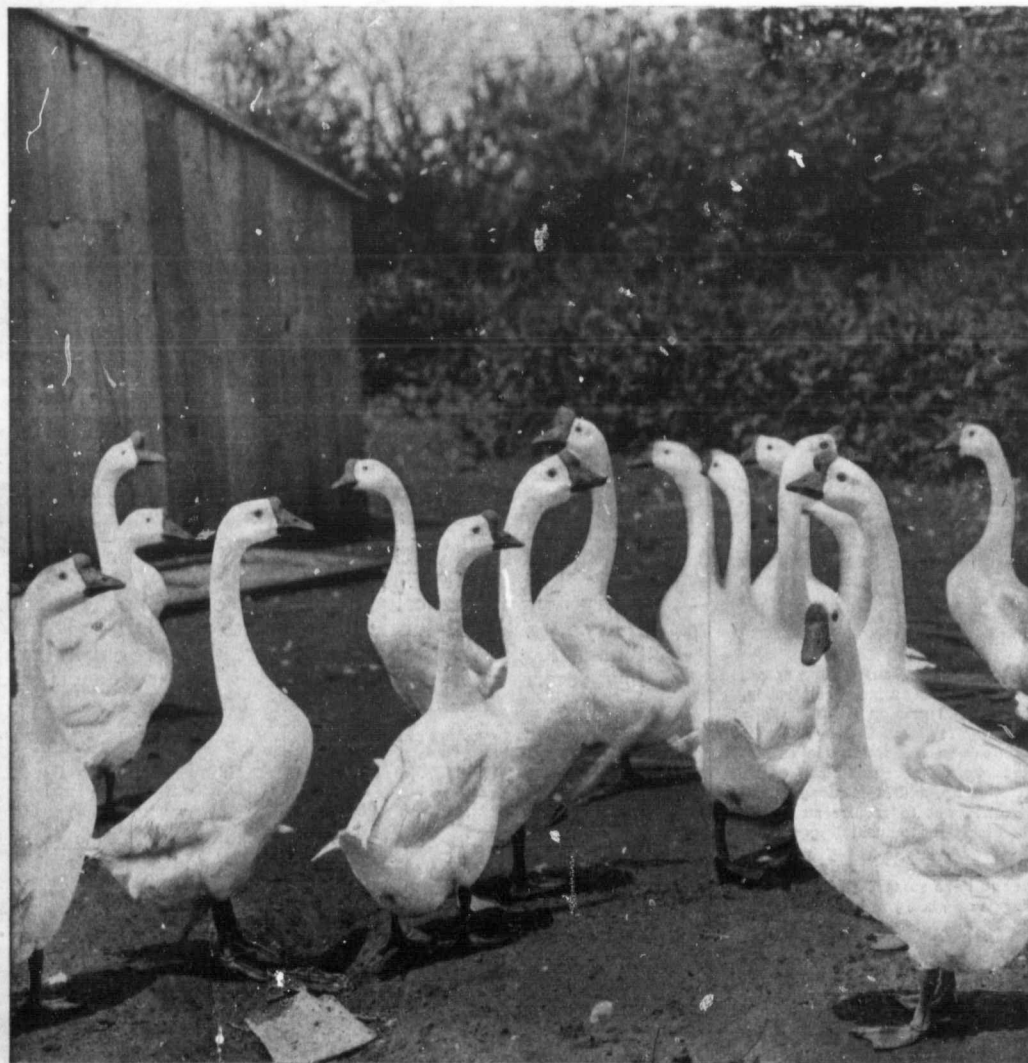


NO. 3 OF MAN LIBRARY DEPARTMENT
OF AGRICULTURE, OTTAWA
L
D
PLEASE RETURN

The **CANADIAN** **THRESHERMAN AND** **FARMER**

WINNIPEG CANADA
NOVEMBER
NINETEEN NINETEEN

BETTER FARMING — BIGGER CROPS — BETTER PRICES



Published Monthly by E. H. HEATH CO. LIMITED — Our Seventeenth Year

NOV 25 1919

12-25 H. P.
Avery
Filling Silo



The "Draft-Horse" Avery Motor

The Real Puller in the Belt

ABOUT half the work of your tractor will be to supply belt power. To do this well it should have a power plant especially built for the work. It should deliver smooth, dependable power at low speed.

That's exactly what you get in the Avery "Draft-Horse" Tractor Motor. It was designed *especially* for tractor work and *exclusively* for Avery Tractors. It is a *thoroughbred* heavy duty power plant that can make your silo filler or thresher hum all day long. As one owner says—"It's the real puller in the belt."

Avery design practically utilizes all of the power of this heavy duty "Draft-Horse" Motor with the "Direct-Drive" Sliding Frame Transmission—gives you direct drive in high, low, reverse, or in the belt. Only three gear contacts used in drawbar work and *no gears whatever* in the belt.

There's a Size Avery Tractor for Every Size Farm

Sizes are 8-16, 12-25, 14-28, 18-36, 25-50 and 40-80 H. P. We also make a special 5-10 H. P. Avery Tractor, a six cylinder Light-Weight Tractor, Motor Cultivators in four and six cylinders for single and double rows, and have a size Avery Thresher and Plow for every size Avery Tractor.

Write for the Avery Catalog and interesting Tractor Hitch Book—explains how to motorize your farm work. See sample machines at your nearest Avery Dealer.

CANADIAN AVERY CO., LIMITED

Western Canadian Distributors
BRANCHES at Regina, Calgary, Saskatoon

MAIN OFFICE, WINNIPEG
SUB-BRANCHES at Lethbridge and Camrose

AVERY

Motor Farming, Threshing
and Road Building Machinery

"Direct-Drive" in the Belt

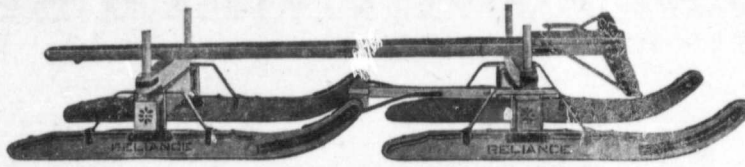
All the power in the Avery "Draft-Horse" Tractor Motor pulls on the belt. None is lost in friction of gears or bearings. The Avery belt wheel is mounted *directly* on the end of the crankshaft.

The Avery Motor runs at low speed, which allows using a large belt pulley, giving a good grip on the belt. The belt pulley is located just where it should be—on the right side of the tractor where the operator can easily see to line up, and high enough from the ground not to require stretching the belt too tight to avoid dragging.

It is always in place ready for use. You don't have to spend a lot of time putting it on when you have a belt job to do.

This Avery "Draft-Horse" Motor is used in all six sizes of Avery Tractors from 8-16 to 40-80 H. P. It's the motor with the famous Avery features—such as the Avery Duplex Gasifiers which turn kerosene or distillate into gas, and *burn it all*; Renewable Inner Cylinder Walls, Two Bearing Crankshaft with Adjustable Boxes, Round Radiator with Thermo Siphon Cooling System, etc.

The Reliance All-Oak Sleigh



Tongues, Bunks, Bolsters---all Wood Parts---OAK

Nothing but the word "perfect" describes the construction of the Reliance sleigh. Many points in construction have been so improved that when the farmer puts this sleigh to work, he can be satisfied that his money could not have purchased a better one, whether he buys the cast shoe or the steel shoe style. The Reliance 2-inch sleigh will compare favorably with any other 2½-inch make on the market.

Runners are built of one solid piece, fine grained oak, 5½ x 2 inches. Front bunk is one solid piece much wider than usual, and carries a bolster plate 6 x 12 inches. There are no built-up parts on either runners or bolsters, as is usually found. Perfect balance is assured by correct position of bunks. Sleigh fits any

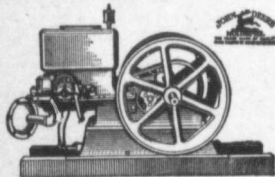
The Reliance comes in 2 and 2½-inch shoes in both cast and steel.

standard wagon box. Every part is well ironed. The steel and wrought iron parts are made heavy, and bracing is placed at all points of strain. The pole is just the correct length for easy pulling. Stark plates are made of cast iron, which is more expensive but far better than thin steel plates.

We also supply a 3-inch shoe in steel only. Don't buy a sleigh

until you

SEE THE JOHN DEERE DEALER



Waterloo Boy Stationary Kerosene Engines

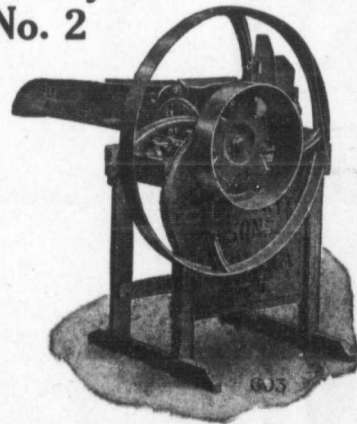
Built and backed by the John Deere Plow Company, Limited. This is not "just another engine"—it has many points of superiority. Particular attention has been paid to the saving of fuel. Every drop of kerosene is consumed and turned into power. An IN-BUILT oscillating magneto gives a very hot spark—and is simple, safe and reliable. Gear driven high speed governor regulates the speed of engine, controlling the fuel flow according to the load. Waterloo Boys are carried in 2—3—5—7—9 and 14 H.P. sizes—also light hand trucks for the 2—3 or 5 H.P. sizes. See the John Deere dealer.

Fleury Grinders



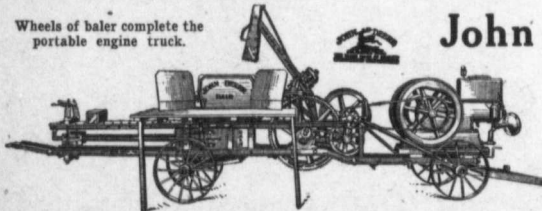
Light running "Rapid-Easy" Grinders that will grind quickly and give good quality feed. Have one piece reversible plates or equipped with flat or concave heads with centre breakers for custom work. All are equipped with safety lever in case of choking or other emergencies. No. 2, 10-inch plates requires 4 to 12 H.P. power. No. 2A, 12-inch, requires 6 to 15 H.P. power. Given proper power the quality and quantity of work of these machines are not equalled by any other grinder.

Fleury Straw Cutters No. 2



Solidly constructed. Every part fitted to do excellent work. Nothing to get out of order. Has 10-inch mouth. Can be run by hand or by belt to the 18-inch pulley as shown (pulley supplied as an extra). Cuts four lengths. Will run at any speed up to 200 R.P.M. See sample on your John Deere dealer's floor.

Wheels of baler complete the portable engine truck.



John Deere-Dain Motor Hay Press

covers all the essentials of the highest type of baler—great baling power and rapid work—block dropper always in position—tucker insures neat looking bales—easy to transport—convenient engine truck—gives more bales per hour than any other style or make Sold with or without engine. The John Deere dealer in your town will give you all the details—ask him.

John Deere Plow Company, Limited

WINNIPEG

REGINA

SASKATOON

CALGARY

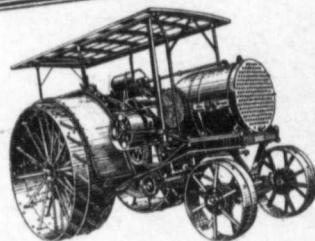
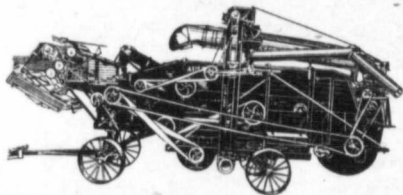
EDMONTON

LETHBRIDGE

AULTMAN-TAYLOR FARM-POWER MACHINERY

**NEW CENTURY
& SIZES**

**2 Small Sizes for
Individual Use**



Tractors and Threshers Alike in Perfection

The farmer—and Aultman-Taylor—have always been fast friends. From the start, we recognized his needs, appreciated his problems—and built our machinery to parallel them.

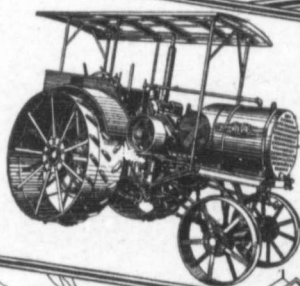
Keeping pace with farm progress, we have built, not for price, but for service—for performance that oustrips all competing makes. And the proof of our policy is seen in the demand for Aultman-Taylor tractors and New Century Threshers, which is so tremendous that, because of our exacting standards of manufacture, we cannot quite hold even with it.

There are three sizes of Aultman-Taylor tractors. And each size, for power, efficiency and economy of operation, is the acknowledged leader in its class. No possible feature of refinement that would make for longer life or better service has been neglected. Whatever the size of your farm, one of these tractors meets your needs exactly.

Aultman-Taylor New Century Threshers are built in four sizes. These machines differ in size only, there being no variation in the quality. The 23336 is an ideal thresher for use with the small gas tractor. It is not a "Junior" or a "baby" thresher (which means a sacrifice in construction) but a standard outfit built for hard work and long years of service.

The New Century has been a favorite with the Canadian farmers for years. Thousands in use in Canada. There's one near you. Ask our neighbor about its wonderful work, or write our nearest Branch House for this information. Insist on having a New Century—it will pay you in saving of time, labor and grain. Our Catalog, free on request, tells you why.

**30-60
H.P.**

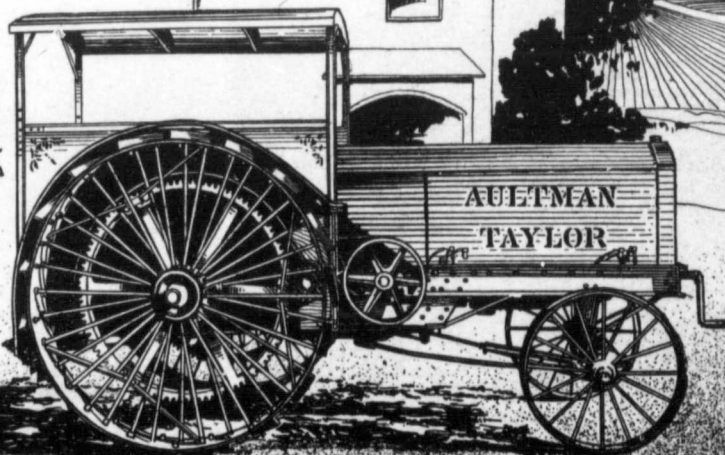


**22-45
H.P.**

**The AULTMAN & TAYLOR
MACHINERY COMPANY**
MANSFIELD OHIO.

CANADIAN BRANCHES: CALGARY & REGINA

Main Branch and Warehouse:
PORTAGE-LA-PRAIRIE





Vol. XXIV

WINNIPEG, CANADA, NOVEMBER, 1919

No 11

OF all the "revivals" that have ever been engineered on the Continent of North America, none of them (humanly speaking) have held greater potentiality for permanent good than the recent Educational Conference, a distinctly national if not international movement, which, for convenience, was held in Winnipeg last month.

We have attended and taken part in many public-spirited functions of the sort in both hemispheres, but we never experienced anything that was so "worth while," so prophetic of great things and of such uniform excellence from start to finish of the three days of intellectual and spiritual banqueting.

In this issue it is not possible to begin to do justice to our appreciation of the event, and of even a small part of its proceedings. As, however, our big Christmas issue is due to subscribers early in December, it is our purpose to publish verbatim as far as possible the meat of this fine incident. The one hope of Canada is in her young people, and be he farmer, farrier or field preacher, there is nothing of greater import to his whole circumstance than the immediate and future interest of the country's child life.

For the moment, we reproduce herewith the wonderful statement of the case as presented by Dr. Theodore Soares, who spoke as follows:

"The premier educator of the

The School and Development of Moral Purpose

Address Delivered to the Educational Conference in
Winnipeg, 20th October, 1919

By DR. THEODORE SOARES, University of Chicago

United States, President Eliot, of Harvard, when he was in Chicago ten years ago at the Centenary of Abraham Lincoln, stated to a group of public school teachers: "It is the business of public education in the United States to produce the type of character that

serious and far-reaching challenge.

"Does it not mean that the type of manhood and womanhood that we are seeking must be expressed in terms of social reaction? The really educated person is the person who can respond, and who

corporation who knows how and is willing to respond to the social situation of an earnest conference with a great body of employees who think they are wronged; it is the social situation of young people in their leisure moments—reading books, going to theatres, beholding scenery and doing all the other things that are worth doing. It is the social situation of sitting down and filling out your income tax schedule, not because the government makes you, but because you are a part of the community and you want to bear your part.

"It is the kind of response to a social situation that leads the soldier to die. All the way from the little child to that superb and supreme sacrifice you have essentially the same type of socialized being. The aim of education is to progressively produce that, and it fails utterly when it fails in that.

"Now the person who, in the process of that education realizes the meaning of the social demands upon him and is making earnest efforts to meet them, is the person who has moral purpose. So moral purpose is integral in the entire school system.

"The child has a very difficult time nowadays. A hundred years ago it was a great deal easier to be a child in Winnipeg—if there was a Winnipeg—because I take it that what is now Winnipeg was at that time the abode of the Indian savage. The child who was



THE "MAKINGS" OF THE TYPE OF WOMANHOOD WE SEEK
"It is the Child of Six Years of Age Who Knows How and is Willing to Respond to the Social Situation of Washing Dishes with Mother." Dr. T. SOARES.

was so superbly manifested in Abraham Lincoln, Abraham Lincoln was very little a product of the schools, and he did not know a great many things that every public school teacher in Canada or the United States knows very well, yet nobody would for a single moment find fault with that

will respond efficiently to every social situation in which he finds himself. Of course, that covers the whole range of life. It is the child of six years of age who knows how and is willing to respond to the social situation of washing dishes with mother; it is the man at the head of the great

born then was born with those fundamental impulses and instincts which were very easily adaptable to a savage life. All he had to do was to grow up in the tribe, and with a little practice he learned to kill the animals, catch the fish and paddle the canoe, and do the other things that the savages did, and the impact of the social life around it very easily prohibited and inhibited the things that the tribe did not allow. The adjustment of a savage child to savage life is a comparatively simple matter. Our children are born to-day with the same kind of impulses and instincts with which the savage child was born—or not very much changed—but the process of adjustment is much more difficult. Instead of being born out in the open, where you can do what you like, you are born in a steam-heated flat, surrounded with all sorts of things you must not touch. You are in the presence of all sorts of people you don't understand.

The Complex Life of To-day

"As you grow up a little further you find the great complex life about you which does not resolve itself into simplicity. Instead of going out and getting what you need to eat and wear, you are struggling to get little bits of paper and little pieces of metal, with which you go to the store. And in the stores apples do not grow on trees; they grow in barrels; the fish are not in the sea or in the lake; they are on the counter in the fish market. The whole life is so different from what the simple life was, and the process of adjusting yourself to that life is a very, very hard one. Instead of doing the things you would like to do and would naturally do, you find a great society, with all its demands, all its prohibitions. You can't walk where you like or drive where you like. You have to stay on the right side of the road. You have got to do those things the law requires and what the teacher says you must do, and your life seems to be cribbed, cabined and confined by all those inhibitions and prohibitions. And so we know how difficult it is to adjust yourself to it and be free.

"The process of social adjustment is infinitely important. It is so vitally necessary that every new child that is born among us shall come to be adjusted to our social group that we have simply to lay our hands upon the child and say that for eight years—for twelve years—this little personality shall have nothing else to do, no sort of responsibility except practice in the business of adjustment to the great society in which we live. That school is efficient

which helps him into that adjustment, to become educated, to become responsive to all the social situations that arise, so that he can discharge the responsibilities that each of them involve. Moral purpose is his appreciation of those social demands and his determination to meet them, and his willingness to pay the price.

"Evidently moral purpose is

voked, therefore you have to have a great variety of situations that demand it in order that it may more and more become characteristic of life. Moral purpose is not a kind of power engine which can be harnessed at the demand of the teacher, or of the parent, to any particular situation that arises. It will only recur, it will only be expressed, as the situation has mean-

ously presented in the great uprising of the nation: each man to do his duty; whereas, in the local situation, in his own community, he may work toward social unrest. Why so different? Because in the one case we were able to make significant to him the social demands; in the other case we failed. You cannot say: 'He has moral purpose and, therefore, wherever he is, he will react effectively.' Moral purpose does not exist by itself: it must inevitably attach itself to the specific situations. Our whole school business will always be so to vary those, so to grade them, so to make them exist practical and imaginative that a child shall live in a very large, wide life, with all kinds of social conditions, and shall be able to appreciate and shall be glad to co-operate in all the things that he is demanded to do.

The Child's Own Standard

"That naturally means, does it not, that this matter of moral purpose has to be considered genetically? We always make the mistake, with regard to our educational plans, when we set up an adult ideal, an adult standard, and say the children are approximating to this adult standard. There is just a little danger—you won't misunderstand me in my tremendous appreciation of every thing that was said this morning—there is just a little danger, as we exalt to ourselves the glories of a great citizenship, that we shall measure the attainments of our children by the degree with which they meet those demands. The demands upon them may be totally different. The thing that is important is not how they approximate an adult standard, but how they approximate a legitimate standard of their own.

"The little child in the Montessori school—I have no brief for the Montessori method—but this is a fine thing—the little child in the Montessori school, who carries the bowl of soup at eleven o'clock, when she is hungry, carries it because she is the little waitress for the day, to give it to her companions, shows that same spirit of fine self-control, self-abnegation, social service that in other places will call forth those sublime devotions which were so eloquently presented this morning.

"It is always an educational task to grade the process, and never to be concerned with moral precocity. Why is it that we are not more successful in what we always recognize when we consider these fundamentals? Because it is so difficult to get social conceptions. After all that has been said about the development of individual character and life, we never exist individually; we exist



THE YOUNG BLOOD OF CANADA
Pupils of the second school of Rembrandt, Man. This school was built in 1916 to relieve overcrowding. Has had candidates pass the "entrance" each year since; in 1918 six passed.

not a virtue that can be cultivated by itself. You cannot have geography at nine o'clock, history at ten o'clock, and moral purpose at eleven o'clock. Nor can it be distributed through the curriculum by any sort of genial or kindly injunctions "to be good." This virtue which we sometimes desiderate in children, which we call "being good," is very little more than the piety of a certain type of unpopular child, or that very unfortunate reaction to the school situation that is produced in what

ing for child, or youth or man. That is why it is that we have to be so varied in our social responses. The child, for example, may be altogether a socialized individual in a family where you have the right kind of living, but he may be a very troublesome individual in school, which may not be organized in such a way as to draw from him his free expression of life. Why is he so good here and so bad there? He is a socialized being in one place because it is his society: he is an



SOME MORE YOUNG BLOOD OF MANITOBA
Hazel Glen pupils and teacher—a bright bunch of fine spirited boys and girls who are keenly responsive to all that is being offered them in educational "bait."

has come to be known as the "teacher's pet." Really robust children, those that are strongly capable and really desirous of playing their part in significant enterprises, are not likely to be attracted by that sort of demand upon them.

"Moral purpose arises in a specific situation, and only as the same situation recurs will it be rein-

unsocialized being in another place because there is imposed upon him a social order that he does not understand.

"He may be—and this has happened to an extraordinary degree in the course of recent years—a highly socialized individual in his capacity in the great patriotic order, which he does understand, and which has been so tremend-

socially. If you take away from a man all that he is as a father, as a husband, as a brother, as a child, as a neighbor, as a citizen, as a business man, and all the other social relationships, what is left of the man to educate? You cannot educate his personality apart from the social life in which he lives. Education has to be conceived of from beginning to end as a social process, and the moral purpose arises in the appreciation of the social values and in the glad devotion to the social ideal.

