO.,
ARE OFFERING

15 High-class Scotch Shorthorn Heifers

At moderate prices, including Cruickshank Non-pareils, Cruickshank Villages, Marr Emmas, Cruickshank Duchesses of Glosters, Bridesmaids, Bruce Fames, Kinellars, Clarets, Crimson Flowers, and other equally desirable Scotch families, together with a member of the grand old milking Atha tribe, which have also been famous in the showing.

Arthur J. Howden & Co., Columbus, Ont.



SHORTHORNS

Sold out of Bulls. Would be glad to have your inquiries for anything else.

CATALOGUE ON APPLICATION.

JOHN CLANCY, Manager. H. CARGILL & SON, Proprietors, Bruce Co., Cargill, Ont.

Shorthorns and Clydesdales

PRESENT SPECIAL OFFERING:

Seven choice young Scotch bulls, from 9 to 15 months; 25 cows and heifers of choicest breeding. This lot includes some strong show heifers for the yearling and two-year-old classes. A pair of imported Clyde fillies, two and three years old (bred).

W. G. PETTIT & SONS, Freeman, Ont.

Long-distance phone.

Burlington Jct. Sta., G. T. R., 1/2 mile from farm.

Robert Miller, Stouffville, Ont.

Can supply young bulls and heifers of the very choicest breeding, and of a very high class, at prices that you can afford to pay. The young bulls are by one of the greatest sons of Whitehall Sultan. They are good colors, and will make show bulls. I also have two good imported bulls at moderate prices and of choice breeding, and some cows and heifers in calf to Superb Sultan; the calves should be worth all the cows will cost. Some beautiful young imported Welsh Ponies still to spare. It will pay you to write, stating what you want. Glad to answer inquiries or show my stock at any time. Business established 74 years.

Pleasant Valley Farm Shorthorns

Herd headed by Scottish Signet, and consisting of females of the leading Scotch families. Have for sale several good young bulls; also cows and heifers. Correspondence solicited. Inspection invited.

GEO. AMOS & SONS, MOFFAT, ONTARIO

Farm 11 miles east of Guelph, C. P. R., half mile from station.

Scotch Shorthorns

FOR SALE: 14 blocky, low-down bull calves, from 6 to 11 months old, all from imported stock. 20 yearling and two-year-old heifers of best Scotch breeding; also one imported bull, an extra sire. Farm 1/4 mile from Burlington Jct. Sta.

Mitchell Bros, Burlington, Ont.



ELMHURST SCOTCH SHORTHORNS AND LARGE ENGLISH BERKSHIRES

H. M. VANDERLIP, Importer and Breeder, Cainsville, Ont. Langford Sta. Brantford & Hamilton Radial in sight of farm, Bell phone.

High-class Shorthorns

I have on hand young bulls and heifers of high-class show type, pure Scotch and Scotch-topped, sired by that sire of champions, Mildred's Royal. If you want a show bull or heifer, write me. GEO. GIER, GRAND VALLEY P. O. AND STATION, ALSO WALDEMAR STATION.

SPRING VALLEY SHORTHORNS

If you want a good Short-horn bull, we have them. Canadian-bred and imported. Females all ages. Also a few good YORKSHIRES—boars and sows. Prices right.

Phone connection. Kyle Bros., Ayr, Ont.

Brampton Jerseys

Bulls fit for service are getting scarce. Just a few left. Yearling heifers in calf are in great demand; 6 for sale; 6 now being bred.

B. H. BULL & SON, BRAMPTON, ONT.

High Grove Jerseys

No better blood in Canada. Present offering: Two choice young solid-colored bulls about 15 months old, out of heavy-producing dams.

ARTHUR H. TUFTS, P. O. Box III, Tweed, Ont.

DON JERSEYS!

Contains more of the blood of Golden Fern's Lad than any other Jersey herd in Canada. For sale are heifer calves from 4 to 9 months of age, and young bulls from calves to 1 year.

DAVID DUNCAN, DON, ONT.
Duncan Station, C. N. R. Phone connection.

When Writing Mention Advocate

QUESTIONS AND ANSWERS. Miscellaneous.

ROUP IN TURKEYS.

Turkeys start to run at the nose, and swell up under the eyes. The breath is very offensive, and the nostrils are closed with a thick, slimy substance, water appearing in the corners of the eyes.

H. E. F.

Ans.—The symptoms indicate a case of roup. Prevention is better than cure. Under ordinary conditions, the best treatment is to kill the affected birds. In all cases it is advisable to use Epsom salts in their drink, for the entire flock, as a means of prevention. If it is desired to treat the birds, immerse their heads in a five-per-cent. solution of potassium permanganate. Give potassium permanganate in the drinking water. Disinfect all poultry buildings and roosts, remove the diseased birds from the flock, and place the healthy birds on a new run which has not been frequented by the diseased birds. If only a few are affected, kill and burn. Avoid drafts and dampness.

PLANK FRAME BARN.

We have just lost our barn, stables, etc., by lightning, and have to build, and we want some information. Our soil is light sand and gravel. How deep should the foundation go? The usual way here is to dig the trench two or three feet deep, fill with broken stone to within six inches of the surface, and build the masonry or concrete foundation on that, and it seems to give satisfaction, but the book issued by a cement company says the concrete should go three or four feet into the ground. We intend to build the barn 36x70 feet, with 16-ft. posts, or studding, allowing 20 feet at one end for horse stable and granary, a 14-ft. floor, and the rest of the space for two rows of cows, the rows running lengthwise. How much plank will be required for the frame? How much space should be allowed for each cow? We will use iron tubing for partitions, and swinging stanchions. Do you know of anyone who draws up plans for plank frame barns, and, if so, what would be the probable charge for such plans?

