

FARMER'S ADVOCATE

AND HOME JOURNAL

THE ONLY WEEKLY AGRICULTURAL PAPER IN WESTERN CANADA

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

August 19, 1908

WINNIPEG, MANITOBA

Vol. XLIV, No. 830



You surely wouldn't buy an inferior cow, when you could get a pedigreed Jersey for the same money? Why should you buy cheap, inferior, imported salt when

Windsor Salt

costs no more. It's best for butter—best for cheese—best for the table.
Insist on having Windsor Salt.



OUR ADVERTISERS ARE DETERMINED TO GIVE VALUE

DUNCAN'S E. & N. RY.

The Residential and Farming District of
VANCOUVER ISLAND

A Subdivision suitable for fruit and mixed farming, close to School, Post Office and Railway Station. Lots 15 to 50 acres partly cleared. Prices are low and terms liberal.
Before too late, write and obtain particulars.

J. H. WITTOME
Duncan's, Vancouver Is., B. C.

FRUIT LAND

Five and Ten Acre Blocks
Three miles from New Westminster

Cleared Land \$200.00 per acre
Uncleared " 125.00 " "

Quarter Cash—Balance very easy
Write at once

Dominion Trust Co., Ltd.
New Westminster, B. C.

Don't Endure Offensive Odors

Germs cause disease and foul odors

ODORKILL

(REGISTERED)

IS GUARANTEED

to destroy both germs and odors

An Ideal Disinfectant

Has NO ODOR Itself and is NON-POISONOUS

PREVENTS swamp fever and hog cholera. Heals cuts and scratches. Should be used on every farm, in every home, in stores, hotels, public buildings, etc.

See daily or weekly papers or write for particulars of prize competition open to users of Odorkill. \$5,300.00 given free, including \$4,000.00 farm, city lots and cash prizes.

Odorkill Manufacturing Co.

402 McIntyre Block, Winnipeg, Man.

PHONE 7966

Wedding Invitations
Wedding Announcements
Visiting Cards

LATEST STYLES LATEST TYPE
PROMPT ATTENTION TO MAIL ORDERS

Farmer's Advocate of Winnipeg
14-16 Princess St., Winnipeg

Barn Roofing

Fire, Lightning
Rust and Storm Proof

Durable and
Ornamental

Let us know the size of any roof you are thinking of covering and we will make you an interesting offer.

Metallic Roofing Co.
Limited
MANUFACTURERS
TORONTO and WINNIPEG

WESTERN CANADA FACTORY:
797 Notre Dame Ave. WINNIPEG, MAN.



There Is No Bridge

to get over a bad place in your business path without you possess an

INSURANCE POLICY

When fire or flood or tornado had destroyed your home or business, the need of ready money to make a fresh start is keenly felt. Perhaps you have nothing to offer as security for a loan, and your friends are not able to help. Be independent of circumstances. Take out a Policy now, and if the worst happens you have the means to begin anew. Information and rates cheerfully furnished on application to

THE WINNIPEG FIRE ASSURANCE COMPANY
[8 Bank of Hamilton Chambers]
Phone 179 Winnipeg, Man.

Thompson, Sons & Company

GRAIN COMMISSION MERCHANTS

P. O. Box 77-B

WINNIPEG

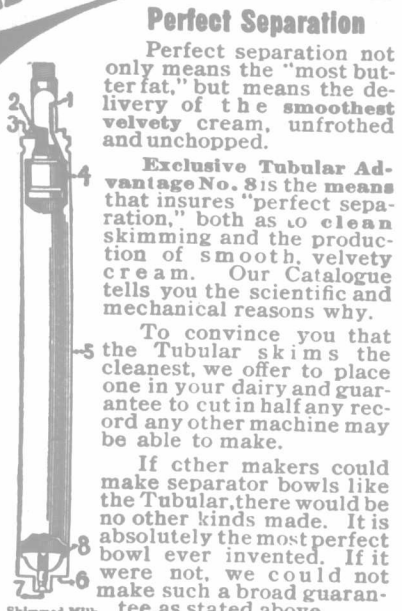
GRADING CAREFULLY LOOKED AFTER

SHIP YOUR GRAIN TO A STRICTLY
COMMISSION FIRM

LIBERAL MONEY ADVANCES MADE ON
SHIPPING BILLS

NOTE—In order that we may check the grading, mark your bills "Advise Thompson, Sons & Co., Winnipeg."

EXCLUSIVE Tubular ADVANTAGES No. 8



Perfect Separation

Perfect separation not only means the "most butterfat" but means the delivery of the smoothest velvety cream, unfrothed and unchopped.

Exclusive Tubular Advantage No. 8 is the means that insures "perfect separation," both as to clean skimming and the production of smooth, velvety cream. Our Catalogue tells you the scientific and mechanical reasons why.

To convince you that the Tubular skims the cleanest, we offer to place one in your dairy and guarantee to cut in half any record any other machine may be able to make.

If other makers could make separator bowls like the Tubular, there would be no other kinds made. It is absolutely the most perfect bowl ever invented. If it were not, we could not make such a broad guarantee as stated above.

Now you want the best, don't you? A postal brings Catalog No. 186, giving more fully this broad guarantee. Write for it today.

The SHARPLES SEPARATOR Co.,
West Chester, Penna.

Toronto, Can., San Francisco, Calif., Chicago, Ill.

ROYAL CITY REALTY Co.

New Westminster, B. C. P. O. Box 626

Farm Lands & City Property

We can suit you in a large or small acreage in the rich Fraser River Valley. The best climate; the best soil; a failure in crops unknown. Fruit and Chicken ranches a specialty. Write for particulars. Correspondence solicited.

B. P. RICHARDSON

BARRISTER, SOLICITOR
NOTARY PUBLIC.

GRENFELL, SASK.

LANDS FOR SALE

T. Mayne Daly, K.C. Roland W. McClure
W. Madeley Crichton E. A. Cohen

Daly, Crichton & McClure

Barristers and Solicitors

OFFICE—CANADA LIFE BUILDING

WINNIPEG MANITOBA

Keep Your Lumber from Rotting

BY USING

SIDEROLEUM

SIDEROLEUM the new Wood Preservative and Stain for your House, Barn, Fence and Machinery.

SIDEROLEUM is the cheapest and best preservative made.

SIDEROLEUM makes the wood Rot Proof and prevents decay.

SIDEROLEUM keeps damp from penetrating.

SIDEROLEUM drives out vermin.

SIDEROLEUM will destroy all disease germs in your horse and cattle mangers.

SIDEROLEUM will keep any length of time.

SIDEROLEUM you can apply yourself and it dries quickly.

SIDEROLEUM can be used inside as well as outside.

SIDEROLEUM can be put on in the winter as well as summer.

SIDEROLEUM dries a pleasing Nut Brown color.

Sold in 10 Gallon drums by the sole Importers.

Price \$1.00 per gallon on car. Cash with order. Drums free.

Booklet and sample of treated wood on application.

West, Porteous & Co.,

Suite 7, Empress Block

354 Main St., WINNIPEG

Telephone 3386.

Farmer's Advocate and Home Journal

The Only Weekly Farm Journal in Western Canada



PUBLISHED EVERY WEDNESDAY BY THE

FARMER'S ADVOCATE OF WINNIPEG, LIMITED

GENERAL OFFICES:

14 and 16 Princess Street, Winnipeg, Manitoba

Branches at London, Ont. and Calgary, Alta.

BRITISH AGENCY—W. W. CHAPMAN, Mowbray House, Norfolk Street, W. C., London, England.

Terms of Subscription.—In Canada, England, Ireland and Scotland, \$1.50 per year in advance; \$2.00 when not paid in advance. In the United States, \$2.50 per year in advance. All other countries, \$3.00.

Advertising Rates.—Single insertion, 15 cents per line, agate. Contract rates furnished on application.

Remittances should be made direct to this office, either by Express or P.O. Money Order or Registered letter, which will be at our risk. When made otherwise we will not be responsible.

The Date on Your Label shows to what time your subscription is paid.

Change of Address.—Subscribers when ordering a change of address should give the old as well as the new P. O. address.

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. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned if accompanied by postage.

Anonymous communications will receive no attention.

Letters intended for publication should be written on one side of the paper only

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.

Address all communications to

FARMER'S ADVOCATE OF WINNIPEG, Limited

Winnipeg, Manitoba.



SUMMER TOURIST RATES

THIRTY DAY and SEASON tickets
now on sale to points in

Eastern Canada

AND

New England States

Choice of routes via St. Paul or Duluth, Chicago and GRAND TRUNK RY., or Port Arthur, Northern Navigation Company, Sarnia and GRAND TRUNK.

STOP-OVER privileges allowed. Free Side Trips to Niagara Falls and Ottawa on certain tickets.

Agency for Ocean Steamship Lines and Cook's Tours.

For full particulars apply to

A. E. DUFF

General Agent, Passenger Dept.

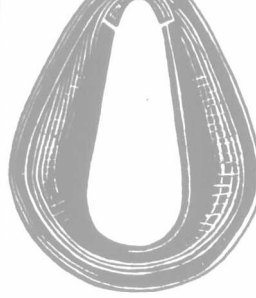
260 Portage Ave. Phone 7098

WINNIPEG

A \$5.00 Bill Will Bring YOU THIS COLLAR—

Mr. T. H. Atkinson says:—"I take great pleasure in recommending this Rope Rimmed Collar to others as I have five in use now, and the last one I purchased has given me an extra horse to use as he was useless until I got the collar owing to a sweeney. Knowing that this testimony is going to be made use of, I take pleasure in stating that I have dealt with Mr. Stewart for the last three years and have found him reliable in every respect."

NO MORE SORE SHOULDERS. If you have a horse unable to work from a sore shoulder you need this collar. It will give you the use of another horse. This collar is made throughout by hand, is of superior workmanship, and is very flexible, readily adapting itself to the peculiarities of the shoulder. Hundreds of these collars are in use in the Regina district alone and are giving entire satisfaction. You can't afford to be without this collar during this busy season. Send me \$5.00 for a trial collar and you will never regret it.



J. N. STEWART
Harness Maker Box 6 RECINA, SASK.

YOU WILL BENEFIT YOURSELF AND HELP US BY DEALING WITH OUR ADVERTISERS. TELL THEM WHERE YOU READ THE AD.

Unedea Change

Does an Orchard Home in The Kootenays, where 10 acres in Fruit, equal 160 acres of Wheat on the Prairies, interest you?

Would you enjoy the finest climate in the world all the year round? Do you appreciate what it is to live amidst the finest scenery in the world? It makes work a pleasure.

SLOCAN PARK

Some of the things that make it the best, and what you want:—

- Situation**—On the beautiful Slocan River, on the C. P. R., 20 miles from Nelson, and 10 minutes walk from station and village.
- Quality**—100 per cent. good fruit land, no stones, easy clearing, plenty of water, and as level as a prairie farm. Uncleared, cleared and planted, or some of each.
- Terms**—None easier.

Write for maps and particulars.

Kootenay-Slocan Fruit Co.

LIMITED

Nelson, B. C.

Catalog Printing

Right on Time
Right Quality
Right on Price

ESTIMATES

CHEERFULLY

GIVEN

The Farmer's Advocate of Winnipeg

SYNOPSIS OF

CANADIAN NORTH-WEST

HOMESTEAD REGULATIONS

Any even numbered section of Dominion Lands in Manitoba, Saskatchewan and Alberta excepting 8 and 26, not reserved, may be homesteaded by any person who is the sole head of a family, or any male over 18 years of age, to the extent of one-quarter section of 160 acres, more or less.

Application for entry must be made in person by the applicant at a Dominion Lands Agency or Sub-agency for the district in which the land is situated. Entry by proxy may, however, be made at an agency on certain conditions by the father, mother, son, daughter, brother or sister of an intending homesteader.

DUTIES.—(1) At least six months' residence upon and cultivation of land in each year for three years.

(2) A homesteader may, if he so desires, perform the required residence duties by living on farming land owned solely by him, not less than eighty (80) acres in extent, in the vicinity of his homestead. He may also do so by living with father or mother, on certain conditions. Joint ownership in land will not meet this requirement.

(3) A homesteader intending to perform his residence duties in accordance with the above while living with parents or on farming and owned by himself must notify the Agent for the district of such intention.

W. W. CORY.

Deputy of the Minister of the Interior.
N. B.—Unauthorized publication of this advertisement will not be paid for.

GOSSIP

HOW LONG HAVE MEN LIVED IN AMERICA?

The subject of the antiquity of man in America has now been reviewed in Bulletin 33 of the Bureau of American Ethnology. On behalf of the bureau, Mr. A. Hrdlicka, an accomplished student of human osseous remains, has long been engaged in a critical examination of all the finds and their locations in North America that have been supposed to indicate the presence of early man. These finds include fourteen specimens or groups of specimens, from the New Orleans bones discovered in 1814 to the Nebraska "loess man" of 1906. The distribution of the specimens was from California to New Jersey, and from Canada to Mexico. Most of them have been previously examined and reported upon, but the entire question has now been reconsidered by the most recent scientific methods. The bulletin contains Mr. Hrdlicka's detailed description of the specimens arranged in the order of their discovery, together with many photographs and the general conclusion which he has reached.

Abundant and convincing evidence had been found of the great antiquity of man in the Old World, and it was thought to be a reasonable theory that similar conditions might be discovered in America. The attitude of the bureau, however, has been much more conservative than that of some of our geologists. In the earlier years of the investigation there was a marked tendency on the part of students to accept testimony that seemed to favor antiquity. Even in the case of the latest investigations relating to the Lansing, Kan., skeleton of 1902, and the discovery of remains of the Nebraska loess man from 1894 to 1906 some well-known geologists appeared to jump at conclusions without sufficient verification.

The gist of Mr. Hrdlicka's conclusions is that in every instance in North America, where enough of the bones of human remains have been provided for comparison, the anatomical and physiological evidence bears witness against the geological antiquity of the remains and for their close affinity to, or identity with, those of the modern Indian. The only deductions justified under these circumstances is that thus far on this continent no human bones of undisputed geological antiquity are known. This is not equivalent to saying that there was no early man in this country, but means only that if early man did exist in North America convincing proof of the fact, from the standpoint of physical anthropology, remains to be produced.

Mr. Hrdlicka's longest discussion relates to the Nebraska loess man, the latest discovery, widely believed to afford the strongest proof of the great antiquity of man in America. But in view of Mr. Hrdlicka, these specimens only strengthen the conclusion that "the existence on this continent of a distinctly primitive type, and of exceptional geological antiquity has not yet been proved."

Mr. Hrdlicka mentions a consideration of far-reaching significance adding strength to the belief that man's introduction in America must have taken place in a comparatively recent geological period. Man made his appearance in the Old World probably during the tertiary period, at least 200,000 or 300,000 years ago, through differentiation from the primates, the class of animals to which he presents the closest structural analogies. Primates of the kind, such as the gorilla and chimpanzee, were not found in America until they existed only in the warm regions of Asia, Africa, and Europe. It is there that we must look for the first traces of man's appearance. The investigator says: "Accepting this view, it follows that America was peopled by immi-

gration from the Old World, which could not have taken place until after great multiplication and wide distribution of the human species and the development of some degree of culture. This implies a vastly later date than that which must be assigned to man's origin. A wide dispersion of the race over the earth could hardly have taken place before the later stages of the Cenozoic era (the glacial period)."

Mr. Hrdlicka believes, however, that there is still abundant stimulus to renewed, careful, and scientifically conducted exploration. A satisfactory demonstration that a geologically ancient man existed on this continent would be important in the history of the American race and of mankind in general. He believes that the Missouri and Mississippi drainage areas offer exceptional opportunities for the discovery of this link of humanity, if it really exists.

SUCCESS OF THE GRADUATE FARMER.

The graduate farmer should not forget that the eyes of the farming community are upon him. He should not think it strange that it is so. The measure of their demands, with reference to his success, may easily be set too high, but they have a right to expect more from him by way of success in his calling than from those who have not enjoyed his advantages, just as the world has a right to expect more from the life of the professing Christian than from the life of one who has made no such profession.

The graduate of an agricultural college begins the life work of agriculture from the threshold of opportunity in advance of the one who has not attended an agricultural college, and his achievement, other things being equal, should certainly be greater.

The graduate farmer has to face temptations that do not come to other men engaged in farming. He has been pointed to better methods than those usually practised. He is probably without much means. To introduce these methods may involve outlay more than he can afford. If he yields to the temptation, and incurs the outlay, it may involve him to such an extent in financial troubles that he cannot extricate himself. He should put away the temptation and be content to go slowly. Theories in farming may be perfectly correct, and yet the attempt to practise them may bring disaster, because of want of experience as to the best methods of reducing them to practice.

With reference to the best methods of doing things, many things are to be learned which can only be learned in the school of experience. The graduate farmer is also much inclined to experiment. This inclination is the outcome of the instruction given to him with regard to better methods. It would be strange if he were not inclined to experiment. There should be moderation, however, in his experimenting, for all experimentation is costly. The cost of experimental work is one of the reasons for establishing and maintaining experiment stations. The temptation, therefore, to experiment in a way that will incur financial hazard should be put away, for in no way can the confidence of the public be more quickly shaken with reference to the value of the work done by experiment stations than by witnessing the failure of the graduates in doing their work.

The fund of practical information imparted in such a course of study is both large and greatly helpful. The information deals in some instances with facts that need no qualification. That live stock which are to be fattened on concentrated foods should be fed up to full feeding is a fact that cannot be gainsaid, and it needs no qualifying. That such concentrates when fed should be so blended as to meet the requirements called for from feeding the roughage calls for the exercise of judgment on the part of the feeder, hence the application of the truth calls for qualification. The

Highland Park College, Des Moines, Iowa. School All Year Enter Any Time. 2000 Students Annually. Terms Open Sept. 1, Oct. 14, Nov. 24, '08, Jan. 4, Feb. 16, Mar. 29 and May 11, '09. Liberal Arts, Business, Shorthand, Telegraphy, Music, Pen Art, etc.

Star Windmill. \$100. Is all we ask for a Star Windmill. GUARANTEED FIRST-CLASS OR MONEY REFUNDED. Brandon Pump & Windmill Works, Brandon, Man.

Wedding Invitations, Wedding Announcements, Visiting Cards. Latest Styles, Latest Type. PROMPT ATTENTION TO MAIL ORDERS. Farmer's Advocate of Winnipeg, 14-16 Princess St., Winnipeg.

WE OFFER HARDY TREES. Grown for Manitoba, Saskatchewan and Alberta. planting in varieties tested and recommended by Experimental Stations at Brandon and Indian Head. SALEMEN WANTED. THE FONTHILL NURSERIES. Stone and Wellington, Toronto, Ont.

Built Like a Watch and Finished Like a Piano.

**The New Improved
De Laval Cream Separator**

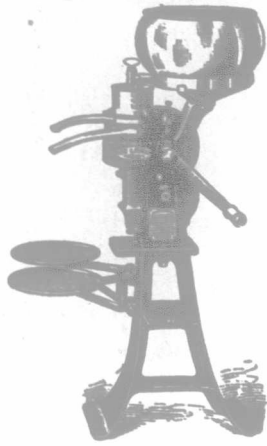
is a noiseless and attractive article of furniture in kitchen or dairy, but before all it is

A Daily Source of Profit and Home Comfort

Every part of the machine is built with a view to convenience and durability, and it is so simple that only one tool—a screw driver—is required to set it or entirely remove the parts.

Write for new 1908 Catalog and name of nearest De Laval agent.

The De Laval Separator Co.
MONTRÉAL WINNIPEG VANCOUVER



The Limited Payment Life Policy

ISSUED by The Great-West Life Assurance Company affords a better means of investing small sums than any other safe and legitimate method. The Investment is not tied up, but is largely at the Policyholder's disposal, while at the same time the full protection afforded and the accruing advantage remains his.

The Fifteen Payment Life Policies issued in 1892 and 1893 have recently matured, and from the results under these Policies may be judged the value of the Great-West contracts. The circular "ACTUAL RESULTS" shows the cash value of each Policy at the end of the 15-year period. A copy will be mailed to any interested person on request.

The Great-West Life Assurance Company
HEAD OFFICE, WINNIPEG

Harrow While You Plow

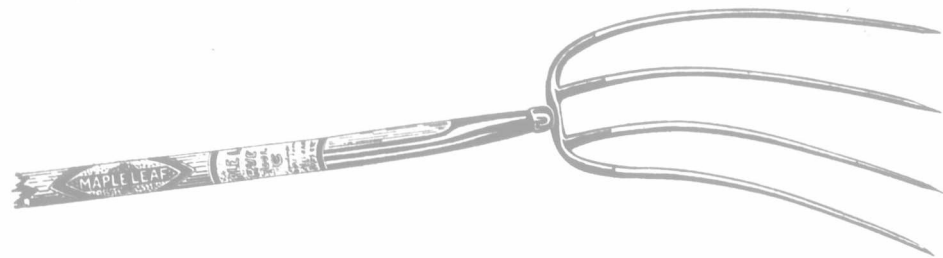
Make one job out of the two, and get your ground in finest condition by harrowing when the soil is first turned up.

**Kramer's Rotary Harrow
Plow Attachment**

Attaches to any gang or sulky and levels, pulverizes and makes a mulch of the "moist soil" that is not possible after the ground dries and "sets." Draft only slightly heavier—you'll be surprised to see how little. A great time and labor saver. **Quick Canadian Shipments.** Stock now carried at Winnipeg, Regina and Calgary. No Custom House or other delays. Write for catalog No. 41.

THE E. M. KRAMER CO., Paxton, Illinois

The Maple Leaf Gold Sheaf Harvest Tools



These tools are tempered by the same process used in the tempering of the famous Maple Leaf Saws. They are the best goods of the kind ever offered to the Canadian public. Every tool is warranted. Handles made of best second-growth white ash. It pays to use the best. If your merchant has not got them, send to the

Maple Leaf Harvest Tool Co., Ltd., Tilsonburg, Ont.
who are the manufacturers. None genuine that do not have the Gold Sheaf on the label.

J. C. DIETRICH, President.
C. J. SHURLY, Vice-President.

F. D. PALMER, Treasurer.
C. K. JANSEN, Secretary

Catalogs and Booklets

MUST HAVE STYLE AND DRESS

You may want something of this nature. Let us build it for you. You will find our prices as reasonable as our service is excellent.

FARMER'S ADVOCATE OF WINNIPEG, LIMITED

man who has not studied may guess approximately at a balanced ration in a given case, but the graduate, from the agricultural college can work out the same with the element of uncertainty eliminated.

What is more valuable, however, to the graduate of the college than knowledge actually acquired is the ability gained of reaching out to other sources of information. He has found out where to look for the books that he may want to help him further in his work and how to benefit from them when he gets them. The farmer may have a book which treats of fertilizers, and much of it so far as he is concerned is written in what is to him a foreign tongue. He does not understand the chemical terms used. The farmer may have a herd book and yet be unable to trace a pedigree to its original sources. Not so the graduate of the college. These and a host of other things not well understood by many farmers come easy to him.

The essentials to success in farming are the same for the farmer graduate as for the farmer who is not the graduate of an agricultural college. The name of these essentials is legion. I shall not even attempt to state them. Two, however, stand out prominently head and shoulders above the others. One of these is industry, and the second is economy.

The graduate who is to attain the highest success in farming must farm not seven but twelve months in the year. The farmer who is idle five months in the year soon loses his grip in the effort for higher attainment. The members of his family also live in a domain that is almost sure to paralyze the highest type of development. It may be all right in the life of a woodchuck to hibernate in winter. It is all wrong in the life of a farmer. The very elements in their sternness in winter are preparing the soil for successful growth.

But there must be economy, as well as industry. No matter how fast one gathers, if the scattering keeps pace with the gathering, it will not avail. The graduate farmer will never be found giving his screening away should he grow them. He will never be guilty of a crime against nature and the state by burning his straw. Nor will he be guilty of the greater crime of dumping fertilizer into waste places to vanish through slow decay. He will be as careful to gather up the fragments of production as to husband the fragments of his time. His home will be in the watchtower of duty during all the days of the year.—PROF. SHAW.

THE ENDURANCE OF THE BRONCHO.

While Colonel Spencer Borden and Captain A. H. Waddell are engaged in a controversy in *The Rider and Driver* as to whether the Arab or the British racehorse is the most enduring cavalry mount in the world, some little range-bred broncos out on the plains have been doing things that make both the courser of the desert and the aristocratic thoroughbred look like amateur equine soldiers.

In a race from Evanston, Wyo., to Denver, Col., Teddy and Sam recently covered 560 miles in six and one-half days, doing the full distance at an average of eighty-six miles a day. The contest ended in a tie between these two, the authorities halting them 20 miles out of Denver and requiring them to proceed side by side at a six-mile jog instead of racing into the city.

Teddy knocked off 112 miles in one day, and the last five miles through a rough canyon was done in the dark in 20 minutes. From Laramie to Denver, 106 miles, the horses travelled with but three hours' rest. Teddy lost 100 pounds during the race, having fed badly all the way, but he came out fresh and fine the next morning, and the opinion was expressed by an expert horseman that either he or Sam could have gone right back over the same road to

Evanston at the rate of 65 or 70 miles a day.

Sam's condition at the finish was said to be remarkable. His eye was bright, his coat blooming, and his legs in better shape than those of the average pony on the streets of Denver.

Den, a sixteen-year-old horse of the trotting type, made a performance equal to that of the winners, everything considered. He was thin when he started, and was slightly sick at Cheyenne, yet was second in the race all the way to within 80 miles of Denver. He lost less weight than any horse in the race, probably because he had less to lose.

BIG LIVE-STOCK SHOW AT SEATTLE.

Seattle, Wash. is preparing for an immense exhibition in 1909. The primary object of the function is to advertise and exploit the resources of Alaska and the American Pacific coast region; but there will be held a monster display of live-stock, that is, if prize money and energy will get them together. Already an advance prize-list has been prepared which recognizes all the domesticated breeds of live stock, and the prize money ranges from \$50 to \$10 over five placings in the more important sections, and quite liberal awards in other sections. The prize-list, as just issued, is subject to change, hence we feel disposed to suggest that in the breeds of draft horses, sections be made for yeld mares and brood mares, as a mare that has raised a foal is handicapped in showing against a dry mare.

The prize-list for cattle is as complete as could be wished. All the breeds are provided for as fully as at any of the largest shows on the continent. Fat cattle will also be shown in pure-bred and grade sections. Sheep, swine and goats are given liberal inducement to attend. The market for stock on the Pacific coast is destined to be a large one, and winning at Seattle will assist trade on the Canadian coast.

NIAGARA LOSING ITS LURE.

There was a time when Niagara Falls was the most popular summer resort on this continent. The place got a sinister reputation on account of the number of mentally-deranged people who took the fatal plunge to escape the burdens of life. But, nowadays, the Falls seems to have lost their reputation. The number ending their lives in this way each year now is not over fifteen. Four have been known to suicide there this year. Practically all leap from the American side. It is difficult, however, to estimate how many do actually end their days by plunging into the Niagara. People, for some weird reason, got the habit some years ago of gaining publicity and notoriety by leaving their coats, or a note of some kind on the river's bank as an intimation that they had gone down stream and would return no more.

They got publicity enough, and press reporters gave them all score-head notoriety which a newspaper could give. But after the police had discovered, in a good many cases, that the supposed suicide was still in the land of the living, they began paying less attention to these sad signs, and, nowadays, somebody has to see the victim plunging in, or the body must be found before a suicide is officially known to occur. Naturally, this has put a damper on the suicide business at Niagara, and publicity seekers have got to find a better way of getting themselves bothered about, than by leaving one of their old coats or a note on the river bank.

Gourlay, Winter & Leeming have issued a catalogue telling just how the Gourlay piano is made. It gives a clear understanding of the care exercised in the construction of the piano of highest merit made in Canada. It will be mailed to your address free on application.

Farmer's Advocate and Home Journal

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

August 19, 1908

WINNIPEG, MANITOBA.

Vol. XLIV. No. 850

EDITORIAL

Our Mis-spent Millions

It will have been noticed that the appropriations for the work of the Dominion department of agriculture amounted to something over one million dollars, including an item of \$200,000 for exhibition purposes and \$300,000 for the health of animal's branch, also \$120,000 for the administration of the meat and canned foods act. We suppose it does not make any particular difference which department expenditures of public money are listed under, but the \$620,000 voted for exhibitions and the preservation of the health of animals and humans should not be understood as an appropriation for constructive work in fostering agriculture, except that of the \$200,000 devoted to exhibitions, probably one-third goes to Canadian exhibition while the balance is used to advertise Canada's resources in British and foreign countries. The expenditures for the actual constructive fostering of agriculture may be said to amount to about half a million, and may be divided under the following heads: Experimental farms \$145,000, dairying, fruit and cold storage branches \$125,000, seed branch \$68,000, live-stock branch \$65,000, and about \$75,000 of the exhibition appropriation.

Without going into a discussion as to whether or not governments should foster individual industries such as agriculture, railroading, steel manufacturing, lumbering, etc., it is interesting to notice the difference between what we spend on our militia, and what we use to make our greatest of all industries still more important and capable of supporting in better condition a larger number of our population. The appropriation for militia purposes approximates \$6,000,000. This and a large part of the hundred odd million dollars which we expend upon different public works, bounties, subsidies, etc., is contributed indirectly by the people of whom the rural population is the larger part. Is public sentiment in favor of such a distribution of government money? If so, the government need not be advised differently, but if not, our politicians should be given an opportunity to know what the public thinks. Is it not reasonable that we should expend more of the public money upon the industry that contributes so largely to the production of food and life, than upon a social organization whose object is to destroy life and property?

Some Government Heresies

The establishment of a government poultry farm at Edmonton serves as a text for a protest against the tendency to demand of governments that they shall set an example in certain fields of endeavor which are clearly beyond the sphere of governments. There has been a growing tendency, in many instances amounting to actuality on the part of the public, to reply to government teachers "give us a demonstration," "show us as well as tell us."

Governments have been importuned to do almost everything that requires to be done to satisfy human desires, from the building of trans-continental railroads to the buying of a school reader for "Johnnie," and the governments, being composed of men swayed by popular impulses have been prone to adopt heterodox practices and principles. Or, they have frequently neglected to adopt any plan whatever, when a remedy of ill-advised measures would have remedied a spreading evil.

We do not wish to be understood as protesting against the establishment of experimental farms, or the carrying on of government experimental work, but we do lay it down as a principle of government that it is not the duty of the state to

engage in commercial enterprises, except in the management of public utilities, the nature of which makes them monopolies. This is a principle that should be applied to all commercial propositions that are laid before governments. It will serve to prevent undertakings, which, from their very nature, cannot succeed as government enterprises, or which work an injustice. There is a crying necessity on the part of present day governments to adhere to principles, and not to be carried away by popular agitation that has no ground in national statesmanship.

The evil of such participation of governments in various commercial enterprises is not simply that it is a mal-administration of public trust, but it develops in people a spirit of lackadaisical dependence upon government for the solution of problems that they should wrestle with personally. One of the first essentials in the development of a people with strong personalities, with grim determinations, resourceful and capable, is that they work out for themselves whatever salvation is necessary to their happiness.

This does not mean that governments should abandon the country to the piratical pillage of strongly entrenched corporations that are in positions to inflict injustice, but that they should endeavor to afford to each person justice without partiality, and allow personal enterprise to have its full sway. Nothing is so enervating to the national spirit as to continually pamper it with governmental solicitation, and nothing makes a man so strong as the overcoming of difficulties.

Constitution the Basis of Success

The most essential quality in any class of stock is constitution. It is even more important than type or functional development, for without it these are of little avail, whereas an animal that possesses strong constitution is almost sure to be capable of at least some degree of usefulness in its particular sphere.