"All this is difficult in our modern educational life because of the persistence of our very inadequate conceptions of education. It is extraordinary how they do persist. They have got just enough truth in them to keep them alive, but not enough truth in them to make them valuable. The first is the conception that education is the preparation for adult life; the second is the conception that education is the acquisition of the body of prescribed knowledge; and the third is the conception of the moral education as the inculcation of obedience to authority—absolutely inadequate. Education is not the acquisition of knowledge; it is the enlargement of social experience; education is not the inculcation of obedience; it is the development of co-operation and good will.

Living the Real Life Now

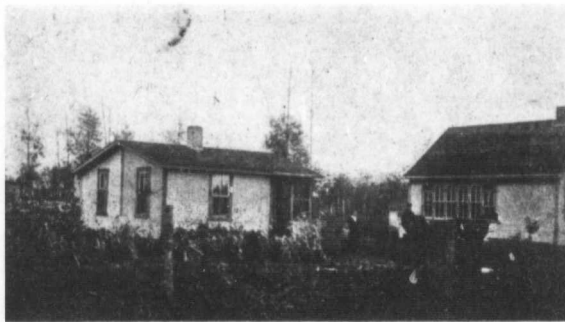
"May I say a word on those points? Education is not preparation for a life that is going to be lived at some other time. All you have got to do is to look at a child to see how his consciousness operates. He thinks, of course, of the future: what he is going to do when he grows up; but his life is not lived with reference to that, any more than you are living a life with reference to the time you are to retire on a chicken farm. He is living his real life now. Modern religion has protested against that old idea of living in this world to prepare for another. Education must protest against the idea that you are living in school to prepare for the world. The child is alive. If anybody on earth is alive it is a child, and he is living a life just as important to him and just as significant to his society as yours and mine. Why, we talk about life as if making a living were life, and the only people who were alive were the people who were making a living. The children are living, and the whole question is, how they are living? Do you want a better opportunity for the development of democratic life? There you have it in the public school. The young and the old, the children of the rich and the children of the poor, the strong and the weak, the able and the halting, male and female,

the taught and the teacher, the people from the other side of the track and the people on Quality Hill. Bring them together, and if they can learn to live a common life, co-operatively, you have got a democratic society.

"We have too much proceeded on the idea that the ideal school would be one teacher for one child, but because that costs too much we have got one teacher and fifty children, sitting on fifty

weeks more. They were not presenting it as private theatricals, but out of sheer joy of living the life of Ruth again.

"I want to point out that those children were learning five significant social lessons. In the first place, they were learning co-operation, they were actually working together, not separately looking at the teacher, and not speaking to one another. It was a great enterprise together. The

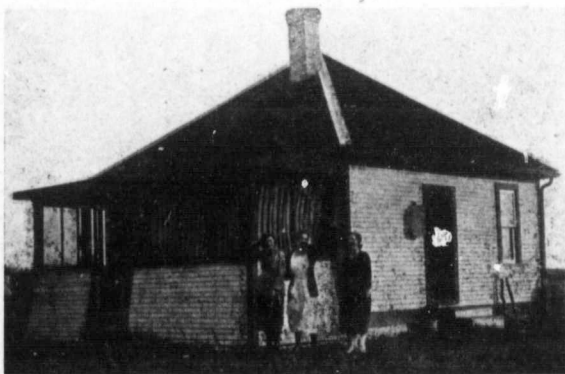


SPECIMEN MANITOBA SCHOOL BUILDINGS
Showing school and school-house of Griffiths S.D. with teacher, his wife, boy and buggy. A great work is being accomplished by this one-man outfit of which more anon.

chairs, sitting as far from one another as possible, who do not speak to one another. 'Let our work be isolated. I am developing your mind!'

"I saw a very interesting thing the other day. It was in a church, but it was Sunday school. Exactly the same thing could be done in a public school. A very gifted woman had charge on Sunday afternoons of a group of children to whom she was teaching dramatization of Bible stories; they were living the stories out in their

second thing they were learning was the great democratic lesson of selecting their leaders. There was the great problem: Who was going to be Ruth? Ruth is in the centre of the stage. 'I ought to be Ruth, of course, and if I can't be Ruth I am going to be Naomi, because she is there most of the time.' Who is going to be Orpha, whose principal business is to 'disappear in the first scene? And among the boys, who is going to be Boaz? Did they do it in the so-called Democratic way, elect their



MELROSE (MANITOBA) TEACHERS' HOME
With three happy English teachers. There are two schoolrooms close at hand, and another a mile-and-a-half distant. The breezy atmosphere of the young women tells you that "this is the life," and their record at the Department of Education is eloquent of serious and successful work.

own way. One of the very best methods, of course, is the living of past social experiences. The particular little drama they were working out was the drama of Ruth. They had been on it for a number of weeks, and they were going to present it for a number

leaders? No, that is not democratic; that is just our clumsy way of carrying on democracy by majorities because we cannot do it any better, but that is not real democracy. Those little children of a dozen years and younger would have worked out in a few

weeks all the wire-pulling that you will find in the City Hall—excuse me, I do not mean any disrespect to Winnipeg; I come from Chicago. What did they do? All the girls played Ruth, and all the boys played Boaz, and all learned all the parts: everyone entered into the joy of it all; everyone wore the costumes. And when they had all done it it was perfectly evident who was to be Ruth. They did not need to elect her, for, by the common consensus of that little community, Jessie is to be Ruth and Tommy is to be Boaz. That is not a theory. They did it, and everyone was satisfied. It is, after all, only that thing that President Wilson so often expressed as the "common consciousness," "common judgment of mankind;" that is democracy. They were learning there the truth which is fundamental in democracy, but which most democracies do not understand, and that is the acceptance of the expert. The notion that democracy means that one man knows as much as another, and one man's opinion is as good as another, is perfect nonsense. Democracies need to learn the need of the expert. The teacher was there, but she was not inflicting her will; she wasn't imposing her direction; she was there with the gentle hand of guidance. When some impasse was reached, when there was something they didn't understand, the teacher, of course, was appealed to. These children were learning a lesson that few democracies have ever learned, the need of acceptance of the judgment of experts—a democratic act of self-direction.

"Then, of course, the fourth thing they were doing was learning a great deal of useful knowledge. They wanted to know how this thing would be done. It would never do to have the wrong kind of costumes. They were looking it up in dictionaries and encyclopaedias, and they wanted the language to be exactly right; nothing would satisfy them except the fine, resounding, euphonious language of our wonderful English version. Ruth did not say: 'Why not let me go with you?' She said: 'Entreat me not to leave thee, or to return from following after thee'

"Then they learned to do the thing and see it through. They made the dresses and learned the parts; they gave the drama and they closed it up. Life—that is what it was. I submit, ladies and gentlemen, that that business of theirs was just as important as selling wheat on the board of trade or making engines in a great factory.

"We shall prepare for life by practising to live.

Continued on Page 10

THE CANADIAN THRESHERMAN AND FARMER

CANADA'S LEADING AGRICULTURAL MONTHLY



PUBLISHED MONTHLY BY

E. H. HEATH COMPANY, Limited - - - WINNIPEG, CANADA

MEMBER CANADIAN PRESS ASSOCIATION

MEMBER AUDIT BUREAU OF CIRCULATIONS

E. H. HEATH
PRESIDENT
E. W. HAMILTON
MANAGING DIRECTOR

F. C. BRAY
TREASURER
J. D. DUTHIE
EDITOR

PEARL RICHMOND HAMILTON
EDITOR WOMAN'S SECTION
J. L. MIDDLETON
CIRCULATION MANAGER

AUTHORIZED BY THE POSTMASTER GENERAL, OTTAWA, CANADA, FOR TRANSMISSION AS SECOND CLASS MATTER

Nov.

The Bootlegger and the Boy

1919

OUR GUARANTEE

No advertisement is allowed in our Columns until we are satisfied that the advertiser is absolutely reliable and that any subscriber can safely do business with him. If any subscriber is defrauded, E. H. Heath Co., Ltd., will make good the loss resulting therefrom, if the event takes place within 30 days of date advertisement appeared, and complaint be made to us in writing with proofs, not later than ten days after its occurring, and provided also, the subscriber in writing to the advertiser, stated that his advertisement was seen in "The Canadian Thresherman and Farmer." Be careful when writing an advertiser to say that you saw the advertisement in "The Canadian Thresherman and Farmer."

ON the surface of Canadian citizenship there has never been absent a frothing not unlike the fermented stuff one has seen on a fine body of "preserves." This, however, is usually found to be but the harmless accumulation of air bubbles, the last expiring discharge of "wind" from the wholesome stuff underneath as it settles down to its real function. So with the rank and file of Canadian manhood and womanhood, as was so wonderfully demonstrated in Ontario the other day when the people of that province expressed themselves on its Temperance Act. In spite of a thin film of heated seum, the body and the soul of the nation is charged from core to circumference with an indefeasible decency that is proof against all odds.

Of all the inherited sin that society suffers from, surely strong drink, the stuff that robs a man of his reason, has bred more mischief than anything in human frailty the world knows of. This is admitted even by the most uncompromising champion of the drink interest, who can "take his glass when he may or leave it when he may not." It is for him the whole damned thing is permitted to live; but for him, the drinking habit would have been swept off the face of the earth ages ago. He is the chap who keeps it going, and in seeking to rid the people of its curse, he is the one obstacle we may seriously consider.

The old stock "arguments" used on him are as hopeless as shrapnel showered on twelve-inch armorplate. But there is one "reason" he can never face up to or skirmish around—the child. Let us bring the boy into court, your own boy, for preference, Mr. Tippler, if not, your neighbor's lad—that bright young promise of manhood who, as he stands in your presence is the very incarnation of physical health, the best image of God's love we know of. Will you say just at what point that boy may begin to "sow" as you did on the night you had your first drink, and was carried home insensible to a broken-hearted mother?

In defiance of the best, the administrators of the law are able to do, the drink traffic still flourishes. Notwithstanding the prohibition act, drunken men are becoming common objects of the city streets, notably on Sundays. A daily newspaper records that "a veritable river of booze from Canada is flowing into Minnesota and North Dakota." Who are they who are engaged in this illicit business, and how are they being encouraged to carry it on? The bootlegger, a type of dirty hog who has neither the capacity nor the con-

honesty to earn a decent living. And he is fed by men and women masquerading as "respectable citizens," society leaders many of them, who will have it in their cellars by any means so long as it can be got.

"Fines" are a perfect farce. In Winnipeg police court men and women are turning up daily with "previous convictions" against their names and paying their \$200 and \$300 fines with all the gaiety and unconcern of children taking a teaspoonful of Gregory's mixture. The other day a miserable little, unwashed proprietor of a shoe shine "parlor" was convicted for the fifth time, fined six hundred dollars and dug the money out of his jeans in a way that left no doubt in the minds of any one who witnessed the transaction that he had been prompted by some one who knew exactly what he might expect and had also prepared him for it.

This, however, is not what excites one's indignation and disgust so much as the fact that because of the facility with which those miserable cads—buyers and pedlars alike—are enabled to distribute the liquor, some of the very best and brightest of our young manhood (if not womanhood) are being fast recruited into the ranks of the drink-sodden dead beat. Humanly speaking, the old "booze artist" is hopeless and may be left to die out, but what is your attitude towards that feature of the curse which creates the common spectacle of young lads, still in their teens, not only ineapably drunk but glorying afterwards in the fact that they were smart enough to obtain the wherewithal to make them drunk?

A young soldier citizen gives the best four years of his life to the service of his country in France and Flanders. He wears three stripes on his sleeve, cloquent of his courage and constancy under fire. He is on his way home to mother, sister and a little brother who is counting the very hours "till Bob comes home." Bob was never in his life under the influence of drink till he landed at Halifax. Two days later that devoted mother received the cruel information that her brave and beloved boy had been the victim of "an unfortunate and fatal accident." Who shall fit the word to the miscreant who, under the specious name of "friendship" gave that splendid young Canadian the drink that sent him reeling in front of "a passing freight" within a day's ride of his home town? The incident is true to the letter and is but one of many occurring daily that are "kept out of the papers" in deference to the lacerated feelings of the breaved ones.

SUBSCRIPTION RATES

Postage prepaid
Canada and Great Britain
\$1.50 per Year
Two Years—\$2.00
Five Years—\$4.00
Single copies 15 cents
Postage prepaid
United States and Foreign Countries
\$2.50 per Year

All subscriptions must be paid for in advance. The address label shows the date on which subscription expires. A label reading: Jas. Brown, 1-21, would show that Mr. Brown's subscription expired January, 1921.

If your first issue has not arrived, or if the date on your address label is not changed within three weeks, please write "The Canadian Thresherman and Farmer" at once. In giving new address, be sure to state also your old address.

Advertising copy in order to secure good position should be in our hands not later than the 15th of the month preceding date of issue.

21 Points of Superiority

1. **Built complete in Advance-Rumely factories.**
2. **Kerosene burning**
Guaranteed in writing to burn kerosene successfully under all conditions, at all loads to its full rated brake horsepower.
3. **Oil cooled**
No evaporation—no refilling.
No freezing in coldest weather.
No rust—oil preserves metal.
No sediment—cooling system always open.
An even motor temperature.
4. **Kerosene motor**
Low speed—heavy duty.
Designed to burn kerosene—no makeshift.
Parts ground to thousandth of an inch.
5. **Unbreakable crankshaft**
Crankshaft built to U. S. naval specifications.
6. **High overload capacity**
Rating base: upon only 80% of maximum—20% reserve power.
7. **Solid frame**
Hot riveted steel members.
No bends—no splices.
8. **Cut gear transmission**
Cut steel gears.
Enclosed and running in oil.
9. **Properly placed pulley**
On right hand side.
Driven directly off crankshaft.
No bevel gears—no intermediate gears.
10. **Governor controlled**
Speed of motor automatically regulated to meet varying loads.
11. **Shifting front axle**
Plenty of belt clearance—no sacrifice in design.
12. **Large wheels**
Plenty of traction—easy to steer.
13. **Adjustable drawbar**
Fits all implements.
14. **Proper weight distribution**
No danger of turning over.
Front wheels stay put.
15. **Hya** roller bearings**
Reduce friction—save power.
16. **Bosch magneto**
Highest quality—highest price.
Dependable service.
17. **Madison-Kipp lubricator**
Individual leads to all bearings.
18. **Roomy platform**
But a step from the ground.
19. **Easy to operate**
No complicated mechanism.
All levers within easy reach.
20. **Accessible**
All parts easy of access.
21. **Dependable service**
27 branch offices and warehouses.
Complete stocks machines and parts.

ADVANCE-RUMELY THRESHER CO., Inc.
La Porte, Indiana

Calgary, Alta.
Saskatoon, Sask.

Toronto, Ont.

Regina, Sask.
Winnipeg, Man.

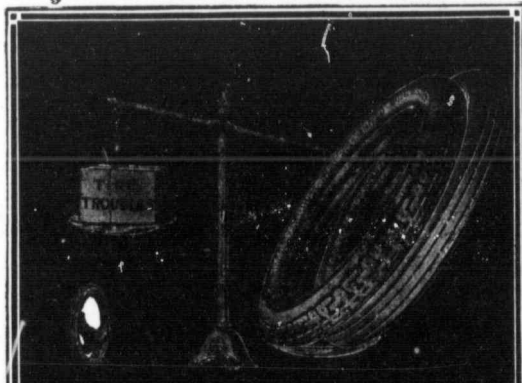


make your own
comparisons

— draw your own
conclusions



RUMELY
OIL PULL
TRACTOR
LA PORTE IND.



Partridge Tires

Out-weigh Tire Troubles

Made by The F.E. Partridge Rubber Company Limited Guelph Ont.

THE SCHOOL AND THE DEVELOPMENT OF MORAL PURPOSE

Continued from page 7

"The second of those heresies is that education is the acquisition of a body of prescribed knowledge. I say it is the enlargement of social experience. Who knows what you ought to learn. We teach it; we know all about it. That is my business — making curricula. The business of the modern child is to learn what I learned when I was a child. I can teach them that because I am doing that all the time, and because I haven't forgotten it, as the rest of the community have. Who knows what a child ought to know?"

"In schools to-day they are teaching spelling. Of course, there is only one way of teaching spelling, and that is by using a list of words an intelligent child ought to be able to spell. You go into a community and you find out the words that that community uses. Now, for example, when my learned friend used that word 'implement' I did not know what he meant. We do not use language that is as fine as that down in Chicago. They take a group of children, and the way they go to work is by listening to them, by getting them to write letters, by finding what their vocabulary is and discovering the sort of words they ought to be able to spell. When I was young I was taught to spell 'ipecaquanha,' but I have never used the word since. It is a mistake to unload a lot of unnecessary knowledge upon children. No wonder they don't care for it. In the little play, 'When Bunty Pulls the Strings,' I know we ought not to get on to religion, but wasn't it here the child said: 'Father, I don't understand the catechism?' and the father said: 'It is not your business to understand it; it is your business to learn it.'

but I can give you the names of the Hebrew prophets, because I live with the Hebrew prophets. I need them, not only in my business of teaching, but in the business of life — but I don't need Jehosaphat.

We shall have to work out the development of moral purpose—which means the enrichment of social experience—so that these representative young scholars, who for eight, ten or a dozen years are practising life, will find out things that are worth knowing in this wonderful world—and there will not be any difficulty about their working hard.

"Then there is that last heresy: the inadequate conception of education that the inculcation of obedience to authority is productive of moral purpose. Oh, I know that a great deal of what I have been suggesting calls for an answer by the exponents of standard pedagogy, but when we look at our great young people's life we see we are not getting the results.

"In my own neighborhood we have a very beautiful system of street lighting. We have some large opalescent globes through which the electric light, all the way down the avenue, gives a beautiful soft light. They are admirable targets. The open season for electric light globes begins on the first of January and closes on the thirty-first of December. Opposite our house the other day a wagon drove up and replaced some globes that had been broken, and they had just got around the corner of the street when a group of boys arrived, and all armed with pebbles. They stood about two hundred feet off and they tried who could hit it first. It costs us \$50,000 a year to replace lamps that are broken by boys. Of course, boys are bad and girls are good. In one community, among the best people, we found a gang of girls, just the nicest, sweetest little girls with ringlets and all the rest of it, who were selling flowers from the gardens of the neighborhood, making them up neatly into bouquets and selling them for the benefit of the Red Cross. You see, they understood patriotism. But we simply had not interpreted to those children the social life of our community, and people are depending on training in obedience to save us.

The "Cold Storage" Theory

"Ladies and gentlemen, I offer the proposition that it is not anybody's business to learn anything that he cannot use at once. The cold storage theory of piling up a lot of information for the future—and usually ninety per cent of it gets rotten before you use it—the cold storage theory, I say, has no relation to the great social process of learning the things that are worth knowing. I was brought up in London. I had an early English education. How many of you can give me the names and dates of the kings and queens of England? And you, you great spiritual souls, how many of you can give me the names and dates of the kings of Israel and Judea? You learned them. I cannot say them, and I am a theological professor,

who were selling flowers from the gardens of the neighborhood, making them up neatly into bouquets and selling them for the benefit of the Red Cross. You see, they understood patriotism. But we simply had not interpreted to those children the social life of our community, and people are depending on training in obedience to save us.

"Ladies and gentlemen, we are in great difficulty. If we are not careful we are going to make the supreme mistake on this continent, whatever they do elsewhere—misinterpreting the glory of that army, the spectacle of whose devotion was so eloquently depicted this morning—by supposing that drill and uniform can reproduce these results at will.

OPPORTUNITY IS KNOCKING AT YOUR DOOR



What 80c will bring you Mr. Trapper

ONE BOTTLE OF SPANNER'S ANIMAL LURE
Enough in one bottle to bait 50 traps. One skin will pay you 10 times over.

SEND-TO-DAY 1 BOTTLE 2 BOTTLES 6 BOTTLES
80c. \$1.50 \$4.00
Post Paid

FREE TRAPPER'S CATALOGUE OF SUPPLIES FREE TO TRAPPERS TRAPPING TRICKS 60 PAGES of the BEST information on Trapping

BEAR IN MIND 1920 prices higher than ever

We Supply Your Wants **Oliver Spanner & Co.** We Buy Your Fur
Dept. C.T., 26 Elm Street, TORONTO Your Fur
TAXIDERMIST SUPPLIES ILLUSTRATED CATALOGUE—FREE



William Penn MOTOR OIL

A body for every make and type of motor car and tractor
EXTRA HEAVY, HEAVY, MEDIUM, LIGHT, COLD TEST

Made of Pennsylvania stocks—admittedly the best in the world—to specifications determined by years of experience catering to Western Canadian needs.
Write our nearest office for chart showing which one of these oils you should use

North Star Oil & Refining Company LIMITED

HEAD OFFICE, WINNIPEG

ST. BONIFACE BRANDON	REGINA SASKATOON SWIFT CURRENT KINDERSLEY WEYBURN	PRINCE ALBERT YORKTON HUGHTON ROSETOWN	CALGARY LETHBRIDGE CAMROSE
----------------------	---	--	----------------------------



This Trade-Mark Is Your Assurance of Greater Motor Oil Satisfaction

En-ar-co National Motor Oil The Scientific Lubricant

THE high quality of En-ar-co National Motor Oil never fluctuates. Year after year for every motor use, under every condition, it gives the same uniformly perfect results. Here is why:

We supply the best materials, the newest modern equipment, exact formulas, and most rigid tests.

En-ar-co is scientifically refined, insuring a uniformly perfect oil.

For All Types of Motors

Tractors, automobiles, aeroplanes, trucks, gas engines and motor boats give better service and last longer when lubricated with En-ar-co National Motor Oil.

It forms a soft, velvety cushion or film—strong and tenacious—that protects all moving parts. Thus is friction practically eliminated, and your motor is able to render its greatest strength and power.

Insist upon En-ar-co National Motor Oil and other En-ar-co products. If your dealer cannot supply you, write us.



All En-ar-co Products Excel

White Rose Gasoline for greater power.

National Light Oil for Tractor fuel. Also best for lamps, oil stoves and incubators.

En-ar-co Motor Grease for every lubrication point around the motor car or tractor.

Black Beauty Axle Grease for wagons.

Always look for the En-ar-co trade-mark!

MADE IN CANADA BY
Canadian Oil Companies, Limited
TORONTO, ONTARIO
BRANCH OFFICES IN 35 CITIES

This Game Sent FREE

A fascinating game in which autos compete in a cross country race will be sent to all auto, tractor, motor boat or engine owners. Grown folks as well as children will be delighted with it. Just the thing for Fall and Winter evenings. Write for it NOW. It's FREE.



Send me your En-ar-co Auto Game free. Enclosed find three-cent stamp to partially cover postage and packing.
Also give nearest shipping point and quote prices on the items I have marked.

- I use.....gals. Gasoline per year
- I use.....gals. Motor Oil per year
- I use.....gals. Tractor Oil per year
- I use.....lbs. Motor Grease per year
- I use.....lbs. Axle Grease per year

My Name is.....
Postoffice..... Province.....
I own.....
(Make of Automobile or Tractor)
(Be sure to give make of auto or tractor or game will not be sent)
Automobile, am at present using.....
Motor Oil. I will be in the market for more oil again about..... and you may quote me on.....
gallons En-ar-co National Motor Oil.

CANADIAN OIL COMPANIES, LIMITED, Excelsior Life Bldg., Toronto, Ont.

Grain Cleaners And Wild Oat Separators



Get full particulars now from your dealer, or from us direct, on our

New Dual Grain Cleaner. This cleaner gives you three times the capacity of all old types of fanning mills, and does a perfect job on any grain. Also ask for facts on—

Cushman Light-Weight Engines, Threshers, Feeders

Cushman Motor Works of Canada Limited

Dept. C

White Avenue and Vine Street

WINNIPEG, MAN.