C. W. B.

Ans.—Two and one-half to three feet should be deep enough for the foundation. It is necessary to go deep enough to avoid injury by frost, but if, as you state, this depth is giving good satisfaction, why go any deeper? The contractor whom you employ to build the barn will be able to tell you exactly how much lumber you will need. He should also be able to draw up the plans for the same. Cow stalls, if single, should be about three and one-half feet wide; if double, seven feet is a good width.

Veterinary.

LUMP ON HORSE'S LEG—SHOE BOIL.

I have a horse that got kicked three months ago on the front of the hind leg, between the two joints, and now has a big hard lump. What is the best way to take the lump away?

2. He also has a shoe boil which has been lanced once, but a large lump about two and a half inches deep and four inches long still remains. Give prescription for same.

Ans.—1. If the bone was injured by the kick, you will not likely be able to remove all of the enlargement. Get 6 drams each of biniodide of mercury and iodide of potassium and mix with 8 ounces of water. Apply every day for about four days, or till the parts get a little sore, then stop for a few days till the soreness ceases, applying a little oil in the meantime; then repeat, and keep at the treatment for several months, and you will at least reduce the size of the enlargement. The horse can do his ordinary work during the treatment.

2. A shoe boil is caused by the elbow coming in contact with the heels of the shoe when lying down. In order to effect a cure, the cause has to be removed, either by letting the animal go without shoes or by placing a pad on the heel each night to protect the elbow. The only sure treatment is to have the lump cut out, and then treat as an ordinary wound.

V.



Genasco

the Trinidad-Lake-Asphalt Roofing

has the life that only natural asphalt can give roofing to lastingly resist all kinds of weather.

The Kant-leak Kleet clamps the roof-seams water-tight without cement, and prevents nail-leaks. Ask your dealer for Genasco with Kant-leak Kleets packed in the roll.

The Barber Asphalt Paving Company

Largest producers of asphalt, and largest manufacturers of ready roofing in the world.

Philadelphia

New York San Francisco Chicago

D. H. Howden & Co., Ltd., 200 York St., London, Ont.

Caverhill, Learmont & Company, Montreal, Que.



Rock Salt, \$10.00 ton.

Toronto Salt Works, 128 Adelaide St. E., Toronto, Ont.

HOLSTEINS

MONRO & LAWLESS

Elmdale Farms, Thorold, Ont.

Lake View Dairy Farm I have several of noted Francy breeding, also daughters of Sir Admiral Ormsby. Present offering: Bull calves and heifers. W. F. BELL, BRITANNIA BAY, ONTARIO.

Holstein Cattle—The most profitable dairy breed. Illustrated descriptive booklets free. Holstein-Friesian Ass'n of America. F. L. HOUGHTON, Secy, Box 127, Brattleboro, Vt.

"I lunched with Winston Churchill at the Ritz in London," said a New York journalist during his campaign. This brilliant young cabinet minister, with his American blood through his mother and his dual blood through his father, praised American journalists. He gave me an example of our perseverance. No less than 47 American correspondents called on him at the Board of Trade offices for an interview one week on the American tariff, and as none of them had sufficiently good credentials, he refused to see them. Finally a correspondent came with a letter from Mr. Lloyd-George, and him Mr. Churchill saw gladly.

"Do you know," he said to the young man, "that I have refused to see forty-seven of your compatriots on this very subject?"

"I ought to know it," the correspondent answered, "for I'm the whole 47."

THE good housewife cleans both her hands and her pans with "SNAP".



"SNAP" is the original and genuine antiseptic hand cleaner. 15c. a can.

QUESTIONS AND ANSWERS. Miscellaneous.

GASOLINE ENGINE QUERIES.

1. Would you buy a gasoline engine in preference to a windmill to pump water?
2. What would be the cost per day to pump water with a gasoline engine from a well 100 feet deep, water standing within 30 feet of the surface, for, say, 40 head of cattle?
3. How many horse-power would it require to pump water from such a well?
4. Will a gasoline engine run a fanning mill satisfactorily? J. McF.

Ans.—1. Not if the situation were favorable by its elevation and freedom from trees, etc., that might obstruct the wind. The latter is the cheapest pumping power.

2. Probably from 7 to 10 cents per week for gasoline, and a little for oil. This will depend on how continuously the engine is run.

3. One and a half horse-power.

4. Yes.

TOAD FLAX.

Please find inclosed the flower and root of a weed that seems to be a new one on our farm. It grows very thickly, especially along ditches, and is working its way into pastures, where it completely crowds out the grass. Would be obliged if you would insert your answer in "The Farmer's Advocate," and give means of eradication. J. D. B.

Ans.—The inclosed specimen is toad flax, or butter and eggs. This is a persistent, deep-rooted perennial, and is found in waste places, on roadsides, and in meadows and crops. Badly infested meadows and pastures should be brought under cultivation by early August plowing, summer-fallowing until autumn, and planting with hood crop the following year. Hand-pulling when the soil is wet is effective in lands that cannot be cultivated. Short rotation of crops, with deep, thorough cultivation in spring and fall, will suppress it.

SOW THISTLE—TOP DRESSING SOD.