Constitution is the basis of success in breeding. The limitations of every breed are bounded by constitution. Within these bounds there is scope for a great variety of attainment, from the meager capacity of the neglected, undeveloped scrub, to the marvellous production of the highly-developed, highly-specialized, abundantly-nourished, judiciously-handled Wisconsin Holstein cow that produced 27,532.5 pounds of milk, and 998.26 pounds of fat (calculated equivalent to 1,247.82 pounds of butter) within a year. Without constitution, a strain of stock is capable of but limited accomplishment, and must sooner or later run to weeds. It will not stand feeding for high development; it will not stand line breeding to fix a type or establish a tendency; will not suit a great variety of conditions; will not make the best use of its feed, and will not afford a large enough number of individuals amongst which to select and breed for high development, because the judicious breeder will require to reject so many animals outright for lack of thrift and stamina; otherwise, he might expect to find a large crop of defects, unsoundness, disease and culls amongst the progeny.

It is true that some individual animals—dairy cows, for instance—may, with care, yield liberally throughout a lifetime, even though seemingly lacking in constitution, perhaps even tuberculous. However, the chances are against their perpetuating their usefulness. Weakness of this kind commonly breeds on and on, eventually showing itself in a preponderance of culls. There are exceptions to this, as to other rules, but, generally speaking, a high average of usefulness is not to be looked for among a delicate breed or strain, while certain it is that the ultimate results which may be wrought with a breed, depend very largely upon the basis of constitution with which the foundation stock is naturally endowed.

One obstacle in the way of placing adequate emphasis upon constitution is the difficulty of discerning it. It is commonly considered that

ample heart-girth, allowing liberal room for the vital organs, such as heart, lungs and digestive apparatus, guarantees constitution. Needless to say, it does not, although animals of such build are more liable to prove robust, for the common-sense reason above indicated. While it is quite right, in judging stock, to lay much stress upon these outward indications of constitution, yet we must remember that mere size of vital organs does not in itself insure vigor. Wide, deep-chested animals may have tuberculosis, though undoubtedly less prone to it than those of opposite conformation. On the other hand, among horses, cattle, sheep and swine, as well as among men, some of the spare, tough, wiry ones, with but very moderate capacity of trunk, possess a very high degree of vigor and stamina. Constitution is not infallibly indicated by build. It cannot be certainly diagnosed in the show-ring. It is evidenced most surely by the health, vigor, thrift, breeding results, and wearing qualities of the herd. These signs the breeder knows better than anyone else, and it behoves him to observe them closely, and to make all possible effort to preserve and increase them, for constitution is the chief cornerstone of success.

Wanted—A New Outlet

Not even when the C. P. R. was first built across the country have the transportation facilities exceeded the requirements. Of late years there has been a constant race between railroad builders and wheat producers with the farmers always beckoning to the railroaders to "come on". Many of those who have thought upon the question have taken the production of the country as a basis of its railway requirements, and assuming that Manitoba, Saskatchewan and Alberta are capable of producing 900,000,000 bushels of wheat, estimate that something like nine times the present transportation facilities will be required in the near future. Be this as it may, or even grant that there will not be any increase in the need of railway transportation in the West, the fact still remains that we haven't yet attained the most economical route to the world's markets. Nor will the opening of the Hudson's Bay route alone be sufficient outlet for the grain that will find a market in Europe and Eastern Canada. Always there will be a large volume of grain go east, via the Great Lakes and their connections. Hence the demand for the elimination of all possible expense in carrying grain by that route. The Georgian Bay canal is a national necessity. One of the first duties of the Federal government is to provide the best possible route between the grain fields of the West and the sea ports of the East.

A Natural Highway

Eminent engineers have pronounced the Georgian Bay Canal feasible; eminent transportation magnates have emphasized its strategic importance; eminent financiers profess willingness to risk their resources on its construction. Our astute American friends view with misgivings any move to exploit it. Had they such an opportunity to draw traffic to New York as we have to concentrate it towards Montreal, the Erie ditch would be forgotten in a day.

Briefly stated, the survey calculates that, by the canalization of the Lake Nipissing-Ottawa River route, a 440-mile waterway could be provided in ten years, at an outlay of \$100,000,000, having a minimum depth of 22 feet, and designed on such lines as to enable boats of large size (600x60x20 feet draught) to pass from Lake Huron, through pond after pond, and channel after channel, to Montreal, the head of ocean navigation. Starting at Fort William or Port Arthur, this would cut 282 miles from the present Welland-Canal route to Montreal, while it would be 424 miles shorter to Montreal than the present distance from Fort William to New York, via

Buffalo. Another basis of comparison shows that, from Fort William to Liverpool, via the Georgian Bay route, would be 4,123 miles, or 806 miles less than the distance via New York. As to time of transit, it is computed that the Georgian Bay Canal route would be from one and three-fifths to two days faster than any other existing water route from the Great Lakes to an ocean port, besides having a much greater carrying capacity.

By the time the canal will have been built it is safe to estimate that from one hundred to two hundred million bushels of grain will be ready to move that way (even if the Hudson Bay route is in operation). Estimating a saving of two cents a bushel in cost of carrying alone as compared with the lower route, the amount will be from two to three million dollars which, of course, will not be the earning power of the canal, for freight will move west as well, and each year will witness a constant increase.

It is earnestly to be hoped that Sir Wilfred Laurier will not be deterred by the criticism of opponents, nor the apathy of friends, from giving effect to his declared belief in this tremendously important link in our chain of direct navigation from Fort William to the sea; and it must be undertaken by the Government as a public work—private ownership is unthinkable. The question is not whether grain barges shall be steamed past Windsor, Port Dalhousie and Toronto, but whether Canada is to win her full share of the vast export trade of the interior continent, much of which now goes to American Atlantic ports.

HORSE

New Blood Needed.

One of the most striking features of the comparison between reports of Canadian exhibitions and those of Scotland and England is the regularity with which the Britisher brings out new stock in the different classes. True, the new stock is not always up to the standards of the old, but it is very few horses that can win championships many years in succession. The chances of producing a worthy champion for show day may at times seem slim, and in fact, on some occasions rather common individuals have carried the honor, yet the breed represented will show steady progress at the end of each decade.

In Canada the horse rings do not contain so many fresh numbers. A champion is generally expected to hold the honor for two years at least, and the number of breeders who annually bring forward young things of their own production is quite small. This year, more particularly than in recent seasons, new horses are scarce, although the few home bred youngsters and imported Percherons furnished some variety to the show rings. The latter part of 1907, and the early part of 1908, was not a time of activity in the horse importing business. The next twelve months promise to be much better for the horse trade, but the home bred stuff should not be overlooked for future shows.



JUDGING SHIRE STALLIONS AT THE ROYAL SHOW.

Importing Percherons.

Only those who are in constant touch with the horse importing business, either directly in the trade, or officially concerned in the registration of pedigrees, or admission through customs, realize the extent of the inconvenience necessary to get free admission into Canada, and to register animals, particularly Percheron horses, in Canada. Every once in a while some one asks us what steps to take in order to get a horse of such and such breeding registered. In many of these cases there is no way to register these animals in Canada. Generally they have a certificate of registration in an unrecognized stud book in the States, and in not a few instances, the horses are eligible for registration in the Percheron stud book of France, or the American Percheron Society's stud book. When Percherons are eligible for registration in either of these books it is possible to register them in Canada, but all ancestors back to the imported one, in case of animals brought to the States from France, must be registered in the Canadian record. For instance, a horse bred in the States may be recorded in one of the different books there, and hold a certificate from, say, "The Illinois Percheron Horse Breeder's Association," and yet be eligible for registry in the American Percheron Society's stud book. At the same time in order to register this horse in Canada, or to import him duty free, his ancestors would have to be carefully traced, and all those bred in America recorded in the Canadian book, or the animal could be recorded in the American Percheron Society's stud book, which certificate would entitle the horse to be registered in Canada. In other cases, horses recorded in various American books may not be eligible for registration in the American Percheron Society's book, and hence not eligible for registration in Canada, and these are the cases to be guarded against. The horse may be as good an individual as there is in the breed, but unless he can be recorded in Canada he is not worth the additional value which attaches to pure breeding.

Making New Breeds in America

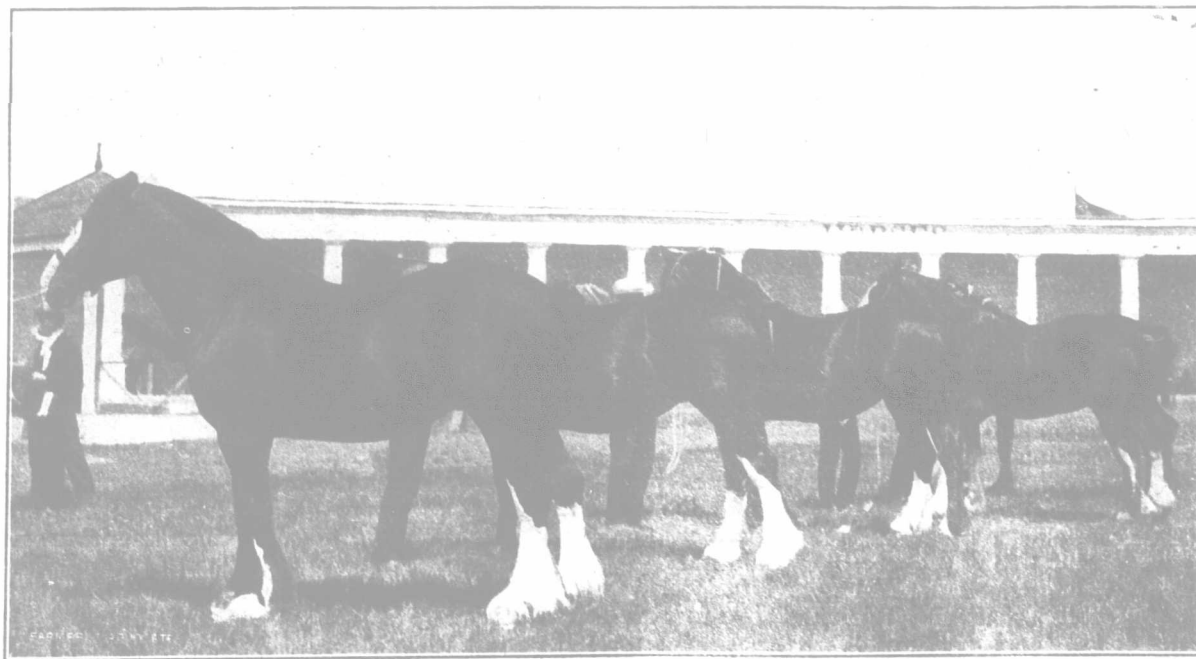
Government enterprise in America is tackling all kinds of stunts in the way of breed-making. The United States Department of Agriculture is co-operating at present in three distinct lines of breed evolution. Out in Colorado, the State resources are being supplemented by Federal aid in the attempt to establish an American breed of carriage horses, using the trotter as foundation stock. In New England the Washington Government is co-operating with the Vermont Experiment Station to rejuvenate the Morgan; while not to be outdone, the Iowa State College besought Federal countenance, and, if we mistake not, financial support, in the ambitious attempt to develop a new breed of draft horse, to be known as the Amgrey, and produced by a blending of the blood of gray Clydesdales and Shires, with a dash of Percheron to be properly introduced. Of course it remains to be seen what will come of all these schemes. The last would appear to be the largest order of the three, and the least commendable. Horsemen who might otherwise look with favor upon the project do not see the wisdom of undertaking to confine the breed to the gray color. The blending of the two breeds is in itself a sufficiently difficult task to render success uncertain and tedious, not to say improbable.

While our American friends are doing so much conjuring with the equine race, it must not be inferred that Canada is behind the band wagon. The Dominion Department of Agriculture has been lending its good offices in a re-inspection of foundation stock for the French Canadian Horse Studbook, which is one of the registers kept by the National Records at Ottawa and if anticipations are realized, Canada will soon have a distinctive breed of native horses of well concentrated blood lines, and a really high degree of equine merit. In fact, these horses are already acknowledged as being for all practical purposes pure-bred, the first move to establish them and having been commenced in 1885. Later the province was visited by inspectors, with a view to making a first selection of animals for the records. Last year, Hon. Sydney Fisher, Dominion Minister of Agriculture, proposed the new selection, which has since been made. Thus this distinctively Canadian breed, preserving and systematically perpetuating what blood lines remain of the celebrated old French-Canadian pony, lays claim to a considerable measure of national interest and pride, and it is considered by some that the Canadian experiment in breed evolution is not unlikely to prove the most successful of the four.

Feeding Milk to Colts

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

Any policy that will keep flesh on foals after they are weaned is a good one. Nothing so detracts from the value of a colt as to let him get down in flesh between weaning time and winter, and at no time is good feeding so well repaid. Cow's milk is not of the same composition as mare's, hence one needs to use care in feeding it. Put the foal on it gradually, using new milk at first diluted with about one-quarter its bulk of water. Cow's milk averages about four per cent fat and mare's about three and as it is generally



YELD CLYDESDALE MARES AT WINNIPEG EXHIBITION.
Lady Rotha, Lady June, Queen Anne, Baron's Lassie.

the fat that causes indigestion its amount should not be large. A little lime water in the cow's milk will also help digestion. After the foal has been accustomed to new milk he can gradually be put on sweet skim milk. Every precaution should be taken to feed him out of a clean dish and to never give sour milk. Two or three quarts three times a day will be all that a healthy colt had better have.

Both before and after weaning, a foal should have a liberal supply of crushed oats and bran. If the colt is intended for road work this will give him muscle and stamina, and if of draft breeding will add size to these two essential features. Always make an effort to keep the milk flesh on a colt. Colts that keep it may be naturally easy feeders anyhow, but it always follows that they are the best keepers. Brown pastures, warm water, no shade, and flies to fight is a combination that will take the flesh off, and the spirit out of, almost any colt. On some farms these are difficult to overcome, but a shed, a well, and some grain will generally answer the purpose.

* * *

The President of the British Board of Agriculture outlined recently the plan which the government has in mind for encouraging English horse breeders to produce army horses. Arrangements will be made for the registration of a large number of suitable stallions and mares, probably five hundred and twenty-five thousand of each, respectively. In addition to purchasing the stock from these, the army authorities will purchase horses henceforth at the age of three instead of five years.

* * *

Russia owns the largest number of horses and mules of any nation in the world, the United States coming second on the list with a total of 26,673,000. In this country there are 333 horses for every 1,000 inhabitants and in Russia 247. Argentina has 911 horses per thousand of population, or just about as many horses as men, women and children. France has 95, Germany 75 and the United Kingdom 49 per thousand of population, while Japan has 27 and British India only 11. There are said to be around 100,000,000 horses and mules all told in the world.

* * *

English Exchanges say the United States government is buying army horses in Australia. The horses are for use in the Philippines where it is believed they are more serviceable than horses bred in America or Europe. Thus the tables are turned in the trade since England bought American horses for the Boer war.

* * *

New York State has voted \$10,000 to the horse show to be held in connection with the State fair at Syracuse, September 14 to 19.

STOCK

Discussions on Live-Stock subjects welcomed.

The Health of Canadian Live-Stock and its Preservation.

All stockmen and other people whose knowledge of the importance of the live-stock market industry to Canada is sufficiently broad, will agree that the preservation of the health of animals in Canada is of paramount importance. Diseases affecting animals of the farm may be broadly divided into two classes, contagious and non-contagious, the latter in the majority of the cases being due to a neglect of Nature's laws by the care taken of the live-stock, either from irregularity in feeding, lack of exercise, insufficient water, too close confinement, or a diet made up of inferior quality forage or grain. These, however, may be dismissed from our minds at present because they present problems easily solved by individual breeder or feeder, who will only remove the cause. It is, however, a different and more serious matter when the contagious diseases are considered, for here the individual can do little and must co-operate with others to form a community of interest, if effective work is to be done. Co-operation should therefore be the motto of all interested in the welfare of the Canadian live-stock trade. I use the word "trade" advisedly, because, unfortunately, some people never recognize danger, never feel the need of public spirit unless their own pockets are affected. Who must co-operate to obtain the

object desired? The farmers, the breeders of live-stock, the government of Canada, the latter represented by the Minister of Agriculture and his coadjutor, the Veterinary Director General and Live Stock Commissioner.

These premises being established and understood, it will not be difficult for each party to get to the other's point of view, and regulations will become less irksome, because of the confidence each will have in the other the object being, as is well understood and already mentioned, the prevention of any possible hindrance on the score of disease to the development and welfare of the live-stock trade of the Dominion.

In order to maintain the welfare of the trade, two objects must be kept in view all the time, (a) the prevention of the ingress of contagious disease new or old, through the gateways into Canada, (b) to prevent the egress, the shipping out of diseased animals, or products from diseased animals, which would be fatal to our trade in other countries, Great Britain and elsewhere. The two objects cannot be separated, for the one is dependent upon the other. What machinery is employed to attain the desired ends and what contagious disease are the efforts of the department directed against?

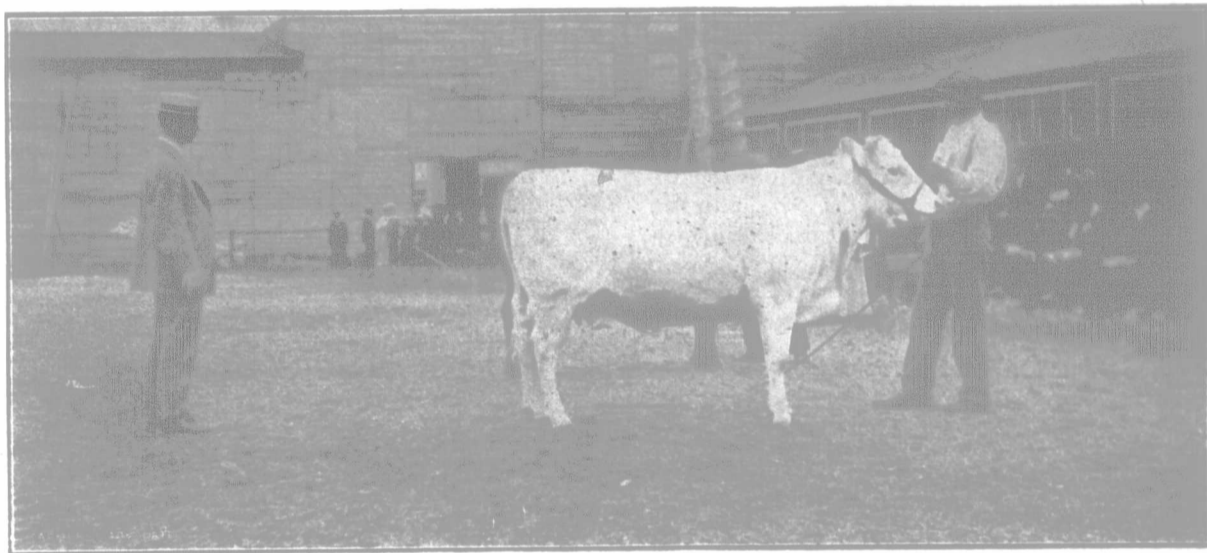
The machinery consists of (a) acts of parliament, viz.—the Animal Contagious Diseases Act 1903 and the Meat and Canned Foods Act of 1907 and the regulations thereof. (b) The technical and lay members of the Health of Animals branch of the Department of Agriculture charged with

diseases, the nature of which may be only partially understood. There is also a clerical staff engaged in keeping and tabulating the results of the work done.

The technical force is recruited as the needs warrant from the ranks of graduate veterinarians, who must pass a stiff examination before they can become eligible for appointment. The value of Canada's live-stock and trade in live-stock products is large, and is increasing rapidly, and more than warrants the expenditures made to date, which are very small in comparison with those of other countries doing similar, but no more effective work.

The following are the contagious or infectious diseases which occupy the attention of the branch: glanders, hog cholera, dourine or *maladie du coit*, sheep scab, rabies, and mange, also as to the disposal of the carcasses and the disinfection of the premises in which anthrax has occurred and the prevention of the exportation of lumpy-jaw (actinomycosis) and mange infected stock. Actinomycosis and tuberculosis, being exempted from certain clauses of the Act, are not dealt with by the inspectors of the Department of Agriculture, beyond preventing the exportation of affected stock. Other diseases, Pictou cattle disease, blackleg and red water, are given attention by the inspectors and pathologists of the branch.

(Continued on page 146).



PROF. CURTISS DECIDING BETWEEN CLARKE'S SNOWBIRD AND DUCHESS OF LANCASTER FOR FEMALE CHAMPIONSHIP AT WINNIPEG.

the administration under the direction of the Minister of Agriculture through the Veterinary Director General.

Previous to 1902, the administrative work of quarantine and disease control was carried on by the lay officers of the Department of Agriculture, with the assistance of a non-resident veterinary inspector. In that year, however, the Minister having in view the establishment of a comprehensive and effective veterinary service, appointed the present Veterinary Director General at the head of a Health of Animals Branch, as a result of which the control of animal diseases in Canada is now centralized at Ottawa. It is only justice to say that the new conditions have rendered it possible to deal with the diseased of live-stock in Canada in an effective manner and in such a way as to inspire the confidence not only of the taxpayers of the Dominion, but also of our neighbors to the South, and the skilled agriculturists and scientific men in other parts of the world, a confidence which is of material benefit in connection with the live-stock trade with other countries.

Under (a) we have given us the legal powers of the branch, the duties of owners of animals, including the penalties for concealing, or failing to notify the proper authorities of the existence of contagious or infectious disease in the animals, the power to order slaughtering of diseased animals, and the amount of compensation that may be paid; the power given to the Minister to prohibit importations, to determine and declare the limits of an infected place; to enforce disinfection by common carriers, as well as the powers of inspectors.

Under (b) comes the personnel of the staff of the health of animals branch, which consists of the Veterinary Director General, who is also Live-Stock Commissioner; a corps of veterinary inspectors, some engaged in field work, some as port inspectors, and others as investigators of

The Herd Law Again

EDITOR FARMER'S ADVOCATE:

I find the correspondence re the Herd Law in your columns interesting, and a trifle amusing, especially amusing from Mr. Bradshaw's shortsighted viewpoint. To quote his own words he also "seems to want further light." Had he not mislaid his spectacles when he read Mr. Mundiman's letter he would not have read 'stock-raising' for 'ranching'—anyone will see there is a wide difference, as all farmers go in for stock-raising to a more or less extent, while few, if any, farmers go in for ranching.

In some districts, perhaps, farming and ranching might be carried on side by side, and I believe is, as in the country near the foothills, but where so, why should the expense of fencing be saddled upon the neighboring farmer. The stockmen were, perhaps, the pioneers of some districts, but as for their self-denying public spiritedness in squatting in the midst of a sort of 'no-man's-land' with a bunch of cattle, I fail to see it, or why any special consideration should be given them at the expense of the farmers. And as for opening up a country, that is contrary to a rancher's creed, and if it were not, I may leave it to your readers to judge which would better open up a country, one rancher, or the twenty or more farmers required to settle up his range.

The whole grievance of the question seems to hinge upon the subject of fencing—who should fence, the rancher or the farmer. Mr. Bradshaw thinks the farmer should fence the grain in, and why in the name of common-sense and British fair-play should a farmer be compelled to look after his neighbor's cattle—for that is what it amounts to. To begin with, the farmer has to buy his land, or homestead it, which amounts to the same thing indirectly, for he must spend time labor money and earn it from the govern-

ment. Then, not being a squatter like most ranchers, he builds substantial buildings as he can afford, and equips his farm with expensive horses, machinery, and implements, not required by the rancher.

It is the farmer, not the rancher, who is the pioneer in the true sense of the word; he it is who builds roads and bridges, schools and churches. Towns follow in his wake, not the drowsy hangers-on of the ranching country, but real live business centers. When it comes to the development of a country the rancher doesn't know what the word means. Of course we all know that there are some districts that are good for nothing but ranching, anyhow, but it is not these that the dispute is about.

Mr. Mundiman is right in saying the stockman's business is outclassed by mixed farming, and I fear Mr. Bradshaw's sarcastic allusions to the dog-in-the-manger are more appropriate to the cattlemen than the farmer. At best the rancher's work is only half done when it leaves his hands; his beef is only half-fat as compared with a stall-fed steer. If Mr. Bradshaw wants reasons why men who have always run a bunch of horses or cattle cannot continue to do so, he can soon be supplied with them. May I ask in turn if the Indians who always hunted this country do not continue to do so merely because the white man came? Why the Hudson's Bay Company do not continue to be the sole traders here? Because civilization creates ever-changing conditions, each successive condition reducing the individual holding of the land, and demanding more intensive measures giving a vastly larger return per acre. When all is said we cannot deny that everyone's living must come primarily from the land, and for one man to imagine that he may monopolize as much as would keep twenty or thirty families merely because he calls himself a rancher, is, to quote an American colloquialism "Damfoolishness."

Instead of abolishing the Herd Law, I think it should be revised so as to compel every owner of any stock whatever, to keep such stock inside his own fences at all times of the year. It would mean some outlay for fences, but this would be offset by the resultant benefits. As the law exists at present it is as much nuisance as any thing else.

Grenfell, Sask.

JOHN HUBBARD.

There is ground for infinite discussion on this subject. Mr. Bradshaw began by protesting against herd law in districts that are obviously useless for grain growing, where it can be shown that stock-raising or ranching will give a greater return per acre than grain growing, and it is to this class of land he intends his remarks to apply. Certainly the only solution to the whole controversy is for each man to fence his own land, but until that can be accomplished some sort of compromise has to be adopted. This is all the herd law should be considered simply a compromise. It is no use looking for some arrangement whereby a community of grain growers can protect their crops in summer and land from infection in winter without fencing.

Every reasonable man will have patience with the rancher who recognizes the changes in conditions and moves upon land that is not suited to grain farming, and that will not produce enough grain to make it worth fencing, only to be followed by shiftless nomadic farmers who break a little land, get herd law and eke out a bare existence. Also, everyone can appreciate the position of the grain farmer over whose land bands of cattle are permitted to roam in the fall, scattering weed seeds and otherwise damaging his property. The herd law is not satisfactory in all conditions and should be substituted by a better arrangement just as soon as it can be devised. Ed.

Importation and Registration of Live Stock

During the past few years Canadian stock breeders, acting in conjunction with the Dominion government, have been endeavoring to work out a uniform system of registration of pure bred stock and a basis of free admission through the customs, of pure bred stock brought to Canada from other countries. The first step was to decide upon what basis an animal could be considered pure bred; then, after that was fixed by the breeders, an act of parliament was passed which went into effect on July 1st, admitting duty free such pure bred animals that may be registered in Canadian books of record, where records are kept for the breed; or where registered in books of recognized standard in other countries.

This means that in order to get free admission for any class of stock for which records are kept in Canada, the pedigrees of the animals must be recorded in the Canadian books. At first sight this may appear a handicap to importers as a man always brings his stock over from a foreign country before he applies for registration, but as all kinds of stock, except horses, are detained for thirty days in quarantine, the registering may be done during that time, and in the case of horses prompt service is promised by the National Record's office at Ottawa. Importers should mail the pedigrees of their horses to the office as soon as possible, giving instructions to forward the Canadian pedigrees or an "import certificate" to the Customs office where it is intended to enter Canada.

In the case of importing from Europe, the pedigree may be mailed from Father Point, Que., and the Canadian pedigrees or "import certificates" will arrive in Montreal by the time the horses are ready to land. Importers from the States will have to take the precaution to allow time for their pedigrees to be examined and returned to points of entry along the border. Customs' officers may no longer admit, duty free, animals upon the strength of certificates issued in a foreign country.

The breeds for which records are kept in Canada, and in which animals of these breeds must be registered before being eligible for admission duty free are:

Horses—

Clydesdale Horse Association of Canada. Canada
Canadian Hackney Horse Society. Canada
Canadian Shire Horse Association. Canada
Canadian Percheron Horse-breeders' Ass'n. Canada
Canadian Pony Society. Canada
Canadian Thoroughbred Horse Society. Canada
Canadian Belgian Draft Horse-breeders' Ass'n. Canada
French-Canadian Horse-breeders' Association. Canada

Cattle—

Holstein-Friesian Association of Canada. Canada
Dominion Shorthorn Breeders' Association. Canada
Canadian Ayrshire Breeders' Association. Canada
Canadian Hereford Breeders' Association. Canada
French-Canadian Cattle-breeders' Association. Canada
North American Galloway Breeders' Ass'n. Canada
Canadian Aberdeen-Angus Association. Canada
Canadian Red Polled Association. Canada
Canadian Jersey Cattle Club. Canada
Canadian Guernsey Breeders' Association. Canada

Swine—

Dominion Swine-breeders' Association. Canada
Sheep—
Dominion Sheep-breeders' Association. Canada

In order to assist an importer when buying to determine whether or not his stock will be admitted duty free, a list of the foreign records recognized as registering pure bred animals has been compiled. These are divided into two groups, the one being those records of breeds in a foreign country for which records are kept in Canada, and the other those records for breeds of which no record is kept in Canada. When an animal is recorded in a recognized foreign record all that is necessary is to send his pedigree to the National Records' office, Ottawa, and a Canadian certificate of registration in the corresponding Canadian breed record will be issued, which will admit the animal duty free, but where no record is kept in Canada the pedigree should be sent just the same and an "import certificate" will be issued.

The following is a list of the records in other countries that are recognized as reliable in Canada and for which breeds, records in Canada are kept:

Clydesdale Stud Book of Great Britain.
American Clydesdale Stud Book.
Shire Horse Stud Book of Great Britain.
American Shire Horse Stud Book.
Percheron Stud Book of France.
American Percheron Society's Stud Book.
Belgian's Certificate of Societe des Eleveurs Belges of Liege.
Societe Nationale des Eleveurs Belges of Brussels.
American National Association of Importers and Breeders of Belgian Draft Horses.
English Hackney Stud Book.
American Hackney Stud Book.
Thoroughbreds—
The French Stud Book.
The English General Stud Book.
The American Stud Book.
The Australian Stud Book.
Ponies (British)—
Shetland Stud Book of Scotland.
Welsh Pony and Cob Society Stud Book.
New Forest Pony Association Stud Book.

Polo and Riding Pony Society's Stud Book.
Connemara Stud Book.

English Hackey Stud Book.

Cattle—

Shorthorns—English Herd Book.
Herefords—English Herefords Herd Book and American Hereford Record.

Aberdeen Angus—Polled Herd Book (Scotland) and American Aberdeen-Angus Herd Book.

Galloways—Galloway Herd Book of Great Britain, American Galloway Herd Book and North American Galloway Herd Book.

Red Polls—Red Polled Herd Book of Great Britain and American Red Polled Herd Book.

Ayrshires—Ayrshire Cattle Herd Book of Great Britain and Ireland.

Guernseys—Herd Book of the Royal Guernsey Agricultural Society, the General Herd Book of Guernsey, the Herd Book of the English Guernsey Cattle Society and the American Guernsey Cattle Club Herd Register.

Jerseys—Island of Jersey Herd Book, English Jersey Herd Book and American Jersey Cattle Club Herd Register.

Sheep—

Lincolns, Leicesters, Oxfords, Cotswolds, South-downs, Hampshires, Dorsets, when registered in the British register or American Record are eligible for registration in Canada and upon acceptance of the pedigrees may enter Canada duty free if the property of a British subject resident in Canada.

Swine—

Yorkshires—English National Swine Register.
Tamworths—British Tamworth Record and American Tamworth Record.

Berkshires—British Berkshire Record and American Berkshire Record.

Poland Chinas—American and Ohio and Central Chester Whites.

Todds Improved—National.

International—Ohio Improved, Chester White Record Association of Indiana and the Standard.