DISTRIBUTING WAREHOUSES:

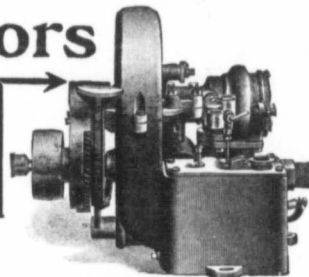
Toronto, Moose Jaw, Saskatoon, Calgary, Edmonton

Tank Heaters
Straw Spreaders
Lincoln Saws
Incubators and Brooders
Auto Accessories
Tractor Flows
Combination Threshers
Light-weight Engines
Lincoln Grinders

Vacuum Washing Machines
"Hoiland" Wild Oat Separators
Smut and Pickling Machines
Wagner Hardware Specialties
Western Pulverizer, Packer and Mulcher

Shinn-Flat Lightning Conductors
Macdonald Tractor "Does More" Lighting Plants
24 & 46 Lincoln Separators
Langdon Feeders
Fanning Mills
Feed Grinders

Hafa-Hors Engine



The only farm engine with a real "auto" starter—simply step on the pedal—so easy on the women folk

The very motor for odd-farm-job power

The next thing to an electric motor. So powerful—full half horse-power. So economical—less than 3c an hour for fuel. So useful—run your cream separator, washing machine, churn, grinder, grindstone, emery wheel, pump, water system, fanning mill, forge, lathe, and so on. So inexpensive—within the purse of every farmer. So money-saving—use it for small jobs instead of using your big engine. Let us describe this air-cooled, perfectly-built motor to you. We have an illustrated folder—sent free.

Guaranteed

Every Hafa-Hors Engine is fully guaranteed to give entire satisfaction if directions are followed.

Emerson Manufacturing Co., Limited

1424 WHYTE AVENUE

WINNIPEG, MAN.

NORTHWESTERN LIFE POLICIES

Head Office: WINNIPEG "PERFECT PROTECTION"

HEMP

Will it grow in Manitoba? Of what interest is it to the Farmer? Where can it be sold and to what uses can it be put?

THE pictures illustrating this article will furnish a complete answer to the first question in the above heading. At the time the snapshots were taken the plant was about three parts fully grown. Plot No. 1 was grown on the farm of W. Buchanan, Dauphin; and plot No. 2

After many years of quiet demonstration throughout the province, it can be safely said that hemp can be successfully grown almost anywhere in Manitoba as a most profitable farm product.

Answering the second question, it is generally admitted that the plant is of the greatest interest to the farmer for the following reasons:



Grown at Selkirk (Plot No. 3) by Mr. Ostler on Van Horne Farm

on the farm of F. L. Peskilt, Dauphin. The seed was distributed by Mr. Chas. Murray, agricultural representative, Dauphin, and either of these two farmers or Mr. Murray will be glad to give anyone interested full particulars as to date of seeding, number of pounds of seed per acre, estimate of tons of green stalks per acre, the suitability of Dauphin district for hemp production, and their personal opinion of hemp as an

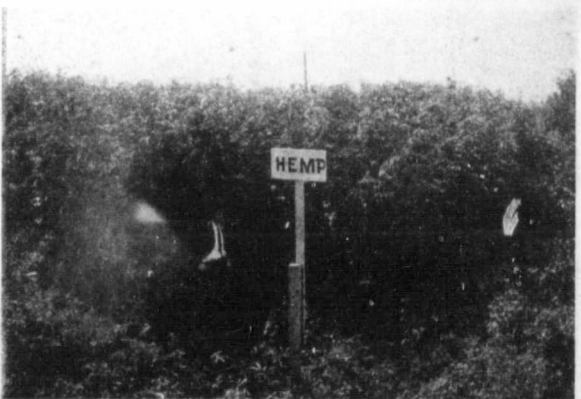
1. Owing to the density and rapidity of growth the hemp plant takes absolute possession of the land shutting out the daylight from shorter and slower growing plants, thereby destroying all noxious weeds, and thus cleaning the ground.

2. Because the hemp plant is frost-proof, grasshopper-proof, rust-proof, and after it attains a height of 18 inches it is drought-proof.

3. Because the average hemp crop will clean the land better than summerfallow, and leave the farmer a handsome balance on the right side of the ledger as against the cost estimated at about \$15.00 per acre of summerfallow, in addition to the loss of a season's crop.

4. The production of hemp in Manitoba and the manufacture of fibre into articles required by the farmer, such as binder twine, grain bags, cordage, rope, horse blankets, etc., at a considerably reduced price to those prevailing to-day.

The third question brings in the growing and marketing of the



Small corner of plot No. 2 on farm of F. L. Peskilt, Dauphin

absolute eradicator of noxious weeds.

Plot No. 3 was grown by Mr. Ostler, manager of the Van Horne farm, E. Selkirk, who will be glad to give similar information to anyone interested in hemp production in this district.

crop. About 35 pounds of seed to the acre should be sown in a good, level tilth, when the ground is sufficiently warm to germinate the seed rapidly, and should be sown anywhere from the 10th to the end of May, depending on the season, an ordinary seed drill be-

A New Departure In Tractor Service for the Farmer

Northern Implement Company's Service Plant

—A Clearing House for New Tractors, Second-Hand Tractors, Re-built Tractors,—fitting the Tractor Supply to the Individual Farmer's Needs.

A Message for Every Farmer

Now is the time to look ahead to next year's harvest: To weigh up the shortcomings of last year and plan and prepare for the improvements that will make your farming more profitable in the coming season.

Nothing is surer than the fact that to increase farming profits, you must lower your operating costs. The tractor is to-day the best and most economical power producer for farm work, when properly fitted to the conditions of the individual farm.

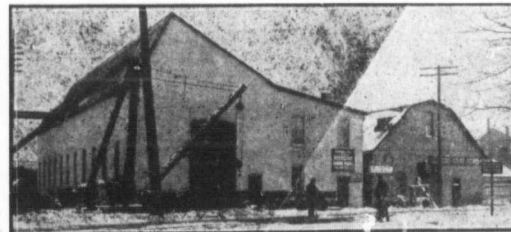
Every Farmer must become a Tractor Owner and put his tractor operations on a proper basis.

We have inaugurated a Tractor Service Department to meet the needs of the hour. A Sales Plant of New and Re-built Tractors. A Clearing House for those who want to buy and sell, whose tractors are not suited to their needs.



Do You Need to Buy a Tractor?

Tractor production can scarcely keep pace with tractor demand. If you want a tractor for next spring, either new or re-built, get in touch with our Service Department and we will secure you delivery of the tractor fitted to the needs of your farm and the compass of your purse.



THE STERLING ENGINE WORKS, WINNIPEG
Service Plant of the Northern Implement Company

New Tractors

There are very few farmers to-day but know the size and power of tractor needed to properly handle the particular work of their own farms.

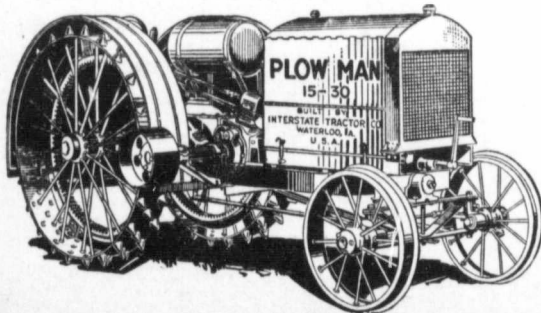
We have Gasoline and Kerosene burning tractors, of reliable standard makes, from 8-16 to 20-40 h.p. Write to us to-day with your requirements or with particulars of the size and nature of your farming operations, and we will send you full particulars, prices and terms on our machines. If you want a new tractor of any make, consult us. We probably have just what you want.

Re-built Tractors

For the farmer who needs a Tractor, but who has been handicapped in its purchase by lack of capital, we have some excellent buys at remarkably low prices—tractors which we have taken in exchange as part payment for new machines, tractors used for demonstrating purposes, and used tractors from the hands of retiring farmers. These have all been thoroughly overhauled and rebuilt, in our own shops, by our own tractor experts. Many are practically as good as new, and all are in first class shape for efficient and satisfactory service.

Do You Want to Sell your Tractor?

Do you find your present 20-40 too large, or your 8-16 too small for real efficiency, or are you giving up your farm and wish to sell your tractor quickly? **WE WILL FIND YOU A BUYER** through our Clearing Department. Write us to-day, with full particulars of size, condition and make of tractor and selling price.



WRITE TO-DAY FOR FULL PARTICULARS

The Northern Implement Company, Ltd.

ESTABLISHED 1913

Home Bank of Canada, Banker.

35 Water Street Winnipeg, Canada

**BEST FOR
CHORING**



UNION MADE



REGISTERED TRADE MARK

OVERALLS

"They wear longer because they're made stronger"

**Insist on Getting
G.W.G.
Accept no Substitute**

GUARANTEE Every garment bearing the G.W.G. Label is guaranteed to give full satisfaction to the wearer in fit, workmanship and quality, and to obtain this satisfaction should the garment prove defective simply satisfy the merchant from whom purchased: he is authorized by us to replace it.

The Great Western Garment Co. Ltd.
Edmonton, Alta.

19

Honest Grading

"The
Old
Reliable"



Est.
1877

Prompt Remittances. We Pay Express
Charges and Charge no Commission on
Fur Shipments.

**RAW FURS
AND HIDES**

Wanted — All Kinds

Write for Market Report, Price List and
Shipping Tags

**McMILLAN FUR &
WOOL COMPANY**

277-9 Rupert St. WINNIPEG

ing used, five inches between sprouts being allowed.

The crop requires no attention whatever throughout the growing period, and anywhere from 110 to 115 days from seeding the crop is cut by a special machine, cut by the company formed to encourage the cultivation of hemp, the farmer furnishing the power. The average weight of the green stalks when cut runs from ten to twelve tons per acre. The green weight of the Dauphin stalks shown herein were estimated at twenty tons to the acre.

The stalks lie on the ground all winter to undergo what is known as the retting or curing process. In the springtime immediately the stalks are free from the frost,

the company will supply the picking machine to pick and tie the stalks into bundles and sheaves. These are stacked for a period of ten days, and when thoroughly dry are brought to the breaking mill, also supplied by the company, put into fibre, baled and ready for market.

The dry stalks at the breaking mill in the spring would run about 40 per cent of the green weight when cut. The price allowed the farmer at the breaking mill would run about \$15 per ton, and as four to five tons per acre of dry stalks would be an average ton, the results are easily figured out.

The disadvantage of handling the crop under the natural ret-

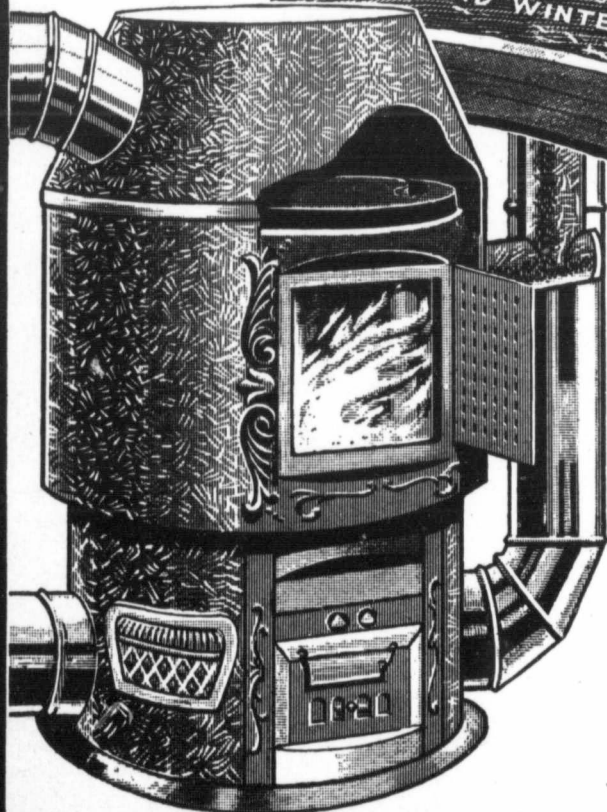
ting process which necessitates the stalks lying on the ground all winter, and the picking and taking to the mill in the spring are more than offset by the many other advantages before mentioned, and the handsome returns which the farmer receives for the crop. As the industry develops the chemical process of retting will take the place of the present method, and the stalks will disappear in the fall along with the other farm crops. As the introduction of chemical vats adds considerably to the cost of the industry it is not the intention to handle this until the industry is well established in the province.

Continued on Page 46

EATON'S FALL CATALOGUE



SEND
FOR THIS BOOK
TO-DAY—A POST
CARD IS
SUFFICIENT



THE BOOK AND ONE OF THE THOUSANDS OF ITEMS LISTED BETWEEN ITS COVERS

Open this book at any one of its 616 pages and you will find a need listed there, for the farm, the home, or perhaps for some member of the family.

Clothing, from boots to head-wear in the season's best styles, every conceivable need for the farm, including implements, cream separators, wagons, buggies, cutters, sleighs, harness and stable accessories.

Complete furnishings for the home from basement to attic are also described and illustrated in a way that makes buying most simple and satisfactory.

If you have not received your copy of this book, send for it to-day and study its values as **EATON** merchandise at **EATON** prices means real savings to you in these times of ever mounting prices.

THE FAMOUS RED HOT FURNACE

here illustrated is listed on page 557 of the Fall and Winter Catalogue. Be sure and read the full description as **RED HOT** furnaces have solved many heating problems such as might be confronting you to-day.

The catalogue number is
45K500

The price is
52.50

THE T. EATON CO. LIMITED
WINNIPEG CANADA

Study These Prices

The machinery listed below has been delivered to us to complete a contract made with the factory a long time ago. That's why we can sell them at the low prices quoted. If you can use any of this machinery during the next year or so, buy now while you can take advantage of these low prices.

WINNIPEG BOY GASOLINE ENGINES

1½-h.p.	\$ 63.15	2½-h.p.	\$116.15
4½-h.p.	156.15	6-h.p.	234.80

WINNIPEG BOY KEROSENE ENGINES

3-h.p.	\$125.35	5-h.p.	\$166.85
7-h.p.		\$246.55	

1½-h.p. Direct-connected Pumping Outfit, with machine-cut gears, Pump Jack	\$86.30
Hand Truck for 1½-h.p. engine	8.85
Hand Truck for up to 4-h.p. engine	18.75

PUMP JACKS

No. 1, Single Gear, sub-base	\$ 9.10
No. 3, Single Gear	9.10
No. 4, Double Gear	9.75
No. 6, Double Gear, sub-base	10.00
All-steel Saw Frames	\$31.50
Saw Mandril Balance Wheel	14.85

CIRCULAR SAW BLADES

24-inch ..	\$5.25	26-inch ..	\$6.20	28-inch ..	\$7.15	30-inch ..	\$8.10
------------	--------	------------	--------	------------	--------	------------	--------

RED STAR CREAM SEPARATORS

The Separator with the Perforated Distributing Sleeve			
250-lb. capacity	\$23.70	300-lb. capacity	\$34.55
450-lb. capacity	37.25	700-lb. capacity	47.45

KING WASHING MACHINES

No. 10, King Bench Washer	\$31.80
No. 15, King Double Tub Washer	49.90
No. 30, King Bench Washer	30.45

GRAIN ELEVATORS

20-ft. Granary Elevator, equipped with either chain or belt bucket carrier	42.50
22-ft. Leg Portable Elevator for loading cars	150.00

PAINT

This is a good standard make of paint, specially priced to clear our stock so that we can devote our entire time to our machinery lines. Cans ¼ to 5 gallon size.

Red Barn Paint, per gallon	\$1.45
Shingle Stain, any color, per gallon	1.25
House Paint, any color, per gallon	2.75

Above prices are good only while present stock lasts

Waterloo Boy Kerosene Tractor of Canada
WINNIPEG LIMITED

The Theory and Practice of Plowing

Plowing is the Strongest Link in the Chain of Tillage Operations—Different Kinds of Furrows Discussed—How to Set Your Plow Right

By J. M. WATERMAN, B.S.A., in "Canadian Countryman"

EVER since "Adam first delved and Eve span" man has continued to work with the soil, and it has furnished his greatest and most natural means of livelihood. Many interesting books have been written on the subject, and although we may not know nearly all there is to be known, yet we, as a people, do understand many of the fundamental principles of the soil, its nature, requirements, and cultivation, and many other things which were unknown to people of earlier times.

We are living in an advanced and favored time so far as agriculture science is concerned, in comparison to the days that even many of our parents knew some fifty years ago. While many of our practices in farming, such as the use of legumes to enrich the soil in nitrogen may have been known in a general way by a few, in earlier times, yet their use was not so universal as at the present time because they were not rightly understood until it was demonstrated beyond a doubt that certain bacteria working in sympathetic relation with the roots of legumes were able to fix the free nitrogen of the air and store it in the ground for the use of plants. Such questions and many others, which are clear to us now, had to be gradually worked out, as man struggled to get a living from the soil.

As the processes of the soil became known, so the need of more efficient machines became more evident, and the eighteenth century saw greater advance along this line than had been accom-

plished during two thousand years previous. Previous till then most of the farm operations, such as cutting, binding and threshing of the grain had to be done by hand, and the plows and other instruments used in tilling the soil were very crude to what they are now. Up till 1837, when John Deere made his first steel plow from an old saw blade, none of that type had been used, and about the same time other labor-saving devices, such as the reaper and cultivator, also came into use. All these inventions in agricultural machinery have served to heighten a man's earning power by enabling him to till a larger area, and to do it more thoroughly.

The importance of good tillage cannot be too greatly emphasized, as on it depends many of the bacterial and chemical actions taking place in the soil. Tillage has been called the "universal manure," and its value as a factor in increasing the available plant food in the soil has long been known to both scientists and practical farmers. Years ago it was believed that plants fed upon the very fine particles of soil, and Jethro Tull, who lived in England in the fore part of the eighteenth century, believed that he had proved this by the successful results of his thorough tillage. He succeeded in raising better crops without manure, with the most thorough possible tillage than his neighbors raised with manures, and less thorough tillage. His methods showed the great value and importance of good cultural methods in obtain-

MAKE MONEY ON FURS



TRAPPING AND SHIPPING

To The OLD RELIABLE The LARGEST CONSIGNMENT HOUSE IN THE NORTHWEST

29 YEARS OF SQUARE DEALING

Write for Price List, Shipping Tags, and Trappers Guide No. 119

Northwestern Hide & Fur Co.,
MINNEAPOLIS, MINNESOTA





THE BUSINESS OF "DEMOBING"
Rearguard Officer of Demobilization (Collecting Stragglers): "What the dooce are you?" Straggler: "I'm wot the mules broke away from."

ing maximum yields from the soil. There exists in most of our soils enormous amounts of the elements of plant food, and the availability of these to the plant is greatly increased by proper tillage, which allows for better action of both mechanical bacterial and chemical agencies.

Although each part of our tillage operations are important, each in its own way, there is none which can equal that of the plow, and for this reason it is important that this step in cultivation be done thoroughly if proper results are to be regularly returned. While a piece of land may do without plowing for a year or so, as in the fresh land of our Canadian West, yet if surface cultivation is followed up, the crop yields will rapidly diminish because of the retarded action of the different soil processes.

Before commencing to plow any piece of land, it is necessary to consider the kind of soil and the object that is to be attained, as these two factors influence the kind of furrow that should be turned. Thus a sod field in summer would require a different type of furrow to a stubble field plowed in the fall to be left over winter; the first requires a flat furrow and the latter a lap furrow.

There are three types of furrow used on our farms, and each accomplishes a purpose of its own. The flat furrow is used to describe that kind of plowing where each furrow is turned over completely and lies flat in the bottom of the preceding one. Such a one is used as for sod, where the grass is to be killed and rotted, as for summer fallow or early in the fall for next year's root crop. A shallow furrow of moderate width should be turned, and it should be laid close up to the previous one, so that there will be no air space between the two. The idea in this style of furrow is to shut out the air from the sod being turned under, so that the grass smothers for want of air, and by heating soon decomposes. In a furrow of this kind the soil is very little broken up, but is turned over solid. It should then be firmed with the roller, after which top cultivation may be given, due care being taken not to tear up any of the sod. This method will kill all green growth and the soil will become mellow and friable. It can then be ribbed up last thing in the fall, so that it will further be exposed to the pulverizing action of the frost.

The lap furrow is undoubtedly the most used of any. In it the furrow slice is only practically turned over, and it laps over somewhat on the preceding one. In former years, when the old

iron plow was more widely used than now, the custom was to turn up a very stiff, comby furrow, but the present-day plows turn one which does not set up so rigidly. When the lap furrow is used in fall plowing, the aim should not be to pulverize the soil very much, especially on heavy soil, but rather to expose as large a

surface as possible to the frost's action during winter. Such a furrow has large air spaces beneath it, which aid the action of thawing and freezing during the winter months, as well as hastening the drying and warming up in spring. In addition to this the uneven surface of the plowed land presented by

the lap furrow allows for the holding of the snow during winter, and this aids in adding moisture to the soil, which is needed for the crop during the following year. In many cases the surface of the stubble fields being plowed in the fall will have a thick growth of trash. This, however, can be turned under

An Exchange of Money That Pays—

When you buy Victory Bonds you simply exchange one kind of money for another.

A dollar bill is Canada's promise to pay.

So are Victory Bonds.

But Victory Bonds pay 5½% interest.

Consider the security behind Victory Bonds—

Canada and all that is contained therein.

Consider the good rate of interest—5½%.

Victory Bonds pay nearly twice as much as Savings Banks.

Consider the saleability of Victory Bonds—

Their use as security for a loan—

Their prospective advancement in price—

Canada must have this money to clean up our obligations to our army and maintain the prosperity of our Country.

These are the best reasons in the world for exchanging one kind of money for another.

Every Canadian should put all his weight behind this Loan.

He should exchange every dollar possible for Victory Bonds—and every dollar he can save for the next ten months.

BUY VICTORY BONDS

Every Dollar of this Loan will be Spent in Canada



The Canadian Fairbanks-Morse Co. Limited

Halifax St. John Quebec Montreal Ottawa Toronto
Hamilton Windsor Winnipeg Saskatoon
Calgary Vancouver Victoria

INVINCIBLE

FORMERLY CALLED
MONARCH

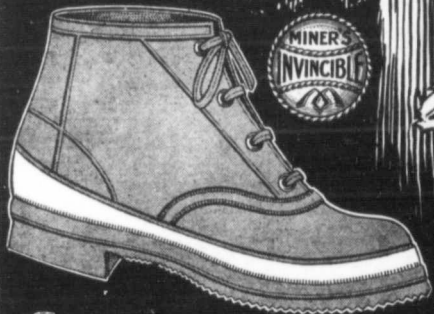


"INVINCIBLE" Rubber Boots and Shoes are built of tough, tire-tread stock and by auto tire methods.

Like auto tires they are cured by the high Pressure Cure Process. A combination that makes the toughest, strongest and longest wearing boot that your money can buy. "Invincible" Rubber Boots and Shoes will outwear any other make, bar none.

If you are hard on footgear ask your local dealer for "Invincibles" and save money.

**The Miner Rubber Co.,
LIMITED.**



spring thaws, as it would have the tendency to do if laid flat. The rough surface it presents also allows it to be more easily pulverized in the spring when cultivated.

On some occasions it is desirable to pulverize the soil as much as possible during the plowing, and for this the plow, with a bold curve to the mould board, which turns what is called the rolling furrow, is best adapted. It is especially useful in spring plowing, where the object is different to what it is in the fall. It breaks up the soil and allows for a quick drying and warming up of the surface layer by facilitating the passage of air through it. In order to prevent undue drying out, it should be firmed with the roller to establish connection with the soil underneath, and allow for the rise of capillary moisture later on when the crop is growing.