1. I have about 150 bushels of oats which grew on a field infested with sow thistle. If well cleaned in a fanning mill, is there any danger of bringing the sow-thistle seed home?

2. When is the best time to top dress an old pasture? J. B. W. Lambton Co., Ont.

Ans.—1. The seed of perennial sow thistle is comparatively light, and if particular care was taken to blow the oats very hard and thoroughly clean them, there would not be much danger of taking any great amount of the seed home. Most of the seed of this pest is blown out in threshing. Screenings should be burned and the fanning mill sieves and screens thoroughly cleaned. If the oats are finely ground, this would also help in destroying the seeds.

2. In the winter, or early spring, provided the land is not too rolling, should be as good a time as any.

CROP FOR SOD.

I have three acres of meadow land that has not been plowed for over ten years. It is on a hillside, and the grass roots are all killed out, and "paint brush" is commencing to come up. What kind of crop would you advise sowing next year? I will not have any manure available next spring. Would peas and oats, cut as green feed, be a good crop to sow? S. K.

Ans.—Devil's paint brush, or orange hawkweed, is a shallow-rooted perennial, and readily succumbs to cultivation. If the field is broken up and put under a short rotation of crops, it will soon be free from the weed. If the field is plowed early this fall, and kept well cultivated until winter, a crop of peas and oats to cut for fodder should do very well next year. If you could get a little manure, the piece might be planted to corn, the cultivation of which would rid the field of the hawkweed. If a crop for next year's green feed is necessary, better try oats and peas.

The Help the Farmer Longs for is Supplied by the GENUINE TOLTON



PEA HARVESTER

With New Patent Side-Delivery Self-Buncher at Work

Harvesting from 10 to 12 acres per day in the most economical and complete manner. Harvesters to suit all kinds of mowers. A wrench is all that is required to attach it to any mower. Every machine warranted. Our motto: "Not how cheap, but how good." Give your orders to any of our local agents, or send them direct to

TOLTON BROS., LTD. (Dept. F) Guelph, Ont.

FAIRVIEW FARMS HERD—HOME OF:

Pontiac Korndyke, the only bull living that is the sire of four 30-pound daughters, and the sire of the world's record cow for seven and thirty days. Rag Apple Korndyke, sire of eight A. R. O. daughters that, at an average age of 2 years and 2 months, have records that average 17 1/2 lbs. each, and over 4.2% fat for the eighth. Three of them made over 20 lbs. each.

Sir Johanna Colantha Gladi, whose dam and sire's dam average 33.61 lbs. each at 7 days, which is higher than can be claimed for any other sire of the breed.

We are offering some splendid young bulls for sale from the above sires, and out of daughters of Pontiac Korndyke and Rag Apple Korndyke.

E. H. DOLLAR, (near Prescott) HEUVELTON, NEW YORK

HOLSTEINS AND YORKSHIRES

More high-record cows in our herd than in any other in Canada, including the champion Canadian-bred three-year-old, and the champion two-year-old of the world for yearly production. The sire of these champions is our main stock bull. We have a large number of heifers bred to him that will be sold right to make room for our natural increase. Also bull calves for sale. We are booking orders for spring pigs, also sows safe in pig. We invite inspection of our herd. Trains met at Hamilton when advised. Long-distance Bell phone 2471 Hamilton.

D. C. FLATT & SON, MILLGROVE, ONT. R. F. D. NO. 2

LAKEVIEW HOLSTEINS

Can offer service bulls and bull calves sired by Count Hengerveld Fayne De Kol, and out of dam with official records from 20 to 24 pounds butter in 7 days. Write for catalogue giving full particulars, or, better still, come and see them. Telephone.

E. F. OSLER, BRONTE, ONTARIO CENTRE AND HILLVIEW HOLSTEINS

Offers two June bulls, nicely marked, out of Record of Merit dams and Bonheur Statesman, whose daughters are testing high price of these; \$70.00 each f.o.b. Woodstock. Also younger ones. Long-Distance Telephone. P. D. Ede, Oxford Centre P.O., Woodstock Stn.

Springbrook Holsteins and Tamworths

A choice bull calf, sired by Brightest Canary, whose two nearest dams average over 26 lbs. butter in a week. Dam, a four-year-old, record of over 12,000 lbs. milk in one year. 25 fine young Tamworth pigs two weeks old; sire and dam imported; best quality; booking orders at \$8 for quick sale. A. C. HALLMAN, BRESLAU, ONTARIO.

Silver Creek Holsteins

officially backed on both sides. King Fayne Segis Clothilde, whose 7 nearest dams have 7-day records that average 27 lbs., is at head of herd. A. H. TEEPLE, CURRIES P. O., Ont. Woodstock Station. Phone Connection.

THE MAPLES HOLSTEIN HERD

Everything of milking age in the Record-of-Merit. Nothing for sale at present but a choice lot of bull calves sired by King Posch De Kol. Write for prices, description and pedigree. Walburn Rivers, Folders, Ontario

Holstein Bulls

From high-class, officially-tested cows. Ready for service. Also bull calves. R. F. Hicks, Newton Brook, Ont., York Co. Toronto Shipping Point.

Ayrshires

Bull calves, from 4 months to 9 months, from imported sire and Record of Performance dams. Records 50 to 63 pounds per day. V. Dymont, R. R. No. 2, Hamilton, Ont.