Duroc Jerseys—American Duroc Jersey Record.

Essex—American Improved Essex Swine Record.

Record Associations, listed as reliable by the Canadian National Record Board, for breeds for which no Canadian Record exists.

To obtain free customs entry for animals recorded in any of the following records, an "Import Certificate," issued by the office of the Canadian National Records, is required for presentation at the port of entry.

FOR HORSES.

Suffolk Horse Society (Great Britain).
Cleveland Bay Horse Society of Great Britain and Ireland.

Yorkshire Coach Horse Society of Great Britain and Ireland.

American Morgan Register Association.

American Saddle Horse Breeders' Association.

American Trotting Register Association.

Commission des Agriculteurs de France (French Draft).

Commission des Stud Book des Chevaux de Demi-Sang (French Coach).

Landwirtschaftlichen Hauptverein fur Ostfriesland (German Coach and Oldenburg).

Zuchtverband des Sudlichen Zuchtgebietes (German Coach and Oldenburg).

Verband der Zuchter des Oldesburger eleganten Schwersen Kutschpferdes (German Coach and Oldenburg.)

Verband der Pferdezuchter in den Holsteinischen Marschen (Holstein).

FOR CATTLE.

Highland Cattle Society, of Scotland.

Kerry and Dexter Herd Book (Dublin, Ireland).

Sussex Herd Book Society (Great Britain).

Polled Durham Breeders' Association (United States).

National Polled Hereford Breeders' Association (United States)

FOR SWINE.

Large Black Pig Society (Great Britain).

FOR SHEEP.

Suffolk Sheep Society (Great Britain).

Kent and Romney Marsh Sheep-breeders' Association (Great Britain).

Cheviot Sheep Society (Great Britain).

Wensleydale Longwool Sheep-breeders' Association (Great Britain).

Blackface Sheep-breeders' Association (Great Britain).

FOR GOATS.

British Goat Society

FOR ASSES.

Societe Centrale d'Agriculture des Deux Sevres (France).

Stud Books of Jacks and Jennets of Spain.

The information contained above is compiled at considerable trouble from the mass of regulations and rules for the registration and entry of pure bred animals. It is not expected that the full purport of the matter will be perfectly clear upon the first reading, but we have endeavored to make the subject as concise and understandable as possible and recommend that this article be preserved. The authorities at Ottawa, and we ourselves, are constantly being asked for the regulations governing a particular case, and if this is kept the information most generally required will be at hand. We especially advise those of our readers who are interested in Percheron breeding to note the records that are recognized in Canada, and in buying in the States to endeavor to have the seller defray the expense of registration in Canada. At first it will work considerable inconvenience to breeders of Percherons to secure Canadian certificates, but in the end there is no doubt but that it will be the best thing for the breed.

Management of Sheep.

In an interesting paper on "The General Management of Sheep," read by Mr. Alfred Mansell at the International Sheep-breeders' conference at Newcastle, he said the finest animals could be spoiled by bad management, and success as a breeder of pedigree sheep could only be achieved by strict attention to all details that made for success, paying particular attention to ensure the health of the lambs after weaning, so that the best growing period in a sheep's life was not jeopardized by injurious parasites. The great object in founding a flock should be to procure a uniform lot of ewes of the same character and type, and this could be best achieved by selecting the ewes from one or two old-established and carefully-bred flocks. Too much importance could not be attached to making a "correct start." Possessed of the ewes, attention should be given to improving the ewe flock, rather than an effort made to acquire a reputation as a ram-breeder by extensive showing. The first few years should be devoted to improving the ewes—an object which, though equally important, was more easily achieved and far less costly than ram-breeding, inasmuch as sires suitable for producing good ewes never commanded such high figures as those likely to obtain high-class rams. Once possessed of a good ewe flock, exhibiting uniformity of character and type, the greatest difficulty had been overcome, and by judicious mating a long and successful show and sale-yard career might be counted upon.

FARM

Comment upon farming operations invited.

Financial Conditions Improving.

Money all over the world has been easier of late. In this country and the American Republic a distinctly better financial feeling prevails. Banks have accumulated larger surpluses, the good natured public, for the first time since last autumn, is showing a disposition to speculate again in stocks on margin. Money is available for investment in larger quantities than for months, and there is little likelihood of any difficulty arising in financing the movement of the crop, at least no difficulty of any significance is visible. Cheap money indicates one of two things, either there is abundance of capital seeking investment, or else business is on the down grade and capital cannot be profitably invested in it. At present money is plentiful and cheap because trade conditions are abnormally low. There are indications, however, that the renewal of public confidence in many of the securities dumped unceremoniously last fall will increase business and stiffen the price of money. In the meantime there seems sufficient in sight to supply adequately the country's demands for crop moving.

The Horseless Age

Ever since the early part of last century when machinery came into general use as a saver of human labor, and steam and electricity became the power behind the machines in industries, for manufacturing, in nearly every thing else where power of any kind could be utilized to perform work, in hauling trains, driving trains, or propelling steamships; ever since the first steam engine was successfully operated, men have been prophesying this so-called horseless age, the age when horses would be used no more. As yet, however, that era seems but little closer than it was half a century or so ago. Each improvement, innovation, or invention, that has been made to increase the usefulness of steam, gas, or electricity in industrial pursuits, seems only to have widened the

field of usefulness of the horse. The electric car was widely heralded one time as the beginning of the end of the horses' reign. But electric railways have pushed out all over this continent, all over the horse-using world, in fact, and horses are in better demand after the electric revolution in motor power than they were before men got the lightning harnessed. It has been the same in everything else. When the horseless carriages, as they called them, first came out, the horse for sure seemed doomed. Motor driven drays and hauling wagons of one kind or another came in to drive him out of business hauling road vehicles. But the motor drays have had their day, and now from London, where they have been most extensively tested, comes the word that owners are selling off their motor drays and going back again to the horse.

When motors can be constructed so that they will work as economically and satisfactorily as horses, there may be some chance of driving the latter from the field, but up to the present, engines of no kind have proved so satisfactory as horses for the work horses ordinarily do. They are too heavy or too light, they are not so certain as horse power, they cost more to begin with, lack durability, and do not work with the same economy of operation.

There is not the least doubt, however, that we are on the verge of a mighty change in the matter of performing ordinary work for which horses are now largely employed. Whether the change will drive the horse out of business, or only increase the demand for him experience alone can tell. We are inclined to think that the crest of crests in the demand for horses on this planet has not yet been reached. A hundred years from now, it seems to us, horses ought to be in as good demand as they are in this year of grace, and it will be the same in ten or twenty years hence or half a century. Motors may come in and drive the horse out of business in agriculture. From the array of agricultural motors to be seen wherever machinery is tested or exhibited, one would opine that the time is not far distant when these little machines will be performing the major part of the farm work for which horses are now employed.

But a revolution, or more strictly speaking, another phase in the evolutionary progress of agriculture seems almost due. Anyone who thinks about the matter at all, knows that the present century will witness some remarkable changes in the way agriculture is carried on this continent, and in the world. Farming methods have to change. We can't always go on increasing our food producing areas. The limit will be reached sometime. Intensive will be superseded by extensive cultivation of the land for two reasons: first, to conserve the soil's fertility and decrease the unit cost of production, and second, to furnish employment for an increasing population. The horse will likely prove as satisfactory under the coming order of things as he has under the old. The day may come when he will be superseded in many of the lines in which he is now employed, but the time is surely dimly distant when agriculture will know him no more.—Ex.

The Ox-Warble Fly.

There is still room for considerable investigation in the life history of this insect. Entomologists have spent no little time upon the ox-warble, known to science as *Hypoderma lineata*, but they are not yet entirely agreed as to how the insect passes that period of its life between the time the female is known to deposit her eggs upon some part of an animal's body, and the following season when the grub or developing larva makes its appearance in a tumor-like enlargement beneath the skin on the back. Formerly the idea prevailed that the female insect was equipped with a needle ovipositor through which the eggs were deposited underneath the skin of the back, where the grubs are afterwards found. Entomologists nowadays, have rejected this theory and a majority of them seem agreed that the eggs are laid by the female fly about the legs of cattle, licked off, swallowed into the gullet where they hatch, the larva passing through the muscular tissues to a point just beneath the skin. Here they attain their growth, pass out through the small opening that is always present wherever a grub is found, change into the adult form and are ready to lay eggs again for production of another generation of their kind.

Whatever the life history of this insect is, it certainly is a source of considerable annoyance and loss to cattle owners. No computation that we know of, has been made, showing the damage done by the insect on this continent, but a careful estimate made by a prominent English scientist, some years ago, placed the loss to British farmers at \$3,500,000 per annum. Certainly its ravages are no less severe here, as any one knows who has anything to do with cattle during the early spring and summer, when the grubs are developing and cattle suffering from the irritation caused by the insect's growth beneath the skin.

The grub as it exists beneath the skin reposes in a sac which it very nearly fills. Its anal extremity points toward the aperture with two spiracles or breathing pores placed towards the opening. The grub during this stage of its career is nourished by the animal's blood and by the pus which the irritation of its presence occasions. When the "bot" is full grown it begins to enlarge the opening to its quarters by pushing outward the last two or three segments of its body, until finally, when mature it forces itself en-

tirely through the aperture, falls to the ground and either burys into the soil or gets under leaves, straw, etc. It remains in this situation for twenty-five or thirty days during which the processes are going on within it which finally result in the adult winged fly. The grub runs a long chance of being destroyed after it leaves its host. It may be trodden on by animals before it can burrow into the soil, and birds esteem the fat little parasite a luscious tit-bit, but so many are produced that some always survive to the adult stage and lay the eggs for a succeeding generation.

The only effective means yet devised for attacking this pest is to destroy every grub that appears on the animals and allow none to escape to the soil and produce the adult form. If it were possible to systematically destroy the grubs in the spring the fly pest would be diminished in proportion, and finally, if properly carried out, would lead to the extermination of the insect altogether. But unfortunately, every stock owner cannot give strict attention to such business. With some, such a course is impracticable, while others who could attend to such matters have the notion that the parasite is doing their stock no particular harm at all, in fact, some are fatuous enough to regard the presence of the larva as proof that their cattle are thriving. A common plan of destroying the maggots is to plug the holes with a mixture of ten parts wagon grease and two parts sublimed sulphur. Mercurial ointment is an effective remedy, but it requires to be used judiciously.

The Farmers from over the Line

By AUBREY FULLERTON

There must be a lure of the Canadian West, a drawing power that brings people even from other good countries, for from across the border there has been coming for months now so steady a stream of settlers that this bids fair to be a record year in American immigration. To be sure the people from the States have been moving over for years, but there are more of them this season; and they are going farther from the border; which proves, since the country they are leaving behind them is more than ordinarily good, that there is something this side of the line that has rare drawing power. It is the lure of the Better West.

We are used enough in the West now to this moving from the American to the Canadian Wheat Land. It is a picture that we have become familiar with through having so often seen it, though it never loses its interest. As seen from the other side of the border, however, the picture has quite a different phase. From there it is a going, not a coming, and it is by no means so welcome a sight.

Why they have come, what discontent moved them or what visions of future good fortune, what hopes and fears they had, what preparations they made, what they expected to find—these are questions that, if they could be answered, would reveal interesting history. The people come to us and we welcome them, but we do not often stop to ask the why of it.

Speaking generally, the farmers of the Western States move north because they can sell their own farms at a high figure and buy at a considerably lower figure or take up free homesteads, in Canada. But that does not tell it all. There is a certain leaven of dissatisfaction at work. Not all the men who move are owners of their farms, but rent them at four or five dollars an acre, paying all working expenses in addition to their rentals; these renters yield readily to the attractive prospect of farms of their own across the line, and many of them are able to move with considerable ready money. A still stronger magnet with all classes is the superior fertility of the Canadian soil; Minnesota's average is twelve bushels an acre, Manitoba's twenty-one. The difference makes it worth while moving.

Iowa, one of the best farming states in the West has probably suffered more than any other by loss of its settlers. It is a corn state, and wheat appears to attract more than corn; and so when people began to leave the Dakotas and move across to Manitoba, a movement set in from Iowa to take the vacant places in Dakota; but now the Iowans themselves are going to Canada. Minnesota is a wheat country, settled by a thrifty German and mixed element, including some former Canadians who went from the eastern provinces in the early exodus days. It contributes to the movement a good class of sturdy, industrious farmers, trained to prairie life and knowing from experience what awaits them.

The immigration of a single year included colonists from every state in the Union except Florida. The states chiefly affected are, in order of numbers, Minnesota, North Dakota, Iowa, South Dakota and Nebraska; these are the sources of the so-called American invasion. North Dakota so closely adjoins Canadian territory that

a move across the border is a comparatively simple matter; southern Minnesota and Iowa are more truly typical of immigration conditions and afford perhaps the best example of how Canada's campaign for settlers is carried on.

The Canadian Government has a joint immigration office for these two states at St. Paul, which, with ten railroads radiating in many directions, is second only to Chicago as a strategic centre. Occasionally, too, a settler comes up the Mississippi. A steady stream of northward bound colonists passes through St. Paul, whose importance in Canadian eyes consists in the fact that it is the chief gateway to the Canadian West.

How these people from the Western States are converted to the Canadian idea, is a process as ingenious as it is effective. In theory and practice it is essentially missionary work on a business basis. For several years Canada has been carrying on a national publicity campaign in the United States that places her among the leading advertising agencies in America.

Such a thing as location of the immigration office, for instance, has an importance. With St. Paul as an example again, the office is a ground floor one, near the railway station. Numbers of travellers, coming from the station or going to it, pass this office at all times of day and night, and day or night they are confronted by a window display of Canadian grains, judiciously labelled. It draws well, for many stop to inquire.

Names and addresses are taken, and literature is afterwards mailed to them, at intervals. A similar means of creating interest is the fair exhibit. For the past twelve years the department has made attractive exhibits at state and county fairs throughout the west, with good results. The most important of these exhibits is at the Minnesota State Fair, an annual event modelled after the Toronto Exhibition, and second to it, the largest on the continent. The Canadian exhibit at the Minnesota Fair is made up of an attractive display of grains and vegetables from Manitoba and the Northwest, which people see and stop to ask questions about.

It is one thing, however, to interest people when they come to be interested, and quite another thing to reach them in their own homes. The farmer who does not visit fairs and cities must be appealed to by a different kind of publicity. And after all, these are the men whom it is most important to reach, for the chances are, they are the busy, thrifty people who have the makings of the best settlers. Their interest is first challenged by advertisements in their farm or local papers, some eight thousand of which are used throughout the United States.

The personal canvas comes next. At certain seasons the immigration agents drive into the country and talk Canada wherever a willing listener and probable settler is to be found. In the winter months they hold public meetings, at which are shown lantern pictures of Canadian farms and homesteads. Nothing is quite so effective with the farmers, along these lines, as the picture of the prosperous home of a man who had moved to Canada from their own or a near-by community a few years before; it is a conclusive "what-he-did-you-can-do" argument.

But with all this sowing of the seed, it sometimes takes a long time for the fruits to show. Results, in the form of actual moving, have come only this year from inquiries and canvassing made first some six years ago. A poor harvest sometimes postpones the possibility of moving for several years. And again, if the truth must be told, a common cause of delay is the disinclination of the farmer's wife. About five years ago an Iowan, who had been attracted by some immigration literature, decided to go to Canada, but his wife flatly refused to live in "a country frozen up most of the year." The following summer he went to see for himself what the country was like, and returned enthusiastic; but his wife was still unwilling. Last year he made another tour of inspection, and this time he took his wife with him. She saw, was convinced and converted, and last spring they moved their family and their goods to Alberta. Which goes to show that a woman convinced by her own eyes makes a good settler.

Just such inspection visits as this, with or without their wives, are made every fall by numbers of prospective settlers. They have been thinking of moving north, but it is a big venture and they wish to know something of the country at first-hand before finally deciding and so, when the slack time comes after harvest, they buy excursion tickets to Manitoba and Alberta, and take a fortnight's holidays. Now

and then a group of neighboring farmers appoint one of their number a delegate to spy out the land for them all. The chances are that as an outcome of this inspection one or more families will move north the following spring.

The net result of all this canvassing, questioning, and investigating is that from forty to fifty thousand settlers cross the line each year. And they are, as all Canada knows, good settlers. They are, many of them, moneyed men, too. The sale of their lands puts ready cash in their hands, and the majority take from \$3,000 to \$10,000 with them to Canada. One Minnesota man took \$38,000; another from Nebraska had a bank account of \$100,000; and 262 men from the latter state moved north in March, 1904, with eighty cars of settlers' effects, and an estimated capital of \$430,000. It is particularly noticeable that both in personal quality and worldly goods, this year's immigrants, from Minnesota and Iowa especially, are above the average.

Naturally, this flitting across the border, while very satisfactory to Canadians, is somewhat displeasing to the State authorities. A few years ago one of the Minnesota senators called attention in the Senate to the immigration campaign being carried on in behalf of Canada, and asked for some measure of restriction. It did not carry; but it attracted considerable attention and proved a very effective advertisement for Canada. The idea seemed a good one, and the next year an interested landowner endeavored to lobby another senator to repeat the motion; but the Senate was not to be caught again. Since then the legislature has been blind, on policy, and were further action to be attempted at any time it would receive doubtful support because of the fact that not a few of the senators are themselves interested in land speculations in Western Canada. One, for instance, not only owns a section of land, but has sons, brothers, and nephews, to the number of nineteen, already settled and at work elsewhere in the West.

More aggressive opposition is being shown by some of the railway companies whose interests lie in the development of the southwest, rather than the northwest. In some cases it has been even thought necessary to counteract the Canadian campaign by the old frozen-north cry, in contrast with the 'golden sunny south' and there have not been wanting instances in which certain railways have wilfully delayed freight billed for Canada. In one section of southern Minnesota several families, after disposing of their land, waited for thirty days for cars in which to move their effects. Failing even then to secure the cars, they were forced to go back to the country and rent farms for another season, postponing their move to Canada till the next year. Usually however, the railroads are anxious for the business and the lines running north are profiting by the immigration traffic.

Alberta's Winter Wheat

The winter wheat crop in southern Alberta is of such a volume this year as to indicate that it will be a staple in that part of the province. The area over which winter wheat has been grown is quite large and the yields that are coming from the thresher are uniformly satisfactory. The climate of southern Alberta is such that wheat that has a good stand in the early spring when cold dry winds are liable to prevail, will be in a position to go on and give a good account of itself before the end of July. But winter wheat to amount to a big crop should be sown early. August is the month when the seed should be gotten in, and the better shape the land is in for seeding, the better will be the crop. Some good results have of course been got from September sowing, but in grain growing, if a thing is worth doing at all, it is worth doing well, and all the extra spurt possible should be made to get winter wheat in early, and the land well worked before and after. Deep plowing, thin packing, then surface working have been preached in Alberta as the essentials in cultivation, and no doubt winter wheat growers will follow the preaching as nearly as circumstances will allow and what is more necessary still, make circumstances allow it.

Power Alcohol to be Tested

That the cause of denatured alcohol for farm power purposes is making headway is illustrated by the action taken by the U. S. government in its appropriation for the National Corn Show at Omaha next December. The appropriation is not specifically set forth in the agricultural bill as was originally suggested, but is taken care of in the general appropriation for the bureau of

chemistry, which has been increased from \$725,000 carried by the house bill to \$810,000, of which \$10,000 is to be used by the Department of Agriculture for demonstration purposes at Omaha.

At the suggestion of Secretary Wilson, who enthusiastically endorsed the purposes for the forthcoming corn exposition, the amendment to the paragraph relating to the bureau of chemistry was adopted as follows: "To demonstrate and illustrate methods for the making of denatured alcohol on a scale suitable for utilization by the farmer, or association of farmers."

This is one of the things Canadian farmers should work for. Cheap fuel in the shape of alcohol would mean a big saving on every farm, as it would tend to regulate the price of coal oil and gasoline. Every politician who goes before the country should have some opinions on the subject of denatured alcohol and should be able to intelligently back them up. He should also endeavor to interest capital in the manufacture of the product.

What Some of Our Land Needs

Every observant visitor to the west, who is at all conversant with farming affairs, notes the difference between the crops on well farmed land and those on land that is simply cropped. Others also note this condition.

Commonly we say of land that is beginning to show the effects of wear that it has been "worked too hard," but in reality it has lost "heart" because it has not been worked enough. To the man who has an instinct for detecting various conditions of the land, the "thinness," shallowness, and general poverty of the top soil on many farms is striking. There is too much land that has simply been worked on the surface, that has been plowed so often at a certain depth that the soil on top is different in texture and color to that lying just below it. Clover has never been grown to bring up from below the mineral elements of plant food that leak through, nor to add to the store of nitrogen, nor to replenish the supply of vegetable matter, to help in holding moisture and giving the land a better texture. Neither is tame grass sufficiently grown to freshen up or rest up soils tired of grain growing. In fact the man with the instinct for good farming in looking over most of the land that has not produced a fair average crop this year in the districts where the rain fall was normal, will simply say it is cropped too much to one kind of crop.

Summer fallows, to a certain extent, rest land, but summer fallowing without adding manure, is like putting a hungry man to bed with an empty stomach; he will feel better when he gets up, but he won't stand work very long. What a lot of our land needs to renew its strength, make it drought and even water resistant, to kill weeds and improve the mechanical condition, is a variety of crops that will open up the subsoil and bind the surface soil.

Quick Planting of Potatoes

EDITOR FARMER'S ADVOCATE:

Having devised a quick way to plant potatoes I thought I would tell you of it. I arranged a box on top of a sulky plow to hold the seed and then hung a stove pipe to convey them to the furrow, and by having a good steady team we can go right along. Then we follow with a common walking plow and turn two furrows on top of them, which makes three furrows between each row. We cut and seed in the following manner: I made a box 8x10 inches square and put knives across the bottom 1 1/4 inches apart and arranged a lever on the same principal as they cut curd in a cheese factory. We throw the whole potatoes into this and pull the lever. By taking a little time and placing the long potatoes across the knives it will do a good job if you are not too particular. One man can cut one hundred bushels of seed in one day and they are all right as we have a fine crop of 4 1/4 acres. We are going to feed them to the pigs. I might add that to grow potatoes in this manner the soil wants to be dry and loose, or if it is heavy it should be covered with coarse manure and plowed in to keep it open. After cutting seed, let them lay at least twenty-four hours to dry, care being taken not to pile them up so they will heat, or they will not grow.

D. E. COLLISON.

(Why would it not pay better to raise mangels for hogs? They are more easily handled, and the hogs like them better. If anyone has had experience with both potatoes and mangels we would like to hear it. Of course with potatoes there is a chance of selling them if the market is good. Ed.)

DAIRY

Cows of mature age lower the average production of a herd just as often as heifers. Many cows are kept too long. If a dairy herd has a certain average production of milk, it follows that some individual cows in the herd must be below the average, and others much above it.

Oregon cannot yet be considered a dairy State, but during the past year or two her farmers have gone rapidly into dairying. In the year of 1907, over \$17,000,000 worth of dairy products was produced. If, in the next ten years, the increase of dairy products is as great as it has been in the past five, Oregon will rank among the leading dairy States of the country.

The Maryland Experiment Station has been making tests as to profits in selling dairy products as milk, cream and butter. This test shows that cream is one of the most profitable forms of sale, when 20 per cent. cream can be sold at 50c. a gallon, and even at this low price returns 23½c. per pound for the butter in the milk, besides leaving the skim milk for use on the farm. Of course, cream can be usually sold for more than 50c. per gallon. It appears that milk shipping is ordinarily more profitable than butter. Thus 12c. per gallon for 3½ per cent. milk is equal to 23½c. per pound of butter, while at 15c. per gallon for 3.6 per cent. milk the butter is sold at 32½c. per pound. In selling cream at 70c. per gallon, the price obtained is equal to 33c. for the butter, but creameries never pay this amount, and no home-made butter brings any such price, except for a very few gilt-edge makes.

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

George P. Grout, B.S.A., formerly of Parkdale, Man. has recently been elected by the Board of Regents of the University of Minnesota to the position of Assistant in charge of Dairy Bacteriology.

We have in our stable, says Prof. H. H. Dean of Ontario Agricultural College, a Holstein which has produced 2,522 pounds of milk in 30 days, within 500 pounds of the average annual production of cows of Ontario and Quebec. In 7 days she gave us 643 pounds and in one day 96 pounds of milk. If we had cows like that there would be no trouble about having plenty of milk to drink. A man cannot afford to keep cows that produce only 3,000 pounds of milk in a year.

The relative amounts of cream and skim milk which come from the separator are determined by the rate of the inflow of the milk, speed of the bowl, temperature of the milk and the adjustment of the cream or skim milk screws. The larger the volume of skim milk entering the separator bowl in a given time the thinner the cream; the greater the speed for a given inflow of milk the richer the cream, or the higher the percentage of fat in it; the higher the temperature of milk at separating the less the volume of the cream and the higher its fat content; the smaller the outlet for the cream and the nearer it is to the center of the bowl the richer is the cream; the larger the opening for skim milk (in case of a skim milk screw) the richer the cream.

Pure milk agitations are of periodic recurrence. Generally, early in the summer, increasing infant mortality directs our attention to the milk supply, and a lot of time, ink and paper is devoted to discussions of the problem. Unless some contagion lingers along rather later in the fall than usual there isn't much talk of impure milk after October or November, and milk users have six or seven months of peace. Then trouble begins again. Indignant purveyors of milk are requested to clean up. Outraged cow owners submit to the humiliation of having their bovine possessions examined and tested for all manner of disease. Doctors hand out interviews, bacteriologists ray forth a lot of startling information and substantiate what they say by the most amazing arrays of figures, said to represent the number of disease producing organisms found in something less than a quarter of a teaspoonful of milk. All of which is disconcerting, not to say alarming, to the average head of a household and father of a family. The wonder of it all is that any of us ever managed to survive the milk consuming stage at all, beset as we are by such disease dangers as impure milk

Sterilized Milk

Where skim-milk has to be kept for some time after it comes from the separator, and difficulty is experienced in keeping it sweet, sterilizing, or pasteurizing as it is generally called, may be tried. To pasteurize, it is necessary to heat the milk up as rapidly as possible to a temperature somewhere between 160 and 170 degrees, F., hold it at that point for fifteen or twenty minutes, and then cool as rapidly as possible to as low a temperature as the cooling facilities at hand will enable you to reduce it. Milk so treated is nearly free from the bacterial forms that induce souring and unless re-infected will remain sweet for a considerable time. It must be remembered though that the cooling part is quite as important in this process as the heating. The organisms producing fermentation and the formation of acid, develops most rapidly in a medium at blood temperature. If milk is allowed to cool down slowly to air temperature, which in summer is 70 or better, exposed to re-infection, there is a long chance that the heating will be of very little avail. The milk will sour in very nearly as short a time as it would without sterilizing at all. If a man has a good cool spring and can get the cans into water at a temperature around 50 degrees, sterilized milk will keep sweet for a good many hours longer than the unsterilized material. Heating the milk does not in any way improve it as a feed. German experiments tend to show that pasteurized milk is no better in calf feeding than ordinary untreated milk. Where milk is kept for feeding some hours after separating, however, the pasteurized product gives best results. It contains fewer bacterial organisms than the other and is less likely to cause scours.

Difficulties in Churning

1. What is the cause of butter coming soft when cream is kept in a cool cellar at a temperature of from 60 to 65 degrees Fahrenheit? The cows are all fresh. The butter when it comes is greasy and soft, but tastes sweet. Cream is separated twice a day and cooled before mixing.

J. M. Sask.

2. When I churn I cannot get the butter to come in any but very small granules. What is the matter, and what would you advise.

MRS. P. Sask.—1. In all probability you are churning at too high a temperature. If you are skimming a heavy cream (30 to 35 per cent. fat) cool it to about 50° F., or say 53 to 54° F., if the cream is only 20 to 30 per cent. fat, and hold at this temperature for at least four hours before churning begins. This will overcome the difficulty.

2. You do not state whether your difficulty occurs before or after the buttermilk has been drawn off. If before, the chances are that your cream is too thin. But butter should never be churned into one solid piece. As soon as the granules are the size of wheat and the buttermilk appears blue, the buttermilk should be removed. If you cannot get the butter to gather into granules this size draw off a portion of the buttermilk and complete the churning. Of course you can avoid a repetition of this difficulty by skimming a heavier cream next time, say 30 to 35 per cent. fat.

Washing the butter with very cold water is the only thing that would tend to prevent the butter granules from uniting during working.

M. A. C. W. J. CARSON.

Buttermaking on the Farm in Summer

There are three circumstances in which buttermaking on the farm in summer may be counteracted: First, when the situation is such that it is impossible to send the milk or cream to a creamery or cheese factory; second, where the farmer has a particularly high class private trade to supply, has proper facilities for carrying on the work, and can make more from his cows by home butter-making than by sending the raw product to the creamery; and third where a man has one or more cows, but not enough milk to be worth while sending out to a factory or creamery where butter is made only for home use. It is the first and third of these classes that usually have trouble, making butter in summer. The man catering to a private trade generally knows enough about the business to worry along safely. If he doesn't it won't be long till he's in the "down and out" class so far as butter goes.

It is difficult in the summer season to have cream in as good condition for churning as in winter. If it is gathered by the gravity creamery system, in pans or long cans, it is likely to be too thin for best churning, and in addition, undesirable fermentations arise readily in cream at this season, due to the temperature at which it is generally held. One way to overcome the development of these ferments which give rise to undesirable flavors, and retard the formation of butter when the cream is being churned, is to pasteurize the cream immediately it is skimmed, and hold it at as low a temperature as possible

until enough is on hand to make a churning. Pasteurizing is not a difficult operation. All that is required is to heat the cream up to a temperature of 170 to 180 degrees Fahrenheit, hold it around that point for fifteen or twenty minutes, and then cool down as rapidly as possible to as low a point as the facilities at hand will permit, holding it at a low temperature until sufficient has been gathered for a churning. Heat up a pan or can of water to this temperature and place the vessel containing the cream into it, stirring the contents frequently to induce rapid and even heating. This destroys most of the organisms that produce undesirable flavors, including the ferment that causes ripening, and if a temperature low enough can be maintained the cream will hold several days without souring. Each skimming, as it is gathered, is mixed, after pasteurizing and cooling, with the supply already on hand, the whole being thoroughly stirred up. If the heating is carefully done, there is little danger of affecting the cream injuriously. When sufficient cream is on hand a starter is added, the cream ripened and churned.

A starter is simply some milk in which the lactic acid ferment has been allowed to develop until it contains millions upon millions of those organisms that induce the souring or ripening of milk and cream. A satisfactory starter may be made by allowing some fresh milk to "lopper" by holding it at a temperature of 60 or 70 degrees, and then adding this to the cream about to be ripened for churning. Pure skim milk makes perhaps the best home-made starter. Cultures also are for sale by dairy supply houses that give satisfactory results.

When enough cream for a churning has been gathered, it should be brought up to a temperature of between 60 and 70 degrees, and one pint of the starter added for each gallon of cream to be churned. Have the temperature as near 65 as possible during the ripening period. It is rather difficult to determine exactly when the cream is "ripe" for the churn. At the proper stage the cream is thick and glossy smelling and tasting slightly sour. When this condition is reached it is ready for churning, and, churned at a temperature of about 60 degrees, should form butter in a reasonable time, inside of half an hour anyway.

The other difficulty in summer buttermaking, thin cream, is rather harder to manage. It is more likely to occur where gravity creaming methods are employed than where a separator is used. Thin cream takes a long time to churn, there is a serious loss of fat in the buttermilk, and a poor quality of butter is almost certain to result. If cans or pans are used in creaming, the product resulting is found to be rather thin, where cream separators are used it is possible to adjust the cream or skim milk outlet so that the machine will produce a cream of the desired "richness."