The rolling furrow is allowable on lighter soil even in the fall, and where there is much surface growth the jointer will be found well worth its price. Where the plowman has not one on hand he can accomplish the turning in of green stuff by setting the plow on an angle and rather deep, then putting a certain amount of pressure on the handle of the plow. This method, however, while it may accomplish the required end, causes much extra draft, which makes the work harder for the horses.

In commencing to plow, half the battle in accomplishing a good job is getting started right. The following points, if noted, will aid greatly in making the task easier for all concerned.

1. Hitch the team as close to the plow as may be possible, allowing the horses opportunity for free movement without striking their heels. The nearer to the load, within ordinary limits, the less the draft.

2. Raise the beam wheel as high as possible, where used, hitch to the lowest hole in the clevis, start the plow, and note whether the furrow is sufficiently deep. If not, raise the hitch one hole at a time until the plow cuts at the right depth.

3. Note whether the furrow is turned over properly. If it goes over flat, and a lap furrow is desired, it is because the furrow is too wide in proportion to its depth, and the clevis must be moved to the left. If, on the other hand, the furrow stands on its edge, or too nearly on its edge, the furrow is too narrow in proportion to its depth, and the clevis must be moved in the opposite direction.

4. When adjustment is so made that a furrow of the right depth is turned and left at the

effectively by the use of a skimmer or jointer, which doubles over on itself a portion of the furrow slice. Where thistles and other weeds which are deep-rooted are present, it is necessary to turn a furrow only of such width as will allow all roots to be severed, because if this is not done, one of the main objects of plowing is defeated, and the results will be evident in the following crop of grain in which the weeds, whose roots were uncut the fall before, will make their appearance.

The lap furrow is especially useful for heavy land on which the effect of weathering is especially important. It prevents it running together during the

BRITISH RAWFUR COMPANY

Our Past Performances are sufficient to warrant you attaching a **YELLOW TAG** to ALL of your Future Shipments.

WRITE TO-DAY FOR OUR MARKET QUOTATIONS

185 King St. East

Do It Now!

Toronto, Ont.

right angle, the plow should run in soil, free from stones or other obstructions, even without holding, and maintain proper balance, and cutting a furrow of even depth and width. If it will not do this either the plow is a poor one, or, what is more likely, it is not correctly set up or adjusted. When at last the plow will run in any soil for some distance without holding, then the beam wheel should be moved down until it just touches the surface, rolling over it without much pressure. Thus adjusted the plow will do its best work, and the team will find the work as easy as it can be made.

Many farmers do not make use of the beam wheel, as mentioned. Experiments, however, have shown that when properly adjusted it lessens the draft on the plow. Sanborn has carefully investigated the effect upon the draft of some of the different parts of the plow, and he found that 55 per cent of the total power is taken up by the cutting of soil beneath and at the sides of the furrow slice; 33 per cent by the friction of the plow upon the bottom of the furrow and upon the land side; while the raising and turning over of the furrow takes up only about 12 per cent. The amount of power exerted by a team on the plow throughout the day without overstraining is about 300 pounds. From this, therefore, it can be seen that 165 pounds are consumed in cutting the furrow, 99 to overcome friction, and 36 to raise and turn the furrow. These figures, of course, will vary according to the kind and condition of the soil, but the proportion will remain about the same. In stubble land a furrow 6 inches deep and 12 inches wide will require about the above power. Sanborn found also that the draft per square inch of the cross section of the furrow slice decreases as the depth of plowing increases so long as the soil is the same and the plow is not worked beyond its depth. However, the total will be greater, therefore if the plowman is to turn a deeper furrow it is evident that he must either cut it in narrower or put on more power. By close observation of his team and careful adjustment of his plow, however, the teamster can arrange the width so that when turning a deeper furrow he will not be imposing on his horses by turning too wide a one also.

The practice of deep plowing to-day is not practised as much as it should be, and while some soils will not stand deep plowing all at once owing to the shallow surface layer of soil, yet there are others which will. By increasing

the depth a little each year any soil can gradually be brought into a state where it can be plowed deeply, and this is important, as it provides a larger area into which plants can send their roots for food and moisture. Along with deep plowing the addition of humus, as turning under of

green crops, should be practised also, as one helps the other in improving the soil.

There are also many other points which might be touched upon, but space will not permit. We would say in conclusion, make a careful study of your soil, the kind of crop plowed for, and

the arrangement of your plow and horses, because it is only when all these things are given thought that the best job can be done and the largest returns realized for your labor. Plowing is slow and expensive, therefore it is the man who makes his head save his heels and hands who comes out best.

Over There— Over Here

STAG Chewing Tobacco is appreciated by both of Canada's war units—those who fought in Flanders and those who served at home.

It is also enjoyed by civilians of all classes throughout Canada and is recognized as being

"Ever-lastingly Good"



Why 4 out of 5 Motors are Champion Equipped



Champion "Bulck"
for McLaughlin Cars
A53, Long 7-8-18.
Price \$1.00

Your best assurance that, in selecting Champion Spark Plugs, you are combining the greatest degree of dependability, service and economy, is contained in the fact that Fords, Overlands, Studebakers, Maxwells, and over two hundred other makes of gasoline motors and engines made in North America, leave their factories equipped with



Champion

Dependable Spark Plugs

The reasons for such widespread preference are obvious—we make only spark plugs, and have concentrated our efforts on studying the peculiarities of every type of motor, and in producing a spark plug that enables it to maintain its highest efficiency.

Be sure that every spark plug you buy has "Champion" on the insulator—it's the mark of satisfaction and "plus service."

Sold wherever Motor Supplies are sold

Champion Spark Plug Co.
of Canada Limited
Windsor, Ontario

Service

builds an institution. It doesn't grow with haphazard or unbusinesslike methods.

Each succeeding year finds a larger volume of new assurances written on Old Policyholders. Their appreciation is evidenced in their loyalty to the Company. "Once a Policyholder, always a Policyholder."



Life Insurance, The Manufacturers Life way, means a competence if you live; an estate if you die. Write for particulars of our Guaranteed Plans.

The Manufacturers Life Insurance Company

HEAD OFFICE - TORONTO, CANADA

Without obligation, will you kindly furnish me with full particulars of your Guaranteed Policies. I am..... years of age, and am (married) (single)

Name.....

Address.....

NORTHERN
Guaranteed
Shirts and Overalls

Ready for the task of reconstruction. Built solid and tough for man-sized jobs. They just naturally fit the man and his work. Let the Northern "rough it" with you.

The Northern Shirt Co. Limited
WINNIPEG

ACETYLENE WELDING APPARATUS and SUPPLIES

We can supply a thoroughly practical outfit from \$100.00 up. There should be at least one plant in every district to repair breakages quickly and SAVE TIME and MONEY. Up-to-date farmers with Traction Engines are putting in welding outfits and doing their own and their neighbors' repairs. We give free instructions to purchasers. SEND YOUR **BROKEN CASTINGS** Scored Cylinders or any kind of Repairs. We Re-bore Cylinders, True Up Crank Shafts, Re-tip Boiler Flues and are in a position to handle any repair job promptly.

Nothing too large or too small

GIEGER WELDING WORKS, SASKATOON

Dr. Thomas' **Electric Oil**
Relieves all Pain in Man or Beast
25 Cent Bottles at all Dealers

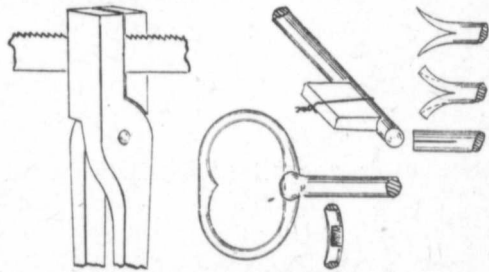
Brazing or Hard Soldering

WHEN a stronger job than can be done by soft soldering is required recourse is generally had to brazing. The strength of the work depends on the strength of the alloy used as a solder, but in turn, the melting point of the alloy must be less than that of the parts to be joined. There are a large number of alloys used in hard soldering, including various proportions of gold, silver, copper, tin, zinc, and so forth. However, for practical use on the farm in connection with such repairs as will be undertaken, it will be found that the list may be narrowed to the two in common use—hard silver solder and brass solder, or spelter.

When the correct degree of heat is obtained the solder melts like a flash and runs into all parts of the joint. When the solder has run do not prolong the heating, as the parts may burn. Remove from the fire and set aside to cool; later remove the binding and dress up the joint.

The only difficulty about brazing is to get a clean, hot flame of sufficient intensity to do the work. Remember that not only must the solder be melted, but the parts to be joined must be brought to the same temperature as that at which the solder melts.

For very small articles and not very hard solder, a blowtorch will serve. Illuminating gas with a draft from a bellows is fine, but



Brazing a saw and a key.

Silver solder may be bought in thin sheets from which small pieces are clipped for use; the alloy is generally of the following proportions: Silver 66 parts, copper 24 parts and zinc 10 parts. This is a strong solder and can be used for joining brass, copper, iron and steel bandsaw blades, and so forth.

A good brass solder is made by fusing together sheet brass chips five parts and zinc three to five parts. It is easily fusible and is suitable for joining brass, bronze, copper and iron. It may be purchased in a granular form and is known as spelter.

To remove the layers of oxide which form during the process of brazing a flux is used, one of the most common being borax made into a paste with water. An improvement on this flux is one made of boracic acid and sodium carbonate—common soda—which are the component parts of borax.

In preparing the parts to be joined they must be freed from oxide and thoroughly cleaned by scouring, scraping filing or picking with acids, and the edges must fit exactly. The parts being thus prepared, they are wired or clamped together so as to be in close contact throughout the operation. The flux is applied to the seam, small particles of solder are added and the parts brought to the melting point of the solder.

will hardly be available on the farm, so for work of any size recourse must be had to the forge. See that the fire is clean and in size proportionate to the work to be done.

To illustrate a brazing job, the method of making a large key from three separate pieces of material is shown. A piece of round iron is selected for the stem of the key, and with a hack saw it is split and opened at the end, and the ends of the two parts tapered with a file, as shown. Next an iron ring of suitable size is selected and bent into an oval shape and further shaped up with a file, so as to present the usual time-honored appearance of a key handle.

The lower part of the ring where it joins the stem of the key is filed on each side into the shape of a blunt wedge so that it will fit into the forked stem. When fitted the stem is put in the vise and the ends of the fork bent over the ring and peened down close, a small space being left between the two ends. It is then a simple matter to cut and shape a piece of iron to form the other end of the key and wire it on as shown. The parts are now ready for brazing and either silver or spelter may be used.

D. W. Blake.

Rough Roads Make Little Difference to Chatham International Bobsleighs



WHEN you buy a bobsleigh you want one with which you can haul heavy loads not only over smooth roads but also where the travelling is rough. In order to do this without twisting or straining the beams and runners, it is necessary that the runners have plenty of play up and down—a wide range of oscillation.

Chatham International Bobsleighs are designed so that the runners follow the unevenness of the ground without twisting the beams, runners or load. And, too,

these sleighs are very rugged and sturdy, being made from well-seasoned first-class wood stock and unusually well ironed. Not only that, but the weight of the load is distributed over a greater portion of the runners than in the case of the average bobsleigh and the beams have exceptionally high clearance which is a feature you will appreciate on drifted roads.

But let us mail you an illustrated pamphlet that fully describes Chatham International Bobsleighs. A post-card addressed to any one of the sixteen branch houses listed below will bring you a copy.

INTERNATIONAL HARVESTER COMPANY OF CANADA LTD.

WESTERN BRANCHES — BRANDON, WINNIPEG, MAN., CALGARY, EDMONTON, LETHBRIDGE, ALTA.
ESTEVAN, N. BATTLEFORD, REGINA, SASKATOON, YORKTON, SASK.
EASTERN BRANCHES — HAMILTON, LONDON, OTTAWA, ONT., MONTREAL, QUEBEC, QUE. ST. JOHN, N. B.

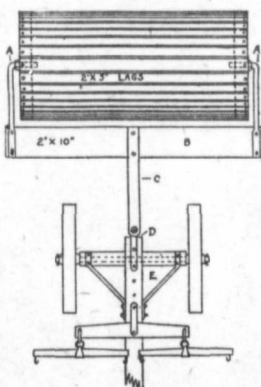
A HOMEMADE LAND ROLLER

ROLLING land after seeding is often beneficial for securing quick germination, as it firms the soil about the seed, securing better contact and at the same time causing a more rapid rise of capillary moisture.

The accompanying drawing and photograph show a roller that can be made in the farm shop from a few pieces of hardwood plank and bar iron, and the wheels taken from two discarded mowing machines. In the roller shown the lagging was made from hardwood plank—oak or maple because of weight—two-by-five-inch in cross section and six and a half feet long. These were bolted round the circumference of the mowing-machine wheels used for the ends with half-inch bolts, holes being drilled through the rim at one side of the central web as shown in the plan for the purpose.

The pieces AA were made from pieces of round iron of the proper size to fit the bore of the wheels—old mower axles are all right when they can be obtained. They are bent at right angles at one end to form the axle and flattened and drilled or punched at the other to permit bolting them to the plank B. The piece B, which served to tie the whole together,

is made from a length of hardwood plank of the size shown. To the center of this plank is secured a piece of flat iron three and a half inches by seven-sixteenth inch in cross section and about three feet in length. This has an eye worked out in the end



A land roller made of discarded material.

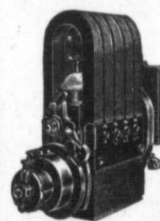
and hooked over an iron that projects from the tongue, this flat iron serving as a stub tongue by which the roller is drawn. It is designated on the drawing by C.

The forward truck shown carrying the seat in the photograph is also made from old

DO NOT SCRAP BROKEN CASTINGS

We make them equal to new at low price. Cylinders, Engine Bases, Gear Wheels, Steam Boilers, in fact any broken or cracked parts, welded and guaranteed by us. Scored or worn cylinders re-bored. Please write for our circular and estimates. We were the first to operate the OXY-ACETYLENE WELDING PROCESS in the West. Established since 1911.

MANITOBA WELDING & MFG. CO.
56 and 58 Princess Street, WINNIPEG, Man.



K.W. High Tension Magnetos

TRACTOR OWNERS

Send for our Catalog of Magnetos and Parts to Fit all Makes

We repair all makes Magnetos, Coils and LIGHTING PLANTS

PROMPT SERVICE WORK GUARANTEED

Acme Magneto Works, 216 FORT ST. WINNIPEG

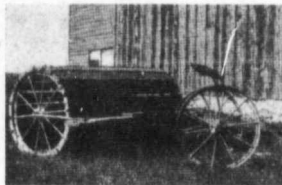
TRADE SAWYER MARK Registered

STITCHED CANVAS BELTING

PLEWES LIMITED (Distributors) WINNIPEG

On sale at your local hardware store.

mower parts and consists simply of a short axle to which is attached, by means of a wood stock and clips as shown, the pole and seat. The seat is attached at E.



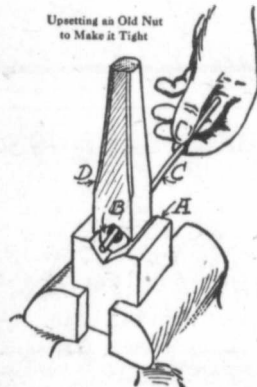
The land roller ready for the field.

Close turning is permitted by the use of the stub tongue C of the rear section and at the same time neck weight and side whipping are prevented by the narrow truck which carries practically no weight other than that of the driver. Robert H. Smith.

UPSETTING LOOSE NUTS

IT IS always well to replace with new ones any loose-fitting nuts which may be found in a machine, especially in an automobile or in a tractor; but there are times when a new nut cannot be procured and it is a great help to be able to upset the

Upsetting an Old Nut to Make it Tight



old nut, so it will become small enough to fit and to hold until a new nut can be obtained.

If the loose-fitting nut is a square one it is easy to upset to a considerable degree. It is only necessary to take a fair red heat—not too hot or too cold—upon the nut, hang it on a bit of stiff wire, then place the nut on edge on the anvil and with many light blows drive the sides of the nut together until the hole is reduced in diameter the desired amount. Do not strike more than one or two blows upon any side of the nut without rolling it over and striking on all the other sides. In this way, distortion and excessive strains in the metal will be avoided. It is well to take a good heat on the finished nut to remove the hammer strains, then to let it cool slowly and tap out to fit the bolt thread.

But where a "hex" nut has become worn enough to slip over the bolt thread, the nut must be handled in a slightly different manner. Make up a swage, as shown at A, to fit the hardy hole of the anvil or to be held in the vise jaws, as shown in the engraving. Cut a groove in the top of the swage of the right shape to fit two sides of a "hex" nut. The swage A can be used for almost any size of nut, provided it be made large enough for the biggest

nut to be handled and that several sizes of sets D are provided for the smaller sizes of nuts.

The set D, like swage A, should be made of good tool steel, with the lower end of the set grooved to fit two sides of a "hex" nut, as swage A was grooved. The upper end of the set may be drawn down small, as shown, and hardened a bit to receive the hammer blows. But the lower end of set D should not be hardened; neither should swage A. The nut, heated and

hung upon a wire, as shown at C, should be placed upon the swage and rotated by one person, while another uses the set and hammer, as the nut is rotated, until the hole has been closed sufficiently to tap to required size.—Tom Scott.

WHAT DAD SAID

He: "What did your father say when you told him that my love for you is like a gushing brook?"
She: "He said, 'Dam it!'"



AUTUMN

HERE is a nip in the air these mornings that must be rather sharp to the man who scrapes his chin when shaving himself.

If he used a Gillette Safety Razor, he would positively enjoy shaving *every* morning, he would look his best at all times, and there would be no cutting or chafing of the skin!

Furthermore, in the time he now takes to get his old razor edge as near right as he can, he could finish shaving with the Gillette.

Stropping and Honing would be a thing of the past for him. That alone is worth \$5,—the price of a

Gillette Safety Razor

Any dealer who is anxious to supply men's needs will gladly show you a variety of Gillette sets. See him to-day if possible.



Safeguard Your Market

The demands of Great Britain determine in a large measure the prices of Canada's farm products.

Without the Mother Country's purchase of these surplus products of Canadian farms, Canadian agriculture would lose its best overseas market.

Great Britain is ready and willing to buy all the farm products that Canada can let her have, but Britain is temporarily unable to pay all cash for these products. Canada, therefore, must extend credit to her if we are to retain this necessary market.

Canada pays cash to the Canadian farmers for their produce and sells that produce to Great Britain on credit.

If Canada does not extend this credit to Great Britain other countries will be glad to do so.

During the War Canada's surplus

crops and farm products were financed by Victory Loans. The result was that every Canadian farmer had a market at good prices for his entire crop.

This year's crops and farm products must be financed in the same way—by the Victory Loan 1919.

Victory Bonds are, as every shrewd investor knows, an investment of the highest class. The interest rate is five and a half per cent., and the interest payments regular. The security is undoubted, and the bonds may be readily turned into cash at any time.

The Loan is vitally important to every farmer in all Canada. It is, therefore, to his interest not only to invest heavily in Victory Bonds 1919, but to work among his neighbors to make absolutely certain the success of the Loan.

BUY VICTORY BONDS And Assure Agricultural Prosperity

Issued by Canada's Victory Loan Committee
in Co-operation with the Minister of Finance
of the Dominion of Canada

Labor as it Looks to the Farmer

IT has been repeatedly shown that a farmer, after providing land, teams and tools, cannot work land enough with his own hands to produce a net labor income equal to that of the soft-coal miner, who furnishes nothing.

Cost-accounting methods indicate that the net labor income from the one-man farm is always to be expressed in three figures, and generally round six hundred dollars. Over against this is to be counted the fact that masons and plumbers get a dollar an hour. Carpenters are on strike for the same wage, and the press carries the item that coal miners are now demanding eight dollars for a six-hour day. In one way or another these discrepancies must be lessened, either by a modified union wage or by increased cost of food.

Under present conditions farm wages are "sky high" and still going up. Three, four and five dollars a day and board! And why not when masons are getting eight dollars, and the only qualification is the possession of a union card! But if these prices are to prevail on the land, what about the cost of food? If the farmer pays these wages, then food will of necessity go up because of the increased cost of production. If he refuses to hire and "gets along" with what he can do himself, then will he produce less, and food will go up in price from sheer scarcity. In this connection it must not be

forgotten that of the entire cost of food about two-thirds is labor.

If the higher-priced labor were correspondingly more efficient, the matter would not be quite so bad, but in general the contrary is true, and this, too, will increase the cost of food. Whether or not the farmer is correct in his general notions about labor, in one respect he is dead right: namely, that entirely independent of the wage question the world will get what it honestly earns and no more, and that real income from human labor will be expressed not in dollars and wages but in food and other goods and in proportion to the energy that is intelligently and skillfully expended. Whatever the wages, the final rewards of labor will be realized only in such concrete commodities as food, clothing and shelter, actually produced. For all this the farmer has good grounds in his everyday experience.

Loyalty to Results

"Make hay while the sun shines" is a homely old adage, but it expresses not only the farmer's experience with work but the very heart of the labor question as well.

The farmer is working with the forces of Nature, and if he sleeps or "lays off" when the sun shines, then his horses and cows will have no hay for the winter. When the spring opens there are but a few days in which to prepare the land and plant the early crops. A strike or a lock-out then, even

WALTHAM

THE WATCH FOR ALL TIME

**Women just love
This dainty watch**

With all the accuracy for which the name "Waltham" is world-famous, the Waltham Convertible Bracelet Watch has, in addition, an exclusive feature which recommends it to all women.

This feature is the "disappearing eye" located on the case opposite to the stem, which enables the watch to be worn in many different styles.

It can be worn with the bracelet, ribbon, strap, brooch or chain—whichever way Dame Fashion may dictate. And whichever way it is worn, its marvellous accuracy remains the same, because it is especially adjusted for changing positions. Despite its small size and delicacy, it is strong and sturdy. It will give many long years of good service as a watch, while being easily adaptable to all changes of fashion.

Ask your jeweler to show you this and many other famous Waltham models.

WALTHAM WATCH COMPANY, LIMITED
MONTREAL
Makers and Distributors of Waltham Products
Agents:—Montreal, Canada, Waltham, Mass.





The Farmer's Delight
A well filled barn—A well stocked stable -- and a pipe well filled with —

MACDONALD'S

BRIER
PLUG SMOKING TOBACCO

"The Tobacco with a Heart"





KEEP HAVANAS BURNING

Sandy (to Doctor who has left the room for a minute): "Here's your cigar, doctor; I was jist keepin' her goin' till ye wud come back."

RAW TRAPPERS - TRADERS - FARMERS
We require immediately—MUSKRAT, SKUNK AND WOLF.
Ship to us. Write for Free Price List.
"Small Advertisement—Low Expenses—Higher Prices To You."

FURS A. & E. PIERCE & COMPANY
The Largest Raw Fur Merchants in Canada
213 Pacific Avenue - - WINNIPEG



HOTEL VANCOUVER,
VANCOUVER, B.C.



WINTER - WHERE

THE CLIMATE IS MODERATE

**ENJOY THE BIG OUTDOORS
AND SUMMER PASTIMES**

**RIDE - MOTOR - GOLF
AT
VANCOUVER - VICTORIA**
S. E. THE
CANADIAN PACIFIC ROCKIES

CHOICE OF **THREE TRAINS DAILY** INCLUDING
THE FAST ALL-SLEEPING CAR TRAIN

"TRANS-CANADA LIMITED"

THIS SEASON EXTEND
THE TRIP TO **CALIFORNIA**

For Full Information, Reservations, Etc.
Ask any Agent of

"THE
WORLD'S
GREATEST
HIGHWAY"



EMPEROR HOTEL,
VICTORIA, B.C.



for a few hours, and the season's yield on that field is lost—lost not only to the farmer but to the city consumer, employer and laborer alike, who depend upon it for their daily bread. In this direct way would the farmer's experience be transferred bodily to the city man should the labor question ever become chronic in the open country as it is now in the city.