Ayrshires and Yorkshires

Special offerings at low prices from the Menie district: Bulls fit for service, 1911 calves. Dams of all ages: some with good official records; others, if their owners entered them, would make good records. Many females, any desired age. A few young Yorkshires. ALEX. HUME & CO., MENIE, ONT.

Choice Ayrshires

Good teats, heavy producers and high testers. Prices low considering quality. White Wyandottes, \$2 each. WILLIAM THORN, Trout Run Stock Farm, Lynedoch, Ont. Long-distance phone in house. JAMES BEGG, R. R. No. 1, St. Thomas.

STONEHOUSE Ayrshires

The champion Canadian herd for 1910 at the leading shows. 32 head imp., 56 herd to select from. R.O.F. official records, the best and richest bred types of the breed. Anything for sale. Young bulls, females all ages. HECTOR GORDON, HOWICK, QUE.

Don't Wear Trusses Like These
Get rid of Straps and Springs and be CURED



Our FREE BOOK tells you why Leg-strap appliances and Spring trusses like shown above CANNOT help you and how the Clute Ball-Bearing Self-Massaging Pad STRENGTHENS the weakened muscles while Holding with ease and CURES Rupture. Waterproof, durable; sent under Guarantee Trial. Remember—NO body-spring, NO plaster, NO leg-strap to pull pad on pelvic bone. Write NOW for this helpful FREE BOOK with 3600 Public Endorsements on this safe and simple Home Cure. When writing, give our box number—

Box 109—CLUTE INSTITUTE,
125 East 23rd Street, New York City.

Ring-Bone

There is no case so old or bad that we will not guarantee

Fleming's Spavin and Ringbone Paste

to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 45-minute applications cure. Works just as well on Sidebone and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of

Fleming's Vest-Pocket Veterinary Adviser

Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durably bound, indexed and illustrated. Make it right beginning by sending for this book.

FLEMING BROS., Chemists,
75 Church St., Toronto, Ontario

Chester Whites

Have a fine lot of young boar and sow pigs. DAM Bessie, sired by Ohio Chief. SIRE Longfellow, a well-known prizewinner. On both sire and dam side these pigs stand for QUALITY and PREPOTENCY. Price on application.

Glen Athol Fruit Ranch
DAVID SMITH, Mgr.,
St. Catharines, Ontario.

Maple Grove Yorkshires

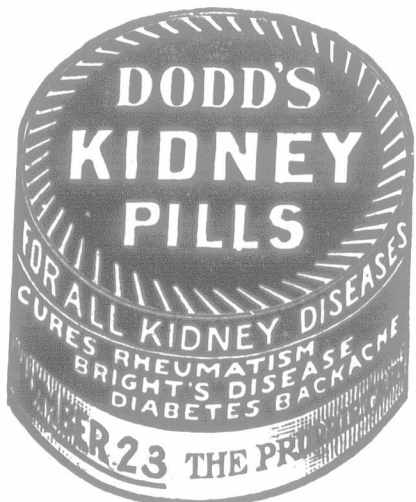
ARE EQUAL TO THE BEST.

Present offering: Twenty-five sows bred to farrow from Aug. to Oct. All first-class, bred to No. 1 quality boars. All big, roomy, growthy stock, and ranging from six months to two years old. Eight young boars fit for use; choice long fellows of various ages. Pairs not related. Our prices will suit the average farmer, but are consistent with the best quality. Stock shipped C. O. D. and on approval. Correspondence and personal inspection invited. Long-distance phone via St. Thomas.

H. S. McDIARMID, FINGAL, ONTARIO,
Shedden Station, P. M. and M. C. R.

A DEADLY WEAPON.

Artist (to friend)—"Yes, I use the palette-knife a good deal. Knocked a child's head off in the morning, and sold it in the afternoon." Nervous old gentleman gets out hurriedly at next stop.—M. A. P.



QUESTIONS AND ANSWERS.
Miscellaneous.

THE KING'S NAME.

What is the full name of King George V.?

Ans.—The King's full name is George Frederick Ernest Albert. The family name is Guelph.

PRUNING CURRANT BUSHES.

Will you kindly inform me as to the right time and method of pruning black currant bushes? My bushes are three years old, and are set 6 x 8 feet, and are touching each way at present. J. C.

Ans.—In the spring, before the leaves are out, is a good time to prune currant bushes. No very definite rule can be given for pruning currants grown in bush form, because the kind and amount of pruning necessary is in each case determined by the condition and individual habits of growth of the bush to be pruned. Bushes require very little pruning the first two or three years, except to head back the new shoots so that the fruit spurs will develop all along the cane. If this is not done, the fruiting branches and fruit spurs will be found mostly near the top of the cane. All drooping and broken branches should be removed. The new wood is that which produces the finest fruit, consequently it is necessary to cut out the old wood each year. It is seldom advisable to leave any wood over three years old. Leave only the strongest, healthiest shoots, and keep them renewed every year. From five to eight shoots make a nice bush.

SILOS—EGGS—WEEDS.

1. Please give explanation of the merits and disadvantages of the different kinds of silos; also approximate cost of medium-sized silo of each, where good gravel could be laid down for \$4 per cord?

2. I would infer from the market reports in "The Farmer's Advocate," that the farmer who sells good eggs in the outlying country districts is being robbed through the antiquated system of collecting them, to the extent of three or four cents per dozen. Now, I think if the eggs were caddled when collected, instead of waiting till they reach Montreal or some other destination, most of the explosive eggs would be used as a fertilizer instead of being turned over to the country storekeeper in exchange for high-priced goods. Could not "The Farmer's Advocate" do something to start a better system of handling this important crop?