A thin cream may be churned at a rather higher temperature than a thick or medium cream. A temperature of from 65 to 68 degrees will catch it about right. The butter will be longer in coming because the fat globules that bunch together to form the butter granules do not pack so readily; and quite a portion of the fat is bound to escape in the buttermilk. About all that can be done is to churn away until the granules form. Then if a portion of the buttermilk is drawn off, and the churning continued, the butter may be gathered. A common practise with housewives when the butter does not form readily, is to throw in a quantity of water, some use warm water, others cold, but water added only increases the trouble. It makes the cream thinner still, and delays still longer the coming of the butter.

Before the Royal Institute of Public Health of Great Britain the other day, the Medical Inspection officer for Portsmouth stated that in the British Isles each year 60,000 people died from tuberculosis and that of this number 11,000 was of children under five years of age. He declared that 10 per cent. of the milk sent into Leeds, Birmingham, Manchester, and Liverpool contained living infection of tuberculosis.

Men are paying for the space these advertisements occupy. They are worth reading.

Patronize our advertisers; they are reputable and dependable.

You will benefit yourself and help us by dealing with our advertisers. Tell them where you read the ad.

POULTRY

Breeding for Egg Production

Eight years ago the state of Maine experiment station at Orono commenced an extensive series of experiments to determine whether high egg production could be bred into a strain of fowls by selecting, each year, breeding stock from the hens that had proven the best producers. The Maine station, to be brief, commenced a test to find out whether there was much of anything in these five theories that poultrymen have been preaching up and down the country the last year or two, to the effect that all a man needed to do was to get in a few trap nests, find out what individuals in his flock were producing best, select his eggs for hatching from these hens and in a year or two, by following up this selective method, develop a strain of laying stock that would perform right up to the handle, all the time. But the tests carried on at Orono hardly bear these theories out. The experiment has answered the question in the negative. That is, the results indicate that no improvement in laying qualities is effected by breeding from selected laying stock. In this test the general trend of average annual production was slightly downward throughout the course of the experiment.

A point of interest in the results of this eight year's work is that "drones" seem impossible of elimination. In the first year of the test there were hens that laid as few as 45 and others that ran as high as 195 eggs in their first laying years, and at the end of eight years it was found that there was no substantial change in the relative proportions of either very good layers or very poor layers in the flocks of successive years. There was in the flock, at the start, a number of fowls that could properly be called drones, and the relative proportion of such at the end of the eight years had not materially changed.

In the words of the experimenters the general results of the experiment may be summed up as follows:

"The practical conclusion to be drawn from the results of this breeding experiment seems to the authors to be clear. It is that the improvement of a strain of hens in egg producing ability by selective breeding is not so simple a matter as it has been supposed to be. Nothing could be simpler than breeding from high producers to get high producers. But if this method of breeding totally fails to get high producers—in other words, if the daughters prove not to be like the mothers in egg production—it cannot fail to excite wonder as to whether the simplicity of the method is not its chief (possibly its only) recommendation. Anyone who makes a thorough first hand study of an extensive selection experiment carried out, as was this one, by the so-called German method, without testing of the congenital power of the individual organisms, cannot fail to be impressed, we believe, with the fact that the improvement of a race by selective breeding is a vastly more complicated matter than it is assumed to be by those who maintain that one need only breed from the best to insure improvement. The supposed 'facts' of heredity on which the practical stock breeder (working for utility points) operates, are in very large part inferences rather than facts. What is needed more than anything else for the advancement of the stock breeding industry in all its phases is an accumulation of definite knowledge of the fundamental principles of the hereditary process. All breeding operations must be based on the laws of inheritance in organisms. The practical stock breeder is able to work out the applications of these laws for himself. What he most needs is broader and deeper knowledge of the laws themselves. This knowledge must come from thoroughgoing, purely scientific investigations."

Table showing average annual production per hen year by year:

Year	Average Production.
1899—1900	136.36
1900—1901	143.44
1901—1902	155.58
1902—1903	135.42
1903—1904	117.90
1904—1905	134.07
1905—1906	140.14
1906—1907	113.42

Feeding Hens during Moulting

Moulting is the shedding of the feathers. Hens at this period need some attention as to care and feeding. They come out of the moult in better condition to commence fall laying, if they are in fair flesh when the feather shedding process starts, and are kept in good tone by judicious feeding all through the moulting period. A carbonaceous ration is preferable to a highly nitrogenous one. While the fowls need nitrogenous matter for feather growing they also require plenty of heat producing foods to keep them warm while the feather growing is going on. Wheat and oats are the best grains to use in feeding the moulting flock. Corn of course, is a more desirable grain than either of these, but not available. It is rather richer in carbohydrates and fat than oats or wheat, and makes a ration wider in nutritive ratio, but these two feeds are of very nearly the same value as corn in this respect.

Doctoring Fowls

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

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

Egg Preservation

Egg preservation is carried on on an enormous scale in Denmark, and, according to a recent report, many of the eggs shipped abroad have already been preserved for four or five months. The material used for this purpose is chiefly water-glass (a solution of silicate of soda), although lime-water is also largely employed, since it is cheaper, and gives almost equally good results. With lime-water, however, the shell of the egg is hardened and roughened, which is not the case with water-glass. The eggs are laid down in enormous tanks, which will hold from 70,000 to 80,000, and the tanks are then filled nearly to the top with the preserving fluid. These tanks are built in cool, underground cellars. For successful results, it is essential that the eggs should be fresh when being laid down. On removal from the solution, the eggs are well washed in running water, and dried in the air before being placed on the market.—*Agricultural News, B.W.I.*

A Provincial Poultry Plant

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

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

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

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

A number of brooder houses and brooders now in operation at the temporary quarters near the Hudson's Bay Fort will shortly be transferred to the new site, and it is expected that in the course of a few weeks the plant will be completed and open to visitors.

Turkey With Roup.

EDITOR FARMER'S ADVOCATE:

Will you be so kind as to inform me as to the proper treatment of a turkey which has a swelling underneath its eyes? It really seems like a bad cold in the head, its eyes are swollen almost shut and it does not seem to be able to breathe through its nostrils. I lanced one side of its "face" and there was a lot of matter like the white of an egg came out, it seemed better for a few days, but it is worse than ever now.

Alta.

N. Mc.

Evidently this is a case of diphtheritic roup. The term roup is used to apply to a variety of diseases affecting the head and throat, but the present tendency is to limit the use of the word roup to diphtheria, or diphtheritic roup, and to call ordinary roup not seriously affecting the throat, influenza. Influenza can be treated as a cold. For diphtheria a number of different treatments have been successful at one time, and failed at another. Whether or not a cure can be effected, probably depends as much on the constitution and antecedents of the fowl as a treatment. Most of the roup remedies advertised have been suc-

cessfully used in many cases. Experienced practical poultrymen do not doctor fowls which have diphtheria. They kill and bury or burn them. For those who wish to try to save their birds, the following remedies are given:

1. One ounce oil of sassafras, one ounce best Jamaica ginger, one ounce tincture of iron, one ounce alcohol, a half-ounce prickly ash fluid extract, one-fourth ounce oil of anise. Dose, fifteen drops to one teaspoonful to each gallon drinking water.

2. Clean out the pus, if in the mouth, with a little wooden spatula; if you make it bleed a little, don't be alarmed. When this is done, wash the mouth with cotton wadding, attached to a little stick of wood, saturated in peroxide of hydrogen, then drop a little aristol on each sore place; repeat this operation morning and evening for three days.

HORTICULTURE

Improving the Native Plum

There is no native fruit that gives greater promise of usefulness in Western Canada than the plum. Some of the wild plums are well worthy of cultivation even as they are. With cultivation and improvement, it is almost certain that some splendid varieties of our native plum will be produced, in time. The plums now grown in the milder portions of Eastern Canada and British Columbia have been originated by a long process of cultivation, from a wild European species that is scarcely equal to the wild plums of Manitoba. This will indicate what may be accomplished by the improvement of our native species. These plums of European origin are not at all suited to the prairie regions of Canada, and in no instance has there been any case of successful cultivation of those plums here. Even the plums grown in Minnesota are of little value here. While in some cases the trees appear to be fairly hardy here, the fruit seldom ripens. At best only two or three of the very earliest of the Minnesota plums will ripen regularly here. These Minnesota plums have been originated from wild varieties found in Northern Iowa and the bordering portion of Minnesota. This will indicate that we will have to depend largely on the improvement of our native plums for our prairie provinces. In order to encourage the improvement of the native plum, the Buchanan Nursery Co., of St. Charles, Manitoba, is offering a prize of \$5.00 for the best sample of wild plums of this season's growth. Any one wishing to compete for this prize should send a sample of the plums by mail to them, marking the package so the name and address of the sender will be known. This is all that is necessary to enter any one for the competition. The fruit should not be sent in tin boxes. Wood or cardboard should be used. Perfumed boxes, such as soap boxes, should not be used, as these will destroy the flavor of the fruit.

Growing Common White Beans.

EDITOR FARMER'S ADVOCATE:

In your issue of May 20th, I noticed some questions asked in regard to growing beans for winter market, by G. G. K., and answered by S. Larcombe. As I take it, G. G. K. meant the growing of dry white beans in quantity, Mr. Larcombe did not touch upon this. I would like very much to hear from growers in the matter.

The question is:—Is there any variety of white beans, the whole crop of which, will mature with certainty, in most seasons in Western Canada? If so it would be a great thing for the farmers, as we have been looking for a "hold" crop that we could raise and sell in large quantities.

I have experimented in a small way with beans for the past three seasons. In the spring of 1906, I purchased some common white beans at the grocery, about one-half of which matured. I planted seed from these in 1908 with the same result, and planted seed from these this year, thinking, maybe, they would do better when acclimated.

I am also trying, this year, the California Wonder, a small white bean resembling the "Navy" and also the Davis White Wax, a white kidney variety.

Is there anyone growing dry white beans in large quantities, and ripening them with success each year in Western Canada?

Which is the earliest bean, Navy, Kidney, Medium or Marrow? I would like to hear from Mr. Larcombe and others in regard to this.

Sask.

H. W. TAYLOR.

If any of our readers have had success in growing beans in large quantities, or if they know of anyone who has, we would be glad to hear of it.

The sowing of home grown seed, year after year, should, in time, give a hardy strain, but it is well to begin with a heavy yield, and one with other desirable qualities.—Ed.

Mr. Larcombe replies to the above as follows: EDITOR FARMER'S ADVOCATE:

"As to your query on the growing of beans for the winter market. Yes! They may be grown with success in almost any year, and I would be inclined to think in any part of the west. The writer has only failed in ripening beans once; but there is always a certain amount of risk, as beans are more sensitive to frost than almost any other crop. They are, of course, liable to be frozen with a late June frost, or to be checked in their ripening stage, with an early September frost; but, as I have mentioned, I have only failed once. The common White Bean will be found to do very well, but there are other varieties that are earlier and heavier yielders, and only for the color of some, are just as good for table use.

"The earliest bean with me, is the 'White Valentine'. Another good variety is the 'Golden Beauty', but this is a spotted bean, and there may be some objection to color. The same will apply to 'Honey Pot' which is very early and an enormous cropper. I have never grown them extensively, that is, by the acre, or acres; but five years ago I tried several varieties by the rod, all of which ripened. 'Golden Beauty' was the heaviest in yield. 'White Valentine' was the earliest and second in yield. I am afraid I have lost track of the nine varieties, and their yields, but if my memory serves me right, I grew 78 pounds to the rod of Golden Beauty and 64 of White Valentine. The ordinary White or Harrowque bean was a few days later, and a few pounds lighter in yield to the rod, but it will be seen that the two first varieties named, worked out considerably over one hundred bushels to the acre. Of course, at this rate, it would make it one of the best paying crops, but there is the danger, if they are grown extensively, of a spring frost. We have to take some chances on almost everything we grow.

"Your correspondent should grow, say, an acre, by way of experiment, and, if successful, he may raise them in any quantities, as the market demands. But I would not like to take chances in sowing in large quantities until after the 20th of May, if there are no checks, this will give

plenty of time for ripening. I would drop a few 'Scarlet Runners' all over the plot as they are more likely to attract the bees. Bees in a bean plot are of incalculable value.

"We have tried a few bunches of mignonette in the bean plot. This may be sown either between the rows, which should be thirty inches apart, or leave a space any where in the plot, for a small bed of mignonette, the bees will find this and then go from flower to flower."

S. LARCOMBE.

FIELD NOTES

Events of the Week

A party of one hundred surveyors with men are making a survey of the country west of Ft. Churchill, and will report to the government upon the conditions surrounding the building of the Hudson's Bay Railway in January.

The first load of this year's Alberta winter wheat was sold in Lethbridge, on July 10th. It went 63 pounds to the bushel and sold for 80 cents. Much of the Alberta crop will go from 35 to 40 bushels to the acre.

The Pillsbury-Washburn Milling company, of Minneapolis, the largest concern of its kind in the world, has gone in the hands of a receiver, but the mill is still in operation. The liabilities are estimated at \$15,000,000, but there is no anxiety on the part of the creditors. Most of the capital stock of the company is held by British investors. The mills have a capacity of 38,800,000 bushels annually.

The Canadian government has refused to suspend operation of the alien labor law at the request of railways and construction contractors who desire to take advantage of the labor situation in the United States.

By a fire on the vessel Premier, at Warrens Landing, on Lake Winnipeg, eight persons lost their lives.

The total loss of property in the Fernie, B. C. fire is estimated by the insurance companies involved to be \$2,225,000.

The gross earnings of the Canadian Pacific Railway company for July, the first month of the company's new fiscal year, make a bad start with a decrease of \$704,000, representing over 12 per cent. below the gross for the corresponding month of 1907. Gross earnings for the last ten days of July decreased \$292,000. The earnings for July, by weeks, are given as follows:

	1908	1907	Dec.
July 1 to 8.....	\$1,399,000	\$1,542,000	\$143,000
July 8 to 14....	1,407,000	1,551,000	144,000
July 15 to 21...	1,400,000	1,525,000	125,000
July 22 to 31...	1,990,000	2,232,000	292,000

* * *

In an illustrated description of the Fernie fire, a California paper publishes a photo of Main street, Winnipeg, and two Doukhobor women at the C. P. R. depot, and named the cuts: "Scenes from Winnipeg fire zone, Street in British Columbia city, to which homeless thousands are fleeing," and "Types of peasant women who are refugees from desolated town in Crow's Nest Valley."

* * *

Nasty feelings have been aroused between the passenger departments of the C. P. R. and C. N. R., on account of the former road stating that the harvesters they bring from the east will be delivered at C. P. R. points only. C. N. R. officials are assisting in getting hands in the west, and offering cheap rates to farmers to Winnipeg to hire men.

* * *

The Canadian government has appointed engineers to rebuild the Quebec bridge which collapsed last year.

* * *

On August 7 last a party of priests of St. Boniface college, Winnipeg, accompanied by Judge Prud'homme, discovered the site of Fort St. Charles, built in 1732 by Sieur de la Verandrye on the north-west angle of the Lake of the Woods. They also discovered the skulls of 19 voyageurs and the skeletons of Father Aulneau and Jean Baptiste de la Verandrye, all of whom were massacred in 1736 by Sioux Indians on an island in the Lake of the Woods.

For many years past the Roman Catholic church has made attempts to locate these remains, but until the present month all efforts to do so had failed.

* * *

Frost visited several districts in the wheat belt of Western Manitoba and Eastern Saskatchewan on the night of the 12th inst. The extent of the damage cannot be ascertained, but it is believed to be considerable as the grain was about ten days from being ripe.



PHOTO BY CLARK, C.N.R.

SUMMER SHADE
On the Red River Bank near Selkirk, Man.

The Ontario government has let a contract to build transmission lines to carry power from Niagara as far west as St. Thomas and east to Toronto. The contractor is F. H. McGuyan, who made a spectacular separation from the Great Northern Railway Co., last year.

The United States department of agriculture is undertaking an extensive practical and scientific study of the use of timber shelter belts in the agricultural regions of fourteen western states. The idea is to obtain data that will be valuable to the farmers who are developing the western plains. The experts who will go through the territory in question, hope to settle once and for all which are the species or varieties best adapted to planting in the various districts.

Prof. Goldwin Smith, Canada's most noted publicist, celebrated his 85th birthday on the 13th.

The School Board of Victoria, B. C., objects to the Provincial Government's order to fly the Union Jack over the schools, claiming the Canadian flag should be used.

The Farmers' Union of Mississippi, it is believed, will, this year, endeavor to hold off their cotton crop, store it in warehouses, and sell only when the price reaches a point satisfactory to the Association, a price that will be remunerative to the producer and fair to all concerned. The Union controls 150 or 200 warehouses, in which cotton can be stored.

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

Farmers—and Farmers' Business

EDITOR FARMER'S ADVOCATE:

I was in a town the other day, and I heard that the annual meeting of the shareholders of the Farmers' Elevator Company was to be held, so I thought I would go to see how the company had done during the year, and I think sir, that the manager and directors deserve great credit for the way in which they carried on the business during such a hard year. But what surprised me more (and this is what I want to talk of most) was the small number of shareholders present, out of over seventy only about half were present. And I began to think and ask myself, Why this indifference among the farmers, that they would not come to their company's annual meeting, a meeting at which every one that held a share should have been, to have heard the reports, and to have made complaints if they had any? Some shareholders were in town but did not go to the meeting. Ask them why? Oh, they haven't time.

After the meeting was over, I thought I would listen to the conversation going on in different groups of farmers, and I found out the thing that you come across from time to time: Farmers kicking about things in general, and how the company was being managed, so I said to some, "Why did you not go to the meeting, or why did you not speak at the meeting?" They said, "Well, they did not like to, or they did not go." "Well then," I said, "stop your kicking now."

And that is just where it is, farmers, you choose men as directors to do your business for you, and you expect these men to lose one or two days every month in the year. When the day comes around for your annual meeting and these men ask you to come for half a day, to listen to their report, you ignore them, and you stand on the street corners cursing the management. As it is with this elevator company, so it is with everything else: you stand on the street corners cursing everything in general, from railroads' elevator systems to the small store keeper, but you yourselves will not lift, no, not so much as a finger to better your own condition.

How can you expect others to do it for you, and why don't you wake up to the possibilities that lie before you? No, but you will not do it, you will not meet together to discuss matters of vital importance to you, and so long as you will not spare a little time to meet together and discuss things, so long will you be narrow-minded, and think everybody is robbing you.

There is no need for more farmers' organizations, for we have plenty of them, you know them all without naming, but there is a need of a closer union among the farmers. We ought to be so organized that we could meet once a month, and just here I fancy I can hear someone say, "What's that man after, a crank I bet." Well I have no doubt you are right, but it is the fact just the same that if we would just meet together, and discuss matters relating to our farming operations, we should be more liberal minded, and we should be better able to overcome the difficulties that are in our way. As the proverb says, "In the multitude of counsels there is wisdom," and so by meeting together we should be helping each other.

Sask.

A FARMER.

Canadian Crop Report

The following statement on the condition of field crops and live-stock in Canada was given out by the census and statistics office on the 11th. The heat and drouth of July have lowered the condition of the field crops all over Canada, but less in Ontario and Alberta than elsewhere because the ripening season in these provinces has been earlier. Measured on the basis of 100 for standard condition as being a full crop of good quality, wheat fell during the month from 84 to 76, oats from 90 to 81, barley from 83 to 80, rye from 92 to 78, peas from 82 to 79, mixed grains from 84 to 81, and hay and clover from 87 to 82. Beans alone have not deteriorated; their condition at the end of the month was 75 per cent., or one more than at the end of June. The other crops show conditions for the end of July of 78 for potatoes, 75 for turnips, 73 for sugar beets, 75 for other roots, 77 for husking corn.

It was too early at the end of July to give estimates of the production for the lower provinces and British Columbia, but from reports of correspondents in Quebec, Ontario, Manitoba, Saskatchewan and Alberta, the yield of wheat, oats and barley are computed to be as shown in the following table:

Provinces.	Wheat.	Oats.	Barley.
Quebec.....	1,575,000	37,008,000	2,289,000
Ontario.....	18,164,000	111,888,000	20,804,000
Manitoba....	56,164,000	54,202,000	21,184,000
Saskatche-			
wan.....	47,080,000	38,130,000	2,640,000
Alberta.....	7,280,000	28,026,000	4,773,000
Totals....	130,263,00	269,254,000	51,690,000

On July 21 the C. P. R. steamer Monteagle, the Japanese steamer Tosa Maru, and the Pacific mail steamer China left Yokohama together, bound respectively for Vancouver, Seattle and San Francisco. Each carried part of a consignment of silk bound for London via New York, the consignors experimenting to see which was the most suitable route. Each line was instructed to hustle the silk ahead as fast as possible.

The Monteagle reached Vancouver August 4, the Tosa Maru arrived at Seattle on the 6th, and the China docked at San Francisco on the 7th.

The Canadian shipment was delivered at New York on the 11th. Tosu Maru's load reached the same port two days later and by the time the shipment via San Francisco got there, the shipment via the C.P.R. was nearing the shores of England.

The race has been watched with keen interest by shipping and railway circles, and the signal victory of the Canadian route is expected to have good effect in increasing the trade between the Orient and Europe via the Dominion trade roads.

After a short strenuous campaign the Saskatchewan government (liberal) was returned by a small majority on the 14th. The exact numbers of each party elected is not yet available. The number of constituencies was increased since the last election in 1905, from 24 to 40, and it is thought the government will have at least 23 of the seats. Two cabinet ministers, Hon. W. R. Motherwell (agriculture) and Hon. J. A. Calder (education) were defeated in North Qu'Appelle and Milestone, respectively.

From all appearances there will be nearly 25,000 men from the east to work in the western harvest fields.

MARKETS

The movement of the markets during the past week furnished a striking illustration of the fact that prices do not always fall just before the new crop arrives. And, incidentally, the man who was on the look out for an instance of how speculative dealing helps to raise the price of actual wheat had an opportunity to make a few notes. By all the rules of the game prices should have gone down, but instead there was a continual rise. New wheat has begun to find its way to market in Chicago and Minneapolis, and a little in Winnipeg, and cables from Europe were not very strong but apparently the bull element had such control of the situation that prices were maintained. Reports of damage in the Dakotas, the knowledge of actual damage from the hot winds in July, and the general shortage in world's supply, all combine to make prices high. Added to these there was quite a severe frost in Eastern Saskatchewan and Western Manitoba, extending north and south across the foot of what is known as the second continental plateau. Just how much damage this frost did cannot be learned, but it must be considerable, since the area is quite large and the temperature low enough to make ice in places.

Cutting is now general over all the west, and the crop promises to be a fair average. The winter wheat crop in Alberta is practically all cut, and threshing is in progress. It is perhaps the best crop the province has yet had, prices are good, around 80c at local points, and as a consequence seeding for next year is on a larger scale than ever. What little barley that has come forward at Winnipeg is of better quality than last year but very little of our barley is free from wild oats. The malters are out with their annual warning to threshers not to knock the germ end off the grain when threshing, as without the germ to start germination barley is useless for malting. It is also injured for seed and in this will be found an explanation for some of the patchy stands one sometimes sees.

An attempt seems to be developing to raise the rates on grain going across the lakes. July was one of the poorest months for the shipping companies that has yet been known, and the hope of redeeming the loss of business lies in the western grain. Both railway companies insist that there will be plenty of cars and power to move the crop and the G. T. P. is also prepared to carry out a lot of grain.

Prices as we go to press are as follows:

1 hard.....	109
1 northern.....	108
2 northern.....	105
3 northern.....	103
No. 4.....	97
No. 5.....	87
No. 6.....	77½
Feed 1.....	70
Feed 2.....	60
No. 2 white oats.....	44
No. 3 white.....	40
Rejected.....	40
No. 3 barley.....	48
No. 4 barley.....	46
Feed.....	42½
Flax, N. W.....	124

OPTION QUOTATIONS.

	Sept.	Oct.	Dec.
Wheat.....	97½	95½	93½
Oats, No. 2 white, October.....		39½	

MINNEAPOLIS CASH PRICES.

1 hard 125 to 126, 1 northern 122, 2 northern 119, No. 3 112, 1 durum 93½, 2 durum 91½, 3 white oats 45½, 3 oats 42, barley 55, rye 71½, flax 133½.

PRODUCE AND MILL FEED.

Net per ton—	
Bran.....	\$19.00
Shorts.....	21.00
Chopped Feeds—	
Barley and oats.....	26.00
Barley.....	25.00
Oats.....	28.00
Oatmeal and millfeed.....	19.00
Wheat chop.....	22.00
Hay per ton (cars on track, Win-	
nipeg), prairie hay.....	6.00@ \$ 7.00
Timothy.....	12.00@ 14.00
Loads.....	9.00@ 10.00
Baled straw.....	5.00@ 6.00

BUTTER, CHEESE AND EGGS.

Fancy fresh-made creamery bricks .	23	@	24
Boxes, 14 to 28 lbs.....	22	@	23
DAIRY BUTTER—			
Extra fancy prints.....	21½	@	22
Dairy, in tubs.....	20½	@	22½
CHEESE—			
Manitoba cheese at Winnipeg.....	13		
Eastern cheese.....	12	@	13½
EGGS—			
Manitoba, fresh-gathered f. o. b.			
Winnipeg.....	21		

VEGETABLES.

Potatoes, car lots, per bu.....	\$0.85
Potatoes, small lots, per bu.....	.75
Beets, per bu.....	.90
Celery, per doz.....	.40
Onions, per cwt.....	3.00

LIVE STOCK.

Range stock is moving forward rapidly and the cattle are uniformly good. Last year about this time exporters were quoted around \$4.25 off cars, and this year there is not much change in quotations, 4c being the nominal figures at point of shipment although \$4.75 is said to be paid frequently at the yards. Hogs sell for 64 quite readily if the quality is good. The figures quoted are:

Export steers, 1200 and over f. o. b. point	
of shipment.....	4
Fat cows and heifers.....	2½ to 3½
Half fat butchers stock.....	2½ to 3
Veal calves.....	4 to 4½

HOGS.

Hogs, 150 lbs. to 250 lbs.....	5½
Heavy hogs.....	4½

SHEEP.

Sheep.....	5
------------	---

HOME JOURNAL

A Department for the Family

PEOPLE AND THINGS THE WORLD OVER

The early home of T. B. Aldrich in Portsmouth, New Hampshire, has been purchased for \$10,000 and will be fitted up as a shrine, containing his books and a collection of first editions, autograph letters and other treasures.

In reply to the letter from the Transvaal asking where the best English is spoken in the British Isles, we should not like to pretend to give an authoritative answer, but our private conviction is that the best English is spoken on the west coast of Scotland, and in parts of Ireland. It sounds paradoxical; but everyone knows that the best French is spoken, not in Paris, but in certain remote and old-fashioned provincial towns.—*London Academy.*

Herr Rymer Schnieder, a German sculptor, recently went to Edmonton to live. He is a member of the Royal Academy of Belgium and has studied in Brussels. He will endeavor to work at his chosen profession in Alberta. The people of Strathcona are planning to erect a statue to Charles Lamb, the man who sacrificed his life last year in an attempt to save the lives of his fellow workmen in Walters' mine, and will probably engage Herr Schnieder. Herr Schnieder will also endeavor to persuade the Alberta government to place a statue at the entrance to the new provincial parliament buildings. He suggests two buffaloes or Indian chasing buffaloes as something typical of the country.

When Claude Rouget de Lisle, an unknown officer quartered with his regiment at Strasburg in the early days of the French Revolution, hearing the mayor of that city express a desire for a patriotic song, sat down and composed the words and music of the 'Chant de Guerre pour l'Armee du Rhin,' he scarcely foresaw a twentieth century President of a French Republic being welcomed to England by its king to the martial strains of his song of the revolution. First heard in the house of the Mayor of Strasburg on April 25, 1792, it had reached Marseilles by June, where it was sung amid great enthusiasm at a civic gathering. A volunteer battalion just leaving for Paris adopted it for a marching song, under the title 'Chant des Marseillais,' and on Aug. 10 it was the rallying song during the attack on the Tuileries. From that day it became the national anthem of the French, and its composer lived to be pensioned by Louis Philippe in 1830.—*Dundee Advertiser.*

Winnipeg had an opportunity recently of seeing Mr. Robert Mantell in Shakesperian drama. "King Lear," "Othello," "Macbeth," "The Merchant of Venice," and "King Richard III" of Shakespeare's productions were presented. In addition, Lytton's famous play, "Richelieu," was given. Mr. Mantell is one of the strongest actors of the Shakesperian drama on the stage today. In the great master's greatest characters, he acts with finish and polish, giving a masterly interpretation to the play. On the whole, Winnipeg theatre goers enjoyed something that is a little better than anything that has appeared here for some time, and appreciative audiences greeted the company at each performance.

Ira D. Sankey the world famous singing evangelist and partner of Dwight L. Moody died at his home Brooklyn, N. Y., on the 13th. Had he lived until the 28th, he would have been sixty-eight years of age. Mr. Sankey was born in Pennsylvania and was all his life active in Christian work. His most enduring work is probably his "sacred songs and solos" which have had a circulation of over 50,000,000 copies. Two of his best songs are "The Ninety and Nine," and "When the Mists Have Rolled Away." It is expected that Mr. Sankey left considerable property, although he gave away thousands in his life time. Since 1903, he had been totally blind.

AGRICULTURAL EDUCATION AT THE N.E.A.

Doubtless the greatest educational event of the year is the convention of the National Education Association of the United States. This year the convention was held in Cleveland, Ohio, where over 15,000 members registered. The National Education Association carries on its deliberations in nineteen departments, one of which is known as the Department of Rural and Agricultural Educational. The last-named department, at the recent meeting, devoted all its time to agricultural education and school gardens, and was addressed by the United States Commissioner of Education and several eminent teachers, on such topics as "Successful Work in Agriculture in Rural Schools"; "The Work of Normal Schools in Preparing Teachers to Teach Agriculture"; "How the Nation Should aid in Agricultural Education"; "Work Done in School Gardens." In addition to this department's work, the National Council, through the president-elect, presented the report of a committee on industrial education in rural schools, which committee was appointed in 1903.

The report just referred to, strongly emphasized the need to educate public opinion to regard the ability to do things as more valuable than the possession of theoretical knowledge. It declared that one most serious difficulty in the way of introducing what might be called agricultural education is the unwillingness of teachers and school authorities to modify the traditional courses of study, except by adding a new one. They are loath to cut out any of the old courses to make way for the new, so they try, instead, to add it on to an already overcrowded course. The second difficulty is the utterly inadequate supply of teachers properly trained to give effective education in this subject.

The specialist on agricultural education in the U. S. Department of Agriculture, D. J. Crosby, stated that nearly every State in the Union is now requiring agriculture to be taught in the schools, and that he knows that it is being done successfully in a few primary schools, a larger number of secondary schools, and in about sixty colleges. He discussed the danger of demanding too much, as some people are doing, and argued that you cannot teach farming operations, such as plowing, reaping or milking, in the rural public schools, and no claims for such teaching should be made. He should confine the agricultural instruction in the primary schools to the simpler facts concerning the principles of the production and utilization of plants and animals useful to man, together with some children's garden work at school and at home. In the secondary schools, we should insist that pupils studying agriculture have some preliminary work in botany, chemistry and physics; and in the colleges we should bear heavily upon training in the physical and biological sciences, as well as in the science of agriculture and the relations of agriculture to the manufacturing and carrying business of the world.