Throughout the season the farmer must work every possible day. In our country, as in most countries, crops are grown during a rainy season, and with the best of weather severe storms come largely unannounced and altogether at their own sweet will. Hence to "make hay while the sun shines" is one of the forms of wisdom that have been hammered out by long ages of human experience, and so well does it square with the facts that its truth has become crystallized in the farmer's consciousness. To seize upon every favorable hour for work has become, therefore, a

fixed habit of life with every successful farmer.

In forty-five days from the time of planting corn in the Mississippi Valley this season the crop was in tassel, and the time for cultivation had long passed. In the meantime had come both haying and harvest with erratic and abundant rains. With the farmer and his men this year, as in most years, there has been and indeed must be but one question about work and that is: "When and for how long can we find an opportunity to get at that field?" A little delay, indeed any delay, and the crop is lost or severely cut. "Now is the accepted time" is true on the farm every day from the beginning to the end of the growing season.

And the lesson of this is that the farmer, to succeed even measurably well, must have the most intense interest in his job and the highest loyalty to results. So sensitive is the situation that poor work, even though bestowed at the time when work is needed, will

cut the crop to such an extent as to wipe out all possible profit.

This is because the forces of Nature actually doing most of the work. The farmer says, "I raised this field of corn," whereas the truth is that the greatest of all causes of growth is the energy brought down by the sunlight, and the amount of it for every acre of growing corn is fully equal to the labor of twenty-four horses working day and night for six months.

If now the farmer is not there with his team and cultivator, then the labor of Nature's forces will be bestowed in growing weeds rather than corn, or else will be wasted on bare and unproductive ground. That is why the farmer knows that his business is a case of "Johnny on the spot and no loafing." That is why "labor" to the farmer means "work," not merely pottering round and putting in time. Good crops mean actual physical toil as the price of something to eat, and in the long run the compensation is in

proportion to the honest and skillful labor expended. It is not a matter of wages or of money; indeed, oftener than not no wages are involved, for in general the farmer does his own work and no money passes. In any case labor on the land is wholly and exclusively a question between the man and his job.

Of the problem of making the work go round the farmer has no conception. Such a thing does not occur in his experience. His whole problem is to make his time go round, and the successful farmer comes nearer accomplishing the impossible task of being in two or more places at once than does any other man who works with his hands. He must.

It is not that the farmer is naturally more industrious than other men, but it is that his work is of such a nature that he has an object lesson every day—indeed many times a day—in the fundamental fact that if he does not do the necessary work at once then it will not get done, and if

MALTESE CROSS TIRES



Preparedness

Is your car prepared for wet and icy roadways? Do your tires have the best Non-skid Tread? Be prepared for slippery motoring by providing your car with the Ideal Continuous Non-Skid Tread Maltese Cross Tires.

Long Mileage—phenomenal endurance—freedom from road trouble—are integral parts of every Maltese Cross Tire. Chat with the motorist whose car is equipped with "The Tires That Give Satisfaction"—he's an enthusiast, you'll find.

Maltese Cross Tires are for sale by all Leading Dealers.

GUTTA PERCHA & RUBBER, LIMITED

Head Offices and Factory: TORONTO
Branches in all leading cities

HARVESTING RETURNS Made Easy for FARMERS

To make accurate returns of your harvesting, and, in fact, of the whole year's work on the farm it is necessary to keep a set of books—cumbersome work generally. We are issuing a "Farmer's Record and Account Book," which requires no knowledge of bookkeeping whatever. The book will be sent free to any farmer sending us his name, address, and date of birth.

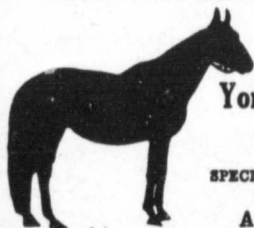
SEND FOR A COPY—WHILE THEY LAST

The Great-West Life Assurance Company

DEPT. "U"

HEAD OFFICE - WINNIPEG

IN WRITING PLEASE MENTION THIS PAPER



F. W. PACE AGENCY LTD.

WINNIPEG

General Agents

**Yorkshire Fire Insurance
Co. of England**

LIVE STOCK DEPARTMENT
SPECIAL FARMERS' ACCIDENT POLICY
FIRE INSURANCE

AGENTS WANTED

it is not done then there will be no harvest. Productive labor is thus made habitual. He lives next to Nature, and thinks directly in terms of wheat, corn, hay and cattle, and is not confused by that medium of exchange called money or by those artificial divisions known as wages and hours of labor. He knows that in general he will get crops in proportion as he labors; not when he pleases to labor, but whenever the conditions call for it and always to the best possible advantage. The fields and the buildings of all his neighbors, from the best farmer down to the most shiftless hill billy, testify daily to the truth of the injunction, "In the sweat of thy face shalt thou eat bread." There is no such thing on the farm as making the work go round.

In these days the farmer's knowledge of affairs is not limited to the farm, for he reads extensively, and besides he holds a somewhat wide acquaintance with men of affairs in more than one line of business.

For example, his friend the shipbuilder told him the other day that the company of which he was a member had just finished a merchant ship at the expenditure of four hundred thousand hours of labor, when the same company had turned out an exact duplicate before the war at an expenditure of two hundred thousand hours of labor. Not only that, the later workmen received an average wage a little more than double that of those who worked twice as efficiently.

Such an incident as this makes the farmer shake his head. He cannot understand why doubling the wage should halve the efficiency; yet he has seen something like it in his own experience. What he does understand is that the second ship must have cost twice as much of human time and energy as was necessary; and what is very much more to the point, that the same men might have built two ships in the same length of time, which fact is of some consequence as long as we really need ships. The farmer assumes, of course, that we would not be building ships if we did not need them and that therefore the whole purpose of the company is to get ships built, just the same as his purpose is to get the fields cultivated.

The farmer connects this concrete incident with his own experience in trying to build, with what he sees going on about him every day, and with what he hears about the great scarcity of houses the country over, now that we have well-nigh suspended building for three or four years. He knows that all classes of people are being discommoded because

of insufficient housing and that the building trades should be among the first to "get busy" after the war, not only in order to start things moving but to provide sufficient housing for all the people. He knows that carpenters and masons and plumbers do not work as they used to work, neither do they work as he and his men are obliged to work if they are to get the work done. Indeed, he has ocular evidence that outside the farm the effort to "get the work done and out of the way" is well-nigh a lost art, if indeed not taboo, as instance the building of the ship.

And he applies all this to the housing problem which is becoming acute in his own home town as in all others. His friend, Mr. Wealthy, for example, is about to build a fine residence. He naturally wonders what it will cost him. The farmer reasons this way about it:

Here is a definite job to be done, not much different from cultivating a field of corn in proper season, only the job is bigger. The workmen can build the house in two hundred thousand hours and everybody knows it. But will they do it? It all depends upon their attitude toward the job. They may reason this way: Old Wealthy has more money than is good for him. Some of it was probably got by unfair means and now is our chance to even up on him. We will put up our wages and shorten the hours and "soldier" a little to make the job go round. In that way we shall get the most out of this particular opportunity.

A Wrong Attitude

Now, if the mason and the hod-carrier and the carpenter and the slater and the lather and the plumber and the plasterer and the painter and the decorator all combine and figure this way, then the house, like the ship, will probably cost four hundred thousand hours of labor instead of the two hundred thousand that might have built it. Well, what of it? The "old man" can pay the bills and what's the difference if his castle did cost him twice what it might have been built for?

This is the difference! If those workmen could have built the house in two hundred thousand hours, they could have built two houses in four hundred thousand, and if they could have done that they could have easily built not only Mr. Wealthy's house but also a very good home for the mason and perhaps one for the carpenter without straining themselves, and all with the time they have wasted in building one house for their rich neighbor. With further jobs other craftsmen could have been fitted out with comfortable homes. With a wrong attitude, however,

only the rich men can have houses and the men who build them will go without, for it is labor, not money, that builds houses.

That is to say, the chief point in the transaction is not that Mr. Wealthy's home cost him twice what it ought, but that the mason's and the carpenter's houses were not built. Now, Mr. Wealthy could ill afford to pay twice what his house was worth, for all money ought to be used to good advantage, but he being rich could far better afford to do that than could the mason and the carpenter afford to go without homes.

For it works out in the end everywhere just as it does upon the farm. If the farmer will not cultivate, then shall he not reap; and if he cultivates indifferently then will his crop be small. Just so, if the carpenter will not do a full day's work, whatever the wage, then he himself cannot live in a good home. And if the plumber soldiers on the job, then no scheme of higher wages or shorter hours or governmental management will ever put a bathtub into his own home.

If we are to have houses with bathrooms in them, then, they must be built and installed by the carpenter and the plumber. This is a matter of work, not of wages, and we shall have both houses and food in exact proportion as we labor efficiently.

Upon this point we are indebted to Russia for a useful demonstration of the fact that all these matters when reduced to their lowest terms express themselves as bread and butter.

The Russian workman had long wanted higher wages and shorter hours—that is, he wanted to make a living easier than he had ever made it before. He was convinced that there was a better way. He found what looked good and tried it out under conditions that rapidly produced results.

When the opportunity came, the Russian workmen turned out the old management of the factories and put in boards of managers made up of their own number, who would conduct the business from the point of view of those who, doing the work, claimed the right to fix the terms of their own employment. Wages were raised and hours of labor shortened. Of course production decreased and prices rose, but that trifling incident was met and provided for by further raise in wages celebrated by still shorter hours of labor, and things went merrily as a marriage bell—for a time.

Ultimately production dropped so near to nothing that the bubble could float no longer, and factory after factory closed until some ninety per cent of Russia's producing power was idle. Nothing

Economical to Buy and Handy to Get

Imperial Royalite Coal Oil and Imperial Premier Gasoline are economical to buy because every gallon is of uniform high quality. Made from the best crudes. Carefully and scientifically refined in modern Canadian refineries. The quality of these well known fuels is always up to the standard—you may depend upon it.

IMPERIAL PREMIER GASOLINE

Straight-distilled—not a mixture. Burns clean. Always the same. Does away with unnecessary carbon and eliminates most of your carburetor and engine troubles. Just what you want for your gasoline tractor and gasoline farm engine.

IMPERIAL ROYALITE COAL OIL

For Coal Oil (Kerosene) tractors and farm engines. Always uniform and dependable. No sediment, grit or foreign matter to clog the carburetor. Saves time and trouble and makes your tractor deliver its full rated H.P. on draw-bar or belt. Excellent for the oil heater and the oil cook-stove, too.

No delays in the busy season if you use Imperial Royalite Coal Oil or Imperial Premier Gasoline. Promptly supplied anywhere in Canada in any quantities desired.



IMPERIAL OIL LIMITED

Power · Heat · Light · Lubrication
Branches in all Cities

CANADIAN NATIONAL RAILWAYS

DAILY TRAIN SERVICE

COMMENCING SUNDAY, OCTOBER 5

BETWEEN

WINNIPEG—VANCOUVER AND WINNIPEG—TORONTO

WESTBOUND		EAST BOUND	
LEAVE WINNIPEG—Daily	10:10 P.M.	LEAVE WINNIPEG—Daily	3:30 P.M.
ARRIVE VANCOUVER—Daily	7:00 P.M.	ARRIVE TORONTO—Daily	4:50 P.M.

BEST IN EQUIPMENT Day Coaches Tourist and Standard Sleeping Cars. Observation Cars between Winnipeg and Toronto and between Edmonton-Vancouver

ENQUIRE ABOUT CHOICE OF ROUTES BETWEEN WINNIPEG and TORONTO

LOCAL AGENT WILL BE GLAD TO GIVE YOU ALL INFORMATION, OR WRITE TO PASSENGER DEPARTMENTS, WINNIPEG, SASKATOON, EDMONTON and VANCOUVER

CANADIAN NATIONAL RAILWAYS

"THE LINE OF TRANSPORTATION THAT BINDS AND BUILDS THE NATION"

was doing, nothing was getting made; but the people were happy, for they had plenty of money and were not obliged to work as in the old, hard days. What if a suit of clothes did cost a thousand dollars in Moscow and hard to find at that! Let them worry about that whose clothes were worn out. Great times had come;

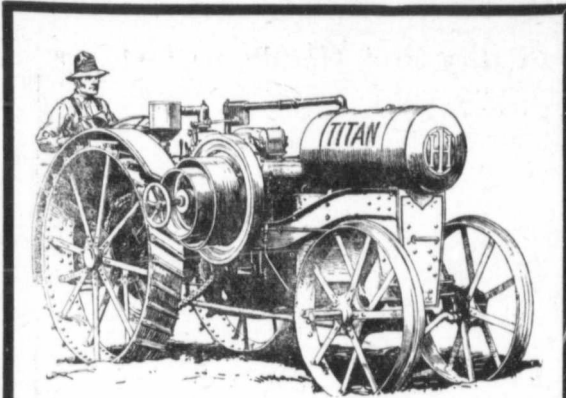
the secret of easy living had been discovered. High wages and short hours, or better, none at all.

But by and by food began to run low. Not being offered for sale in sufficient quantities, the ex-workmen went to the country to get it. They found wheat, but the peasant farmers seemed strangely reluctant to sell. Price

seemed no object. "We have plenty of money; set your price." The peasant shook his head. He would rather keep his wheat. "Don't want the money? Why not?"

(To be concluded in December issue)





Things to Look For When You Buy Tractor Power

WHEN you buy a tractor, use just as much care in making your selection as you would in buying a good horse. Don't make the important decision too hastily—find out for yourself. Be sure that the tractor you buy has all the features essential to all-around service, efficiency and economy of operation.

For instance, look for—

A kerosene engine so that you can use cheap fuel, thereby doing your power work at the lowest possible cost;

A throttle governor to regulate the fuel to the load variations, insuring uniform speed and fuel economy and saving one man's time when engaged in belt work;

A drawbar with a wide range of adjustment both ways so that the tractor will pull any machine or implement on the farm with equal advantage;

A friction clutch pulley with wide face and broad diameter to insure full power-delivery to the driven machine—a pulley so placed that the belt doesn't rub or drag.

Wide fenders over the drive wheels to protect the operator and engine from dirt and mud. Also a "safety first" feature.

You will find these and a number of other features on the Titan 10-20 tractor.

If you need a larger tractor just bear in mind the International 15-30—50% more power than the 10-20—and its a kerosene burner. Write for pamphlet descriptive of the tractor best suited to your needs.

INTERNATIONAL HARVESTER COMPANY OF CANADA LTD.

WESTERN BRANCHES—BRANDON, WINNIPEG, MAN., CALGARY, EDMONTON, LETHBRIDGE, ALTA. N. BATTLEFORD, REGINA, SASKATOON, YORKTON, SASK. EASTERN BRANCHES—HAMILTON, LONDON, OTTAWA, ONT., MONTREAL, QUEBEC, QUE. ST. JOHN, N. B.

Drilling Cylinder to Stop Oil Pumping

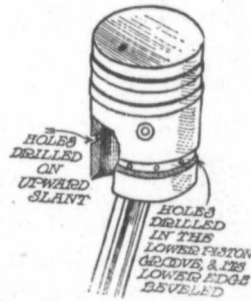
A FARMER neighbor purchased a second-hand automobile, and after a few weeks' operation was obliged to take off the cylinders and thoroughly scrape out an excessive accumulation of carbon. The engine was old and had worn pistons which caused oil pumping. Oil pumping means that some of the oil which is splashed onto the cylinder walls by every revolution of the crank shaft in the crank case is picked up by the edges of the piston rings and carried upward to the top of the

TO CUT OVERSIZE
VERY often it is desired or necessary to make a tap, drill, reamer or a die cut larger than it is intended to do. A hole may need tapping out larger than the standard tap size in order that an oversize bolt or stud may be used, or to make a nut go on easy. A tap can be made to cut oversize in two ways as shown in figure 1.

The first method is to cut a narrow wedge strip of tin and then bend it as shown in the sketch. Lay this thin piece of tin into one of the flutes or grooves of the tap, so that one edge of it laps over and covers the threads of one side as shown. By working the tap into the hole slowly and carefully the tin will make it cut considerably larger.

Another and simpler method is that shown in the next sketch. Several threads or strings of waste are wound round the whole tap and this, worked into the hole when turning the tap, makes it cut large.

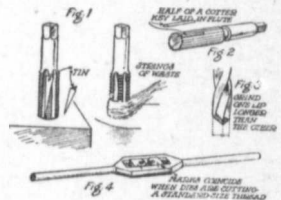
To make a reamer cut larger, procure an ordinary cotter key of suitable size. Take a half of it and lay it in one flute of the reamer, as shown in figure 2. This will force the reamer to cut all on one side, thus making it cut larger. To cause a drill to make a larger hole it is but necessary to grind one of its cutting edges or lips longer than the other, as shown in figure 3, and do the drilling slowly, not crowding the drill.



cylinder with each stroke. The oil burns and leaves a residue of heavy black carbon which causes fouling of the plugs and valves besides aggravating trouble of preignition.

Those who do not understand how this preignition occurs can quickly learn if they will lift the cover off a coal stove and notice the dark red fire of the heavily carbonized or soot-coated cover. The same thing occurs in a carbon-covered cylinder; this carbon becomes ignited when the engine is running, due to the heat of the explosions, and when it becomes ignited it will stay red hot; this causes the fresh charge of gas to be ignited prematurely.

If any of the readers find, as did my neighbor, that the engine pistons are pumping oil, let them try the trick shown in the accompanying sketch—that of removing the lower piston ring of each piston that gives trouble and filing the lower edge of that piston-ring groove at a slight bevel, and then drilling a series of three-sixteenth-inch holes on a slant upward. The upper edge of this groove will now act as a scraper and catch all the oil in the groove and return it to the crank case. This is very simple means, yet an effective one. The ring, of course, cannot be, replaced in this groove. This trouble is usually found only on old engines to which it hardly pays to fit new pistons or rebore the cylinders.



Ways to make tools cut over-size

Two-piece dies held in a die stock can be made to cut large or small according to the distance they are set apart in the die stock. As shown in figure 4 they are set to cut large. Each half of the die and each side of the frame of the die stock is marked to show where the dies should be to cut standard size. Any variation either side of these marks makes them cut small or large.

Charles H. Willey.

THE REASON

The single eye-glass is worn by the dude. The theory is that he can see more with one eye than he can comprehend.

CHARACTER WON THE WAR.

Character—meaning absolute integrity, constancy and lasting quality—is what won the war and what wins out in every contest. The four-flush may fizzle in the air for a time, but as sure as night follows day, it comes to earth at last like a spent rocket stick. It is because of the **good character**, the **lasting quality**, of our belting products and for no other reason that we are here today. Satisfied farmers, threshermen and manufacturers are our advertisers, and no other advertising is worth paying for if these men are not behind it all. Get the **best** that can be got in belting—the



LION BRAND
Rubber Belt
 and the
YELLOW FELLOW
ENDLESS THRESHER BELT



They are unbeaten in the field of grain production

and are sold by all thresher companies doing business in Canada. They may cost a trifle more than some fabrics that are always a big risk but that is forgotten in the added years of service, and we guarantee our goods against all disappointment from slippage or breaking. It is not possible to make better belting by any scientific method known at this day.

Gutta Percha and Rubber Limited

WINNIPEG FORT WILLIAM REGINA SASKATOON CALGARY LETHBRIDGE EDMONTON

WHY RINGS BREAK

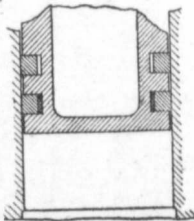
COMPLAINT is sometimes made about the scoring of tractor cylinders and the breaking of rings. This is particularly the case with top rings. The grooves are frequently found to be packed with carbon behind the upper ring. This carbon forces the ring out, scoring the cylinder. Ordinarily the piston ring is supposed to be elastic and to adapt itself to the irregularities of the cylinder and the movement of the piston due to side thrust.

Many operators blame this on the lubricating oil. Experienced men, however, know that this action is due to fuel which runs down the sides of the cylinder, washing off the lubricating oil and working behind the piston ring, where it gradually volatilizes, leaving tarry deposits of carbon behind the ring. The presence of this fuel may be due to cold mixture improperly carburated or it may frequently be occasioned by excessive priming, particularly in cold weather.

It has been popular to illustrate a carburetor as discharging a jet of fuel into the center of a stream of air and to assume that this stream of correct mixture progresses unhampered to the cylinder. This is not the case. Under all ordinary conditions the greater

part of the fuel is immediately condensed upon the sides of the manifold and washed into the cylinder by the friction of the ingoing air. In proof of this it will be found that directly under the inlet valve the side of the piston will be more or less dry of lubricating oil, and show evidence of more wear than the other side.

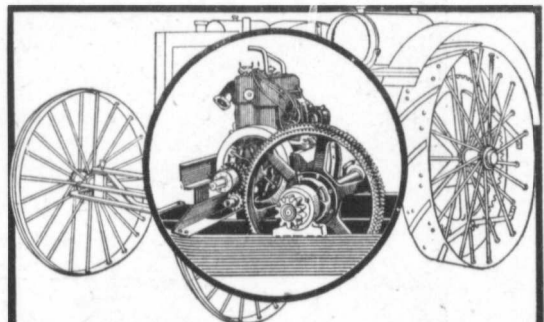
The accompanying drawing illustrates all these points, and shows in addition the carbon packed in the space behind the upper ring.



Carbon packed in space behind upper ring

This drawing will undoubtedly aid the engine owner to a clearer understanding of why piston rings break and cylinders become scored.

FOR SALE—20-40 H. P. Case Tractor, only plowed 450 acres, practically as new; and five-furrow Cockshutt Plow, stubble and breaking bottoms, and about 25 shares. Would trade for cattle. Owner must sell on account of leaving Canada. H. F. Coie, Masonville P.O., Saskatchewan.



Direct Drive Conserves Power in

12 H. P. on Draw-Bar
 25 H. P. on Belt Pulley

THE HUBER Light Four

Draws three bottoms
 Turns an acre an hour

TRACTOR economy and tractor power depend largely on the proportion of the power developed by the motor that is delivered to the draw-bar. In simplicity and economy the direct spur gear drive of the Huber Light Four is unequalled. There are no bevel gears—simply a friction clutch and spur gear reduction to the driving wheels.

Other reasons why the Huber develops such large power in proportion to its weight are: the high wheels roll easier and afford a larger area of "traction grip"; center draft conserves power by avoiding "side pull"; high-grade extra strong materials reduce weight.

These features are the result of 20 years' development. They are behind the Huber reliability that has created thousands of satisfied Huber owners. Write for "The Tractor in the Making". It tells the history of tractor development.

THE HUBER MFG. CO., Marion, Ohio

BARKLEY TRACTOR & SEPARATOR CO., Edmonton, Alberta

THE HUBER MFG. COMPANY, Brandon, Manitoba

Some good territory is still available for live dealers.



The Outfit that took First Prize. A Grand Detour 2 Bottom Rigid Beam Plow and a Case 10-18 Kerosene Tractor



This Shows part of the Field Plowed by the Outfit that Was Awarded First Prize. The Stubble Field Was Hard and Dry



The Outfit that took Second Prize. A Grand Detour 3 Bottom Rigid Beam Plow and a Case 15-27 Kerosene Tractor

CASE 10-18 Kerosene Tractor

For all kinds of drawbar and belt work. Specially designed 4-cylinder, valve-in-head, kerosene burning motor, mounted crosswise. One piece main frame assures permanent alignment of all gears, shafts and bearings. Cut steel gears enclosed and run in oil. Belt pulley mounted on crank shaft. Air washer prevents dirt from entering cylinders. All parts accessible. Write for all details.