3. The pathmasters appointed by our Township Council seem to be all dead as far as the thistles and weeds on the roads are concerned. Please suggest best means of resurrecting them.

R. C. A.

Middlesex Co., Ont.

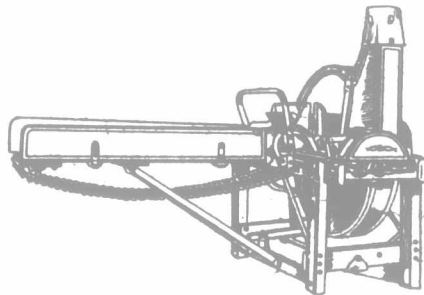
Ans.—1. Cement slop wall silos and cement block silos are discussed in an article on pages 1239 and 1240 of "The Farmer's Advocate," issue of July 27th, 1911. Frame silos are advertised in "The Farmer's Advocate" by firms who would be pleased to furnish their catalogues of information. Cement slop wall makes a good silo, and probably scarcely as expensive as cement blocks. Frame silos are also found satisfactory, and, while perhaps not so permanent, if well built and seasoned lumber is used, they last many years, and the first cost is less than that of the cement. They can be quickly erected. The cost of cement silos is discussed in the article referred to. All styles of silos are better to be roofed.

2. Co-operative egg circles are the means of solving the bad-egg problem. Their rules make it necessary to gather the eggs regularly and often, and caddle them when they are delivered at a local point several times per week. Persons marketing bad eggs are fined, consequently the eggs receive greater care and attention, and a higher class of product is produced, which sell at a higher price.

3. The best thing to do, if bringing the matter before the pathmaster personally is not effective, would be to take it before the Council. Time is often gained by cutting the weeds along one's own farm, which is usually less trouble than getting someone else to do it. This work is counted along with roadwork in many districts.

Handles Twelve Tons of Silage an Hour

Cuts corn any length, from 3/8 of an inch to an inch-and-a-half, and elevates it forty feet at the rate of twelve tons an hour. Yet the Thom's Ensilage Cutter uses no more power than the ordinary cutter of far less capacity. You want this machine for filling your silo. Its price is moderate.



There's strength and satisfaction built into every detail of

Thom's Ensilage Cutter and Silo Filler

Picture shows Model 13B, for general farm use—8 to 12 tons an hour. Style 16A handles 25 tons an hour—great for threshermen!

Equipped with Knives that STAY Sharp

Specially-tempered knives made for us in Sheffield, England, by Spear & Jackson—knives that hold a keen edge longer than you would think possible. Model, pictured here, uses only 4 to 8 horse-power to cut and elevate 400 pounds a minute. And it is mighty hard to get it out of order—it's built to stand the racket.

Does Its Work with Least Fuss

Every part that must endure strain is built with surplus strength—bottom drum, for instance, of ten gauge steel. Keep the Thom's going at top speed with no fear of a smash. Year after year satisfaction in this machine. Why not ask us NOW for particulars, proofs and price?

DAIN MFG. COMPANY, Limited, Welland, Ont.

PINE GROVE BERKSHIRES

Sold out of young boars. Have a few young sows three and four months old. Price right for quick sale. Milton, C. P. R. W. W. Brownridge, Ashgrove, Ont.

Hillcrest Tamworths

I ship to all parts of Canada and United States. Stock Boars, Bred Sows, and Exhibition Stock. Bell phone. Herbert German, St. George, Ont. SUNNYSIDE CHESTER WHITE HOGS—I am now offering some very choice young things of both sexes, of breeding age. A few Shropshire sheep of both sexes. Also Red Cap cockerels and pullets. W. E. WRIGHT, Ganworth P. O., Ont.

Duroc - Jersey Swine.

Largest herd in Canada. 100 pigs ready to ship. Pairs and trios not akin; also a few sows ready to breed. Bell phone at the house. MAC CAMPBELL & SONS, NORTHWOOD, ONT.

Monkland Yorkshires

I am making a special offering of 50 young bred sows. They will average 200 pounds in weight, and are from 6 to 7 months of age. An exceptionally choice lot, full of type and quality; also a limited number of young boars. MATTHEW WILSON, FERGUS, ONTARIO

Newcastle Tamworths and Shorthorns

For sale: Choice young sows bred and ready to breed. Boars ready for service; nice things, 2 to 4 months, by imp. boar. Dam by Colwill's Choice. Canada champion boar, 1901-2-3-5. Two splendid young Shorthorn bulls and six heifers—bred. Prices right. Bell phone. A. A. COLWILL, NEWCASTLE, ONTARIO

Willowdale Berkshires.

For sale: Nice lot of 5 months sows, one 5 months' boar. Eggs from my famous flock of R. C. R. 1 Reds, \$1 per 13. Express prepaid on 5 settings or more. Phone 52, Milton. J. J. WILSON, Importer and Breeder, Milton, Ontario, C. P. R. and G. T. R.

MAPLE VILLA YORKSHIRES AND OXFORDS

A grand lot of boars fit for service. Some splendid sows to farrow to first-class boars. 30 ewe lambs, including 2nd pen at Winter Fair. Long-distance phone Central Beeton. Bradford or Beeton Sta. J. A. CERSWELL, Bond Head, Ont.