Prof. Davis, of Maine University, claimed that practical instruction in milking and churning could be given the girl undergraduate in such a way as to do her intellect and heart as much good as the Latin grammar she is learning. He also condemned much of the so-called scientific education given in the High Schools. He would change it for a study of living vegetables and crops, soils, and living animals. A summary of opinions obtained by Prof. Davis from about 500 persons, scattered all over the continent, set forth (1) that the great difficulties in the way are the almost universal lack of teachers who are able to give agricultural instruction, and the indifference and frequent opposition on the part of patrons; (2) agriculture, when handled in an efficient manner, aids in keeping up school attendance, increases interest of patrons, and reacts favorably on other school work. Training a sufficient number of teachers is the most serious problem in the way of general introduction of agriculture as a school subject. The graduates of small

High Schools are supplying teachers for rural schools. Agriculture, as a part of the High-school courses, is therefore, desirable. The most direct means of reaching the largest number of rural schools is in better preparation of High-school teachers who teach in rural communities.

THE CONQUEST OF THE AIR

In the last few years wonderful strides have been made towards the conquest of the air. Inventors in all parts of the world have been experimenting with different types of flying machines. The progress has been amazing. Airships have been perfected that will stay aloft for any time desired, steered in any direction by the intrepid navigator. Motors have been made light and strong enough to drive ships at a good clip, airship races have been arranged over courses a thousand miles or so in length, competitions of various kinds have been held in different parts, and man emerges from each experiment a little better equipped than before to perfect a machine that moves through the atmosphere as smoothly and safely, and more rapidly than the ships he has fashioned now plow the deep.

According to *Harper's Weekly*, airships will be carrying passengers and freight between New York and Boston within the next year and a half at least. A company is being formed for the purpose of establishing aerial routes for the transportations of freight and passengers in the United States, Canada and Mexico. The new venture is being taken hold of in a serious spirit, and there is little doubt but that air routes with the necessary stations will be laid out in some part of North America. Aerial navigation is now an accepted fact. Up to the present it has been little better than a possibility.

It is seventy years now, or more, since Tennyson

"Looked into the future,
Far as human eye could see . . .
Saw the heavens filled with commerce
And there rained a ghastly dew,
From the nations airy navies,
Fighting in the central blue."

There is much probability that the generations that knew Tennyson will live to witness the realization of his vision. Aerial navies will be one of the first results of the successful navigation of the air. Already governments in Europe are experimenting with war balloons, air battleship or whatever they are to be called, and just as soon as ships can be perfected large enough to mount weapons of warfare in, the nations will be ready to dispute with hostile nations the supremacy of the newly conquered element. Airships will work revolutions in commerce difficult to comprehend. What they will do for war can better be imagined than described.

Kiplings' "Lady of the Snows," could not have been "at home" to Lord Roberts. If the genial "Bobs" and the versatile Kipling come again they may both be differently received.

The most remarkable railroad enterprise of today, the construction of the Turkish line connecting Damascus with Mecca, for the benefit of the thousands of pilgrims who journey each year from all portions of the Mohammedan world to the Sacred City, is nearing completion. The line has now reached the city of Medina, only 250 miles north of Mecca, and on September 1, the anniversary of the accession to the throne of the Sultan, will take place the inauguration of the mosque near the station there, of the water supply from Ain Elzerk, and of the railway line. The railway, as far as completed, has a total length of 1500 kilometers (932 miles), including the branch to Haifa, the stations having been all built of stone, and the workshops all having been constructed in less than six years.

ED 1866

and the
e winter
cut, and
best crop
, around
eding for
hat little
is of bet-
ur barley
with their
the germ
hout the
for malt-
s will be
y stands

raise the
was one
ompanies
deeming
n. Both
plenty of
G. T. P.

109
108
105
103
97
87
77
70
60
44
40
40
48
46
42
124

Dec.
93

hern 119,
white oats

@ \$ 7.00
@ 14.00
@ 10.00
@ 6.00

@ 24
@ 23

@ 22
@ 22

@ 13

\$0.85
.75
.90
.40
3.00

and the
bout this
off cars,
rotations,
shipment
ly at the
quality

4
2 1/2 to 3 1/2
2 1/2 to 3
4 to 4 1/2

5 1/2
4 1/2

5

The Quiet Hour

THE WITNESS OF THE GRAVE CLOTHES.

But Peter arose, and ran unto the tomb; and stooping and looking in, he seeth the linen clothes by themselves; and he departed to his home, wondering at that which was come to pass. St. Luke xxiv. 12 (R. V.).

The other disciple outran Peter, and came first to the tomb; and stooping and looking in, he seeth the linen clothes lying; yet entered he not in. Simon Peter therefore also cometh, following him, and entered into the tomb; and he beholdeth the linen clothes lying, and the napkin that was upon His head, not lying with the linen clothes, but rolled up, in a place by itself. Then entered in therefore the other disciple also, which came first to the tomb, and he saw, and believed. For as yet they knew not the scripture that He must rise again from the dead. St. John xxiv. 4-10. (R. V.)

Ah! sure within him
and without,
Could his dark wisdom
find it out,
There must be answer
to his doubt.
—Tennyson.

We live in a world of progress; even the unchanging truths of our glorious religion are seen from a new point of view by each generation of men, revealing beauty which was always there, though it was veiled before. As electricity was always in the world, with all its marvelous powers waiting for men to discover and use, so many great treasures have been lying unnoticed in God's two great books—Nature and the Bible—revealing their mysteries in these latter days and coming upon us with all the freshness of new discoveries. Why should we fear the scientific study of God's word? Christianity is a religion of facts as well as of spiritual truths, and microscopic inspection is continually bringing to light facts that have been overlooked, as witnesses to the truths which can be grasped by faith alone. God does not demand a credulous belief in unattested prodigies. The true definition of faith is not that of the small boy who said that faith was "believing things we know are not true." Faith does require us to believe things that are beyond the reach of reason, nevertheless reasoning faith is the only possible kind of faith for sane people. We believe thousands of things about this physical world which we cannot understand. Who can understand how the chicken is formed in an egg, how the blossoms on the trees turn to fruit, how the food we eat turns into flesh and blood, nerves, muscles, etc.? If we cannot understand the physical world, how much less likely is it that we should entirely comprehend things spiritual and transcendent.

I have just been reading a deeply interesting book called "The Risen Master," by Rev. Henry Latham; and, as many of our readers may not have the opportunity of reading such books, I will try to pass on a few of the thoughts contained in it. Perhaps another week I may tell you about other things in the book, but to-day we will look only at one subject, "The Witness of the Grave-Clothes."

The disciples who hurried to the tomb after our Lord's Resurrection seem to have been tremendously impressed with the appearance of the linen clothes which had been wound like bandages many times around the body. For many centuries men have passed over with scanty attention, the fact that the sacred record brings prominently into

notice that apparently insignificant detail—the position of the grave-clothes or "cloths" as the R. V. gives us the translation. Now, after nearly 2,000 years, those swathing cloths suddenly take their place as they did that great Resurrection Day among the strongest proofs of the foundation Fact of Christianity. St. John, in telling his story of his visit to the tomb, declares emphatically that when he beheld those cloths he believed that Christ was risen. He could not imagine that friend or enemy had removed the body and left the clothes behind, because their appearance showed that to be impossible. Those who have carefully studied the Greek account throw light on the mystery. The Body had been swathed in cloths, wound round and round like bandages, with a hundred pounds of myrrh and aloes strewn within the folds.



WAITING TILL THE COWS COME HOME.

These cloths were now "lying flat," without disarrangement, weighed down by the spices. They had not been unwound nor disarranged in any way. Our Lord's Body had mysteriously changed its nature, changing probably, as St. Paul expresses it, from a "natural" body to a "spiritual" body, and passing as easily as the air itself through the cloths, which immediately fell flat on the rocky slab. The napkin which had been twisted like a turban about his head, still kept its "twirled" shape—it was "wrapped together." It is also said to have been "in a place by itself." It was probably lying on a raised pillow-like slab where the head had rested, and was some distance from the rest of the cloths, for there is a considerable space between the wrappings of a corpse and the head-covering in many Eastern countries to-day. Often the face, neck and upper part of the shoulders remain uncovered. See how this fits in with various incidents of that Day. Mary Magdalene saw two angels sitting, "the one at the head and the other at the feet, where the body of Jesus had lain." The silent Sign of the Resurrection lay between these guards. No one could be allowed to disarrange that unmistakable testimony until his work was accomplished. St. Matthew speaks of an angel who sat outside on the stone and who said to the woman, "Come, see the place where the Lord lay." He was evidently inviting them inside not to see only the negative witness of an empty tomb, but to be convinced by the positive witness of the grave-cloths. They were so deeply impressed by what they saw that

they ran, with fear and "great joy," to tell the disciples. An empty tomb would not have instantly turned their grief into "great joy."

In St. Mark's account we read of a young man dressed in white who sat within the sepulchre on the right side. He drew the attention of visitors to the mysterious witness of the cloths, saying, "Behold the place where they laid Him." It was not an empty space nor a pile of disarranged cloths and scattered spices that they saw, for such a sight would not have impressed them so that they "trembled and were amazed."

St. Luke says that when the women told their story to the apostles their words seemed to them as "idle tales, and they believed them not." They had no reason to question the good faith of the women, and, if they had only said that the Body was gone, the statement would not have seemed an incredible "idle tale." But people are seldom very willing to believe a seeming impossibility, and it did appear to be impossible to believe that the Body had gone, leaving the bandages untouched. This was a new thing in their experience,

had said." If they only meant to state that the tomb was empty it was strange that they should use such a roundabout expression, which is far more positive than negative. Besides, they would hardly have seemed so astonished at finding that the tale of the women was true, if it had only been the statement that the tomb was empty. But such astounding information about the grave-clothes would certainly not be unquestionably accepted. No one but Mary seems to have imagined that the Body had been "taken away," though that would have been the natural explanation of an empty tomb. Mary probably failed to notice anything remarkable in the position of the grave-clothes on her first visit, because it would not be noticeable in the dim light of dawn. When she slowly returned, after running with her heartbroken message to St. Peter and St. John, she was blinded by tears and not likely to notice anything. The Evangelists do not go out of their way to explain why she was so despairing while the other women were filled with "great joy." They seldom

go out of their way to explain anything, being occupied with the telling of facts. There was reason enough, if Mary thought her Lord was dead and even the Body had been swept out of her reach, while the other women knew that He had risen with new life.

It is suggested that the witness of the grave-clothes was probably one great reason for the rapid increase in the number of converts from 120 to 3,000 on the Day of Pentecost, and soon after to 5,000. The wonderful news of the Resurrection would soon spread through Jerusalem, which was always crowded at the Passover. Many would visit the tomb and see the mysterious empty wrappings, and others would hear about them. The news would be carried by returning pilgrims to their homes, and so men would be prepared to believe in the foundation fact of Christianity—the Resurrection of Christ.

And what shall I say about ourselves? A man who will venture to say that anything is impossible, in these days of

marvellous discoveries, is showing a most unscientific form of mind; and, unless we take that obstinately foolish position and deny the possibility of the Resurrection, we must own that critical examination of the various records of that Event show that it was not a fabrication. Such undesigned coincidences, fitting perfectly into each other—coincidences that have passed unobserved for centuries, or at least have attracted very little attention—prove to any unprejudiced student that they are not invented. The writers were evidently telling their story in good faith. And it is a great help to us to know that the evidence for Christ's triumph over death gains instead of loses by closest scrutiny. Those who are like St. Thomas, doubting, though they wish to believe, need not fear to seek for proof. God does not force our belief, and yet He provides "many infallible proofs" for those who are earnestly seeking for them. The promise that those who seek shall "find" can be depended on. Those who do not take the trouble to "seek" can hardly expect to "find."

"Blind unbelief is sure to err

And scan His work in vain:

God is His own Interpreter,

And He will make it plain."

HOPE.

Naggus (literary editor)—"Borus, which one of the magazines is going to publish that last short story of yours?" Borus (struggling author)—"All I can tell you about it now Naggus, is that seven of the magazines are not going to publish it."—Chicago Tribune.

Power Lot == God Help Us

By Sarah McLean Greene

Copyrighted by the Publishers, Musson Book Co.

Serial rights in Canada secured by the Farmer's Advocate and Home Journal

CHAPTER XXII.

"HE WILL STAND."

It was a drizzly, foggy morning scarcely daylight, when a repeated knocking at my door awakened me.

I cared no more than as if I had been lead—my heart was leaden; my senses, numbed by chagrin and despair, were leaden. It might be afternoon—I might be sleeping over still another tide for all I cared.

The knocking grew more distinct. "Who is there—and what do you want?" I growled.

"Jim," said a voice, and I started from my bed, for it was Rob's voice, only husky and weak, like the ghost of Rob.

"Drunk!" I muttered to myself. But it was he—Rob—and I sprang to the door and opened it.

Such a sight never saw I before in the gray of the morning. I drew him in, horrified, and locked the door behind us. His hair was matted with blood, his face bruised and caked with mire and blood, his shirt and trousers were in rags, and one hand hung helpless at his side.

"My God, Rob!" said I, and began the work of bathing and binding up his wounds without another word. When I had his face recognizable again, and found that his arm was not broken, only so painfully sprained that it was almost worse, he lay back on the pillows, his lips drawn and pinched with suffering, his eyes sunken like a man's who has been to the grave itself.

"Jim," said he hoarsely, "I never touched a drop. Jim—I give you my word, before my Creator, there was no drink—in this night's business."

"I believe you, Rob. Never mind about explaining now. Rest a bit."

"And—they took my money—every scrap of it."

"What! In God's name—"

"I went—after we parted there—to get the things for Cuby—and I carried them down to the boat—"

"Wait a bit, wait a bit, laddie—let's fix these pillows here. There's time enough, wait a little, now—"

"No—I want to tell you. Then I went back to the town and bought some little trifles—for Mrs. Skipper and Rhody—and I bought half-a-dozen cigars. I'm such a fool of a young one, Jim, I'd had that pleasing my mind and tickling my shopping-list, all the time, how I'd get half-a-dozen prime cigars for you and me to smoke going home."

He smiled, and I let him take his own way for reeling off his yarn, for it was lying heavy on him till it was spoken. He was there—Rob, himself—with truth shining like sunlight on his poor, hurt face; and if any degree of the high joy and gush of love and yearning that I felt for him then showed in the smile I gave him back, he must have thought I was a soft one for a son of Neptune.

"And I got them," he went on, "and coming out of the shop—you know how the quarry runs along there—dark—back of the shops—for a ways, along there—I thought, if I could get into an alleyway maybe it would shut off the wind enough for me to strike a match—and light up my old pipe."

"I was holding the match protected in the scoop of my hand—and was leaning forward to light up—when a blow with a loaded club struck me—terribly—on the head—and, Jim, the last thing I saw, and all I saw in that flash as I fell—hush—you come nearer—I saw Bate Stingaree's hand. I know that hand—and I saw it. It was there, Jim, over me—as sure as judgment day—I know that hand—and I saw it."

"The next thing I knew—when I came to—I was lying among the rocks and mire—at the bottom of that quarry; but where I was, at first, I did not know. Jim, it was hell—black—dead of night—and one arm no good—only sending tortures through me. I felt the mire around me—and I crawled and

felt the rocks each side; and it may have been—I don't know how long—before the blow came back to me, and the sight, sure, of that dreadful, familiar hand—and I realized that I had been thrown over into the quarry for dead; and if I'd come to half an hour later, the tide that fills up everything would have covered me, too.

"I did not cry out nor call—I thought they might be hiding somewhere about. I tried to climb out, but in the darkness I had to go by feeling, and only one arm to work with—and I'd fall back and have to begin again. How long it seemed down there, Jim, only God knows—till morning came enough so I could see the outline of things—faint—and then I managed to climb up; and I reasoned it out you would be here at the hotel. My body was in agony; but I think that blow—"

Rob actually laughed, and the sunken blue eyes darkened wide with mirth—"I think that blow has cleared my head as nothing ever did before, Jim, and knocked all fear out of me, for big things or little, for evermore. I saw things clear. I limped up here—the janitor and his boy were pottering around gathering some kindling in the sheds, and the back doors were open. I passed in, not caring whether they saw me or not—they did not see me—no one else was stirring. I went up to the slate where they register guests in the office, and found your name and the number of your room—and here I am. God bless you, Jim, is it really your face looking down at me? I thought once I should die there without getting to you. And I'm cleaned out—a pauper again—a penniless, crippled—"

"You are not going to be crippled," said I, "and in a week's time you'll be as pretty as ever. But I'm going out to get some liniment and bandages for that arm of yours. You lie back now and take a nap."

"Since you give me my choice," said Rob, still carrying on by way of a joke, though his teeth were chattering with pain, "I'll wait to take my nap till you've brought something to ease this arm. Say, Jim, it hurts so I can fairly hear it ache. Kite out—that's a good fellow—and hurry up."

I had a doctor there within the next fifteen minutes.

"Better give him a little nip o' something to brace him up while I find out what's the matter with this arm," said the doctor significantly; "he's pretty well run down."

"Oh, you get to work, sir. I don't want any dose," Rob replied impatiently. "I'm game—this isn't a pinprick to what I've been through, soul and body. Only hurry up, please—get to work."

Sawbones looked at him curiously, and stretched the poor arm, and worked it this way and that; and Rob, white as death, with his teeth clenched, never uttered a moan. Relief came presently, though, from the applications the good man put on, and Rob turned over on the pillows and slept like an infant.

I locked the bedroom door behind me, and left word no one was to disturb the occupant there. My purpose was to get to the bank for a couple o' hundred dollars that I meant should go back to Power Lot in Rob's pocket, after all; and to get to the furnishing store for some whole clothes for the lad. I found it was still too early to get admission either to bank or shops. So I crept up the hotel stairs again. I was for all the world like an old bird hovering over a nest. I turned the key softly and took a look at my fledgling. He was sleeping so deeply, free from pain, you could almost see the bliss of his rest in a halo 'round him. I drew the blinds down, against the sun should rise that far, for it was already making signs of burning up through the fog; then I went out again on tiptoe, locking my tragic young potato-farmer safe behind me.

The wind was beginning to leap up from the north-west a bit, and my heart was taking a swing with it. Rob had been true, and by the miracle of God his bruised body was safe alive. I'd never cease to be grateful for that to my dying day. I went down to my boat and overhauled her, to have all in readiness for sailing if Rob should waken fit for it later in the day. As I went back along Main Street I heard the usual clattering in the restaurant, and the impulse took me to turn in there. By the time I had discussed some breakfast, and put a few observations to the table-girl, the bank would be open and I could get through business and make back to feed and clothe the nestling, who would be eager for trying his wings again as soon as possible.

"Wal!" said the girl commiseratingly, "here you be again, all by your lonesome. I guess he found the hotel, all right, and hasn't had to use no saleratus to make his drink beady—te-he! He's takin' a good, long nap this mornin', I reckon?"

"That's just where you are mistaken," said I gayly; "he hasn't touched a drop of drink of any kind. He's all right."

Her face fell, and she said insolently, "Why doesn't he come and have breakfast with you, then?"

"Oh, he's a swell; he'll take his breakfast at the hotel," I made answer; "he's something rather choice." She set the remaining dishes down very noisily, at my plate.

"You didn't see any other friends o' mine in here yesterday, did ye?" said I, with a bald attempt at being genial.

"You must be a lunkhead," she rejoined, "how do I know who your friends are?"

"Sure. You're right. But, for instance now, a dark fellow, sort of surly acting—wonder if you saw him?"

"Guess he wasn't anxious for your company. Him and another man sneaked in here, soon as you and your 'choice' article left."

"Him and the Frenchman?"

"French or Dutch or Portugee, what do I care?"

"Of course not." I placed a fee for her on the table and spoke lightly. "They did not say among themselves where they left their boat, did they? She wasn't visible in harbor."

"No," said she shortly. "They acted like a pair of sneaks, and gobbled their vittles, and lit out. Thank ye"—she picked up the silver, but hustled about as though it were my business to be gone. Rob would never have had such brusque treatment at her hands. Little I cared. Rob's vision of the familiar hand as he fell was no hallucination. If the blow had cleared his head, it had mazed and staggered mine.

That Bate mingled some idiocy with his brutality, I knew. But how could he follow us to Waldeck and dine immediately after we did at the restaurant, and expect to go undetected of those incriminating circumstances? Then I remembered the slow, morbid working of his mind, with hate and revenge paramount as a motive; he had meant, no doubt, to "make a good job of it," and by a hand's turn luck might have favored him. A few moments more and the tide would have sucked in over Rob.

If the lad's body had been discovered at ebb tide the conclusion would have been that he had staggered along the quarry edge hopelessly drunk, and had fallen over; his wounds would all have been accounted for by that fact. It was that one glimmer of a masked hand before Rob's reeling senses that fixed the crime at Bate's door. Not only would he have thrown Rob's body to destruction, but the fair name for which the boy had struggled so painfully and long; that would have gone down, too, with the undesired stigma of "drunkard" at last and of one faithless and fallen,—one who had proven so faithful, who, in spite of every temptation, had stood erect and true.

And one complication of it was that Mary must not know the details of this day's work. To shield and rescue Bate she had spent life and substance. To save him in the end was, after all, her chief earthly ambition. She must not know. I would seek him out by himself, and I would send terror through his soul. He should walk straight hereafter for fear of me. But Mary must not know.

So I did my errands in the town, winning out to this conclusion of the matter, and with the next tide Rob and I set sail for home. It was not till we had clipped past Barstake Island to a fair wind that Rob, fingering over his new jacket with his able hand, found the pocket secured by two rows of pins, just as the old one had been. Blushing and trembling, he worked in and found the roll of two hundred dollars.

"D—n you, Jim," said the boy, in a queer voice that belied the malediction of his words; and he put his head down and sobbed before he could speak again. "You know what I meant, Jim. You're enough to make a man want to live, just because there is such a one as you to be his friend. But I can't take it, Jim."

"See here," said I, reasonable "there ain't any sentiment about this. I'd give my blood for you, lad, and all I have for you, for that matter. You're true. But it isn't that. We've got to go on, you and I, as if nothing had happened. Mary must not know about this business of Bate's. She never would know from you—"

I stopped him, for the splendid loyalty and vindication that blazed in his eyes.

"I know that, Rob. Never would she have known from you. I don't need your word. I would take my dying oath on it, on the Bible, she never would know from you. But we've got to act this thing out reasonable. You've got to go home to Mary's with your money. And Rob, don't you fret; you'll pay it back to me. I am thinking," I sighed, "it may be easier than you think, now, for you to pay it back to me sometime. That'll be all right. Meanwhile, you and I have got to work together in this business, hand in hand."

"Jim, I'm a great ass of a baby, with my cheap pride, and all; but I wanted to say that first to you—Mary must not know. I've said it over and over to myself times enough. I wanted to say it to you."

"You didn't need to. I knew it of you."

"Jim, if I don't pay it back, it won't be for lack of anything a man-can do, or bear, or deny himself."

"I know, Rob. You needn't to talk."

We went up to the Stingaree house together. I wanted to do that, and Rob let me—Rob, with his face patched up with courtplaster and his arm in a sling. It was night, and for some reasons, we were glad of that.

Well, if I'm anything in line of descent from a wizard, I'm surely mighty soft-born of humanity, too, so far as reading people's hearts from their faces go; and something got settled in my heart for good and all when Mary Stingaree opened the door and met us. Some lives seem, anyway, just to run a predestined, course of "giving up," "giving up," and, on any occasion when they wouldn't do it voluntarily, having to give up, until it turns by way of being a sort of meat and drink to them! You don't know but there's a fashion of enjoyment of its own goes along with it, like you can acquire a taste for bitter things, and make the best of it, and reckon it's all going to sum up for good somehow, somewhere.

It was not for old Jim Turbine—that look in Mary's eyes; it was not for any thought in her heart for the great doctor; it was a look straight out of her soul, that she could not help, for that big, winsome, tragic-joy of a young man, Robert Hilton.

And the deuce of it was—see what a pair of haggard eyes and a score or so of bruises will do for a fellow!—He was not one bit of a simpleton to her any more. I believe, true, that blow and fall had sent him up instead of down, after all. He was a man glorious from head to foot, a sort of veteran, grave-faced, square-shouldered, plastered up though he was, with his maimed arm; he met her look straight.

"Miss Stingaree," said he, "I met with an accident. But on my word as a man, it was not drink. I never touched a drop."

"I'm witness to that," said I.

"Rob's word does not need any witness," said Mary, very softly, very gently, to us both.

Tears of triumph and joy sprang to Rob's eyes. And I too—well, I was

(Continued on Page 140)

Ingle Nook

CHILDREN FOR ADOPTION.

Editor Farmer's Advocate:

We are desirous of finding good homes for some children who are already wards of this Society. The homes that we require are with good reliable farming people who have preferably no children of their own, and who are in comfortable circumstances and are able to look after a child. If any of your readers are desirous of adopting a child we shall be glad to send them application forms, and on their filling out same, their references proving satisfactory, we would do our best to supply them with the children such as they need. There seems to be at all times a preference for the adoption of girls, and, though we do not wish to exclude applications for girls, we would like specially now to obtain several applications for boys, as we have several in our Shelter waiting to be sent out.

We trust and believe that this appeal will result in a number of applications from desirable people, as has been the case when you have before allowed us to use your columns for this purpose.

E. SURGENT,
Secretary, pro tem,
Children's Aid Society.

HOW A FARMER'S WIFE MAY HAVE A HOLIDAY.

Dear Dame Durden:—In your issue of May 27th, many duties which prevent a farmer's wife taking a holiday were mentioned. We all feel that these and many more are the responsibilities not to be neglected by a farmer's wife, yet I shall try to suggest some possible holidays for even the busiest.

Granted, that she is in only moderate circumstances; that she has children from the ages of two to young manhood and womanhood; that she has farm laborers living with her and only irresponsible help; and also, that the farm is situated far from lake or mountain district which might constitute a summer resort.

It must first be understood what a holiday means. As we like to think of Heaven as perfect rest, so do we wish to think of a holiday as perfect rest; yet who was ever idle both in brain and muscle, during a holiday? Surely no one ever enjoyed perfect idleness! Is it not, rather, an equal adjustment of both labor and pleasure, with sufficient time for rest in sleep, and sufficient refreshment of mind and body in "God's great out of doors?"

Even our holidays will depend largely upon individual tastes and "Advice helps no man but suggests self help." No one needs a holiday more than the over-busy woman, but it is usually she who is, in her own idea, least able to take, or at any rate, to enjoy such a holiday. To such, or to any approaching such state of mind, holidays must be self compulsory. Have you ever said to yourself: "Oh, I wish I could read all day; I wish I could live outside all to-day with the birds and the flowers; I wish the horses were not always so hard worked, so that we might occasionally take a pleasure drive;" or, "I wish I could take time to make pretty furnishings for my home or dainty clothes for the children; but that washing and ironing and churning and getting of meals and darning and mending, combined with all the other duties makes over-work and ill-temper."

For my holiday I wish, if only for a short time, to cast aside all over-burdens of mind or body, or rather, what is more practical, to out-crowd them with the study and enjoyment of the highest ideals and ambitions within me, at the same time extending such pleasures to all around me.

We (my children and myself) had long looked forward to a bright sunny morning in which to take the first of our daily holiday outings. Our extra sleep was not to be taken in the early morning, those most invigorating hours of

the day. We were up and out to the call of the birds, not to wash or milk or churn, but (with the little one in a little wagon) to take a long walk and watch and listen to the birds, returning before the sun had gathered all the dew-drops from the grass. Half of my pleasure in such an outing was the keen interest and merry participation of the children in this luxurious life.

Previous to this we had treated our bird neighbors as very formal friends and though we knew many of them by sight, we had, in no sense, appreciated their worthy companionship. The first to welcome us was the meadowlark. When one saw his brisk movements and neat attire his call sounded much less mournful, and we realized that probably his great difficulty in calling people up at his energetic rising hour accounted, in some measure, for the impatience and discouragement suggested in his minor notes. It was not this first morning, nor for several mornings, but quite by accident one morn we almost—yet stopped in time—crushed beneath our feet the home of our friend. Perhaps you have never seen the picturesque home with thatched roof and latticed walls. It is cleverly concealed, made entirely of grass as it grows. The floor is as smooth and clean as ours, with our beautifully woven matting, and the pretty arched roof is quite thick with long grass bent over, woven together and fastened with much skilled workmanship. I am sure it would prove quite water-proof.

It was the sudden flight of the bird that had attracted our attention to the little home, but peering in at the front door we saw several eggs. Feeling that we had disturbed Mrs. Meadowlark rather unceremoniously at this early hour, we waited only to look all about us to place in our memory the exact location of this interesting discovery; and to help to attract our attention we placed a stick in the ground near by, in hopes that we might often call to inquire for Mrs. Meadowlark. It will, no doubt, be disappointing to you, even as it was to us, to know that though many diligent searches were made for that picturesque little home we never again found it or any quite like it; thus showing how well they are concealed in the grass.

Gathering on our way home a little basket full of mushrooms to add savor to our breakfast, (which we always prepared for ourselves and cleared away after, to make less, instead of more work for those who were so kindly affording us our holiday) and also gathering a nice basket of wild flowers to give life to the empty winter vases and carry our messages of enjoyment to those at home, we returned to the indoor pleasures for the heat of the day. I was then generally permitted time to take a general supervision of the home duties, and my heart was too full of nature's inspiration and enjoyment to express itself in anything but encouraging suggestions to those who were doing their best.

Needless to say, during these many hours of cheerful inspiration, we found expression for our souls in music, and in reading aloud many entertaining stories. Many dainty simple dresses seemed to get made as if by a magic machine. It was never any trouble during a morning to wash and iron a few simple little dresses and it was always our delight to look as fresh as a daisy. This reflected itself in all around us and others felt fresher, cleaner and cooler merely by our little thoughtfulness. We started some of our work for the coming exhibition and found it a pleasant employment for the spare minutes, while we were astonished to find how much we improved our work by adding this new inspiration of competition and reward. One of the most interesting and odd of the exhibits was a very antique-looking jug, carefully carved, with pen knife, out of an old dead branch of a tree, which lent itself with very little carving to this odd new ornament. Before the jug was quite complete, came the delight of finding in a similar unexpected way,

just lying by the roadside, a very knotty, twisted, twig handle—I say handle because, with a chip off the top and bottom to make it fit the jug, it was quite complete as such, fitted the hand, and allowed a rest for the thumb. (The ornament still remains with the one who made it, though several antique hunters have tried to entice it away.)

Have farmer's wives not some accomplishments? Have they not some ambitions beyond slavery? Then they should take a holiday from "all work and no play," and refresh mind and body with sufficient of the outside world to enable them with fresh in-

spiration to take a few minutes every day of the year to study how best one can use her life, both for her own physical and mental advancement and for the worthy and improving companionship of those around her. Most of all let her take time to know her children.

It was never any difficulty for us to get a holiday after that, because there were always some of the household willing to work twice as hard in order to send us out to gather in news and sunshine and good spirits, and when possible, to convey such to sick or depressed or hard-working neighbors.

G. M. H.

Selected Recipes

Kidney soup—One bullock's kidney, two quarts of stock, three sticks of celery, two turnips, two carrots, a bay leaf, bunch of sweet herbs, pepper and salt. Method:—I often use the stock that mutton has boiled in for this soup, after carefully removing all fat. Place the stock in a saucepan with the kidney, and simmer till half cooked, then take it out, cut into dice, and replace in the stewpan. Slice the vegetables finely, and add to the soup with the herbs. Simmer all for three hours, and then pass all through the sieve, season to taste, adding a little made mustard. Let all boil up, and serve with sippets of fried bread.

Rhubarb Jam—To each quart cut rhubarb allow 1 lb. sugar. Remove the white rinds and paps from 6 oranges and slice, peel and pulp into the preserving kettle with the rhubarb and sugar. Cook all slowly until thick as desired.