CASE 15-27 Kerosene Tractor

Develops full power on kerosene with liberal reserve. Practical at the drawbar and belt. Four cylinder, valve-in-head motor mounted on one piece frame assures permanent alignment of all shafts, gears and bearings. Motor has removable cylinder walls. Cut steel spur gears, enclosed transmission. Air washer prolongs life of motor. Write for our Tractor Booklet.

CASE 22-40 Kerosene Tractor

Pulls 4 or 5 plows and is used for a multiplicity of other drawbar and belt jobs. The 4-cylinder, valve-in-head motor specially designed for tractor work burns kerosene economically. Transmission, all cut steel enclosed spur gears. Air washer keeps dirt out of cylinders. Every working part easily accessible. Let us tell you all the details. Write for literature.



The winning outfits were awarded a handsome silver cup. This has been placed with a collection of similar trophies in the offices of the J. I. Case Threshing Machine Company, manufacturers of Case tractors and Grand Detour plows.

Wheatland (Ill.) Plowing Contest Honors Go To J. I. CASE THRESHING MACHINE CO.

Grand Detour plows and Case Kerosene tractors won a double victory at the 41st Annual Wheatland (Ill.) Plowing Contest held on September 11, 1919. Against a field of 13 well known and reliable makes of tractors and plows, the products of the J. I. Case Threshing Machine Co. were awarded first and second prizes by the judges of the contest.

A Grand Detour 2-bottom 14-inch rigid beam plow operated by a Case 10-18 Tractor scored *first*.

The Grand Detour 3-bottom 14-inch rigid beam operated by a Case 15-27 tractor won *second* honors. The winning outfits are pictured on the opposite page.



J. I. CASE THRESHING MACHINE COMPANY, Inc.
990 LIBERTY STREET.

RACINE, WISCONSIN, U. S. A.



The Object and Conditions of the Contest

The object of Wheatland (Ill.) Plowing Contest was to determine which of the outfits entered could do the best plowing. Particular attention was paid to the way in which the soil was turned into even, *clean* and *straight* furrows of rounded-conformation. Rules of the contest provided that each outfit be operated by only one man, who controlled both tractor and plow.

In judging the performance of each outfit, the possible points were apportioned as follows: for opening furrows, 30 points; for conformation of furrows, 25 points; for straightness of furrows, 20 points; for evenness of furrows, 15 points; and for neatness of furrows, 10 points. One Hundred points being perfect.

The ground plowed during the contest was a stubble field, *very hard* and *dry*. It put the strength of the plow to the acid test. It gave the tractor an opportunity to demonstrate its power. The work done was excellent. Farmers were convinced that power plowing can be done as well and *better*

than plowing with teams. They also saw how easily the winning outfits were operated.

If you are interested in power plows and kerosene tractors, we shall be glad to send you our booklet which interestingly describes from cover to cover our line of Case tractors and Grand Detour plows.

NOTICE: We want the public to know that our plows are NOT the Case plows made by the J. I. Case Plow Works Co.

THEY NEVER VARY

EXCEPT TO
Increase in Value



That is, in brief, the character features of BUTTER FAT and the "MAGNET" CREAM SEPARATOR. Everyone, to the smallest day-scholar, knows the value of butter fat, but not everyone knows how to handle it to the end that its FULL value is found, and that none of it leaks away with the by-product. The milk-pail content is like the gold-impregnated block of quartz. It holds the precious metal in minute particles all through the matrix which, in the hands of any but an expert, would run to waste. The EXPERT OF THE MILK-PAIL is the

"MAGNET" Cream Separator—

It is the greatest labor-saving and food-conserving machine ever introduced into Dairy Farming.

DAIRY WOMEN know that the "MAGNET" bowl and one-piece skimmer is easily washed sweet and clean in less than five minutes—a saving of from 10 to 15 days' labor each year over the time required to properly wash the disc kind.

After nearly 18 years' constant use on Canadian farms the "MAGNET" has established beyond the shadow of a doubt that its square gear drive and ball-bearing adjustments is unequalled as an effective piece of dairy mechanics and has nothing in front of it in lasting quality.

MAGNET ALWAYS SKIMS CLEAN

because its bowl is supported at both ends, cannot wobble, and therefore will do perfect skimming for life-time. Dairy men and women can avoid all "misery" by buying the up-to-date "MAGNET" Cream Separator. "Facts are chiefs that winna ding, and canna be disputed."

The Petrie Mfg. Co. Ltd.

Head Office and Factory: Hamilton, Ont.
WINNIPEG, CALGARY, REGINA, VANCOUVER, MONTREAL,
ST. JOHN, EDMONTON, LETHBRIDGE



Live Stock What Is Canada Going To Do About It?

By H. S. ARKELL, M A., B.S.A., Live Stock Commissioner

A BIG, profitable live stock, meat and produce trade is open to Canada overseas.

What is Canada going to do about it? No one doubts that the success of the Canadian live stock industry is and will be dependent upon, the extent and variety of our export trade. We cannot eat all we produce. Further, we cannot afford to. If we would purchase abroad, we must sell abroad and our credit balance with foreign countries is already heavily overdrawn. To redress this balance, we must rapidly extend the output and export of the products of our land. Theoretically we agree to the truth of this statement. Practically we decide to pass on to the other fellow the duty that it implies. In fairness to the Canadian farmer, it must be admitted that the responsibility for shifting this obligation lies less with him than with the great masses of people who are content to crowd our cities and towns, creating thus a problem for society which it is taxing human ingenuity to solve. If Canada needs one thing more than another, she needs labor upon the land—honest, dependable labor to swell our farm production to a volume that will ensure a steady and permanent exportable surplus of the supplies that Europe wants. This way lies success.

Respecting cattle, herein lies a problem that will prove a worthy test of Canada's nerve, ingenuity and determination. The difficulties are great, but they are not insurmountable. In the Argentine and Australia are more and better cattle than in Canada, and these countries are proving much cheaper sources of supply. The Argentine has landed live cattle in Italy and is proposing to do likewise for Germany via Antwerp. The United States is trading with France and is busy in Holland, endeavoring to secure passage to Germany via Rotterdam. We have secured this con-

adian goods—bacon, eggs, etc., for which they could obtain but a tenth of the product they required. The unwarrantably high price of hogs in Canada during the past months is but a reflection of the reputation of Canadian bacon as compared with American and demonstrates the effort of our packers to maintain their connection with old established clients in the face of short supplies. Since Denmark within a year will again be a factor in the bacon market, our only security for the future is full production and such a substantial export supply as must command recognition by its volume and quality. Short hog production is unquestionably the most dangerous policy Canada can adopt. This is true of eggs as well as of bacon.

The London agents of our Canadian packers reviewed in disappointment the orders for Can-

adian goods—bacon, eggs, etc., for which they could obtain but a tenth of the product they required. The unwarrantably high price of hogs in Canada during the past months is but a reflection of the reputation of Canadian bacon as compared with American and demonstrates the effort of our packers to maintain their connection with old established clients in the face of short supplies. Since Denmark within a year will again be a factor in the bacon market, our only security for the future is full production and such a substantial export supply as must command recognition by its volume and quality. Short hog production is unquestionably the most dangerous policy Canada can adopt. This is true of eggs as well as of bacon.

The London agents of our Canadian packers reviewed in disappointment the orders for Can-



For rough work wear
OVERALLS
SHIRTS and
JUMPERS
made of

STIFEL'S INDIGO CLOTH

Standard for over 75 years.

Better than you expect—a cloth that's built to stand wear and tear and weather. Three generations of wearers have found it the most-for-the-money cloth.

Be sure your overalls, shirts and jumpers are made of Stifel's—it hasn't an equal anywhere for all-round satisfaction. Look for the label on the back of the cloth inside the garments when you buy. Insist upon STIFEL'S and you'll never be disappointed in service. Remember, it's the CLOTH in your overalls that gives the wear!

Cloth Manufactured by

J. L. STIFEL & SONS

Indigo Dyers and Printers
Baltimore Coca-Cola Bldg.
St. Louis 528 Victoria Bldg.
St. Paul 239 Kendrick Bldg.
Toronto 14 Manchester Bldg.
Winnipeg 488 Hammond Bldg.
Montreal Room 509, 459 St. Paul St.

WHEELING, W. VA.
New York 246-242 Church St.
Philadelphia 324 Market St.
Boston 31 Bedford St.
Chicago 223 W. Jackson Blvd.
San Francisco Postal Tel. Bldg.
St. Joseph, Mo. Saxton Bank Bldg.



Black Aberdeen-Angus at Home

cession for Canada on account of the health of Canadian cattle and it now remains to see what advantage we can take of it. Two Canadian firms only, one Western and one Eastern, have as yet dared to face the risks of live cattle export, and they deserve all the success and profit which they are likely to obtain from it. I am firmly of the opinion that this live cattle trade must become a necessary part of our cattle policy. So far as Europe is concerned, we are only at the beginning of this business, even if in the end it prove not to be permanent. Germany, France and Belgium are now in the market for fat cattle and the landed price is from sixty-five to seventy-five pounds per head. Further, next spring there will be large demand for feeding and breeding cattle, the latter chiefly of the Holstein and Shorthorn sorts. I recommend the organization of companies of producers to join with commission men in the development of this business. The present avenues of distribution must be widened; otherwise other countries will secure the business to Canada's disadvantage.

Linked with the live cattle trade is the establishment of a chilled beef business. Canada cannot compete with the Argentine and Australia in frozen meat. Owing, however, to shorter haul, we have an advantage in the export of chilled beef. It is suggested that the difference in price in favor of the latter article will be from 1d. to 2d. per lb. Our packers are thoroughly investigating this trade and preparing themselves for it when the proper moment arrives. The production of a sufficient quantity of high-class meat will alone make this trade possible. The cattle business of Canada can be made a great success if we set ourselves wisely and determinedly to the task. Otherwise, it will prove a dismal failure. In this business, however, more than in any other, we must widen the channels of distribution and therein the producers themselves should have an important part to play.

As regards dairy products, butter is everywhere at a premium and Canadian cheese holds a similar reputation to Canadian bacon. The shortage of milk and dairy products in Great Britain is unprecedented. The same is true of Europe. Partly this is due to the scarcity and high price of concentrated feed. It is a condition that is so general as not quickly to be remedied. This condition, in fact, is regarded with the gravest concern by those who have in hand the difficult task of agricultural reconstruction. It is retarding also the increase of swine production and the restoration of the

normal requirements of fat. The concensus of opinion is that the future of the export trade in dairy products is assured.

With regard to horses, a Scotch firm, the agents of a big transport company whose manager I met in London, has recently taken a consignment of heavy Canadian draft horses to Great Britain. Motor transport is apparently unable to displace good heavy drafters, either for city or farm use, and for choice animals London is paying from £175 to £250 per head. An aggressive Canadian firm, prepared to deal straight-forwardly with British purchasers and to carefully hand-pick every animal sent forward, should make a little money out of this business. Good horses are in demand even for farm use. New York has already offered horses on the London market.

A similar scarcity exists on the continent. Belgium is in need of large numbers of moderate priced horses for use by the repatriated peasants and France is in the market for heavy horses of the Percheron type for city and country use. Good horses of this sort are worth 6,000 francs each and are hard to get. French buyers have recently been on this side to secure a number for use in the vineyards in the south of France, but were obliged to defer buying meanwhile, owing to the present low exchange value of the French franc. Notwithstanding this fact, the market exists and business will eventually be done. As regards the Mediterranean countries, no trade offers at present although the Canadian case has been fully presented to Italy, Serbia, Roumania, Greece and Poland. Greece, it may be noted, is now making inquiry regarding light horses and dairy cattle. The sale of Canadian ponies for fresh horse meat has been investigated but appears not to be practicable owing to the present cost of transportation. The meat may eventually go forward after being boned and frozen or salted and packed in barrels.

The people are tired of the poor quality stuff that they have been obliged to eat during the war and there is still enough money amongst them to pay for the better article. If Canada can take full advantage of this demand while our packers are adjusting their business to the development of the trade in chilled beef, it may help to tide us over a very difficult period. In conclusion, therefore, I desire to emphasize the importance of an extension of this business and of the number of those engaging in it.

Dependability

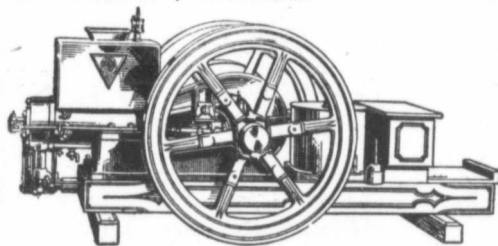


THE KEYNOTE of the ALPHA Engine is dependability. It runs when you want it to, day after day, and you never need to worry about it. Its simple, sturdy construction makes it dependable.

The ALPHA power rating is *dependable*; if it is a 1½ Horse Power it will deliver at least one-and-a-half horse power; if it is a 28 Horse Power you can bank on getting more than 28—never less.

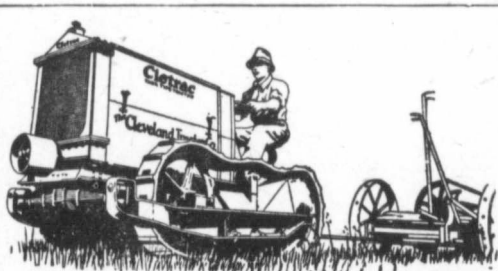
The De Laval Company is *dependable*—the largest manufacturers of dairy supplies in Canada.

If you don't know who handles the ALPHA in your vicinity, write nearest sales headquarters for his name.



THE DE LAVAL COMPANY, Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA.
Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Silos. Alpha Gas Engines, Alpha Churns.
Catalogues of any of our lines mailed upon request.
MONTREAL PETERBORO WINNIPEG VANCOUVER
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER



The Tracks Save Power

The Cletrac Tank-Type Tractor runs on metal tracks like a locomotive. Three wheels on each side carry the entire weight of the machine and run on the endless tracks which are laid down and picked up as the Cletrac goes along.

This distinctive feature enables the Cletrac to work efficiently on wet or sandy soil, sod, snow or ice. It permits it to go over the seed bed without packing the soil. The Cletrac will work on hills where most tractors fail.

Small But Powerful

The Cletrac is only 96 inches long, 52 inches high and 50 inches wide, enabling it to work up close

to trees and fences, and making it ideal for orchard use. The Cletrac is extremely powerful. It has a speed from 40 to 50 per cent. greater than the average tractor.

The Cletrac does *more than plow*. It goes right through from plowing to harvesting. In addition, it does the belt work on the farm.

The Cletrac is specially designed to operate on kerosene. *More economy.* Write for the illustrated booklet "Selecting Your Tractor."

St. Catharines, Ont.
Since purchasing my Cletrac I have had it in almost continuous use. Before buying a tractor I attended a number of demonstrations and investigated to my own satisfaction the merits of the various tractors that are on the market. Finally purchasing the "Cletrac" in preference to any other make, and I am entirely satisfied with the results I have obtained.
Yours very truly,
Geo. Goffin.

Cletrac

TANK-TYPE TRACTOR.

The Cleveland Tractor Co. of Canada, Ltd., Windsor, Ont.
The Cleveland Tractor Service Co., Ltd., Regina, Sask.

Education In and Through Agriculture

By J. W. GIBSON, M.A.

Director of Elementary Agricultural Education, British Columbia

IN the June number of the Agricultural Gazette, Mr. John Dearness, in his most timely article on "Agriculture as Education," points out some of the dangers and also some of the errors attendant upon the introduction of agriculture in the schools. The case has not been overstated. Agricultural instruction can hardly be said to have more than begun in the schools of Canada and already one sees evidences of mischief and impending failure, chiefly, we think, through a lack of understanding combined with the misdirected enthusiasm of some of its strongest supporters. What we seem to need and need badly is a philosophy of agricultural education. Education in agriculture is comparatively easy of understanding. "Let us have agriculture taught in our schools," is the slogan, and many who know more about agriculture than about the true function of schools are leading rashly and blindly on. In too many cases they mistake the means for the end. They have not grasped the important fact that in the public schools, at least there is one thing more important than education in agriculture and that is education through agriculture.

good thing to know, then the sooner they learn it the better," seems to be the theory of some agricultural instructors. But this is wrong in principle and can never be permanently successful. For example, the scientific feeding of hogs is a fine study and the economic production of pork is a splendid achievement, but it properly belongs to young men and not to little boys and girls of junior or intermediate grade. A certain kind of agricultural propagandist in Canada has failed to recognize or appreciate this fact and the sudden popularity which now attends all efforts on the part of the schools to increase food production seems to give him right of way in the schools. Under war conditions we felt that this should be tolerated and even encouraged, but it is now time that school inspectors and superintendents should think their way through this question of agriculture in the schools and get on to a sound basis of education both in and through agriculture.

Agriculture has wonderful possibilities as a great liberalizing subject of instruction. It stands so close to the first interests of the human race that it is destined to occupy a most important place in the educational systems of the future, but it will never become the great factor and the fine instrument in education which it can and should be unless it is properly organized and intelligently handled. It has its beginnings in primary education in a direct observational study of the things that surround the children and which enter into their daily experience and activity. It includes a knowledge of the plant and animal life of the district and of the soil and later of the processes entering into plant production. Probably no single phrase or term adequately expresses all that we wish to include in the elementary work which logically precedes vocational and economic agriculture, but certainly "nature study" as we understand it today most nearly expresses what we mean. The true teacher who has learned to think with the children and to appreciate their mental processes and above all the normal development of their interests, attitudes and tendencies, makes no dividing line between nature study and agriculture. She thinks of agriculture as nature study specialized and applied—and as it becomes more specialized and operative it obviously may become more economic

At various times during the last half century attempts have been made to introduce the study of agriculture in the public schools of Canada. The supposition was that agriculture was something that children would do well to know about, hence it never got beyond the stage of good and useful information, dispensed from text-books with a certain amount of doubtful exposition thrown in. Indeed, the instructions issued to teachers in Ontario in 1896, relative to the teaching of agriculture in public schools, specifically stated that the teaching of this subject was to be "by conversation only." Of course, Ontario and the other provinces have got well beyond that stage in the teaching of agriculture but there is a grave danger of our making another mistake and that is what Mr. Dearness has taken occasion to point out. The whole question is too serious and too important to be passed over. There is a right way and we may be sure that it is based upon sound pedagogic principles.

How many teachers of agriculture ever stop to consider the great question of the evolution of interest in children? "If it is a





Before stropping
(magnified)



After stropping
(magnified)

Which blade is yours?



You shave with the first blade—unless you use an AutoStrop Razor. Shaving causes a saw-like edge to form and the blade becomes dull. Stropping re-aligns the edge and brings the blade back to original keenness. That's why men of judgment select the AutoStrop Razor; they realize that no razor can do good work without constant stropping. If you doubt this, ask a barber. Take a barber's strop from him and he'd have to close up his shop.

Why then put up with dull blades, needless expense, half-removed stubble, and a smarting sense of discomfort—penalties imposed by a non-stropping razor?

The AutoStrop Razor strops itself without removing the blade; it is cleaned without taking it apart; while the self-stropping feature makes for shaving comfort by preserving the keen edge that makes close, even shaving possible.

Drop in at your dealers the next time you're in town and ask to see the AutoStrop Razor. There is no obligation to buy; and no obligation to keep an AutoStrop Razor if it doesn't please you. Everywhere—razor, strop and 12 blades, complete, \$5.00.

AUTOSTROP SAFETY RAZOR CO., LIMITED
AutoStrop Building, Toronto, Canada

Auto-Strop Safety Razor



Horses and Carhartt Overalls

Surely the same considerations that impel a man to choose a first-class horse should also induce him to buy first-class overalls. The one big thing you will like about my Carhartt Overalls is that they are thoroughbred all the way through, and that means thoroughbred service, neat and finished tailoring and heavy denim cloth. Every seam is double stitched, every button is reinforced. Sizes are correct, extra large handy pockets, high back, high bib and generous seat. Behind it all is my guarantee of satisfaction and 25 years of knowing how.

Hamilton Carhartt
President

**HAMILTON CARHARTT
COTTON MILLS, LIMITED**
TORONTO MONTREAL
WINNIPEG VANCOUVER

and vocational. It is not altogether a question of age or of grade, but in the main Mr. Dearness is right in his conclusion that "in the public schools there is very little of agriculture that should not be taught with a liberalizing and socializing aim as nature study."

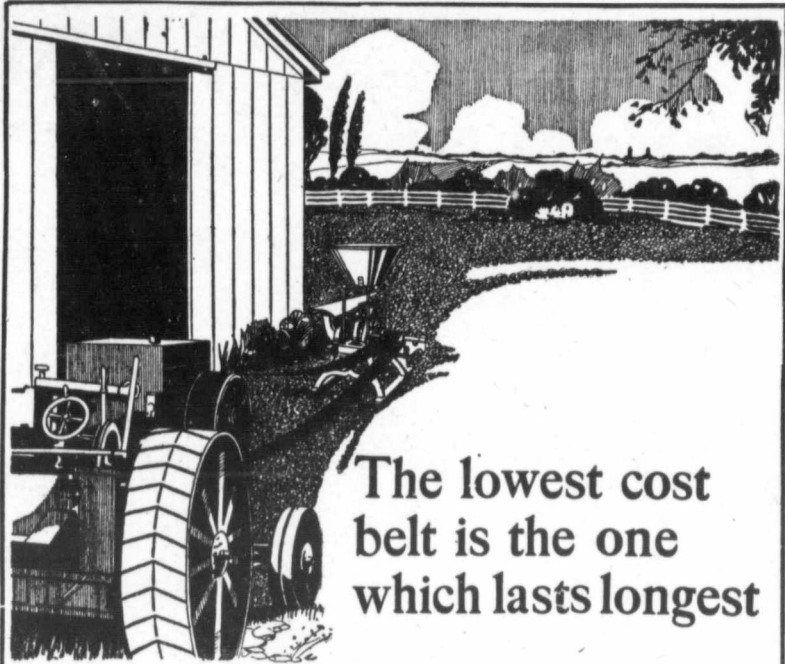
Nature study with domestic animals is not agriculture but it is a most desirable introduction to the animal husbandry side of agriculture. Pigs are most interesting animals for observational study for little boys and girls, but the butcher's verdict on the animal is a highly economic consideration which is more appropriate to developing adult interest and can best be dealt with in senior grade or high school work. In the public school we can afford to have more "piggy" and less "pork."

And what about our Pig Clubs? It is a fine thing to interest boys and girls in the feeding and care of pigs and other animals. They learn much of animal peculiarities and of their response to good care — in the matter of friendship quite as much as of increasing avoirdupois. They get a certain amount of business training and may even develop some skill in the mixing of rations but to the little boy of ten pig clubs are mainly nature study clubs and to the big boy of eighteen they are young farmer's pork raising clubs. The little boy manages to fatten up his pet in order that in its death both he and it may make a record for the county or for the province and receive in connection therewith a big prize and a halo of glory. There is something incongruous about this whole performance. Why can we not have nature study clubs as fine, educational organizations for boys and girls of public school age and good, up-to-date, well-managed Junior Farmers' Agricultural or Production Clubs for boys from fifteen to twenty years of age? At present we are trying to be all-inclusive in our agricultural programme, to the detriment of permanency of interest and of good pedagogy. (The article by Mr. Dearness to which Mr. Gibson refers from the "Agricultural Gazette," page 43 of our September issue.—Ed.)

Fifty-Fifty

"I believe in reciprocity," said the old-fashioned householder. "I take to bed with me every cold night a hot brick carefully wrapped up. The first half of the night it keeps me warm, and the last half of the night I keep it warm."

Do not keep the family skeleton in a closet; give it a Christian burial.



The lowest cost belt is the one which lasts longest

Don't be fooled by a price-tag into buying an extravagant belt for your farm.

A price-tag doesn't mean anything. You can't tell what a belt has cost you until it is worn out.

If you paid \$100 for it, and it lasted one season, the cost was \$100 a year.