ELMWOOD STOCK FARM offers Ohio Improved Chester White Pigs. Largest strain. Oldest established registered herd in Canada. Choice lot, 6 to 8 weeks old. Pairs furnished not akin. Express prepaid. Pedigrees and sale delivery guaranteed. E. D. George & Sons, Putnam, Ont.

Morrison Tamworths

Bred from the best blood in England; both sexes for sale, from 2 to 10 months old; young sows, dandies, in farrow to first-class boars. Chas. Currie, Morrison, Ont.

First-Class Exhibition Stock for Sale BOTH SEXES Leicesters

Lambs that are hard to beat; sired by my big imported ram, Burnside Speaker. One of my ram lambs would creditably head your stock. WILLOWDALE STOCK FARM, LENNOXVILLE, QUE J. H. M. PARKER, Proprietor

Alloway Lodge Stock Farm

COLLIES.—That win at the shows and make excellent workers. Railway station, London.

SOUTH-DOWNS.—Do you want a fine-fitted Southdown to win out with at the shows, and to put some good new blood into your flock? I am now taking orders, and you will advantage in ordering early. I guarantee to please you, and at reasonable prices. ANGUS.—The first offering since founding the herd. Bulls and heifers for sale of showyard quality, and the choicest breeding.

Shropshires and Gotswolds

I am now offering for sale 25 shearing Shropshire rams and 15 shearing ewes, nearly all from imported ewes and ram. Also the best lot of lambs I ever raised. Am fitting some of all ages for showing. Prices very reasonable.

JOHN MILLER, Brougham, Ont. Claremont Stn., C. P. R.

CATTLE and SHEEP LABELS

Metal ear labels with owner's name, address and any numbers required. They are inexpensive, simple and practical. The greatest thing for stock. Do not neglect to send for free circular and sample. Send your name and address to-day. F. G. JAMES, Bowmanville, Ont.

SHROPSHIRE BARGAINS AT FAIRVIEW

Choice shearing rams sired by grand champions, and out of the best of dams. We have in the flock leaders and showing propositions. We guarantee them to be as described. See representatives at Toronto's Canadian National. J. & D. J. CAMPBELL, FAIRVIEW FARM, WOODVILLE, ONTARIO

**"IDEAL" CONCRETE BLOCK
SILO**
On the Massey Farm
East Toronto.



Erected at Dentonia Park Farm
for Mrs. E. D. Massey. 34 feet
high—15 feet diameter—capacity
180 tons. Built of "Ideal" Blocks.

Farmers, all over Canada, are
eagerly taking up Concrete Blocks for
all kinds of farm buildings.

Besides being fireproof, waterproof
and verminproof, Ideal Concrete Blocks
are the cheapest of all permanent
building materials.

An Ideal Machine will more than
pay for itself on the first house, barn
or silo you build.

Write us for full particulars—
catalogues free on request.

IDEAL CONCRETE MACHINERY CO. LIMITED
Dept. A, LONDON, Ont.

Reliable and energetic agents wanted in
every locality.

During a portion of the South African
war, Lord Kitchener had as an orderly a
young scion of a noble house who had
joined the Imperial Yeomanry as a
trooper. He could not quite understand
that he was not on terms of perfect
equality with the members of the staff,
and having been summoned one morning
to carry some dispatches for the Com-
mander-in-Chief, he entered the room with
a jaunty air.

"Did you want me, Kitchener?" he
asked calmly, while the rest of the staff
gasped for fear of what would happen
next.

Kitchener, however, merely looked at
him with a quiet smile. "Oh, don't call
me Kitchener," he remarked gently; "it's
so beastly formal. Call me Herbert!"

Diarrhoea Dysentery Summer Complaint

and all
Bowel Troubles

Are Curable by the Use of

DR. FOWLER'S Extract of Wild Strawberry

THIS STERLING REMEDY HAS BEEN
ON THE MARKET FOR OVER 65
YEARS AND HAS YET TO FAIL
TO DO WHAT WE CLAIM FOR IT.

If an unscrupulous druggist or dealer
says:—

"This is just as good or better," just
say—"Give me 'Dr. Fowler's,' I know
what I want when I ask for it, and give
me what I ask for."

The price is 35 cents per bottle. See
that the name, The T. Milburn Co.,
Limited, Toronto, Ont., appears on the
label as we are the manufacturers and
sole proprietors of this remedy.

GOSSIP.

FAIRMONT HOLSTEINS.