Baked Ginger Pudding—Bake a light gingerbread without fruit, cut into squares and serve with the following sauce: Melt butter the size of an egg; stir into it a heaping tablespoon of flour, half a cup of sugar, 1 spoonful of molasses and a pinch of ginger. Pour enough boiling water to thicken and let boil for ten minutes. Serve hot. A cottage pudding can be made in the same way by leaving the molasses out of the same.

Date Muffins—Stir together three coffee cupfuls of flour, three teaspoonfuls of yeast powder and half a teaspoonful of salt; sift into a bowl with one and one-half coffee cupfuls of milk; beat in the yolks of two well-beaten eggs; beat this gradually as you sift in the flour; add one tablespoonful of melted butter; when smooth beat it into three-fourths of a coffee cupful of chopped, floured dates, and lastly, force in the stiffened whites; put in warmed greased gem pans and bake 25 minutes.

Cold Meat Omelet—Half a pound of cooked meat chopped fine; 3 table-spoons flour; an onion par-boiled and chopped; 1 tablespoon chopped parsley; 1 pint milk; 1 egg; 1 teaspoon baking powder; 1/4 teaspoon salt; 1/2 teaspoon pepper. Sage or thyme may be used instead of parsley. When all is mixed put into a well buttered pudding dish and bake 1/2 hour. Serve with brown gravy.

Liver, Terrapin Style—Simmer the liver, which has been cut in strips, in cold water until the meat is tender. This process must be slow or the liver will toughen. When done, remove the meat and when cold cut into inch cubes. Mash the yolks of three hard-boiled eggs with one-half cupful of cream. Place two tablespoonfuls of butter in a saucepan and when melted add one rounding spoonful of flour; then stir it until the mixture is well blended; add the yolks and the liver, then a few grains of pepper and salt to suit the individual taste. Let the mixture become hot without boiling, as this would curdle the eggs. Just before taking up, grate in a little nutmeg.

Steamed Steak Pie—For the paste mix together with cold water 1/2 lb. of flour, 1/4 lb. chopped suet, 1/2 teaspoon each of baking powder and salt. Roll out thin and line a granite or earthenware basin. Put in 1 1/2 pounds of steak and a sheep's kidney cut into pieces. Steam for 2 hours.

Fillet of Fish—A fillet of haddock cut into pieces and dried with a towel. Rub over with a mixture of flour, pepper, salt, dip in a beaten egg and then in bread crumbs. Cook in smoking hot dripping.

Potato Balls—Mash boiled potatoes with a bit of butter or a little milk. Take out in small portions and rub into balls with your hands. Dip in egg and bread crumbs and fry.

Birds Nests—One teacup bread-crumbs; 1 tablespoon suet; 1 dessert-spoon chopped parsley; 1 egg. Mix all together with the egg. Take 3 hard boiled eggs, roll in flour, then roll in the mixture till quite a ball of egg and breadcrumbs is formed. Fry, cut through the centre and serve.

Pancakes—Half a pound flour; 1 oz. butter; 2 table-spoons sugar; 1 small teaspoon each of baking soda and cream of tartar; 1 egg. After mixing the dry ingredients drop the egg in without beating. Mix with sufficient milk to make a rather stiff batter and drop in spoonfuls on a hot greased griddle.

Raspberry Vinegar—Have 4 1/2 pints fresh raspberries and a clean stone jar. Put in 1 1/2 pints of the berries and pour over them 3 pints of best vinegar. Let stand for 24 hours, then pour the liquid over another pint and a half of fresh berries and let stand again. Repeat the process once more thus using in all the 4 1/2 pints of fruit. Strain then through a jelly bag without squeezing. Wet the bag with vinegar juice before using. To every pint of the strained juice allow a pound of loaf sugar, stirring it in until dissolved. Then place the stone jar in a pot of boiling water for an hour, skimming constantly as the scum rises. After it has boiled an hour add a glass of brandy to each pint of liquid. When cold bottle, cork and seal. Use it in cases of cold or fever, taken in cold water. (Many of our readers will not care to use the brandy and will find the recipe just as good if it is left out.—D. S.)

WASHES FOR THE HAIR

For a good hair wash take five cents' worth each of borax and camphor added to a pint of boiling water and left to dissolve. Bottle when cold.

2. Half a pint of olive oil and five cents' worth of borax in a pint of boiling water. Bottle when cold and shake well before using.

3. A little rosemary water and borax mixed makes a good hair wash.

minutes every
ow best one
r her own
ement and
oving com-
her. Most
know her

y for us to
cause there
household
in order to
vs and sun-
when pos-
r depressed

G. M. H.

the paste
er 1/2 lb. of
1/2 teaspoon
salt. Roll
or earthen-
ds of steak
nto pieces.

of haddock
h a towel.
ur, pepper,
id then in
oking hot

1 potatoes
ittle milk.
d rub into
in egg and

ip bread-
1 dessert-
egg. Mix
ake 3 hard
en roll in
of egg and
Fry, cut

our; 1 oz.
; 1 small
soda and
er mixing
e egg in
sufficient
atter and
t greased

4 1/2 pints
stone jar.
and pour
gar. Let
pour the
a half of
d again.
ore, thus
t. Strain
at squeez-
gar juice
t of the
d of loaf
dissolved.
a pot of
skimming
s. After
glass of
l. When
Use it in
t in cold
will not
find the
ft out.—

ake five
nd cam-
ng water
hen cold.
and five
t of boil-
old and
ter and
r wash.

Children's Corner

WHY DIDN'T YOU SUGGEST A NAME?

Dear Cousin Dorothy:—This is the second letter I have written to your cosy corner, and as my last letter escaped the "waste paper basket," I thought I would try my luck again. I think it was a very wise plan to adopt pen names. Don't you think it would be nice to call our club some nice

name like "Inglenook" or "Dame Durden"?

My cousin used to be the manager of the FARMER'S ADVOCATE, and my cousin Charlie used to belong to the ADVOCATE staff.

I have a sister named Dorothy. She has a camera that father brought her from Winnipeg three years ago, and she can take good photos with it. I wish I could see your photo, or yourself would be better still.

Now, I think you will be tired reading this letter, so I will close-wishing your club every success.

DAFFODIL.

A PLEASANT HOME

Dear Cousin Dorothy:—This is the second letter I have written to the Corner. My other letter escaped the waste paper basket, and I hope this one will also. I agree with many other correspondents to the Corner on the subject of pen names.

I passed the entrance examination last summer and I have not been going to school since. My oldest brother is ten years old. He has a rifle and has lots of fun shooting gophers and blackbirds and sparrows.

I have one sister older than myself and three sisters and two brothers younger. I live on a farm about half a mile northwest of Kelloe. Our house is brick vincer, and we have maple trees all around it. We have a nice lawn and we play croquet in the summer. I hope I have not made my letter too long and in closing I wish the Corner every success.

Man. (a)

MAPLE LEAF.

Advertise in the Advocate

Our Fall and Winter Catalogue is Out

OUR new Fall and Winter catalogue has been issued; if you have not already received a copy we want to hear from you without delay. As usual it will be found an authority on styles in men's and women's apparel of every description and as usual it is the standard of low prices for all of the many lines of goods we carry.

But write for the catalogue and see it yourself; and in ordering goods try to make up at least one hundred pounds weight of merchandise. They can then be sent at the minimum freight rate and of course freight is altogether the cheap mode of transportation. But any portion of one hundred pounds costs just the same as the full hundred weight.

In view of the advent of harvest and the approaching threshing season we publish here a list of much wanted articles at Eaton prices. So as to avoid possible delay order early. Our liberal guarantee which you will find fully explained in our General Catalogue insures satisfaction.

Harvesters' and Threshers' Supplies.

Diamond "E" Machine Oils.

	In bbl. per gal.	1/2 bbl. per gal.	5 gal. cases each.
6a. Diamond "E" Amber Cylinder Oil	65c	70c	\$3.75
" " Dark Cylinder Oil	46c	50c	2.85
" " Gas Engine Oil	55c	60c	3.25
" " Engine Oil	33c	37c	2.15
" " Dynamo Oil	55c	60c	3.25
" " Cream Separator Oil	45c	50c	2.75
" " Harvester Oil	40c	45c	2.65
" " Castor Machine Oil	29c	36c	2.00
" " Black Machine Oil	25c	30c	1.85
" " Neatsfoot Oil	80c	85c	4.50
" " Dark Axle Grease, 25 lbs.			1.50
" " " " 10 lbs.			.75
" " Threshers' Hard Oil, 10 lbs.			1.10

	bbl. lots per gal.	5 gal. lots
Raw linseed Oil	70c	80c
Boiled Linseed Oil	75c	85c
Turpentine	80c	90c
Wood Alcohol	75c	90c

Coal Oil and Gasoline.

24a. Diamond "E" Brand Highest Grade American Coal Oil, in barrels of about 44 Imperial Gallons (no charge for barrels) per gal. 26c
Shipping Weight about 400 lbs.
In cases of two five gallon tins (wine measure) equal to 8 1/2 gallons Imperial measure, per case \$2.75
Shipping Weight about 85 lbs.

Bright Light Refined Burning Oil.

24b. In barrels of about 44 Imperial gallons (no charge for barrels) per gal. 25c
Shipping Weight about 400 lbs.
In cases of two five gallon tins (wine measure), equal to 8 1/2 gallons, Imperial measure, per case \$2.60
Shipping Weight about 85 lbs.

Gasoline.

24c. Highest Grade American Gasoline, for Gasoline Lamps, in barrels of about 44 gallons Imperial measure (no charge for barrels) per gallon 34c
Shipping Weight about 400 lbs.
In cases of two five gallon tins (wine measure) equal to 8 1/2 gallons Imperial measure, per case \$3.25
Shipping Weight about 85 lbs.
24d. High Grade American Gasoline, for Gasoline Engines, in barrels of about 44 gallons Imperial measure (no charge for barrels) per gallon 29c
Shipping Weight about 400 lbs.

In cases of two five gallon tins (wine measure) equal to 8 1/2 gallons Imperial measure, per case \$2.90
Shipping Weight about 85 lbs.

NOTE—Barrels weigh about 400 pounds each, and cases 85 pounds each.
We sell these goods only by the Barrel or Case.

Rubber Belting.

The line we handle is one of the best made, heaviest duck being used in its construction. It is not affected by dampness or change in temperature. It is uniform in width and thickness. This belting is thoroughly stretched in the manufacture, thus reducing to a minimum the amount of stretching caused by work. We guarantee it to be thoroughly reliable.

23-45	150-ft. 7-in., 4 ply endless belt	\$55.75
	150-ft. 7-in., 5 ply " "	69.15
	150-ft. 8-in., 4 ply " "	63.75
	150-ft. 8-in., 5 ply " "	79.85
	160-ft. 8-in., 4 ply " "	68.00
23-46	Best Star Rubber Belting.	
	2-in. wide, 3 ply, per foot	15c
	4-in. wide, 4 ply, per foot	23c
	5-in. wide, 4 ply, per foot	27c
	6-in. wide, 4 ply, per foot	31c
	7-in. wide, 4 ply, per foot	39c
	8-in. wide, 4 ply, per foot	43c

Prices quoted on any length of belting on application.
Our endless belts are 150 ft. actual length, not 147.

In ordering give Number.

Tank Pump and Suction Hose.

23P-43. Our low down Tank Pump, is the most powerful pump of this type manufactured. It has a 5-in. double acting cylinder, sucking water at each stroke of the piston. The openings are 2-in. in size for both suction and discharge. It has a capacity of 2 barrels per minute, and will throw a stream 60 feet. It is equipped with brass valve seats, and has a connection for discharge pipe, so that 1-in. hose may be attached if desired. We furnish a large strainer and clamp with each pump. These pumps are specially adapted for threshers, for draining cellars, or for cistern purposes. The price includes hose clamp, strainer, and 1-in. discharge nozzle. Shipping weight 100 lbs. Sale price \$6.50.

23P-44. Suction Hose for tank purposes	
2-in. wire lined, 20-foot length	\$ 7.00
2-in. wire lined, 25-foot length	8.75
2-in., hard rubber hose, 20-foot length	14.00
2-in., " " 25-foot length	17.50
1-in., " " " per foot	.23
1-in., discharge hose, per foot	.13

Write for our special Grocery Catalogue which is issued every two months.

THE T. EATON CO. LIMITED

WINNIPEG CANADA

TAKE CARE OF YOUR STOMACH

Take care of your stomach and your health will take care of itself. That is the golden rule of correct living. Your stomach is the factory of your body. It is there that the raw material we call food is prepared and made ready to be absorbed into your system and turned into blood, brain, bone and sinew. See to it then, and help it when it fails with Mother Seigel's Syrup, the great stomach healer, and you must be well. Mrs. David Martin, Beaver Brook, Albert Co., N.B., writing on January 20, 1908, says:—

"I have used Mother Seigel's Syrup for stomach troubles, and would not be without it on any account. I had much pain after eating, and often could not retain my food. It was thought my complaint was chronic, but the Syrup completely cured me."

MOTHER SEIGEL'S SYRUP IS THE SURE MEANS.

Price 60 cts. per bottle.
Sold everywhere.
A. J. WHITE & Co., LTD., MONTREAL.

British Columbia IRRIGATED FRUIT LANDS with Water Free

Several hundred acres of the finest fruit lands have been put on the market for sale in the Kettle Valley, which have been subdivided into lots of various sizes; many of these front along the river and are beautifully situated. Soil a rich sandy loam, which produces the most magnificent apples, small fruit and vegetables. Very valuable local market only a few miles away in the flourishing mining district of the boundary, where the monthly pay roll is \$250,000. Splendid climate. About 30 miles east of Okanagan Valley. Excellent railway facilities. Prices only \$100 to \$150 per acre. Abundant supply of the finest water and no rent to pay for it. Apply to

D. R. TAIT, Secretary, Manager.
Kettle Valley Irrigated Fruit Lands Co
MIDWAY, B. C.

Winnipeg Agents:
B. M. Tomlinson & Co., Edward Building
Opp. Eaton's, Winnipeg, Man.

POWER LOT (Continued from Page 137)

content, as I trudged home alone in the dark. She, who had been my learned lady, and above all flesh, was mortal after all. How sweet to ecstasy, that thought might be to the mortal who had made her mortal, a man can imagine. But Rob was too slow, and had been too deeply hurt once upon a time by her incisively expressed disapproval of him. Once he would have thrown himself to earth with joy, just to touch the hem of her dress; now she was too far away for him to make the interpretation of her kindness one of common mortal accessibility.

Moreover, he was bound, and she was the lost glory of his dreams afar off in the sweet elysium of the things that "cannot be."
"My lady," said I, tramping on alone, "and may it all be as you wish, and it shall be, if Jim Turbine can help; but it was a proud heart you struck low in Rob Hilton—as proud as it was simple and humble, if I may so speak. And your soulful eyes will have to tell their story more than once before he'll look into them with any hope to find his heaven."

(To be continued)

Questions and Answers

WIDOW'S RIGHTS.

What are a widow's rights to the property of her deceased husband? She is the second wife with an adopted child, and the children of her husband's first wife. What are the children's rights?

Alta. D. T. L.
Ans.—If the husband left no will, his widow is entitled to one-third of his property only, while the children receive the other two-thirds. The administration of the property to be carried out by executors named by the proper authorities. If the husband left a will the property should be divided according to the conditions of the will. The adopted child has not the same property rights as children of the blood.

GROWING RYE.

My land is very sandy and there is also some gravel on it. Grain does not yield very well except rye. What do you think of growing rye? Do saddlers buy the straw, and what do they pay for it?

S. E. Man. G. G. K.
Ans.—In some districts of Manitoba, among the Mennonites, rye is quite extensively grown. The straw is bought by the harness makers in Winnipeg, (The Great West and Winnipeg Saddlery) at about twelve to fifteen dollars a ton at point of shipment. The straw, of course, must be clean and tied in bundles. The Mennonites thresh it with a flail so as not to crush the straw but a machine may be used if it is not set at too high a speed and the sheaf be withdrawn when the head is threshed. Rye straw is very scarce at present and there has not been an over supply for several years. We should think it would be quite a profitable crop to grow on light land but, like other crops, the heavier it is up to its own limit the more profitable it will be. A lot of people think because it is rye the crop must be light, but there are good and poor crops of rye as of other grains.

DIFFICULT CHURNING.

We have had considerable trouble this summer in getting the butter to come after it is broken. We churn somewhere about two to three hours before it will gather, and so cannot ascertain the reason. We use a Daisy churn, also a separator. We have no farrow cows, and cows get plenty of salt; also a half gallon pea meal twice daily. They are on good pasture.

W. J. C.
Ans.—Probably the cream is not ripe enough, or it may be too thin—that is, too much milk in it. If you will obtain a richer cream, by adjusting the outlets of the separator, use a thermometer, see that cream is rich enough; churn at a temperature of 65 degrees, and have the churn not much more than half full, you should have no difficulty in getting butter in thirty to thirty-five minutes.

DISLOCATION OF STIFLE.

I have a colt that is stifled. There seems to be quite an enlargement, and the bone cracks when he walks. I have kept him in all summer, and blistered it, but he does not seem to be getting better. What would be a good blister for it, or what would you advise to do with it? Should he be kept in the stable, and would it be possible to bandage it to keep the stifle in place? How long should one wait after blistering it before greasing it; and how long between blisters?

SUBSCRIBER.
Ans.—Keep him quiet in a level place. In partial dislocations in grown horses sometimes a sharp crack of a whip will startle the animal and the bone will fly into place; in other cases (complete dislocation) it will be necessary to place a rope around the fetlock and have an assistant to draw the limb well forward, the hand being used to press the bone forward and inward, when it will usually fly into place with a sharp click. Once in place, it is best kept there by keeping

the limb well forward by means of a side line. There is no better blister than cantharides (Spanish fly), one part, to clean lard, six parts. Clip the hair off and rub in well, and grease the third day. Repeat the blister after two or three weeks, and again repeat if necessary.

UMBILICAL HERNIA.

I have a colt, three months old, that for the last two months has had a lump on the navel about the size of a hen's egg, and lately it seems to be getting a little larger. The lump seems to be quite soft, as though it were filled with water, and can quite easily be pressed back up into the body. What is the matter with it? What is the cause of it? Is it dangerous? What will cure it?

A SUBSCRIBER.
Ans.—This is hernia, or a mild form of rupture. Unless it gets much worse it may be as well to leave it alone for a few weeks, at least, as sometimes nature works out a cure of this class of trouble. If it continues to grow worse it is advisable to put a truss or pad over the part, supported by a leather or strong linen bandage four or five inches wide around the body. Make a pad about the size of a small deep saucer on the bandage to fit over the rupture to keep it in place. Have the straps and buckles fastened to the bandage so that it can be regulated and fastened to prevent its slipping or shifting back or forwards. Keep this on for three or four weeks, and if it does not effect a cure, have your veterinarian apply a clam.

...
A correspondent at Lewiswyn, Sask., asks two questions, but as he did not observe the rule of signing his name when writing, we have not published the replies. We require the names of correspondents before answering questions. No man should be ashamed of his name, or of seeing his initials in print.

WITCH-HAZEL TO FIND WATER.

1. Do you put any faith in the finding of water by a witch-hazel or apple-wood crotch?
2. If so, why does the crotch act as it does?
3. Why will it act with some people and not with others?

J. S. C.
Ans.—Personally I have had no experience with this method of finding water, but I can see no reason why the witch-hazel or apple-wood crotch should turn and indicate water; consequently I have no confidence in it. On the other hand, I have heard most estimable people declare that they had seen this method indicate correctly the place where water might be found, while only a short distance on either side dry wells had been sunk. It would be hard to convince a man who had had such experience that there was no virtue in the witch-hazel or apple-wood crotch for finding water.

I may add that there is an automatic spring-finder manufactured by W. Mansfield & Co., Liverpool, England. A pamphlet describing the instrument says:—

"The principle on which the instrument works is the measuring of the strength of the electrical currents which are constantly flowing between earth and atmosphere, and which are always strongest in the vicinity of subterranean water courses, the flowing waters of which are charged with electricity to a certain degree. Should a subterranean spring be present under where the instrument has been fixed, the needle commences to move; note being carefully taken of the number of degrees on the scale, and the position of the instrument changed from time to time, the spot where the greatest movement of the needle has been obtained being that where the well-boring should be made."

"If the needle remains stationary, it may be taken for granted that a subterranean spring does not exist under the spot where the instrument is fixed."

The witch-hazel or apple-wood crotch not being a magnetic needle, we cannot attribute its action (?) to the electrical currents which make the needle move in the automatic spring-finder referred to.

O. A. C. Wm. H. Day.

BOVRIL

is indispensable in the camp, and for all impromptu meals. Add a little BOVRIL to your canned meats and soups and note the difference.



BOVRIL sandwiches are nutritious and toothsome.

EE A MOTHER'S EE HAPPY THOUGHT.

A lady writing from Ireland says:—"I went to see my sister's baby, who was very ill indeed. She had been up for nights with him without undressing; he was crying all the time as with some internal pain. The doctor told her he could do nothing except put him in a warm bath, which gave him a little ease for the time being."

"I thought of STEEDMAN'S SOOTHING POWDERS which I used for my own children; and next day I sent some to my sister, when she gave the child half a powder according to directions. For the first time for a fortnight she and the baby, and, in fact, all the household, had a good night's sleep, and the little fellow has continued to improve ever since."

These powders do not contain poison, nor are they a narcotic; but they act gently on the bowels, thus relieving feverish heat and preventing fits, convulsions, etc.

Please notice that the name STEEDMAN is always spelt with EE.



The GASOLINE "Stover" ENGINES For Service

It leads them all. Don't buy till you know all about it. Write for catalog to
STOVER ENGINE WORKS
63 River Street Freeport, Illinois
General Agents for Canada:
THE CHAPIN COMPANY
63 River Street Calgary, Alberta
THE CANADIAN STOVER GASOLINE ENGINE CO.
94 Ocean Street Brandon, Manitoba

SLOAN - DUPLOYAN Shorthand by Mail In 12 Easy Lessons

The most wonderful invention of the age. 12 gold medals awarded. Write for our Free Booklet.

Gibbons Business College, Ltd
SASKATOON, SASK.

For local and long distance telephone equipment—use apparatus made by

The Northern Electric & Mfg. Co. Ltd.
MONTREAL & WINNIPEG

Makers of everything pertaining to a telephone.

A \$5.00 TREATMENT FREE

If you suffer with Catarrh, Deafness, Discharging Ears, Weak Sore Eyes, Opacities, Strains or any disease of the Eye, Ear, Nose or Throat; write us today giving history of your case and we will send you absolutely free to try a month's full treatment of the Absorption Remedies that cure naturally without pain and have been used by over 100,000 persons. Don't delay. The National Eye & Ear Infirmary, Dept. 117 - Des Moines, Ia.

**CATARRH
DEAFNESS
SOFT EYES**

Only the Best

We are our own severest critics. Our experts test every batch of ammunition for accuracy, velocity, penetration and cleanliness.

We test with all makes of arms in competition with ammunition of every rival make. If our tested samples fail to measure up to the others under good and bad conditions, the whole run goes to the scrap heap.

For all makes of arms. Costs one-third to one-fifth less than duty paying ammunition. Our guarantee puts all risk on the Dominion Cartridge Co., Ltd., Montreal.

DOMINION AMMUNITION

PEACH & SONS LACE CURTAINS

Illustrated List & Buyers' Guide. Also latest and most complete Window Drapery Guide in Canadian Currency. Sole Makers and Patentees of "CONTINENT" Curtains. Twice the Wear. No Extra Cost. Latest styles Nets, Muslins, Cretonnes, Blinds, Linen, Ladies' and Gents' Underwear, Tailoring, Boots and Shoes.

POPULAR CANADIAN PARCEL 6 pairs Choice Lace Curtains \$8.40 1 pair each \$4.30 Contains 2 pairs effective Diningroom Curtains, 3 1/2 yds. long, 60 ins. wide. 2 pairs exquisite Drawingroom Curtains, 4 yds. long, 2 yds. wide. 2 pairs choice Bedroom Curtains, 3 yds. long, 43 ins. wide. (White or Ecru) postage paid, Marvellous Value. Reliable Goods. Quite Different. DIRECT FROM THE LOOMS. DIRECT TO YOU. Price Lists may be obtained at the office of this Paper SAML. PEACH & SONS, The Looms, Box 665 NOTTINGHAM, Eng. (Est. 1857.)

Stanfield's Underwear for Women

fits perfectly because each garment is made to fit an individual type of figure.

After it is finished and goes to the laundry for its final washing, each garment is tested on models ranging from 22 to 50 inch bust measurement. Thus the size is determined accurately. And the size as marked is exact, and stays so, because Stanfield's Underwear can't shrink nor stretch.

Your dealer will likely have all sizes and weights. If not, he can get them for you.

STANFIELDS LIMITED - TRURO, N.S.

Well DRILLING & PROSPECTING MACHINES. Best drillers known. Great money earners! LOMIS MACHINE CO., TIFFIN, OHIO.

COWS FAILING TO BREED.

It seems impossible to get my cows with calf. I keep a bull of my own; he was two years old last spring, is healthy and in good trim, yet has not got a cow with calf this summer. He was all right last year, and I had no trouble with my cows. Some of my neighbors last year could not get their cows with calf. They took them to a neighbor who had bought a Shorthorn bull; the cows all came back again. I do not know whether he got a calf or not, but a few of the cows came to my bull after. This summer, as far as I know, I do not think there is a cow in calf in the section. The cows are all healthy and in good trim. I have some two-year-old heifers that are the same as the cows. Do you think it is abortion? If so, what would be the best to do? If not, what would be the cause of it, it being general all over this section?

C. M.

Ans.—If the trouble were due to contagious abortion, the evidences of it would probably be seen in the enlarging udders of dry cows and heifers, and in other indications, and the aborted fetus would be seen in some cases in field or stable. Abortion is often conveyed to a herd of cows by a bull that has been allowed to serve cows that have aborted. The only cure for this malady that has gained any considerable confidence is the tedious task of flushing the cows with disinfectant solutions, and the sheath of the bull with the same, and delaying services for several weeks in the case of cows that have aborted. The difficulty, apart from this, is as likely to be in the cows as in the bull, but it would be advisable to try another bull, as possibly the quickest way out of the dilemma.

All the component parts of the Gourlay piano are so nicely balanced as to make up the perfect whole, the case or outer covering of the Gourlay being in keeping with the sweet, beautiful harmonies of sound it encompasses.

NOTICE TO QUIT

I hired a man on March 10th, 1908, for a year. An agreement was drawn up and wages agreed upon for each month. July 27th, he said he would leave and gave me thirty days notice. How much notice can I claim at this season? Should a month's notice not mean a calendar month?

A. H.

Ans.—Thirty days' notice is usually considered sufficient in such cases, but it is customary to give the notice upon the end or beginning of a month of employment—in this case the 10th, to take effect the following 10th—however we are not sure a court would so award, and would advise settlement.

INJURY TO TAIL.

A ridge appeared last year on heifer's tail, about a foot from the root, but it gave no trouble. About a month ago it reappeared, and extends all around the tail and is quite sore.

W. B.

Ans.—She has had her tail injured in some way. Dress three times daily with a lotion made of 1 oz. laudanum, 1 oz. chloroform, 4 drams acetate of lead, and water to make 8 ozs. If it becomes raw, dress with carbolic acid, 1 part; sweet oil, 25 parts.

COW WITH COUGH.

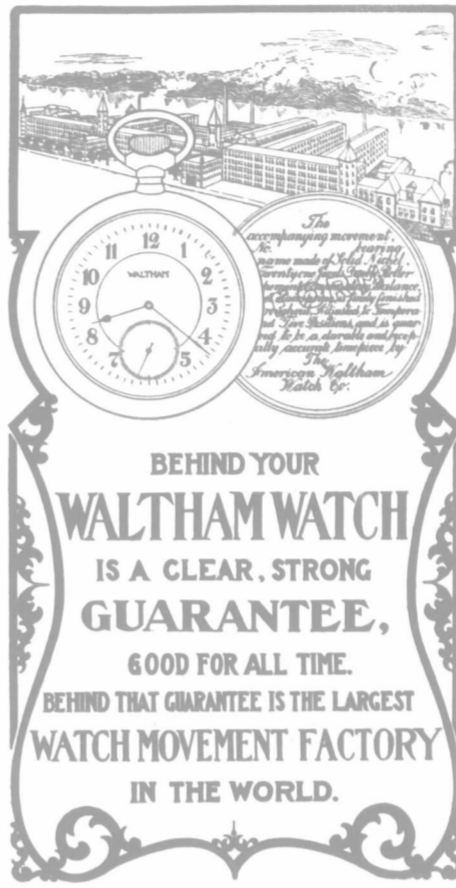
Old cow has had a bad cough for some time. She coughs worse after drinking, or if chased by a dog. Sometimes when coughing she discharges from nostrils. She will calve in October.

W. H. B.

Ans.—The symptoms indicate pulmonary tuberculosis, for which nothing can be done. The only means of making a definite diagnosis is to have her tested with tuberculin by a veterinarian. There is little doubt she is tubercular, and if her udder is diseased her milk will not be healthful.

ABSCESS.

Pregnant mare's leg swelled up last winter when she stood in stable, but the swelling disappeared on exercise. She became lame for a week in the spring, and her leg broke and ran matter at the



The Perfected American Watch

An illustrated book of interesting information in regard to Waltham Watches will be sent free upon request to

The Waltham Watch Company WALTHAM MASS.

Bonded G. G. G. Co. Licensed

FARMERS! TAKE A LOOK!

Wheat Oats Flax Barley

When shipping your grain this season Remember the Farmer's Company. Don't sell your grain on street. Ship it and get the highest price going. We have formed a Claims Department in our office and all claims for shortage, lumber for grain doors, damage to grain in transit, etc., are carefully looked after. Write for any information you may want and ship your grain to—

The Grain Grower's Grain Co., Limited. WINNIPEG MANITOBA

Advertisement for Peter Jansen Company, Grain Commission Winnipeg Man. Includes text: 'When shipping WHEAT', 'We are members of the GRAIN EXCHANGE', 'GRAIN CONSIGNED TO US ENSURES SPEEDY CASH RETURNS', 'PETER JANSEN COMPANY. GRAIN COMMISSION WINNIPEG MAN.' and 'Write for our book "Every Farmer's Form Filler," which we will send free if you state that you saw our Advertisement in the "Farmer's Advocate"'

WANTS AND FOR SALE

Advertisements will be inserted under this heading, such as Farm Property, Help and Situations Wanted and Miscellaneous advertising.

TERMS—Two cents per word per 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.

FARMERS! BUTCHERS!! EVERYBODY!!! Keep your knives and scissors sharp by using the **Black Diamond Sharpener Stone**. Puts keen cutting edge on all tools. Price 25c., postage 7c. Wright Supply Co., P. O. Box 1145, Edmonton, Alta. 22-tf

FOR SALE—We have a number of rebuilt Threshing Engines, Portable and Traction, in first class order, various sizes. We can sell much below their value. Write for particulars. The John Abell Eng. & Mach. Works Co., Limited, 760 Main St., Winnipeg. P. O. Box 481.

WANTED—Young men for Firemen and Brakemen, instruct you at home by mail. We assist in securing employment. For free information send stamp to National Railway Training School Inc., 376 Robert St., (Room 176), St. Paul, Minn.

WANTED—Stockmen and others to get their Printing done by The **FARMER'S ADVOCATE**. Mail Order Job Printing Department. Prices Quoted. Sample sent on application. Address Mail Order Dept. The **FARMER'S ADVOCATE**, Winnipeg.