But if you paid \$200 for it, and it lasted *three* seasons, the cost was only \$66 a year.

That's real economy.

That's the Goodyear way of making and selling belting for farms.

Goodyear Extra Power Belting is the best belt we know how to build. It is strong—extra strong. The cotton is protected with a great deal of fine, tough rubber. This belt lasts long—resists bad weather and clings to the pulleys, doing the work better and saving the bearings.

It does cost more in first price. But it lasts so long that the cost in the end is very low.

You will save money by buying farm belting on the Goodyear basis. Insist on Goodyear Extra Power. Ask for it by name. If your dealer does not have it, he can get it quickly from our branches.

The Goodyear Tire & Rubber Co. of Canada, Limited
Toronto, Ont.

GOODYEAR
MADE IN CANADA

EXTRA POWER BELT



If Ben Franklin could have foreseen

the Fiery Little Columbia

IN Franklin's time the use of electricity was unknown. . . . In our day we have the fiery little Columbia Dry Battery at our beck and call

- to ring our doorbells
- to buzz our dining room buzzers
- to regulate the heat in our homes
- to run toys for our kiddies
- to make our telephones speak up
- to light our flashlights
- to ignite the power in our autos, motorboats, and farm engines

The Columbia is the most useful little package of power on earth. It is the handy man of the world.

When your doorbell gets weak, or any of your electric things begin to quit, don't buy just "a battery"—make the man understand you want Columbia.

Columbias meet every battery need—last longest—cost no more—for sale in every store where you would naturally inquire—Fahnestock Spring Clip Binding Posts without extra charge

CANADIAN NATIONAL CARBON CO. LIMITED
Toronto, Ontario

THE STORAGE BATTERY

IT'S the definite power and long life idea back of the Columbia Storage Battery—that is why so many thousands of car owners prefer it. . . . Columbia Service is everywhere. Find out the advantages it has to offer you, too.

Columbia
Dry and Storage Batteries

J-19

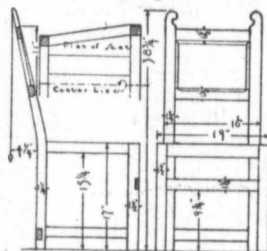
Home-Made Furniture

Chairs that are Comfortable and of Good Design

By WILLIAM L. SIMONS

CHAIRS must be not only comfortable, they must be pleasing to the eye. It is quite possible for your companion to be comfortable in a poorly designed chair, but you are not comfortable when conversing with him, for you see the ugly chair,

stick reduced in size by being chipped off with a chisel on all four sides until it is $\frac{1}{2}$ by 1 inch in size. If this tenon is held to the leg at the place where it is to be joined, and the place is marked with a pencil, the location for the mortise or space into which the tenon is to be placed will be obtained. This hole should be a little deeper than the tenon is long, so that when the glue is applied the surplus can run into the space.



In like manner the back legs are framed up, and the side rails of the seat, with side stretchers, are joined to the front and back legs.

The seat is made of boards $\frac{1}{2}$ -inch thick which, like those of the back panel, fit into grooves on four sides and must be put in place before the chair is glued.

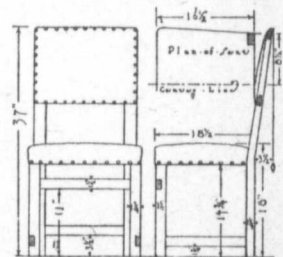


The chair with the wooden panel in the back and drawings for its construction.

After all the joining is completed put all the parts together to see that everything fits exactly. If such is the case the parts may be glued together. Five cents worth of cabinetmaker's glue, which comes in dry chips, will be more than enough. Put a part of it into an old tin drinking cup, pour in about two ounces of water and place the cup into a basin of water. Place the basin on the fire, allowing the water to boil until all the glue is dissolved. By means of an old brush or stick apply the hot glue, the hotter the better, to the tenon, after giving the inside of the mortise a coat of the glue. It is well to do this work in a warm place and also to warm the sticks of wood before applying the glue, as it dries quickly.

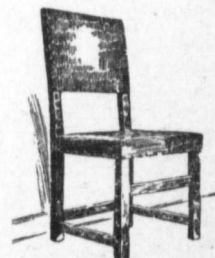
and whether you are conscious of it or not it does have its effect upon you.

Three views of a chair are necessary: The front elevation, the side elevation and the plan. Before beginning work make out a list of the materials needed. In the chair with the wooden panel in the back the two front legs are alike, as are also the two back legs, but the latter continue above the seat and form a part of the back of the chair. The side view of the sticks, as given in the drawing, shows the bend, and the bend is just the thing that makes the chair comfortable, so care must be taken to make it correctly.



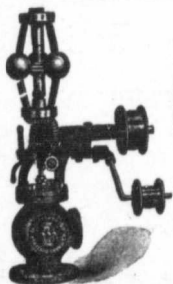
The two front legs are made from sticks of oak $1\frac{1}{2}$ inches square and 17 inches long. The seat frame and the front and side stretchers are joined to these by means of a mortise and tenon. The front rail of the seat frame and the front stretcher are the same length. The total width of the seat in the front is to be 19 inches. Inasmuch as the legs are each $1\frac{1}{2}$ inches square, these sticks—the front rail and the front stretcher—are each 16 inches long. Added to this length is the tenon of $\frac{3}{4}$ -inch at each end.

Gluing the Parts Together
This tenon is a part of the same



Leather-Covered Chair and the Details of Construction

Steam or Gas Tractors



Equipped with

PICKERING
"THE GOVERNOR WITHOUT JOINTS"

give greatest efficiency

FITTED TO EVERY BUILD OF ENGINE

Patent Ball Ranger Speed Changer Supplied on all Genuine Pickering Governors.

Will increase speed 50% or more.



THE PICKERING GOVERNOR CO.

PORTLAND

CONN, U.S.A.

Glue up the back legs first, not forgetting to put in the panel; then the front legs, clamping them tightly together. When they are dry put the side rails of the seat and the side stretchers into the back legs. Arrange the seat boards in the groove and lastly join the front legs to the seat and tie or clamp them together firmly. Glue sets in twelve hours; it must dry thoroughly.

Take a great deal of pains to clean off all spots of glue at the joints or wherever they may occur. Sandpaper every part until it is perfectly smooth. Round off all the sharp edges, particularly where the chair will receive wear, as, for example, the front edge of the seat.

Upholstering

Wash the entire chair with ammonia, which will remove any grease, and then apply the stain. If possible get a water-color stain, which may be dissolved in hot water. Boil floor wax in a little turpentine and rub it over the entire surface. Finally rub lightly with pumice stone.

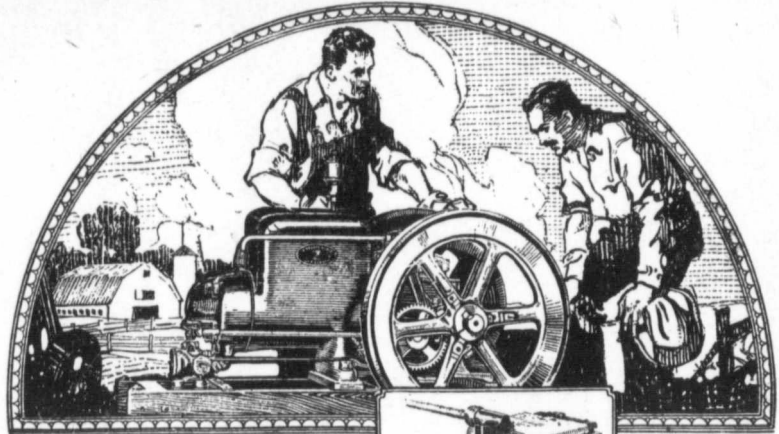
The use of pumice stone, besides giving a very smooth surface dulls and tones the finish of a piece of furniture, giving it a "near-antique" appearance. Dusting some of the pumice into the corners heightens the effect.

The framework of the other chair may be made in the same manner. After the frame has been made, cut out paper patterns of the back and the seat. Try them on the chair. If they fit use them as guides to cut the leather. Webbing and hair or wool for the seat will be necessary. Webbing may be obtained from any upholsterer or by sending to any department store in a city. Ten yards of webbing three inches wide will be plenty and will cost five cents a yard. Run the strips half an inch apart across the seat frame from one side to the other. Also it pays to run strips from the front to the back, interlacing them in a basket-work pattern.

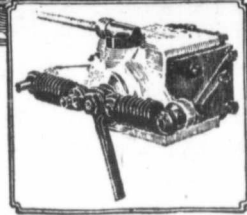
Place over the webbing a piece of burlap. An old sack, washed clean, will answer the purpose. Cover it with hair or wool. Over this stretch muslin and nail securely. The leather cover can now be carefully adjusted and secured with brass nails, placed at equal intervals, as shown in the drawing.

Upholster the back in the same way, first placing a piece of the leather with the right side out to give the outside back a neat finish.

The material for the all-wood chair will cost approximately two dollars; for the chair upholstered in leather probably not more than four dollars.



Fairbanks-Morse
"Z" Engine with
Bosch Magneto



Farm Engine Supremacy

THE famous "Z" Engine and the Bosch high-tension, oscillating magneto combine to make the one SUPREME farm engine. The dependability of the Bosch in delivering a steady succession of hot, intensive sparks is well known, and adds the one possible betterment to the "Z"—always recognized as the foremost of farm engines. Call on your "Z" Engine dealer and see the result of this newest combination—FAIRBANKS-MORSE "Z" WITH BOSCH MAGNETO. All Bosch Service Stations throughout Canada will assist our dealers in delivering maximum engine service.

MADE IN TORONTO, CANADA, BY

The Canadian Fairbanks-Morse Co., Limited.

Hallifax St. John's Windsor Montreal Ottawa Toronto
Hamilton Calgary Vancouver Victoria Saskatoon

A HORSE CAN TRAVEL WHERE AN AUTOMOBILE CANNOT GO

Often in the deep snows of winter an automobile cannot get through the drifts, but the horse can travel anywhere if he can secure footing. There is just one thing which insures safe footing on any road anywhere any time, no matter how icy or slippery, and that is the



Neverslip Red Tip Horse Shoe Calk
Whatever the occasion; a hurried trip to the doctor, an important call to town, a load of produce to be delivered—your horse is ready when you are ready. The wise horse owner will go to his horse shoer early and have the safe, reliable RED TIP SHOES put on. Then he can laugh at the weather. No sleet storm, no sudden freeze will hold him back. His sharp, strong RED TIP CALKS can be adjusted in 20 minutes, and he is ready for the road. Avoid substitutes. LOOK FOR THE RED TIP.
THE NEVERSIP WORKS
550 Pius IX Ave., Montreal, Canada.
U. S. Factory, New Brunswick, N. J.

Five Hundred Million Dollars in Animals

Canada's exports of animal produce in the last fiscal year reached almost \$200,000,000 compared with \$175,000,000 in the previous year and \$127,000,000 three years ago; in other words \$500,000,000 in three years. Farmers more and more are coming to realize the wealth that lies in live stock. When you ship your live stock, grain or dairy produce, assure prompt payment by putting through a Union Bank of Canada draft on the consignee.

UNION BANK OF CANADA

THE PIONEER BANK OF WESTERN CANADA

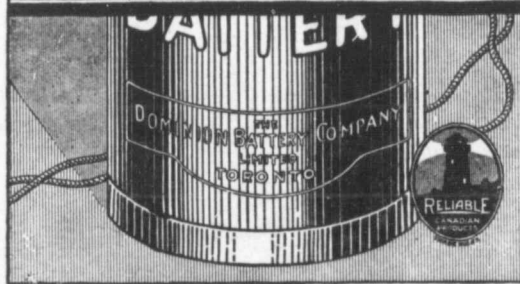


RELIABLE IGNITION

Reliable Ignition Batteries make your electric lighting plant most efficient. They are "Lively and Lasting"—two things that a good battery must be. Reliable Ignition Batteries are best for your telephone, truck, automobile, and for all household purposes. They pay for themselves over and over. A guarantee of satisfactory service printed right on every Reliable Battery box. Equip yourself with a Reliable Flashlight for night farm work. Can't blow out, explode, or set fire. In many sizes and styles. Everyone admires our colored assembled Tubular Flashlights and Searchlights. Reliable Products are Canadian made and of best quality. For sale by dealers everywhere.

DOMINION BATTERY COMPANY LIMITED, Toronto, Canada

"Lively and Lasting"



DON'T SCRAP YOUR BREAKAGES

Send us all your broken or cracked Cylinders, Crank Cases, Gear Wheels, Gear Housings or Machine Parts. We will deliver perfect results and save you money.

HUB WELDING COMPANY

253 SHERBROOKE STREET, WINNIPEG
Lowest Prices consistent with Best Workmanship.

RAW FURS

OUR ADVICE

Ship to us at once and Reap Benefits of High Prices now prevailing

PRICE LIST AND SHIPPING TAGS FREE

Pierce Fur Co., Ltd
Richard M. Pierce, Manager

King and Alexander, WINNIPEG, Canada

We Also Buy HIDES and SENECA ROOT

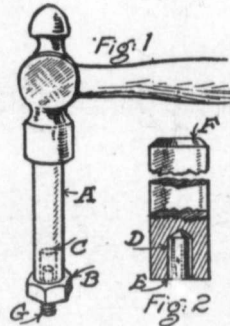
Useful Stunts in Farm Mechanics

TIGHT BOLTS

FREQUENTLY while taking down an automobile or its engine, a stationary steam engine or some of the tractor parts, bolts will be found so badly stuck in their holes that it is impossible to remove them in the usual way—that is, by removing

up farther and the set driving repeated until the nut comes flush with the top end of the bolt, when the set is dropped and the hammer applied directly against the end of the bolt and the top of the nut.

The manner of making bolt set A is shown in Figure 2, a piece of round or "hex" steel being used. Several sizes will be necessary for different diameters of bolts, each each set being used for two sizes of bolts. A hole D is drilled into the center of the end of the set, as shown, then the end E is faced off true and hardened. This operation is necessary, otherwise the set will soon be hammered out of shape because of the severe punishment it receives by being driven against nuts of comparatively small surface. The top of the tool F should be chamfered, but should not be hardened.



the nut and driving out the bolt with a hammer. Some bolts fail to move under this treatment, even though the end of the bolt be hammered so badly that the thread is spoiled and the nut cannot be replaced without mending the bolt end and its thread.

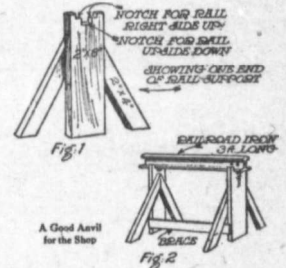
When a bolt is found which will not yield to light driving with a hammer upon the threaded end, take a hammer with a face about three times the diameter of the bolt and drive smartly upon the head of the bolt as though the bolt were to be driven in farther. This will frequently break the rust which holds the bolt in its place and enable the bolt to be driven out in the usual way, by a light hammer applied to the threaded end of the bolt and supplemented by a drift after the bolt has been driven flush with the surface of its hole.

If this treatment fails to start the bolt resource may be had to the method illustrated in Figure 1, in which the "stuck" bolt is shown at G, with its nut B unscrewed a couple of threads. The hollow set A is placed upon the nut, as shown, the upper end of the bolt G projecting, without touching A, into the cavity C which has been drilled in the lower end of set A for that purpose.

Vigorous hammer blows on the upper end of set G will either loosen the bolt or strip its thread. It will not strip the thread of the nut, for tests have shown that the usual nut possesses more thread strength than the threads of the bolt section inside of that nut; therefore the bolt will fail before the nut lets go. As soon as the bolt starts, the nut B is screwed

A RAILROAD-IRON ANVIL

An anvil for the home shop or work-bench may be made from a three-foot length of railroad iron, as shown by the sketch. The frame consists of two-inch material, two two-by-eighths forming the supports which are held solid by two-by-four braces.



The tops of the planks are double notched so that the iron may be used either side up. The wide notches are cut the width of the base of the rail, and in the center of these, deeper notches are cut to fit the head of the rail. These should be deep enough so that the rail, when upside down, will rest on both pairs of notches.

This anvil will be heavy enough to do ordinary work. One end may be ground at a sharp right angle, making a good cutting edge for all sorts of hot or cold strap irons.

Dale R. Van Horn.

Just Like Iron

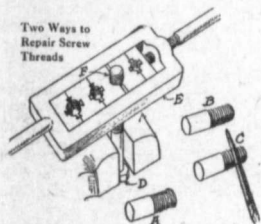
"My dear sir," said the salesman, courteously, as he handed the customer his package and no change, "you will find that your suit will wear like iron."

And sure enough it did. The man hadn't worn it two months when it began to look rusty.

REPAIRING BOLT THREADS

BOLTS with threads battered by driving out, are good for nothing but aggravation. Fix the threads before a minute is lost in trying in vain to start the nuts in place. A common three-cornered file will cure the damaged thread, but if badly battered the thread-renovating job is apt to be rather long and tedious.

Two Ways to Repair Screw Threads



The accompanying sketch A represents a bolt with the end threads battered by hammering upon the bolt end. Sketch B shows the first operation. Simply reduce the end of the bolt to its proper diameter by rotating the bolt slowly while filing it. If the bolt is placed upon the vise jaws while the latter are open less than the diameter of the bolt, the filing may be done easily.

With the bolt held on the vise jaws, as described above, apply the three-cornered file as shown by sketch C. Start down the bolt where the threads are perfectly good and file toward the end of the bolt by revolving the bolt so the file will travel along the thread. Take care to file very little where the thread has not been battered, and also take care to guide the file so the thread will have the same pitch as the old thread.

As long as any of the old thread is left, it can be made to answer as a guide to the file, but look out when several threads next to the end have been smashed, for they are brought closer together by the hammering down of the end of the bolt and if you follow those old threads without making allowance for the upsetting of the bolt end, then the new threads will be too close together. But there is a far quicker way of repairing damaged bolt ends. Get a die plate—one of the old-fashioned "squash" plates. Open the dies and place upon the bolt as shown at F. Close the dies until they fit the bolt, then screw the plate off over the end of the bolt and the threads will be repaired in a jiffy.

James F. Hobart.

Fashion Notes from the Front
"Where are you going?" asked one rookie of another.

"Going to the blacksmith shop to get my tin hat reblocked."



W. W. Ballantyne
writes an advertisement

Neidpath Farm

Dear Sir:—

The Delco-Light Plant you sold me to light my farm has not only given us the pleasure and convenience of electric light in all our buildings, but is rapidly paying for itself in the work it does.

It would be a good investment for us aside from the lighting altogether. So far, we have found 16 jobs for Delco on our farm and we are constantly finding new jobs for it. We are using power from Delco-Light to run—

- | | |
|--------------------------|---|
| 1 3-unit milking machine | 11 Electric iron |
| 2 Cream separator | 12 Toaster |
| 3 The pump in the dairy | 13 Charging batteries on our motor car |
| 4 Root pulper | 14 Pumping water for household use |
| 5 Emery stone | 15 Lighting our home, stable, outbuildings and yard |
| 6 Horse clippers | 16 Violet ray generator |
| 7 Sheep shearing machine | |
| 8 Fanning mill | |
| 9 Washing machine | |
| 10 Vacuum cleaner | |

We have never figured this work down to so many hours per day, but we do know that we can operate the farm with one less man than we used to. Figure out the wages and board of a farm hand, and you can see what the Delco-Light plant saves us.

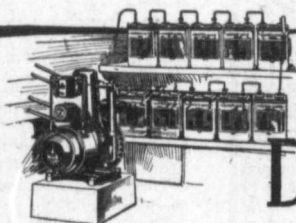
We used to run a gas engine on the milker and cream separator at a cost of 10 cents a day. Our Delco-Light plant, supplying light and power for the whole farm, costs only 7 cents a day.

It would not only be a harder proposition to run our farm without Delco-Light, but it would cost us a lot more money. We have no hesitation in recommending any farmer to harness up his farm to Delco-Light.

Yours truly,

(Signed)

W. W. Ballantyne



DELCO-LIGHT

The complete Electric Light and Power Plant for farms

The Domestic Engineering Co., Dayton, Ohio.

Makers of Delco-Light Products

BREEN MOTOR CO.
Winnipeg, Man.

BRUCE L. ROBINSON
Calgary, Alta.

A Grain of Wheat
It has been calculated that one grain of wheat produces fifty grains, and that these fifty grains will each produce fifty grains more and so on. Working on this basis, a single grain of wheat develops in the following proportion: In the second year, 2,500; in the third year, 125,000

grains; in the sixth year 15,625,000,000 grains and in the twelfth year, 244,140,625,000,000,000 grains!

The third year's crop would give three hundred men one meal, leaving sufficient to feed eight pigs for one day. The produce of a single grain of wheat in the twelfth year would be enough to

supply all the inhabitants of the earth with food during their lifetime!

THE WORSE THE BETTER
Grocer: "I can't guarantee those sixty-cent eggs, madam."
Customer: "No matter; want 'em for when the neighbors come borrowing."

The man who considers Delco-Light something that he will buy—when he can afford it—should heed this strong letter from Mr. Ballantyne. It costs more money to farm without Delco-Light. Can you afford, then, to delay equipping your farm with light and power?

Exclusive Delco-Light features

Where there is a boy on the farm he can look after this simple plant. These features insure care-free, long-lasting service for you.

It is direct-connected. There are no belts to slip, break or be replaced.

It is self-cranking. Pressing down on a lever starts the engine and it stops automatically when the batteries are charged.

It is air-cooled. There is no water to carry, to freeze or to boil away.

There is only one place to put oil. There are no grease cups.

A simple mixing valve regulates the fuel supply. There is no complicated carburetor.

Ball and roller bearings cut down friction and increase efficiency.

Thick-plate batteries are long lasting.

75,000 Delco-Lights are operating in Canada and the United States. This in itself proves the practical nature of the plant. Let us put you in touch with some of these people.

You owe it to yourself and your family to learn what Delco-Light will do for you. As a start toward a greater comfort and larger profit, ask us to send you the Book—"Pays for Itself"—written by practical farmers.

Young Ladies with Particular Taste

would do well to insist on

"Northland Brand"



when looking for the "Latest" thing in SWEATERS. "Up-to-

the-Minute Styles," and Quality the Very Best.



286



SOLD AT ALL GOOD STORES THROUGHOUT THE WEST

Northland Knitting Co., Limited

Manufacturers of Men's, Women's and Children's Sweaters, Mitts, Gloves and Moccasins.

AVOID THE HIGH COST OF FEEDING LIVE STOCK

Use **CANE MOLA**

(100% Pure Sugar Cane Molasses)

Sprinkle Cane Mola over your straw, old hay, corn stover, ensilage, fodder, screenings, etc.

Reduces cost of feeding.

This is not a stock feed, but a selected, 100% pure sugar-cane molasses. It is not a beet molasses or a Louisiana Black Strap.

Cane Mola has been analyzed by the head chemist of the Central Experimental Farm, Ottawa, and is recommended by the best dairymen and breeders in Canada.

When you are using CANE MOLA—

Horses will winter at hard work better.

Cows will give more milk.

Hogs will gain healthy weight quickly.

Sold in strong iron-hooped barrels at a reasonable price.

Send for full particulars of this wonderful product and our booklet on economical feeding, stating number of live stock you have. 23

CANE MOLA CO. OF CANADA, Limited, 118 St. Paul Street W., MONTREAL, Que.

LOCAL DISTRIBUTOR

- Calgary, Alta. J. W. CAHILL, Alberta Stock Yards
- Edmonton, Alta. NORTHERN SEED CO.
- Saskatoon, Sask. J. H. SPEERS & CO.
- Welfort, Sask. A. E. CODE
- Brandon, Man. C. S. UNICUM
- Regina, Sask. REGINA FLOUR & FEED CO.