The Fairmont herd of Holstein cattle,
owned by C. R. Gies, of Heidelberg, Ont.,
a short distance from St. Jacob Station,
G. T. R., showed a most decided im-
provement over that of a year ago when
visited by a representative of "The Farm-
er's Advocate" a few days ago. The
herd is now headed by the richly-bred
bull, Aagie Grace Cornucopia Lad, a son
of Beauty Cornucopia Lad, whose three
nearest dams have records that average
over 18.25 lbs. butter in seven days, two
of them two-year-old records. His dam
is Aagie Grace Manor Josephine, whose
seven-day record is 20.93 lbs., and his
dam has a three-year-old record of 20.87
lbs., and grandam 23.51 lbs., and great-
grandam 20 lbs. The breeding of this
bull is also most intensive on his sire's
side, many A. R. O. daughters and sons
being sired by his sire and grandsire,
great-grandsire, and great-great-grandsire.
All the young things in the herd are
sired by him. None of the females in the
herd have ever been officially tested, but
all will be at their next freshening. In
a private test, the following very satis-
factory showing of a few of them is evi-
dence of their ability to show up well in
the official record lists when given a
chance: Posch Calamity Colantha, at two
years of age, butter in seven days, 17.95
lbs.; Black Beauty Zozo, as a two-year-
old, is giving 44 lbs. of milk a day, and
is a daughter of Sir Johanna Mercedes,
whose six nearest dams have records that
average 22.31 lbs.; Toitilla, O. A. C., at
first freshening, made 16½ lbs. butter in
seven days. She has a five-months-old
bull calf, sired by the stock bull, Teake
Fairmont Claxton gives 60 lbs. a day of
milk, and 18 lbs. butter in seven days.
This heifer has never been dry since first
freshening, and her dam, Kate Claxton,
milked steadily for six years. She, too,
has a five-months-old bull calf by the
stock bull; a most desirable coming herd-
header. Netherland Posch 2nd, a cow
with a 16-lb. weekly butter record, also
has a bull calf four months old by the
stock bull. Several of the herd are
closely related to that great bull, Victoria
De Kol Pietertje, the sire of the Guelph
champion and twenty other A. R. O.
daughters, and his sire has ten daughters
and ten sons in the A. R. O. Anything
in the herd is for sale. Mr. Gies is the
first man in Canada to establish the sys-
tem of registered seed grain, and this
year, under the inspection of the well-
known seed expert, T. G. Raynor, his
Dawson's Golden Chaff wheat scored 97½
points, Daubeny oats 93½, New Market
oats 90½, and Mandscheuri barley 84½.
Mr. Gies will have a quantity of each of
these grains for sale this fall.

TRADE TOPIC.

Genasco is a new roofing made by the
Barber Asphalt Company, of Philadelphia,
and advertised elsewhere in this issue.
The firm's claim for the material is that
it is an everlasting natural waterproof,
so easy to apply that any farmer can lay
it. The company issues an attractive
booklet, "The Good Roof Guide Book,"
giving information on roofing in general.
This book may be had on application.
Timber is becoming scarcer, and the old-
fashioned shingle is giving way to newer
materials. Roofing is one of the all-
important parts of any building, and any-
one having a building to cover should
write this company for their booklet and
particulars.

"Be what your friends think you are;
avoid being what your enemies say you
are; go right forward and be happy."—
Pomeroy.

"Be not hasty to cast off every asper-
sion that is cast on you. Let them
alone for a while, and then, like mud on
your clothes, they will rub off of them-
selves."—Murray.

"The best of men and the most earnest
workers will make enough of mistakes to
keep them humble. Thank God for mis-
takes, and take courage. Don't give up
on account of mistakes."—Moody.

"In religion, as in every other profes-
sion, practicality is the great thing. We
practice law, practice medicine, and min-
isters must practice what they preach;
Christians must practice their religion."
—Jacobus.



FARM LABORERS' EXCURSIONS

\$10.00 to
WINNIPEG

And certain points in Western Canada,
including points on Grand Trunk
Pacific Railway, via Chicago,
Duluth and Fort Frances.

\$18.00 Additional Returning

Aug. 12th {From all stations north of, but not including Main Line
Toronto to Sarnia Tunnel, via Stratford, to and including
the line from Toronto to North Bay and west in Ontario.

Aug. 16th {From Toronto and stations east in Ontario; also east of
Orillia and Scotia Junction in Ontario.

Aug. 23rd {From all stations Toronto, North Bay and west in Ontario.

Aug. 25th {From all stations Toronto and east of Orillia and Scotia
Junction in Canada.

Full particulars from any Grand Trunk Agent, or address A. E.
DUFF, District Passenger Agent, Toronto.

Central Canada Exhibition

Ottawa, Sept. 8th to 16th, 1911

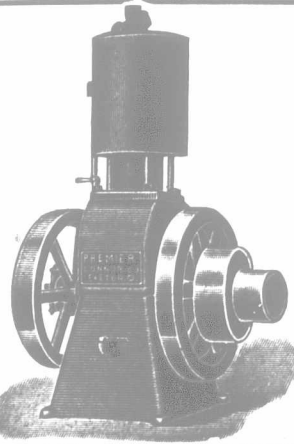
Larger appropriations of prize money for horses, cattle, sheep, swine and
poultry. \$16,000 in cash prizes, and over 100 gold medals and other
trophies. Extension in grain and horticultural exhibits.

LESSONS ON DAIRYING INDUSTRY

Five acres added to grounds. Airship flights. Spectacular reproduction of
grand naval review at Coronation. Gorgeous day and night fireworks,
vaudeville, midway, and numerous other special attractions.

WRITE FOR PRIZE LIST

E. McMAHON, Secretary.



It will soon be time to use power for cutting feed,
pumping and other farm requirements. **NOW** is
a good time to consider the merits of the various
engines. We offer in the

AIR-COOLED PREMIER

a gasoline engine which is simple in construc-
tion, and will carry any load that the water-
cooled engines of the same size will. 2 and 4
H.-P. only, but big enough for any farm work.
When writing, it is a help to state the purpose
for which the engine is wanted.

Connor Machine Co., Exeter, Ont.

WHEN WRITING ADVERTISERS MENTION THE FARMER'S ADVOCATE.