WE WANT YOU to mail us your watch for repair and we will tell you what the cost will be. We are specialists in watch repairing. The Manitoba Watch & Jewelry Co., 275 Garry St., Winnipeg, Man. T. F.

\$7000—Poultry Ranch for sale. Address Chas. Durbal, Spokane, Washington.

FOR SALE—Cattle and Hay Ranch, land, buildings, stock and implements, endless hay and pasture—a snap. John Sieffert, Winnipegosis, Manitoba. 19-8

FEW SECRET FORMULAS—Invaluable to stock raisers. \$3.00 will give you a chance in a life time. Been used by innumerable prize winning exhibitors giving excellent results. R. S. Anderson, High River, Alberta. 19-8

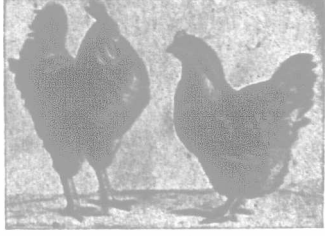
MEN WANTED, good vision, under 30, over 145 pounds, for brakemen and firemen on all railroads. Experience unnecessary; pay \$75 to \$100 monthly; promoted to conductor or engineer; \$150 to \$200. Railway Association, Room 163-227 Monroe Street, Brooklyn, N.Y. Distance is no bar. Position guaranteed competent men. 22-tf

Lost, Strayed or Impounded

This department is for the benefit of paid-up subscribers to the **FARMER'S ADVOCATE**, each of whom is entitled to one free insertion of a notice not exceeding five lines. Notices exceeding five lines will be charged two cents per word for each additional word, payable in advance.

STRAYED—On July 13, from Lot 23, Kildonan, two mile road (McPhillips street), a brown mare six years old, with halter and heavy rope on neck, left hind leg branded figure 2. Also colt about 2 weeks old, brown, with black spot on forehead. Any information leading to recovery of same will be rewarded at above address, or 120 Atkins St., Winnipeg. 22-tf

Have
You
Poultry



or Eggs
For
Sale?

Your condensed advt. can be placed in our Poultry and Egg column for 2 cents per word each insertion and your message can thus be carried to over 20,000 Western farm homes.

Give it a Trial Results are Sure

POULTRY AND EGGS

Rates—Two cents per word each insertion. Cash with order. No advertisement taken under fifty cents.

RHODE ISLAND REDS and Mammoth Buff Rocks, nine entries, eight prizes Manitoba's largest shows, 1908. Eggs \$1.00 up. Fine Red Cockerels, \$1.50. J. Buchanan, Oakville Man. T. F.

POULTRY MARKET

CRATES SUPPLIED
BEST PRICES FOR ALL VARIETIES
LARGEST BUYERS IN WESTERN CANADA
THE W. J. GUEST FISH CO. LTD., WINNIPEG

BREEDERS' DIRECTORY

Breeder's name, post office address, class of stock kept, will be inserted under this heading at \$4.00 per line per year. Terms cash strictly in advance. No card to be less than two lines or more than three lines.

BANTING STOCK FARM—Clydesdales, Shorthorns, Tamworths. T. E. M. Banting, proprietor, Wawanesa, Man. Phone 85.

POPULAR PARK HEREFORDS, A number of young cows, heifers, and bulls now for sale from this famous herd at low prices. Berkshire Pigs. J. E. Marples, Deleau, Man. tf

A. & J. MORRISON, Glen Ross Farm, Homewood, Man., Clydesdales and Shorthorns. 13-11

GEO. SWALES, Holmfild, Man., breeder of Red Polled cattle. Young stock for sale.

POLAND CHINA PIGS. Young stock for sale. Stringency prices. W. J. Boughen, Valley River, Man.

A. J. MACKAY, Wa-Wa-Dell Farm, MacDonald Man., breeder of Shorthorn Cattle and Leicester sheep.

MERRYFIELD FARM, Fairview, Thos. Brooks, breeder of Clydesdales and Shorthorns. Box 134, Pense, Sask. 30-10

STRONSA STOCK FARM—Well-bred and carefully selected Shorthorns and Berkshires. David Allison, Roland, Man. 13-11

SHEPHERD PONIES and Hereford cattle, finest in Canada, also Berkshire pigs. J. E. Marples, Poplar Park Farm, Deleau, Man. tf

BERKSHIRES.—Gold Medal Herd, Neepawa, Manitoba. Address J. A. McGill. 24-4

JOHN GARDHOUSE & SONS, Highfield, P. O. Ont.—Breeder of Scotch and Scotch-topped Shorthorns, Lincoln and Leicester sheep and horses. T. F.

James A. Colvin, Willow Dell Farm, Sedgewick, Alta. Breeder of Shorthorns and Berkshires.

T. E. WALLACE, Portage La Prairie, Man. Breeding Shorthorns of various ages for sale.

JAS. BRAY, Portage la Prairie. Choice Hereford cattle and Berkshire swine for sale. 20-t

JAMES WILSON, Grand View Stock Farm, Innisfail, Alta.,—Breeder of Shorthorns. 13-6

R. A. & J. A. WAIT, Salem, Elora Station, G. T. and C. N. R.—Champion herd of Toronto and New York State Fairs, 1905, also Grand Champion females, including both senior and junior Honors at both fairs. Write your wants. 13-12

BROWNE BROS., Ellisboro, Assa.—Breeders of Polled Angus cattle and Berkshire swine. Stock of both for sale. 13-3

WOODMERE FARM,—Clydesdales, Shorthorns and Yorkshires. Pigs at 8 weeks, f. o. b. Neepawa, \$8 apiece. S. Benson. 24-4

GEORGE LITTLE, Neepawa, Man.—Shorthorns of best Scotch type. 24-4

CLYDESDALES.—A choice collection of breeding stock always available. Jas. Burnett, Napinka, Man. 30-1

D. SMITH, Gladstone, Man., Shires, Jerseys and Shorthorns, Yorkshire Hogs and Pekin Ducks.

BEN MORE, reg. Jersey herd—P. W. Reid, proprietor. Enquiries solicited. Hill P. O Vancouver Is., B. C.

H. C. GRAHAM, Kitscoty, Alta.—Shorthorns—Scotch Collies and Yorkshires, for sale. 1-4-09

A. D. McDONALD, Sunnyside Farm, Napinka, Man. Berkshires and Yorkshires from prize winning stock; all ages; write for particulars.

FOSTER AND LYLE, Lyleton, Man.—Imported and homebred Clydesdales and Shorthorns. Correspondence solicited. 15-7

pastern joint. I bathed it three times daily and it healed, but it still swells when she stands, and the swelling does not all disappear on exercise. R. W.

Ans.—She received a bruise in some way, and this caused an abscess, from which the tissues became thickened. Get a liniment made of 4 drams each of iodine and iodide of potassium, and 4 ozs. each, glycerine and alcohol. Rub well with this every morning. Feed lightly and give regular exercise, or turn on grass. Some horses are predisposed to thickening of the legs when standing idle, and it is not possible to prevent it in some cases.

ORCHITIS.

Bull's scrotum and sheath became swollen and sore about a week ago. He had some difficulty in urinating. This trouble has passed, but the swelling remains. How long will it be before he is fit for service? J. C. A.

Ans.—Place him in a comfortable box stall and exclude flies. Give him a purgative of 2 lbs. Epsom salts and 1 oz. ginger. Follow up with 2 drams nitrate of potassium three times daily for four or five days. Suspend scrotum in suspensory bandage and apply heat, either by bathing with hot water or poulticing. Apply several times daily a lotion made of acetate of lead, 1 oz.; chloroform, 2 ozs.; tincture of opium, 2 ozs., and water to make a pint. If enlargement and hardness remains after inflammation ceases, give 1 dram iodide of potassium three times daily (if this checks appetite reduce the dose to 40 grains), and rub the scrotum well, once daily with an ointment made of 2 drams each, iodine and iodide of potassium, mixed with 2 ozs. vaseline. He should not be bred until recovery is complete, and the time varies in different cases.

REGISTERING JERSEYS

Will the Canadian Jersey cattle club admit for registration, as a pure bred, a cow that has been graded up; and how many crosses are required? L. A. D.

Ans.—No. All animals admitted to the Canadian Jersey cattle clubs register must be descended from animals eligible for registration in recognized records. This is what is commonly called a closed book. Other breeds have adopted similar rules, but, as for ourselves, we believe it is in the best interests of a breed to arrange for the admission to registry of graded up stock.

LEAKING MILK.

Can you let me know of any cure, temporary or permanent, for a cow that leaks her milk? Cow has been in milk five weeks; did not leak for the first three, but now does very badly in hind quarters. A. S.

Ans.—We know of no sure cure, but would suggest trying, as a temporary measure, the experiment of soaking the points of the teats in alum water for a minute after milking, as possibly the astringent might contract the opening sufficiently to prevent the trouble. It is not likely that much milk fat escapes in that way, and the trouble will probably be less noticeable after the cow has been in lactation a few weeks. We are told by scientists that the first few streams of milk are full of injurious bacteria, and should not go into the pail for dairy purposes. If this be correct, the leaking cow has the advantage.

SWOLLEN TENDON SHEATH

Horse, five years old has a soft growth on the outside of hind leg two or three inches long, about one inch in height above fetlock. He is very fine in the bone. Apparently he inherits a poor constitution, as the hocks are not perfect, and he was laid up all winter with a bad shoulder. What is the growth and what is the treatment? He is not lame but stumbles. H. G. B. C.

Ans.—The swelling is an enlargement of the sheath of the tendon. The sheath has filled to an abnormal extent with the lubricating fluid these sheaths contain, probably the result of a sprain. If the enlargement is of recent origin, the proper treatment would be the application of cold water bandages, put on sufficiently tight to cause slight pressure immediately over the swelling. Keep the leg well bandaged while the horse is in the stable, removing bandage when the animal is taken out to work or exercise. If the condition is of long standing it should be well blistered two or three times. For blistering use powdered cantharides 1 dram, biniodide of mercury, 1 dram, lard 1 1/2 ounces; clip off the hair over the swelling and well rub in the ointment for fifteen minutes. Tie his head up for forty-eight hours so that he cannot reach the blistered surface with his mouth. Wash off with warm water and soap, smear with vaseline every three days, then turn him out to pasture.

THE WINGOLD CATALOGUE

Contains Stoves of EVERY KIND. Sold Direct to the User at Lowest Prices. Our new line of Heating and Cooking Stoves, for all kinds of fuel, made of new iron, in attractive patterns, with every known improvement and up-to-date feature, are ready for immediate shipment at low prices, saving you one-third to one-half from the prices that others ask.

The Best Stoves Made. Fuel Savers and Do Perfect Work

FULLY GUARANTEED

In Every Respect



Sheet Steel lined \$1.75

Hard or soft Coal \$9.50

Buy no stove until you have seen our wonderful splendid patterns of economical stoves, costing little to buy and so constructed as to use the least possible fuel; all told about

in our **New Catalogue**

We guarantee prompt and safe delivery and agree to take the stove back, pay freight both ways and return your money if you are not more than pleased with your purchase. Save \$5 to \$10 on every purchase. Buy direct and save the dealer's profit. Every stove guaranteed and 30 days' Free Trial given.

Write for New Catalogue, please.

The WINGOLD STOVE CO. Ltd., Winnipeg
245 Notre Dame Ave., Dept. F. A.

RAILROADING WANTED FIREMEN AND BRAKEMEN for all Railroads. Experience unnecessary. Firemen \$100, become Engineers and earn \$200 monthly. Brakemen \$75, become Name position preferred. RAILWAY ASSOCIATION, Room 163, 227 Monroe St., Brooklyn, N.Y. Distance is no bar. Positions guaranteed competent men.



Your Little Girl Can Do The Washing WITH THE "New Century" Washing Machine

It's far easier than churning or running a sewing machine. No rubbing—no work. Just turn the handle for 5 minutes and the clothes are washed—snowy white. Has a strong wringer stand that allows the water to drain right into the tub. Price delivered at any railway station in Ontario or Quebec—\$9.50. Our booklet tells how to turn wash day into child's play. Write for free copy. 33

Bowersell Mfg. Co. Limited, Hamilton, Ont.

Somerville Steam Marble and Granite Works
Rosser Ave., BRANDON, Man.
SPRING, 1908



SCOTCH GRANITES

Our stock of Marble and Granite is the largest in Western Canada and you will have no difficulty in selecting just what you want. The goods which we turn out are of the highest grade as regards material and workmanship. Send for catalog.

Remember — BRANDON



IT DRIES THEM UP.

COMMON SENSE EXTERMINATOR

Kills Roaches, Bed-bugs, Rats and Mice.

All Dealers and 377 Queen St. W., Toronto, Ontario.

Write for Testimonials.



Bog Spavin

Cure the lameness and remove the blemish without scarring the horse—have the part looking just as it did before the blemish came.

Fleming's Spavin Cure (Liquid) is a special remedy for soft and semi-solid blemishes—Bog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be imitated. Easy to use, only a little required, and your money back if it ever fails.

Fleming's Vest-Pocket Veterinary Adviser describes and illustrates all kinds of blemishes, and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write.

FLEMING BROS., Chemists,
45 Church Street, Toronto, Ont.

GOSSIP

TAKING CARE OF THE HARNESS.

"There is nothing like leather." But there is nothing like knowing how to keep your leather goods in fine condition, too. Leather is composed of a mass of fine tendrils, intimately interlocked and entwined. When in good, pliable condition, each tendril is capable of much stretching. If allowed to become dry and hard, when the leather is subjected to a severe pull, the tendrils break instead of stretching. But this does not mean that leather boots or harness should be kept soaked with oil or dressing. Elbow grease applied in quantity is better. "All dressings should be applied sparingly" is the sound advice of a big saddlery concern. Black oil should always be used on black harness and not neatsfoot oil, as the latter will draw out the black dye and leave the harness brown. The black harness fats now on the market make excellent farm harness dressing. They contain the "nourishment" necessary for keeping the harness in good order. But first, all dirt should be washed off with luke warm water and ordinary soap. The black fat should then be applied with a cloth, given a short time to penetrate the leather and then rubbed dry with another cloth. Some make the mistake of oiling without unbuckling the harness. The parts that need nourishment most are under the buckles where the metal causes hardness and brittleness. If people would vary the holes of the harness occasionally it would last much longer.

An objection to neatsfoot oil is that it inclines to wash off the beeswax from the stitches, leaving the bare thread, which then soon breaks.

A Gourlay piano in the music-room denotes musical culture throughout the home just as surely as you can estimate the intellectual aspirations in the home by the class of books in the library.

GERMANS TAKING TO DOG MEAT.

Not only is the flesh of horses and mules eaten in Germany almost as much as in France, but also there is a growing consumption of dog meat and in some localities dogs are fattened for market and there are several special places for slaughtering them. The use of dog meat is said to have had its origin in Saxony and there are statistics going as far back as 1869. But on June 3, 1900, a law was passed which authorized the sale and consumption of dog meat all over the German Empire.

The taste for dog meat is reported as extending throughout Silesia and into Bavaria. In Munich dogs are regularly slaughtered and the flesh is sold by low-grade butchers. The Germans, however, declare that they do not buy it in that region and that the demand is confined to the lowest class of Italian laborers. No dog flesh is sold in Berlin as yet.

THE FIRST SCIENTIFIC FARMER

The first scientific farmer, so far as the records show, was one Jethro Tull, an Englishman, who wrote and labored in the cause of agriculture between the years 1680-1740.

Tull claimed that, since it was from the soil that plants derived their nourishment, the finer the condition of the soil the better would be the results to the farmer.

He also insisted upon deep plowing to give moisture to the plant's roots, and upon frequency of cultivation to keep the surface open to the influence of the rays of the sun.

In a word, it was the Englishman who first strove to impress upon men's minds the idea that farming was a science, and that in order to get good crops, agriculture needed to be carried out upon scientific principles.

Tull furthermore believed that there was no reason why agriculture should be carried on almost wholly by brute strength. He believed in saving as much of man's labor and strength as

possible, and he set himself to the task of finding ways and means of doing farm work that should be an improvement upon the old muscle-wearing methods.

His thinking took shape in the invention of a horse hoe, a grain drill and a threshing machine—not much of a threshing machine, it is true, as compared with those of to-day, but still a great improvement upon the old-time flail.

The impetus given to scientific farming by Tull started the movement which was later on taken up with enthusiasm by Arthur Young, the correspondent and friend of Washington.

Young did a great deal for agriculture. By his pen, by travel and painstaking investigation and experiment, and last but not least, by a series of bright and useful inventions, he did more for the ancient art than any man of his day and generation.

With the birth of modern chemistry, and through the writings and experiments of such men as Sir Humphrey Davy, Thomas Jefferson, Justus von Liebig and others, agriculture began to look up as it never had before, and to-day, as a result of those men's labors, the farmer is beginning for the first time since farming began, to get from the earth something like a fair return for his toil.

A SIPHON FOR THE BABY

A new method has been discovered whereby milk may be kept perfectly fresh for many months, the process consisting merely in charging it with carbonic acid gas under pressure, and keeping it thereafter bottled in a cool place until it is wanted for use.

For this purpose newly pasteurized or clean, fresh milk is taken and charged with the gas in tanks, exactly as water is loaded with carbon dioxide in establishments which put up that innocent fluid for sale at "soda" counters. From the tank it is transferred to syphon bottles, in which it is held under a pressure of about seventy-five pounds.

The bottles should be stored in some place where the temperature is not higher than sixty degrees. If preferred, they may be kept in the household refrigerator. Though the cream separates in the flasks, it may be thoroughly re-mixed by a little shaking as the milk comes from the bottle. It comes out as a foamy mass, and has a slightly acid, pleasant flavor.

Kept in the manner above described, carbonated milk will remain in excellent condition for at least four or five months. Not only does it afford an agreeable beverage, but it is likely to prove a valuable food for invalids and children who are not able to digest ordinary milk easily. Its possibilities have been developed through experiments.

The experts of New York State Agricultural Station engaged in this work state that, in order to prepare the product successfully, the milk should be drawn as clean as possible, and promptly cooled below forty-five degrees Fahrenheit. All vessels with which it comes into contact, from milking to bottling, should be carefully sterilized before using. It should be carbonated within a few hours; or, if this cannot be done, it should be pasteurized before being charged and bottled.


On July 13th the citizens of Guelph, Ont., declared by a small vote of 342 against 236 in favor of a bylaw for the raising of \$10,000 and the giving of a site on the market square towards a building to be erected by the Provincial Government for the enlargement of the present accommodation of the Winter Fair. It is understood that the Government will be expected to enter into an agreement to continue the Fair at Guelph for a period of years, probably ten. The present agreement has still two years to run. The architect of the Department of Public Works has been working on the plans for the new building, and it is hoped to have it ready for occupation during this winter's exhibition. Matters have moved rather slowly up to date, but now that the by-law is passed the authorities are looking for better despatch.

Burdock Blood Bitters

Has been in use for over 30 years, and is considered by all who have used it to be the best medicine for

**BAD BLOOD
BAD BOWELS
BAD BREATH**

It will thoroughly renovate the entire system, and make the blood pure, rich and red—curing Boils, Pimples, Eczema, Ringworm, and all blood and skin diseases.



Lump Jaw

The first remedy to cure Lump Jaw was Fleming's Lump Jaw Cure and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in Fleming's Vest-Pocket Veterinary Adviser. Most complete veterinary book ever printed to be given away. Durable bound, indexed and illustrated. Write us for a free copy. FLEMING BROS., Chemists, 45 Church Street, Toronto, Ont.

Not the lowest-priced; but the lowest-cost.

Genasco Ready Roofing

Saves repair-money and time and trouble. Made of Trinidad Lake Asphalt, the greatest weatherproofer in existence.

Gives you longer roof-protection than any other ready roofing at any price.

Mineral or smooth surface. Insist on Genasco. Look for the trade-mark. Write for free Book 77 and samples.

THE BARBER ASPHALT PAVING COMPANY



Largest producers of asphalt, and largest manufacturers of ready roofing in the world.

PHILADELPHIA
New York
San Francisco Chicago

Samples and prices of Genasco Ready Roofing to be had by applying to the J. H. Ashdown Hardware Co. Ltd.

SOLE DISTRIBUTING AGENTS
WINNIPEG



BELLS

Memorial Bells a Specialty.
Bobbins Bell Foundry Co., Baltimore, Md., U.S.A.

IT PAYS TO BORROW MONEY TO BUY A MANURE SPREADER

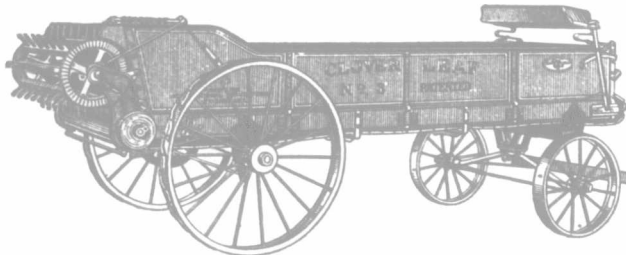
IF you do not have to borrow, so much the better. But in any event have a spreader of your own this year. The increase in the first crop through the use of your spreader will more than pay the principal and interest. It will cut down the labor of manure spreading. It will make the work agreeable. There will be no waste of manure. You will have a more fertile soil for future crops.

A manure spreader should be considered as a permanent investment, not as a running expense.

For the only way you can get all the value out of the farm manure every year is to use a spreader. There is absolutely no comparison between results produced by hand spreading and machine spreading.

The Cleverleaf Endless Apron Spreader
The Corn King Return Apron Spreader

CANADIAN BRANCHES: Calgary, Hamilton, London, Montreal, Ottawa, Regina, St. John, Winnipeg
INTERNATIONAL HARVESTER COMPANY OF AMERICA, Chicago, U. S. A.
(Incorporated)



You will make no mistake in buying either one of these right working, durable I. H. C. spreaders. I. H. C. spreaders are not built excessively heavy, but they have the strength required by such machines. The draft is as light as possible in any spreader.

The machines differ in certain features, but each have good strong broad tires, simple and strong driving parts, are easily and conveniently controlled, and do first-class work with any kind of manure.

Any I. H. C. local agent will supply catalogs and explain the distinguishing features of each machine, or show you a machine at work so that you can choose wisely.

If you prefer, write direct to our branch house nearest you for any information desired.

ALCOHOL AS A SOURCE OF POWER.

One distinct advantage of alcohol as a source of power is that it can be made on the spot—that is to say, wherever it may be wanted for fuel purposes. Furthermore, it can be manufactured most cheaply in the tropics, where coal and petroleum are lacking. It will undoubtedly be produced in immense quantities in hot latitudes from the cassava—a plant with big tuberous roots, which yields several times as much starch as does the common potato. There are, however, many other materials, such as molasses and sugar cane stalks, which are available in warm countries for alcohol making.

Recently, some very interesting tests were made by the technologic branch of the U. S. geological survey, with alcohol in a slightly-modified gasoline engine, alcohol being used instead of gasoline. These tests have proved that in an engine of the kind thus modified, alcohol may be so utilized as to give it as high a fuel efficiency as gasoline. Hitherto, it has been recognized as possessing only about one-half of the efficiency of gasoline.

Every gallon of petroleum taken out of the earth signifies a lessening of the available supply by just that much. With alcohol, the case is exactly opposite, because the more of it people use the greater will be the production of it. Furthermore, it is going steadily down in price, as methods of making it are improved, while mineral oil is sure to go up. If, as is the case, alcohol is now manufactured in Cuba, and sold for eight cents a gallon, it can be made in other tropical countries for as little and should not cost very much more in the United States, if the Congress chose to remove the tariff from it.

When one reads in the newspapers about the "petrol" which is commonly used in Europe for running automobiles, one should not imagine that the stuff referred to is petroleum. It is, as a matter of fact, benzol, which is a by-product of the coking of coal. The German Government has been making experiments with a view to utilizing this "petrol" as fuel for warships. But the same objection applies to it—the available supply must give out before very long. Not so with alcohol, the production of which can be augmented to any extent, and which seems destined, say the experts, to obtain recognition as universal fuel.

Alcohol is, strictly speaking, an agricultural fuel. It is a farm product—as much so as wheat or corn. The possibilities of its usefulness seem well-nigh unlimited; but, so far as its maritime employment is concerned, one does not need to look very far ahead to see at every sea port a supply station, with gigantic tanks containing alcohol for sale to ships. When provision of this kind is made, all of the arduous labor of coaling will be done away with, and vessels needing a fresh supply of fuel will have only to steam into a harbor, connect with a tank through the medium of a pipe, and fill up according to their needs.

ELECTRICITY IN AGRICULTURE.

Sir Oliver Lodge is to be congratulated on having again called the attention of practical men to a valuable agricultural principle that was in danger of being ignored. It has

been proved experimentally beyond all possibility of dispute that crops are able to be very largely increased by charging them with electricity in the course of their growth. To do this is practicable on a large scale, at any rate in England. The field to be treated is covered with a number of wires stretched across it by telegraph poles. The wires are connected up to a dynamo driven by a small power engine. The electric current thus produced is transformed from a low to a high potential, and the plants become electrified oppositely to the wires. As the wires have a very small electrical capacity, it is practicable to electrify them to a very high degree with a very small expenditure of electricity. The figures quoted by Sir Oliver Lodge show that the crops increase under this treatment by as much as 30 and 40 per cent., and in the case of wheat produce a more highly-priced flour. The same principle has been applied successfully to strawberries, cucumbers, raspberries, beans, cabbages, celery, tomatoes, beetroot, and carrots, so that it may be said to be of general application. The experiments were actually conducted by Mr. Lionel Lodge, Mr. Newman, and Mr. Bomford. The theoretical knowledge of the principle dates back to 1746, and its development has been hitherto prevented only by the cost of electrical apparatus. The cause and mechanism of this increased yield remains at present obscure, though Berthelot has suggested that the process acts by enabling the plants to utilize the atmospheric nitrogen.—*Standard of Empire.*

A lawyer once asked a man who had at various times sat on several juries, "Who influenced you most—the lawyers, the witnesses, or the judge?" He expected to get some useful and interesting information from so inexperienced a juror. This was the man's reply: "I tell you, sir, 'ow I makes up my mind. I'm a plain man, and a reasonin' man, and I ain't influenced by anything the lawyers say, nor by what the witnesses say, nor by what the judge says. I just looks at the man in the docks and I says, 'If he ain't done nothing, why's he there?' And I brings 'em all in guilty."

Durable and artistic construction gives permanence to the clear singing tone and the perfect action of the Gourlay piano. It is an instrument that retains its musical qualities throughout long years of constant use.

STACKING GRAIN

After a person has stacked grain for a number of years he usually finds a method of his own which differs more or less from those of others. As a general proposition, however, stacking is carried on much in the same manner throughout the grain growing sections of this western country, although we see a vast difference in the way the stacks are built. Some shed water to perfection while others seem to soak in every drop that falls. It is a well known fact that large quantities of grain are annually lost on account of poor stacking and many of our farmers have a serious jolt in this respect each season. The first thing to be considered is the location for the stacks. It is scarcely necessary to say that a high place should be selected although one frequently sees stacks erected on low spots. To begin a stack build a round shock on the spot intended to be the center of the stack. Set these bundles as nearly perpendicular as possible. Continue to set bundles around this center, one row as a time, giving each row a trifle greater slant than the one preceding and let the top of each bundle point directly toward the center of the stack. After sufficient rows of bundles have been set up in the manner indicated and the circumference of the butt is large enough, the outside row will be found quite slanting. A row of bundles should then be laid on the flat

The Royal Grain Co., Limited

GRAIN COMMISSION MERCHANTS
GRAIN EXCHANGE - - WINNIPEG

FARMERS—We will make you a liberal cash advance on your car lots and guarantee you a square deal.

SHIP—your GRAIN to our advice and make drafts on us through your Bank with bill of lading attached.

KINGSTON TORONTO WINNIPEG

Jas. Richardson & Sons

HIGHEST PRICES PAID FOR ALL KINDS OF
GRAIN

In carload lots. Special attention paid to low grade samples, Wheat, Oats, Barley, Flax. Write for shipping instructions and price circulars.

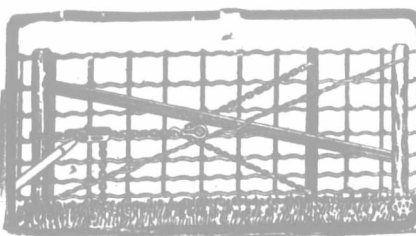
Consign Your Grain To Donald Morrison & Co.

Grain Exchange Winnipeg, Man.

Grain Commission Over 24 years experience in Grain Commission Business. Prompt reliable work at all times.
Wheat
Oats All enquiries will be given careful and immediate attention.
Barley
Flax

DON'T BUY GASOLINE ENGINES UNTIL YOU INVESTIGATE "THE MASTER WORKMAN,"

alcohol engine, superior to any one-cylinder engine; revolutionizing power. Its weight and bulk are half that of single cylinder engines, with greater durability. Costs Less to Buy—Less to Run. Quickly, easily started. Vibration practically overcome. Cheaply mounted on any wagon. It is a combination portable, stationary or traction engine. SEND FOR CATALOGUE. THE TEMPLE PUMP CO., Mrs. Meagher and 15th Sts., Chicago. THIS IS OUR FIFTY-FIFTH YEAR.



HOW TO BUILD A GOOD FENCE

Everyone intending fence building should send for our folder on Erecting Fences. It's full of valuable information on fence building; tells how to erect woven wire fencing quickly and substantially, describes the manufacture of fence wire and has an article quoted from bulletin of U. S. Dept. of Agriculture on concrete post making, showing how these durable posts can be economically made at home. Don't fail to write for a copy. It's free.

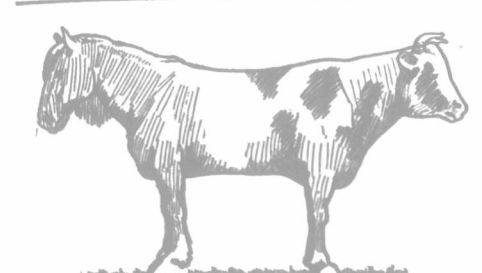
THE BANWELL HOXIE WIRE FENCE CO., Ltd.
Dept. M Hamilton, Ontario. Winnipeg, Manitoba.



Horse Owners! Use
GOMBAULT'S
Caustic
Balsam



A Safe, Speedy, and Painless Cure
 The safest, Best BLISTER ever used. Taken the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUSTERY OR FIRING. Impossible to produce scar or blemish. 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.



The Stock-Owners' Medicine Chest
 What you have been wanting for years

This chest contains:
 1 Colic Draught
 6 Cough Powders
 6 Diuretic Powders
 1 Wound Lotion
 6 Diarrhoea Draughts
 12 Condition Powders

Full instructions and veterinary advice enclosed. For \$3.00 you get drugs that would cost you \$10.00 in the ordinary way. Send for one of our medicine chests at once, you may have a sick horse to-morrow and by spending \$3.00 now may save \$300.00 in a week.

THE
Stock-Owners' Veterinary Dispensary
 249 Jarvis St., Toronto
 Agents wanted everywhere.

ABSORBINE

Removes Bursal Enlargements, Thickened Tissues, Infiltrated Parts, and any Puff or Swelling. Cures Lameness, Allays Pain without laying the horse up. Does not blister, stain or remove the hair. \$2.00 a bottle, delivered. Pamphlet 1-C free.

ABSORBINE, J.R., for manking, \$1.00 bottle. Cures Synovitis, Weeping Sheath Strains, Gouty or Rheumatic Deposits, reduces Varicose Veins, Varicocele, Hydrocele, Allays pain. Book free. Genuine mfd. only by

W. F. YOUNG, P.D.F., 46 Monmouth St., Springfield, Mass.
LYMAN SONS & CO., Montreal, Canadian Agents.
 Also furnished by Martin Sole & Wynne Co., Winnipeg
 The National Drug & Chemical Co., Winnipeg and Calgary
 and Henderson Bros. Co. Ltd., Vancouver.

CORRUGATED METAL ROOFING & SIDING

IT WILL PAY YOU TO SEND TODAY FOR OUR BARN BOOKLET.

"SHOULD LAST FIFTY YEARS" says Mr. R. Nagle, of Mount Brydges, Ont. about our Corrugated Sheet Roofing. He adds: "I think it is as near perfection as anything I ever saw."

Our "Acorn Quality" Corrugated Sheet Roofing and Siding makes an absolutely lightning-proof barn construction, besides being quickly put on. Our Galvanized Sheets show no signs of wear, even on our earliest work years ago. Such Roofing prevents all moisture or dampness.

Clare & Brockport, Winnipeg
 ROOFERS to the FARMERS OF CANADA

HUDSON'S BAY COMPANY

LEASING OF LANDS

The company is prepared to lease for hay and grazing purposes all reserved quarter or half sections. For particulars apply the Land Department Hudson's Bay Company, Winnipeg.

sides with the long end of the butts upward clear around the stack and far enough out to well cover the tops of the last row set up, always bearing in mind that the head of every bundle that goes into the stack should point directly toward its center. The second row should be laid with the butts reaching midway between the tops and the bands of the bundles of the first row. The third row may be laid in a similar manner or as some choose it may lap a little more; that is, allow the butt of the third row to extend to the bands of the second row, etc. The succeeding rows to the center may lap to the ends. Start another layer and proceed as before. In order to build a good stack the center must be kept full. It is a good plan also to let the weight of the stacker come on each bundle, except on those in the outside tiers, so as to firm them and cause them to settle evenly. The first three or four tiers should not be built out, but the outside of the stack at that place should be perpendicular like a brick wall. After that each outside layer should extend slightly farther out than the one beneath it, until a height of seven or eight feet be secured to make the bulge. It is not necessary to have the middle of the butt very steep. It should, however, remain well rounded at all times. In case it is not steep enough, each row of bundles may be made to lap to the bands or farther. This will raise the middle. If it is too full the remedy is lapping the bundles less. The stacker, especially if he is not an expert, should get off the stack after each load has been put on and carefully examine it to see if the stack has remained true. Whenever the butt of a stack has been thoroughly built there is very little danger of its getting out of shape as it settles.

When the top is started good work counts for much. The first outside row of bundles immediately above the bulge should have a greater slant than the rows underneath it. To secure this the last layers of the butt should be laid in such manner that the first outside row of the top may rest on three rows of bundles. That is to say, the last rows of the bundles should be laid as follows: The second row should just lap over the tops of the first row and the third row should lap midway between the band and the butt of the second row. In this way it will be seen that the first row of the bundles of the top will lay with the tops on the second and the third row of butts immediately underneath and thus obtain quite a steep slant. When a stack is being drawn in, the long side of the butts should be turned down instead of up as mentioned, when the bulge is being constructed. The top is built the same as the butt with the exception that the middle should be more steep.

It is easier to stack with a fork than by hand, which is the old way and the work is easier on the stacker as well as on the pitcher. By those who are expert with a fork it is claimed that a much better stack can be constructed with than without it. Stacking with a fork is also easier on the grain than stacking by hand. After the stack has been topped out a pointed stick from six to eight feet long should be pressed into the top to hold the bundles in place. If desired, four weights may be tied over the top in addition.

Every farmer should learn to stack his own grain as it is one of the very important jobs on the farm. Professional stackers can usually be secured but they are not always what they claim themselves to be. Too many farmers have had serious experience along this line. Most of these stackers know how to charge for their services but not all know how to build the kind of stacks that will shed rain as they should. Bear in mind that grain kept in a well constructed stack for from one to two months improves the quality. If it is threshed out of the shock it sweats in the bin; if stacked it sweats under most favorable conditions.—Field and Farm.

It is owing to the high musical ideals of the men back of the Gourlay that it has attained such a high state of proficiency. The conscientious care entering into every part of its construction has produced what is acknowledged to be a piano of the highest merit.

Amatite ROOFING

About all you need is a hammer

IN making Amatite our endeavor has been to produce a ready roofing that would not require painting or repairs and that anyone could lay without special tools.

We have succeeded beyond our expectations.

Send for a Free Sample of Amatite and examine it carefully. Note the kind and quality of materials used—how they are put together, and, lastly, the top surface of real mineral matter which does away entirely with the need of painting.

It is a complete roofing when it reaches you.

All the labor required you can do yourself and nails and liquid cement are furnished free. There are no extras required and no special tools. About all you need is a hammer.

Once Amatite is on your roof it requires no further attention.

If you are building or contemplating a new roof it will pay you to send for a sample of Amatite. We will send same free with descriptive Booklet on request to our nearest office.


Paterson Manufacturing Co., Limited
 Toronto Montreal Winnipeg
 St. John, N. B. Halifax, N. S.



SORE SHOULDERS

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

WINGATE CHEMICAL CO. LTD.,
 Canadian Distributors, 645 Notre Dame St., W. Montreal, Canada.



Glendening Bros., Harding, Man.

RED POLLED CATTLE

We are nearly sold out of bulls but have a few females for sale.

YORKSHIRE HOGS

If you want hogs—good hogs—hogs that will make you money—it will pay you to write us. We have breeding sows, young pigs, and two stock boars in the market.

Registered Shorthorn Cattle For Sale!

My herd of 35 head of Pure Blood Registered Shorthorn Cattle with calves at foot, together with the prize bull, "Keepsake," are for sale.

For further particulars apply to
W. J. McNamara, - Wetaskiwin, Alta.



Yorkshires & Berkshires

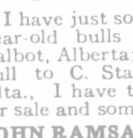
We advise prospective purchasers to buy Young Pigs. They can save on the price: save on the express charges (as crates can be made very light), and develop their pigs to suit themselves. We have five Stock Boars and over twenty-five sows, and will quote prices that mean business. Write for particulars or send your orders to

WALTER JAMES & SONS, Rosser, Man.

SHORTHORNS

I have just sold four nice three-year-old bulls to T. McCord, of Talbot, Alberta; also one yearling bull to C. Standish, of Priddis, Alta. I have two yearling bulls for sale and some bull calves.

JOHN RAMSAY, Priddis, Alta.



Glencorse Yorkshires



Stock from boar, Oak Lodge, Prior 36th, sired by Dalmeny D.C. Imp., bred by Earl of Rosebery, K.G., Scotland, also from the boar Markland Candidate 4th—Imp., in the dam, champion sow at Edinburgh, Scotland, two successive years. Stock not akin, in numbers to suit purchasers.

Glen Bros., Didsbury, Alta.

Thomas Mercer, Markdale, Ont.

now offers for sale his recent Toronto winners—the 1st prize and Champion Shire Horse, Newham's Duke (Imp.); also the 3rd and 7th prize in aged Clydesdale, in an entry of 27. The two latter horses are sired by the noted Hiawatha, dams Lady Gratley and May Rose. The weighty kind that will sire draught horses. Correspondence solicited.

Mr. A. I. Hickman, Court Lodge

Egerton, Kent, England, exports pedigree Live Stock of every description to all parts of the world. Exported during 1907 more Shetland Ponies, more Romney Marsh Sheep, and more champion Oxford Downs than any other breeder or exporter, besides large numbers of other breeds of horses, ponies, cattle, sheep and hogs. Correspondence invited. Highest references given.

STAR FARM SHORTHORNS

This prize winning herd is headed by the Imported Champion Bull Allister. Several animals for sale a number of prize winners in the lot. Farm one mile from station. Improved Yorkshire pigs and Banded Plymouth Rocks.

R. W. CASWELL, Box 13, Saskatoon, Sask



Aberdeen-Angus Cattle.

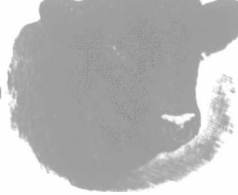
My herd is headed by the famous Black Gay-Lawn (91941) sired by Black Woodlawn (2706), the brother of the International Gr. Championship winner in 1907. I have for sale at present a number of splendid young bulls bred from such families as the Erica's, Prides and Blackbirds. Prices reasonable. Write for particulars.

Geo. G. Melson.
 Wildwood Stock Farm, Olds, Alberta.

STOCKMEN

Have you any stock for sale? If you have why not advertise. This is the largest circulated stock paper in the West. If you have the goods the Advocate will find the buyers. Send your adv't in to-day.

Farmer's Advocate
 AND HOME JOURNAL
 WINNIPEG, MAN.



HEALTH OF CANADIAN LIVE-STOCK
(Continued from Page 128)

As a result of the experiments carried out during the past four years under the guidance of the Veterinary Director General, it has been settled that the former disease properly comes under the non-contagious diseases, being of dietetic origin, the result of the ingestion of the ragwort or Striking Willie (*Senecio Jacobaea*); blackleg or blackquarter (unfortunately termed by some members of the profession symptomatic anthrax). This disease is combated by a vaccine prepared and supplied by the department in a form easily administered (the cord form), and at a moderate price (5 cents per dose in any quantity) to all and sundry who ask for it and remit the money.

Redwater in cattle, a disease which has caused considerable losses in some sections of B. C. is now being investigated with a view to determining the causal factor, which when once thoroughly understood, it is hoped methods may be devised to overcome.

It will be noticed that there are six main diseases occupying the attention of the officers of the department, and in the first three of that number, affected animals are ordered to be slaughtered and compensation paid, when the conditions laid down in the regulations are complied with. The sextet will be considered briefly seriatim, so that a general idea may be had of the procedure followed:—

Glanders or farcy. An owner suspects one or more of his horses as to be affected with the disease for one of the following reasons; chronic discharge from the nostrils, or has been in contact with horses, or mules afterward found to have glanders; or on the limbs or other parts of the body are seen farcy buds, small abscesses which form, break, and discharge pus. The case is reported to headquarters, or to an inspector of the department (preferably the former); an inspector is then sent, who examines all the horses on the premises, and submits them to the mallein test. Reactors are ordered to be destroyed and the non-reactors, apparently healthy ones, are, if one of the reactors has shown clinical symptoms, discharge from the nose, etc., held for a retest in from 15 to 30 days, when, if found healthy, and the premises properly cleaned and disinfected, are released. The object of the retest after the fortnight's interval is to catch any of the non-reactors to the first test, which may have become infected, yet not sufficiently so to react at that time.

The method described sounds extremely simple, but calls for an extraordinary amount of tact and scientific use of the diagnostic agent, and when the disease is very prevalent a lot of money, which will not be grudged by the taxpayer when the danger to human life and the whole agricultural industry is considered. Dourine, or (*maladie du coit*), a disease difficult to detect and therefore hard to stamp out. This disease is communicated naturally at coition; the cause is known but hard to demonstrate. One of the pathologists of this branch was the first man on the American continent to find the cause, the blood parasite (*trypanosom equiperdum*). It is hoped that some quick and reliable diagnostic agent similar to mallein, or a protective serum, may now be elaborated, so that this insidious and fatal disease, with its disastrous effects on the horse breeding industry may be overcome. At present when cases are found, such are ordered to be slaughtered and compensation paid. It may be found that in order to more quickly stamp out Dourine, more stringent regulations must be formulated perhaps in limiting the running at large of stallions, or of male colts over one year on the range, unless altered. This disease has existed in S. Dakota, Nebraska, and Iowa, but in the report of the chief of the B. A. I. it is stated that as a result of several years' vigilant work it has been practically eradicated.

Hog Cholera. Fortunately the Canadian climate and methods of feeding pigs do not seem as favorable to this expensive disease as in other climes where corn is the staple diet. The

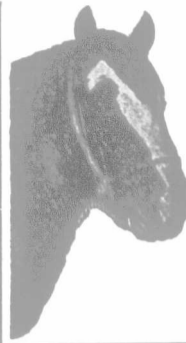
stamping ground of this disease in Canada has been certain counties in Western Ontario, one reason for it being their geographical relation to our neighbors, and the fact that some railroads running in and out of Canada, over which hog trains were drawn were factors in distributing the disease. However, a constant watch is kept by our inspectors. Foreign transit hogs are not permitted to be unloaded in Canada, and the cars used have boards to prevent the distribution of infected manure along the right of way. The disease is well under control in Canada, the number of outbreaks being materially reduced year by year, as a result of the policy of the Department. A similar principle to that employed with glanders, in the matter of compensation is observed. When an outbreak occurs, an inspector of the Department has all the hogs slaughtered, both affected and in contact. They are valued and compensation paid after the premises have been cleaned and disinfected to the satisfaction of the inspector who also, in all cases, endeavors to trace the source of the infection.

Sheep Scab. This serious hindrance to the well-being of sheep and menace to our U. S. trade is mainly confined to Ontario. The efforts of the Department are directed principally against the exportation of sheep or lambs affected with the disease, either grade or purebred. Unfortunately some of the dealers in wool-bearers have not exhibited that public spirit so essential to the conservation of the Canadian trade in live-stock, and in several cases have for a temporary pecuniary advantage imperilled the trade with our neighbors. The disease, as is known to many of you, is caused by the scab mite (*psoroptes communis ovis*) and causes irritation of the skin, itching and rubbing, and falling out of the wool, and ill-health of the sheep, and necessitates dipping of the flock at regular periods to eradicate the disease. Recovery does not occur spontaneously, and if owners are careless the death rate may be high. The only method is to dip, using preferably one containing sulphur. The parasites causing the disease multiply very rapidly, hence the measures taken need to be prompt.

Rabies. The chief interest in this disease lies in its menace to human beings, and need not be considered at length here, beyond the statement that when an outbreak occurs the locality is quarantined and all dogs ordered muzzled, stray ones being ordered destroyed. I am sure each average sheep breeder wishes his particular district were under quarantine against Rabies.

Mange. This disease occurs in horses and cattle, and beyond a few scattered outbreaks is confined to cattle in Western Canada, where for years it has infected the herds on those far-flung pasture fields. The disease is due to a parasite, the (*psoroptes communis var bovis*), a scab mite, and the only cure for affected cattle is by dipping. Attempts were not made seriously to control this disease until four years ago, when the first compulsory Mange Dipping Order was promulgated, a measure that in order to be effective needed the hearty co-operation of cattle owners and departmental officials. To allow Mange to go unchecked would be suicidal and it would only be a short time before our export cattle trade would be but a memory instead of a reality; dipping costs money, but mange cannot be eradicated any other way, and ears must be cleaned and disinfected to destroy the infection.

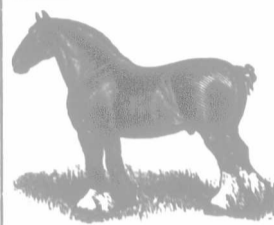
The press dispatches recently contained an announcement which if given the careful consideration of Canadian breeders of live-stock, should impress upon them the great need for the continuation of the present quarantine regulations, and the restriction of stock breeders who are negligent in securing their own premises. The despatch in question states that foot-and-mouth disease was again out in the County of Muskogee, Okla. One does not need to delve into statistics to convince this intelligent class of men that it is absolutely imperative to maintain every possible precaution against the introduction of disease from other countries.



Golden West Stock Farm
Clydesdales and Shorthorns

Stallions and Mares of excellent breeding, of all ages, for sale. Also some choice young bulls fit for service and a number of cows and heifers of noted Scotch strains. Many of them Leading Prize Winners at the big Western Fairs.

P. M. BREDT REGINA, SASK.



JOHN A. TURNER
BALGREGGAN STOCK FARM

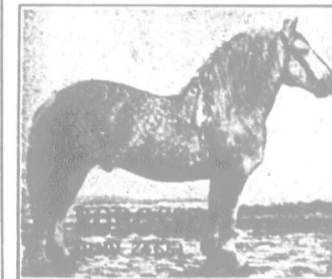
Box 472 CALGARY, ALTA.

Importer and Breeder of Clydesdales, Hackneys, Shorthorns and Shropshire Sheep. Since last December I have sold 42 STALLIONS and have now 20 STALLIONS on hand. A new importation will arrive soon. My prices defy competition and you have a greater choice than in any other breeding establishment in Canada. Business conducted personally. Everyone welcome.

FOR SALE—REGISTERED PERCHERONS
Stallions, Mares, or Colts, all ages

Your choice of 40 bred from imported stock. One black Stallion, Charleroi, 6 years old, weight 2,050 lbs.; Mares weighing 1,500 lbs. to 1,700 lbs.; Yearlings and two-year-olds of good quality. Correspondence solicited. Photos sent on application. Imported stallion, Robosse, at head of herd. Prices very low for this class of stock. Farm 3 miles from North Portal.

W. E. & R. C. UPPER, North Portal Sask.



Brampton JERSEYS Canada's Premier Herd

Strengthened regularly by importations from United States, England and the Island of Jersey. We have animals of all ages and both sexes for sale, and the largest herd in Canada to choose from. Write for prices and particulars. Long distance 'phone at farm.

B. H. BULL & SON - - BRAMPTON, ONT.



Rare Bargains in
Fairview Shorthorns

I have more cattle than I have feed for, so am willing to sell a few, of both sexes, at prices I never expected to quote. The bulls are mostly young, or I can supply mature ones. The females are of different ages.

All are cattle that a man only gets on bargain days. No trouble to quote prices or show the stock.

Fairview, C. N. R. Station
Carberry P. O., and C. P. R. Station

JOHN G. BARRON

I CURE WEAK MEN

YOU RUN NO RISK IN USING MY BELT. I TAKE ALL CHANCES

I want to talk to men who have pains and aches, who feel run down physically, who realize that the old "fire" and energy which was so evident in youth is absent now; men who can't stand the amount of exertion they could years ago. I want you—if that means you—to come to me, and if I say that I can cure you I don't ask you to pay me until I DO so. That is fair, surely. You take no chances, as I know what I can do, and I'll run the risk. If it were not for the prejudice due to the great number of fakes in the land, I would not be able to handle the business that would come to me. The "Free Belt" brand and the "Free Drug" scheme, which are not free at all, have made every one skeptical, but I know that I have a good thing, and I'll hammer away until you know it.



MR. FRANK VINALL, Hespeler, Ont., says: "Your Belt cured me completely of pains in the back, and I would not be without it."
MR. F. G. HABKIRK, Carleton Place, Ont., says: "Your Belt completely cured me six years ago, and I am now in perfect health."
MR. W. ROBINSON, 443 Broadview, Winnipeg, Manitoba, says: "My rheumatism is completely gone. No more medicines for me. I am done with them. Your Belt cured me completely."

If you are skeptical, all I ask is reasonable security for the price of the Belt, and

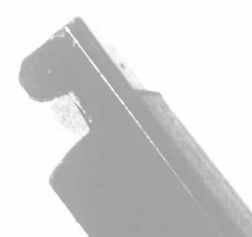
IF I DON'T CURE YOU MY BELT COMES BACK TO ME.

You can't see the time you stand on it, because it while you sleep, making more of your time and serving you better than ever. I am the only man in the world, who has confidence enough in his remedy to wait for his pay until you are cured.

CALL TO-DAY. FREE CONSULTATION. FREE BOOK.

Write to-day for my new book, "The Cure of Weak Men," which will tell you all about my Belt, and how to use it. It is free, and you need not pay for it.

Dr. M. D. McLaughlin, 112 Yonge Street, Toronto.



In a Lighter Vein

She had worked her leap-year prerogative, but he was trying to dodge the issue.

"I appreciate your proposal," he said, "but my income is not sufficient for two."

"Oh, that's all right," she replied. "When we are married, we'll be one, you know."

Mr. Stubb (in astonishment).—Why, Maria! That tramp has been singing out in the back yard for the last hour.

Mrs. Stubb.—Yes, John, it is all my fault.

Mr. Stubb.—Your fault?

Mrs. Stubb.—Indeed it is. I thought I was giving him a dish of boiled oatmeal and instead of that I boiled up the birdseed by mistake.

"I know what's passing in your mind," suddenly said the maiden as the habitually silent caller stared at her. "I know, too, why you are calling here night after night, appropriating my time to yourself and keeping other nice young men away. You want me to marry you, don't you?"

"I—I do!" gasped the young man.

"I thought so. Very well; I will."

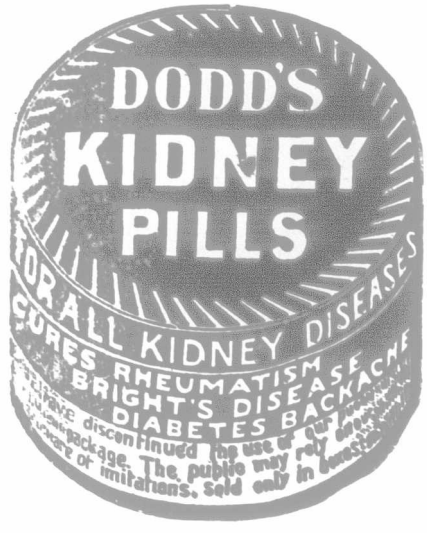
One woman asserts that she has discovered "just how to tell about furs." It is worth while knowing the secret, even if you never make use of it. "Double the skin over," she says, "with the fur outward and look through the ridge of overhair toward bright sunlight. The tips of the overhair in both nature and "shaded" skins are darker than the lower part of the hair, so, looking at it in that way, you perceive a high-water mark half-way between hide and tip, where the color suddenly darkens. Now, in the artificially "shaded" skins this high-water mark is an absolute straight line, but in the natural skin it is broken by curves.

An Erie young man called to take his sweetheart out driving the other day, but when the stunningly-attired young lady caught sight of the turnout the young man had hired for the occasion she feigned a headache and refused to accompany him.

"Why, Violet," asked the astonished mother, "why didn't you go with him?"

"Well, mamma," was the indignant reply, "I consider that a very foolish question on your part. How could I go when the horse he was driving didn't match a single thing I had to wear?"

Recently at a public school at Niagara Falls, a little girl complained to the teacher that another little girl—of Scottish birth—had called her a bad name. When questioned what it was, she said she did not like to repeat it, as it was a "regular swear word." Being pressed to tell, she said the girl had called her a "wee bairn!" The defendant was honorably discharged.



The book agent had spent a discouraging morning, and when he had an opportunity to scan the face of Eli Hobb at close range he felt that there was small chance of making a sale. However, he had more than one method of suggestion.

"Sitting out here on the piazza afternoons with your wife, this would be the very book to read aloud," he said, ingratiatingly, to Mr. Hobbs, taking the other rocking-chair and opening the large red-covered volume.

"I don't read, and I haven't any wife," replied Mr. Hobbs, drily.

"Dear me!" said the book agent.

"Well, if your wife is dead, perhaps there are children. Now, children find this book—"

"There are no children," interrupted Mr. Hobbs. "There's nobody but myself and my cat."

"Well," said the book agent, "don't you ever want a good heavy book to throw at her, just to ease your feelings?"—*Youths Coupon*.

The eminent lawyer had stepped from the London train and was making his way to an hotel when he was approached by a porter. "I can see you're a commercial traveller," said the latter, with a touch of his cap. "Show me where your luggage is and I'll carry it to the hotel for you." The lawyer smiled in a quizzical way. "I am a traveller," he said, "but I deal in brains." The porter sniffed suggestively. "Fust time ever I see a traveller as didn't carry no samples!" he said.

A small boy whose chief fault was that he would interrupt his elders, had been repeatedly corrected by being told daily that he should say, "At your convenience, mamma, I have something to tell you." His sister, Lisi Cipriani, relates, in "A Tuscan Childhood," the results which ensued from the care with which he followed instructions in one instance. One day toward the end of the season my mother had taken Ritchie and me to the baths at Leghorn. The baths are built on piers and rotundas into the sea. We have no tide at Leghorn, and these piers are connected by bridges. Before the autumn storms begin, the boards are taken away, so that only two long wooden beams and the railings remain. There was absolutely no danger in walking across these bridges on the beams, as we could have all necessary support from the railings, and it was great fun. I had crossed one of these bridges quite a distance from where my mother and some friends were sitting. When I started to return I forgot that the boards had been taken away, and walked splash into the sea. Ritchie, who was standing by me, instead of taking the slightest concern as to what would happen to me, rapidly crossed the bridge and ran to my mother. Taking off his cap, the little fellow stood politely beside her for some time, waiting till she had finished a rather long story she was just telling. Then he said:

"Mamma, at your convenience, I have something to tell you."

"What is it?" said my mother, approvingly, for she appreciated that

her efforts were being rewarded.

"Mamma, at your convenience, Lisi has fallen into the water."

"What?" exclaimed my mother, jumping up. "Has anyone pulled her out?"

"I don't know," said Ritchie, very politely, "but I did not interrupt your story, and she can swim."

GINEVRA.

If thou shouldst ever come to Modena,

Stop at a palace near the Reggio Gate

Dwelt in of old by one of the Orsini.

Its noble gardens, terrace above terrace,

And rich in fountains, statues, cypresses,

Will long detain thee; but, before thou go,

Enter the house—prithce, forget it not—

And look awhile upon a picture there.

'Tis of a lady in her earliest youth; She sits inclining forward as to speak,

Her lips half open, and her fingers up,

As though she said, "Beware!"—her vest of gold

Broider'd with flowers, and clasp'd from head to foot—

An emerald stone in every golden clasp;

And on her brow, fairer than alabaster,

A coronet of pearls. But then her face,

So lovely, yet so arch, so full of mirth,

The overflowing of an innocent heart,

It haunts me still, though many a year has fled,

Like some wild melody!—Alone it hangs

Over a mouldering heirloom, its companion,

An oaken chest half-eaten by the worm.

She was an only child from infancy

The joy, the pride of an indulgent sire,

Her mother dying of the gift she gave.

That precious gift, what else remain'd to him?

The young Ginevra was his all in life.

Still as she grew forever in his sight.

She was all gentleness, all gaiety,

Her pranks the favorite theme of every tongue.

But now the day was come, the day, the hour;

And in the lustre of her youth she gave

Her hand, with her heart in it, to Francesco.

Great was the joy; but at the bridal feast,

When all sat down the bride was wanting there—

Nor was she to be found! Her father cried,

"'Tis but to make a trial of our love!"—

And fill'd his glass to all; but his hand shook.

And soon from guest to guest the panic spread.

'Twas but that instant she had left Francesco,

Laughing and looking back, and flying still.

Her ivory tooth imprinted on his finger.

But now, alas! she was not to be found.

Nor from that hour could anything be guess'd

For Diarrhoea, Dysentery

AND ALL

Summer Complaints

DR. FOWLER'S

EXTRACT OF

WILD STRAWBERRY

IS AN INSTANTANEOUS CURE.

It has been used in thousands of homes during the past sixty-two years and has always given satisfaction.

Every home should have a bottle so as to be ready in case of emergency.

Price 35 cents at all druggists and dealers. Do not let some unprincipled druggist humbug you into taking so-called Strawberry Compound. The original is Dr. FOWLER'S. The rest are substitutes.

Mrs. G. Bode, Lethbridge, Alta., writes: "We have used Dr. FOWLER'S EXTRACT OF WILD STRAWBERRY and found it a great remedy for Diarrhoea, Summer Complaint and Cramps. We would not like to be without it in the house."

But that she was not! Weary of his life, Francesco flew to Venice, and forthwith flung it away in battle with the Turk. Orsini lived; and long mightst thou have seen An old man wandering as in quest of something— Something he could not find—he knew not what, When he was gone, the house remain'd a while Silent and tenantless—then went to strangers. Full fifty years had passed, and all forgot, When on an idle day, a day of search, 'Mid the old lumber in the gallery, That mouldering chest was noticed; and 'twas said By one as young, as thoughtless as Ginevra, "Why not remove it from its lurking place?" 'Twas done as soon as said; but in the way It burst—it fell; and lo! a skeleton; With here and there a pearl, an emerald stone, A golden clasp, clasping a shred of gold. All else had perish'd—save a nuptial ring, And a small seal, her mother's legacy, Engraven with a name! the name of both—"Ginevra"—there then had she found a grave; Within that chest had she concealed herself, Fluttering with joy, the happiest of the happy, When a spring-lock, that lay in ambush there, Fasten'd her down for ever!

BLAIR'S GOUT AND RHEUMATIC PILLS

All druggists: 40c. and \$1.00.

LYMAN, SONS & CO., MONTREAL

Black Watch
Black Plug
The Chewing Tobacco
of Quality.



2271

The Right Kind of Roof



Long years before you could find a sign of wear-out about "Oshawa"-shingled roof, any wood-shingled roof would be rotted to dust. Any ordinary metal-shingle roof would be pitted with thousands of rust holes. Any patent paper-and-tar roof would be ragged pulp. Even a slate roof would be dangerously out of repair,—

Long, long before any "Oshawa"-shingled roof needed a single thing done to it.

Because, as you can easily see for yourself, there is simply nothing TO wear out about a shingle of heavy (28-gauge) toughened steel, special galvanized to defy moisture—"Oshawa" Galvanized



Steel Shingles are like that.

We are safe enough in guaranteeing these shingles for twenty-five years, as we do, in plain English, with a quarter-million dollars back of the written guarantee, which says:

If any roof that's "Oshawa"-shingled in 1908 leaks at all by 1933, we will put a new roof on for nothing.

Honestly, we believe an "Oshawa"-shingled roof will last a century, let alone twenty-five years. Why shouldn't it?

These heavy steel galvanized shingles lock underneath on all four sides in such a way that the whole roof is practically one sheer sheet of steel—without a crevice or a seam to catch moisture or to let wet get through.

You need never put a brushful of paint on an "Oshawa"-shingled roof, the special galvanizing makes paint entirely needless, and it won't wear off nor flake nor peel. Yet that roof will be Rain-Proof, Snow-Proof, Wind-Proof, Weather-TIGHT as long as the buildings stand.

Fire-proof, of course. How could



a seamless sheet of tough steel catch fire? That alone is worth the whole price of these Oshawa Galvanized

**Lasts a Century
Never Needs Painting
Never Needs Patching
Can't Catch Fire
Makes Buildings Lightning Proof**

Half a million dollars doesn't cover the damage lightning did last year to Canadian farm buildings alone, and "Oshawa"-shingling would have saved all that loss.

Yet, with all these things to show you that an "Oshawa"-shingled roof is the RIGHT roof for you, Oshawa Galvanized Steel Shingles cost no more than wood shingles to start with. Let me tell you just what it would cost to roof any building right. You needn't figure



the labor, for anybody who can use a hammer can put these shingles on easily and quickly.

Will you let me send you sample shingles, an estimate, and book that tells all about "Roofing Right?" It would pay you, I think, to read the book. It's free, of course.

Just address our nearest place. Use a postcard if you wish.

G. A. Pedlar

We will send postpaid and free, Catalogues showing some of our 2000 designs of Pedlar Art Steel Ceilings and Side-Walls.

**"OSHAWA"
GALVANIZED STEEL
SHINGLES**

**A New Roof For Nothing if They Leak
in 25 Years**

Steel Shingles. Count the saving in insurance rates (any company makes a lower rate on buildings so shingled).

Count the freedom from anxiety, the safety of your houses and barns.



And, a most important fact to you, an "Oshawa"-shingled roof is LIGHTNING-proof! Positively proof against lightning—insulated far better than if it bristled with lightning rods.

The PEDLAR PEOPLE of Oshawa ESTABLISHED 1861

QUEBEC
7-11 Notre Dame Square

MONTREAL
321-3 Craig St. W.

TORONTO
21 Colborne St.

OTTAWA
423 Sussex St.

LONDON
69 Dundas St.

WINNIPEG
76 Lombard St.

We want agents in many sections. Write for details. Mention this paper.