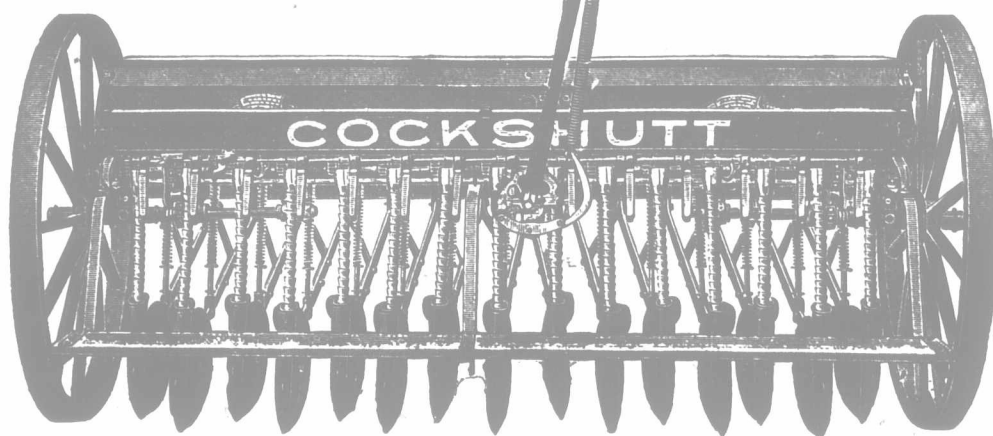
BIGGER CROPS — BETTER GRAIN MORE MONEY

IS THAT WHAT YOU WANT?

LIKE lots of other farmers at this time of the year, you are thinking of buying either a Disc or a Hoe Drill. Read this advertisement carefully before you decide—study the principle of

this Cockshutt Disc Drill—get our Drill booklet and go into this matter thoroughly, because here is a machine that will help you get better crops.

Cockshutt
New
Model



Made
with 13
and 15
Discs

The Lightest Draft Disc Drill

THE particular advantage which the Cockshutt Disc Drill possesses, is that it sows the grain 6 inches apart—not 7 inches as is the usual method. Close seeding gives the grain a better chance to germinate—to sap all the nourishment of the soil. Thus the grain grows up closer and firmer—holds moisture better—resulting in a bigger yield and better grain. Close seeding does not mean that you have to sow more seed—you simply plant the same quantity of seed as you would with old style machines, but you plant with more discs. Farmers who have used this Cockshutt Disc Drill report an increase of from 2 to 5 bushels an acre, in other words this Cockshutt Disc Drill will easily pay for itself in one season and still leave you a nice profit over and above. Read all about the other advantages it has—then write us and get our very instructive booklet about it.

The discs on this machine are 6 inches apart—not 7 inches like old style machines. Footboard runs the whole length of the machine, which makes it optional with the driver whether he walks or rides. Footboard can also be used for carrying seed bag to the field. The frame is built of high carbon steel, the corners being re-inforced by heavy malleable castings and steel corner braces. The castings pressure bar and short self-aligning axles are rivetted to the strong I beam which runs the

whole length of the machine. One of the great advantages of this I beam is that it never allows the machine to sag in the centre. Axles are made of cold rolled shafting, always uniform in size and set at the right angle to give the wheels proper pitch. The self-oiling device keeps the disc bearings in good shape a whole season. The grain flows down the closed boot right into the bottom of the furrow and is always sown at uniform depth. The space between the grain boots and discs gradually widens from bottom to top, preventing mud and trash stopping the discs from revolving. No matter how wet or sticky the soil, these discs will always revolve and cut. Scrapers are provided so as to keep discs clean on each side. The feed on this Cockshutt Disc Drill is a positive force feed of great accuracy and is driven by a short steel chain from the axle, each half of the feed being driven separately. The seed box is made of choice seasoned lumber and the cover locks automatically.

We use metal bridges between feed cups to prevent grain from clogging, so that the last seed is sown out of the box at the same rate per acre as when the grain box is full. You can't realize all the advantages and improvements of this Drill until you read full explanations in our booklet. Don't buy a Drill of any kind until you read it.

Works Exceptionally Well

Cockshutt Plow Co.,
Gentlemen,—The 13 Disc Drill I purchased from your agent, W. J. Shaw, works exceptionally well in all kinds and conditions of soil; it is impossible to clog this Drill in marshy or dry land. It is also lighter in draft than any other drill I have ever used, and I have farmed for over fifty years. I used this drill with a very light team, and sowed over one hundred acres this spring.

Yours truly,
WALTER THOMSON.

Fergus, Ont.

Read These Letters—Then Write for Booklet

Cockshutt Plow Co. Ltd.,
Brantford, Ontario

I purchased a Cockshutt 15 Single Disc Drill from your agent, Mr. J. H. Finlay of Collingwood, and I desire to state that I am more than pleased with the work done by it. After giving it a severe trial in lumpy ground, also in wet and sticky soil, I could not clog the drill. I would recommend this drill to all farmers intending to purchase.

(Signed) R. S. BAKER.

[Dairy Farm, Bay View

Cockshutt Plow Co. Ltd.,
Brantford, Ontario

Gentlemen:—

I have very much pleasure in recommending the 15 Single Disc Drill purchased from your agent, W. McMartin of Thorndale. After putting in seventy acres of spring seeding with two horses I think it the best drill I have ever seen, and the easiest to operate. I have not seen its equal, and think it has to be made yet. I cannot say too much for it.

(Signed) JOHN MORDEN.

Thorndale,

COCKSHUTT PLOW CO. **BRANTFORD**
LIMITED