SEE PAGES 44 and 45

for our

GREAT PONY CONTEST

The Business End

of farming demands much attention. Shaw's Business Schools, Toronto, offer unexcelled courses by mail or by attendance. Particulars Free. Write W. H. SHAW, Pres., 397 Yonge St.

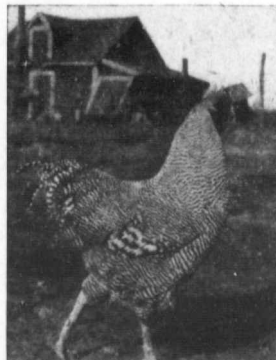
How to Obtain Maximum Winter Egg Production

Use Pullets from Males Which Come from a Heavy Laying Strain—Value of the Trap Nest.

By M. A. JULL, in "Canadian Countryman"

IN view of the high price which eggs will probably soar to this winter, every one with any pullets on hand, should take care to get them laying as soon as possible. The pullets should be handled very carefully while approaching the laying stage, any

It has been found that the male has a greater influence in transmitting the ability to lay a good number of eggs in the winter months than has the female. The hen transmits the ability to lay a normal number of eggs during the spring season, but she cannot transmit the ability to produce a large number of eggs in the winter season. This ability is transmitted by the male, but he should come from a heavy producing hen. The problem, then, is to select the heaviest winter producers and mate them with a male whose mother was known to have been a heavy winter layer. The selection of the male is very important, and it is only by using a male bred from a good winter layer that best results can be secured.



The Head of the House

Nevertheless, care must be exercised in the selection of the female breeders, for not only is it necessary to get a good male breeder from a heavy layer, but her eggs should be of good size, and sound in shell. They should run high in fertility and in hatching power. Her chicks should be healthy and vigorous. In other words, the hen should not only be a good layer, but she should be a good breeder also.

unnecessary excitement may delay egg production and certainly if they are not fed well, they cannot be expected to lay before Christmas. What should be borne in mind is that the sooner they begin to lay, the more money they make.

The discussion on breeding would intimate that trap-nesting is necessary, and many farmers will find it well worth while trapping from October to the last of February. It has been found that pullets which start to lay early are usually the best layers. Also, the pullets which lay best during the winter months are the best layers for the year. On the average, heavy producers can be

Good stock is absolutely essential, and most people now realize that pure-bred stock has many advantages over other mongrel stock. Furthermore, the pullets must be fully well matured to be most profitable.

The ability to lay eggs is inherited, and it requires careful selection and the adoption of a consistent breeding policy to develop an egg-laying strain. What is most needed is the development of winter layers, since the majority of the eggs produced in the country are laid from March to June, and although the cost of production is low the profits are small, because the eggs are worth less than any other time.



And the "Neck"

The average farm hen should not only lay 144 or more eggs in a year, but the majority of them should be laid from November to March. Not only is this necessary from the standpoint of economical production, but from the standpoint of breeding, it is highly desirable, since heavy winter laying pullets make the best breeders as yearlings.

selected on the basis of egg production during the early laying season. Therefore, in order to secure the most substantial improvement in egg production,

The selection of heavy producing females may not in itself improve the egg production of the subsequent flocks to any extent.

m

Laying

the male in trans- a good winter ale. The 7 to lay s during the can- to pro- eggs in ability ale, but heavy problem, heaviest te them ner was heavy tion of nt, and le bred er that d. be ex- of the nly is it d male er, but od size, should hatch- ould be n other ot, only should

eeding nesting farmers 1 while the last found to lay layers. y best are the On the can be

g pro- laying to se- l im- ction,

trap-nesting *for the winter months at least is necessary.

The numerous egg-laying contests have established the fact that the production in the pullet year is nearly always greater than that of subsequent years. It is nearly always the case that hens which are unprofitable during the first year are still more unprofitable during the second year. Herein lies another reason for trap-nesting, the poor laying pullets can be eliminated from the flock, the good ones being saved for breeding purposes as yearlings.

In summarizing the discussion on breeding for egg production, the following suggestions are given as basic principles in a well-directed effort towards the development of winter laying strains. First, all breeding birds should be selected on the basis of constitutional vigor and vitality. Second, no bird which has been known to have been in should be used as a breeder. Third, the use of breeders of such females only as have shown themselves by trap-nest records to be high producers, since it is only from such females that there can be any hope of getting males capable of transmitting heavy laying qualities. Fourth, only those females used as breeders a second time, which show a high record of performance in respect to the vitality of their chicks. Fifth, the use as breeders of such males only as are known to be the sons of heavy laying dams, since only from such males can heavy laying daughters be obtained. By following the above principles, coupled with progeny testing and a reasonable degree of inbreeding, a winter laying strain can be developed. In this way egg production will be greatly improved and farmers will secure the most satisfactory returns from their flocks.

The pullets should be ready to lay by November 1, and they should be in their laying quarters even now. Moving them by night is preferable, and when they have been placed in their laying quarters, they should be watched very carefully for the first few nights. They should be taught to go to roost, and if necessary they should be placed on the roost at dusk. You can teach birds almost any habit, but once they

have acquired the habit of roosting in a bad place, it is very hard to break them from it.

Avoid overcrowding, and watch carefully the water, since colds and diseases are most readily spread by means of the drinking vessel. This should be kept absolutely clean, and disinfected regularly. Keep a solution of potassium permanganate in the drinking water. Buy the crystal form from the drug store, and make up a stock solution, add enough of the stock solution to the drinking water to make it a light wine color.

Finally, bear in mind that it is only through the most careful observance and management that the "Winter Egg Basket" can be filled, and winter egg-production, to my mind, is the most profitable phase of poultry keeping.

Mangels make one of the best "green" feeds for poultry. Split it and hang up by a stout wire just above the heads of the fowls, to encourage them to take exercise. Don't give too much at once, but just what they will eat up each day.

TOURS

TO
Eastern Canada
 NORTH PACIFIC COAST
 AND
CALIFORNIA

DAILY TRAINS

Any agent will assist you with your winter trip, quote lowest fares, secure berths and other accommodations.

CHOICE OF ROUTES WINNIPEG TO TORONTO

Most Modern and Up-to-date Equipment, including Observation Cars Winnipeg-Toronto and Edmonton-Vancouver.

MAKE THIS YOUR VACATION WINTER AND TRAVEL

CANADIAN NATIONAL RAILWAYS

"The Line of Transportation That Builds and Binds a Nation"

J. MADILL, District Passenger Agent, Edmonton, Alta. W. STAPLETON, District Passenger Agent, Saskatoon, Sask. OSBORNE SCOTT, General Passenger Agent, Winnipeg, Man.

Lump Jaw

The only reliable treatment for Lump Jaw in Cattle.
Fleming's Lump Jaw Cure
 Price \$2.50 a bottle. Sold under a positive guarantee since 1896. Your money back if it fails. Write for Fleming's Vast-Pocket Veterinary Adviser 60 pages and illustrated. It is Free.
 Fleming's Chemical Horn Stop.
 A small quantity applied when calves are young will prevent growth of Horns. A 50c tube sent postpaid is enough for 25 calves.
FLEMING BROS., Chemists,
 25 Church St., Toronto, Ont.



USE HOYT BABBITS

When re-lining the bearings on your farm machinery.

NICKEL GENUINE

babbitt for heavy duty gas tractors

56 lb. box \$0.90 per lb.
28 lb. box 1.10 per lb.
Less than 28 lbs. 1.25 per lb.
delivered your town.

FROST KING

babbitt for threshers, separators and all kinds of stationary engines

56 lb. box \$0.35 per lb.
28 lb. box 0.37 per lb.
Less than 28 lbs. 0.40 per lb.
delivered your town.

Hoyt Metal Co.

Eastern Ave. and Lewis St.
TORONTO

Factories: LONDON ST. LOUIS
TORONTO NEW YORK

RAW FURS

We specialize on shipments. Shippers patronizing us are satisfied with returns as we guarantee honest grading and high prices. Send for our Fur Price List, issued monthly. It will save you money.

Information regarding game laws will be found in our price list.

GOODMAN & ROSENTHAL
168 King Street East TORONTO, Canada

WE WANT

RAW FURS

Our Price List mailed on request
We pay Express and Postage

E. T. CARTER & CO.
85 Front St. E., Toronto

CYLINDERS REBORED

All makes of Gas Engines, general repair work on all classes of Farm Machinery.

Satisfaction and quick work.

ROMAN'S MACHINE AND REPAIR CO.
MOOSE JAW SASK.

Trapping and Hunting

(A Paying Hobby for the Returned Boys—and for all Boys)

By ROBERT G. HODGSON

There is nothing more interesting to the boy than trapping, even hunting and fishing having no advantages over it. Of course, this refers to the average boy, as we know there are some who do not care for it.

The boy who loves to trap, hunt, fish, and camp will be better off, both mentally and physically than the boy who does not. Hunting and trapping gives him courage, good nerves, a steady eye, a love of nature and an appreciation of the wonderful things found in her ways.

He learns to depend on his own resources and while he may not rise to fame as a trapper—the days of the professional trapper, as a vocation, are past—with a little help in securing his outfit and a little instruction in setting his traps. He not only gains health and pleasure from trapping, but adds to his income, in a substantial way, as well.

He learns to overcome obstacles, investigate solutions and use his brains in a way that will later be valuable training in the business he later undertakes, and eventually he will have something to keep him busy and interested and he will not be loafing around.

Giving methods for trapping is somewhat difficult as first of all the methods themselves depend a great deal on weather conditions, climate, the particular locality the trapper operates in, and the exact spot the trap is to be set. Short of a book, many times the size of these articles, all the best methods employed in capturing the animals cannot be given. Therefore the methods given are the most successful and adapted to almost every locality.

If, however, the amateur trapper can go with and watch closely, an experienced trapper setting his traps and going over his trap line he will learn a great deal more of trapping, which will prove a valuable addition to the information derived from reading this article.

Early Trapping

As the fall months come around and the heavy frosts make their appearance, the amateur trapper in his wanderings runs across tracks and signs of fur-bearing animals and contracts the fatal disease known as trapping fever.

This tendency for early trapping, unless checked, will result in the taking of many unprime, worthless pelts. These inclinations for early trapping should be curbed, as early caught, unprime furs are worthless or nearly so—one skin taken the middle of November is worth several caught the forepart of October. Where there are no game laws respecting the taking of animals, early trapping is usually the rule but anyone who is thinking of his own interests will not begin trapping until fur is prime; he will also do everything possible to prevent others from early trapping.

I have often thought it too bad that many fur-bearers were not like the weasel in the fact that they are worthless until fully prime. There is no money in trapping unprime furs; it is a waste of time; a loss to the country and the early trapper will have difficulty in selling his pelts, running chances as he does of being fined. So wait until the trapping season opens in your state before you begin trapping operations.



The New Cushman Grinder

This Grinder will do more work of better quality with the least power of any grinder sold in Western Canada. It is made in four sizes as follows:

6 inch (Flat Plates).... 2½ to 4 H.P.
8 inch (Flat Plates).... 5 to 10 H.P.
10 inch (Flat Plates).... 6 to 12 H.P.
13 inch (Flat Plates).... 16 to 25 H.P.

"CUSHMAN" machinery has nothing in front of it for sterling quality, satisfactory service, durability and value, and the "CUSHMAN" GRINDER takes no second rank in a first-class line. It will automatically save you a big slice of profit. You don't have to work or worry with it. It is a self-contained, indispensable tool and the livestock you are feeding will bear testimony to its worth.

Cushman Motor Works of Canada, Limited
Dept. A. Whyte Avenue and Vine Street WINNIPEG, Canada

A POSTCARD addressed THUS:



EVERY farm home in Western Canada should have a

NEW JEWELLERY CATALOGUE

Thousands of homes would consider satisfactory Christmas shopping an impossibility were it not for the great assistance this beautiful book affords.

Through its wonderfully illustrated pages you will find those helpful suggestions that will turn your Christmas Gift problems into pleasurable moments of giving.

Practical suggestions for gifts at every price for mother, father, sister, brother, friends and relations.

Our mailing lists are nearly complete—if you want this beautiful book, send for it to-day—it will be mailed you free and post paid.

D. R. Dingwall Limited

Diamond Merchants, Jewellers and Silversmiths
WINNIPEG

brings THIS!



LEARN WIRELESS

operating if you don't want to farm. Shaw's School, Toronto, has best equipment in Canada. Write for particulars.

GEO. CREWSON, Secretary,
1 Gerrard Street

FOR SALE—4-cyl. 60 H.P. gasoline engine, \$1,800, and complete 28 H.P. steam engine, \$2,400 separator in good condition, \$1,800, had cash, balance to suit. William Drews, Botha, Alta.

Care of Traps

Before setting your traps bury them for a couple of weeks in barnyard manure or black, damp earth, or boil them in a liquid made by boiling hemlock bark and walnut husks. This gives them an ideal color and removes all human odor. Then oil them with a good trap oil—do not, under any circumstances use machine or gun oil or kerosene as this only drives the animals away. Use rather oil made especially to use on traps; if you cannot procure this render out the fat found on a duck or goose, being careful not to burn it and use this to oil your traps.

Your traps should be well oiled before setting them out and again oiled when pulled up in the spring, preparatory to laying them away for the summer. Many trappers seem to be of the opinion that a trap does not require oiling—at least they never oil them. A trap, as much as any other working mechanism, requires oiling and by seeing that they are oiled regularly you not only prolong their life but you insure their working when an animal steps on the pan.

The dictionary defines ethics as "the science that treats of the principles of human morality and duty; moral philosophy; morals." While as a general rule this manner of reasoning is not applied to trapping it can be and it is expedient that it should be so applied. Trapping is really a sport as much as hunting or fishing or camping, only it is a much more lucrative one. And to preserve and develop that quality of sportsmanship so necessary in any true sportsman it would not be out of place here to mention a few rules on the ethics of trapping; especially when we consider that the majority of the readers of this article are amateur trappers and boys.

There is among sportsmen, generally, a feeling of good fellowship and reciprocity; this feeling wants to be cultivated to develop real true sportsmen.

Trapping is considered by many people, some of whom are doubtless fanatics, as being extremely cruel in all its phases and no matter how conducted. There is a strong movement on foot to place laws on the statute books of both the United States and Canada prohibiting the use of steel traps for the taking of fur-bearing animals and abolishing them entirely, so far at least as the purpose for which they are now used is concerned.

The writer has had his attention called to this matter several times and while some of this society's claims are well founded others are not. It must be admitted, even by anyone who is an

advocate of trapping fur-bearing animals that there are parts of trapping that are indeed cruel. However, there is seemingly no way out of it and all trappers can do is to make the best of a bad job.

Trappers can, however, practice certain methods that will, in a large measure, reduce the cruelties of trapping. For instance: I have seen trappers skinning animals while they were still living. They might be knocked unconscious but they were not dead and would undoubtedly recover had they been left in this state. There is no necessity of doing this; the animal can be easily killed or drowned in a very short time and this being the case trappers should be sure they are dead before beginning skinning operations. The point is this: That this and other methods of trapping have given this industry the appearance of a very cruel one and all methods should be employed by trappers whereby as much of this as possible is eliminated.

(To Be Continued in December Issue)

Here's a FREE BOOK that tells you how to make farming more profitable

IN it you'll find practical directions for the construction of all sorts of permanent improvements. Many of these improvements can be made in their spare time by the men required for the usual farm tasks from materials close at hand. Every shovelful of Concrete you use adds to the value of your farm and increases your profits from it.

"What the Farmer can do with Concrete" tells everything you need to know about Concrete in plain language, free from technical terms. Get your copy now—just send your name and address.

A few of the subjects this book covers: Barns, foundations, feeding floors, engine bases, concrete blocks, root cellars, milk houses, fence posts, silos, dairy barns, hog-houses, poultry-houses, cellars, watering troughs, mixing and placing Concrete, etc.

Ask for Canada Portland Cement, the uniformly reliable brand. It can be secured from more than 2,000 dealers throughout Canada. If your dealer cannot supply you, write our nearest Sales Office.

Canada Cement Company Limited

Herald Building Montreal

Sales offices at

Montreal Toronto Winnipeg Calgary



**CANADA CEMENT
CONCRETE
FOR PERMANENCE**

Send me your Literature

NAME _____

ADDRESS _____

Are You Getting Your Full 100% Out of Your Tractor Engine?

90% of Farm Tractors, in use for a year or more, are running with faulty compression, due to worn down cylinder walls and pistons.

Cylinder Re-Boring

BY OUR SPECIAL MACHINERY

—the most economical and satisfactory way to restore worn-out Tractor cylinders.

With uneven compression in the cylinder comes loss of power, increased fuel consumption and faulty operation. With our special machinery we can make your old Tractor, Truck or Automobile Engine, just as good as new, at reasonable cost, by re-boring and fitting with oversized pistons and rings. Only the actual amount required to true the cylinder is taken out, but no matter how badly worn the cylinder, the cost of the operation is no more. Accurate records of measurements are kept. We can supply new piston rings at any time.

WE ABSOLUTELY GUARANTEE SATISFACTORY RESULTS

General Repairs

We specialize in Cut Gears, Tractor, Truck and Automobile Machine Work, General Machine and Boiler Work. We have a large assortment of patterns and can promptly supply oversized pistons and rings for any Tractor Truck or Gasoline Engine. Acetylene Welding a Specialty.

The Sterling Engine Works Limited

WINNIPEG Foot of Water Street MANITOBA

BIGGEST OFFER EVER MADE

Read How
Easy it is to
Get
One of These

5 Shetland Ponies

FREE TO BOYS AND GIRLS **FREE**
OF WESTERN CANADA

LIKE PLAY TO WIN

Every Boy
and Girl has
a Chance to Get
One of These

BY DEVOTING a portion of your spare moments after school and during holidays you can very easily get one of these beautiful gentle and well broken Shetland Ponies. They are great chums for any boy or girl. So small you would think you could pick them up. They never kick, bite or get angry. You can tell them all your secrets. They never will tell. You can talk to them and they will do everything, but talk back to you. It will be just like play for you to meet the conditions of the contest, and yet we are going to pay you well for everything you do for us. Get your entrance form in quick, so that we can send supplies out to you and so that you can get started at once. You want one of these beautiful Ponies and an early start is an advantage, because you can get the extra points for orders sent in prior to January 1st, 1920.

5 Shetland Ponies—5 Big Prizes

The Five Shetland Ponies constitute the big feature, but every boy or girl contesting will receive large cash prizes.

GIRLS' BIG PRIZE OUTFIT consists of Shetland Pony, "Dandy," and a beautiful Buggy and Harness, also a fine riding saddle and a nickle-mounted bridle. The whole outfit will be sent to the home town of the winner, all charges prepaid. "Dandy" is the dearest little Pony you ever saw. All ready to move. Will it be to your home? This Prize will be given to the girl living in one of the three Western provinces—Manitoba, Saskatchewan or Alberta—whom the records show at the close of the contest has the greatest number of points of the girl contestants.

BOYS' BIG PRIZE OUTFIT consists of Shetland Pony, "Prince Edward," with a complete outfit same as is given with the Girls' Big Prize Outfit, all prepaid to the winner's home town. "Prince Edward" is full of play, is gentle and has good manners. He is looking for a pal. Are you going to get him? This prize will be given to the boy living in one of the three Western provinces—Manitoba, Saskatchewan or Alberta—whom the records show at the close of the contest has the greatest number of points of the boy contestants.

Note:—Winning one of the above prizes eliminates the contestant and bars him or her from winning one of the following prizes:—

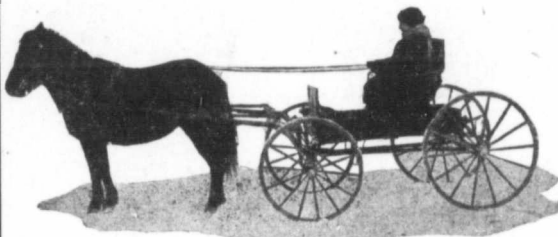
MANITOBA'S BIG PRIZE OUTFIT consists of Shetland Pony, "Chummy," a dandy saddle and beautiful nickle-mounted bridle. He is a handsome little fellow, every bit as nice as either of the above two, only we do not include a buggy and harness. This entire outfit will be given to the boy or girl living in the Province of Manitoba who obtains the greatest number of points, unless eliminated by winning one of the first two prizes, in which case the second greatest number of points obtained by a boy or girl living in the Province of Manitoba wins. Did you say you wanted this one? If so, get started early.

SASKATCHEWAN'S BIG PRIZE OUTFIT consists of Shetland Pony, "Baby Doll," and the same kind of an outfit as goes with the Manitoba Prize. This outfit will be given to a boy or girl living in the Province of Saskatchewan under the same terms and conditions as prevail in the Manitoba Prize.

ALBERTA'S BIG PRIZE OUTFIT consists of Shetland Pony, "Beauty," and everything the same as the previous two prizes, only that the boy or girl must live in Alberta.

Note:—We have substituted the above names in place of the proper names of the Ponies. When the Prizes are won and announced, we will advise their proper names.

REMEMBER: If Not a Pony Winner You Get Cash Anyway



"DANDY"



"PRINCE EDWARD"

EVERY BOY OR GIRL CAN TRY

Any boy or girl under 18 years of age, living in either Manitoba, Saskatchewan or Alberta, is eligible to enter this Contest (excepting those who are the children of any employee of the E. H. Heath Co., Ltd., or children who reside in Winnipeg, Regina, Saskatoon, Calgary or Edmonton). We want only boys or girls living in the rural districts to try for and get these Ponies. He or she can obtain orders anywhere within the three above-named provinces, excepting in the above big cities. Contestants will be considered entrants in the province in which he or she lives. It costs nothing to enter this contest, and if you follow our directions you have just as good a chance as any other boy or girl to win one of the beautiful Shetland Ponies.

POINTS ARE WHAT COUNT

The greatest number of points, not necessarily the number of orders obtained, will win the Prizes. For every subscription, to The Canadian Thresherman and Farmer obtained for one year a given number of points will be given. For a two-year subscription, we double the number of points; for a three-year subscription a greater number of points are given than would be earned by obtaining three one-year subscriptions. For a five-year subscription a greater number of points are given than for either yearly, two-year or three-year orders. Then, again, subscriptions obtained in and mailed to us in November or December are worth more in points than those obtained at a later date. (See table below.) Then, again, by forming Clubs you obtain a big additional number of points. (See table below.) You also get points for turning in to our office expiry slips. (See paragraph below.)

HOW TO ENTER THE CONTEST

Fill in the Entrant Blank below with your full name and address and return at once to the Circulation Manager of The Canadian Thresherman and Farmer. On receipt at the office of this form properly filled out, we will send full information and all necessary supplies so that you can start taking orders.

We will also credit your entry card with 1000 points. This number of points will stand to your credit throughout the Contest and be a part of your grand total number of points, provided you have made an effort to increase the number by obtaining orders. If it is found on the closing date that you have not procured sufficient orders to give you a total of 3000 points, then the 1000 entry points will be taken from your record card and no claim shall be made on the E. H. Heath Co., Limited, to pay you for the said 1000 points. If your grand total shows a greater number than 3000 points on closing date, then you will be paid in cash for each point standing to your credit.

EVERY POINT MEANS MONEY

To all contestants we are going to pay in cash one-half a cent for every point obtained. You will readily see that each 1000 points to your credit means \$5.00. If at the close of the contest your record shows less than 50,000 points and that you are a winner of one of the Shetland Ponies, then, and in that case, the Shetland Pony will become yours, but the E. H. Heath Co., Limited, will not pay for the points to your credit as per the one-half cent per point. Should your record show more than 50,000 points and that you are the winner of one of the Shetland Ponies, then, and in that case, the Shetland Pony will become yours, and the E. H. Heath Co., Limited, will also pay you for the points to your credit as per the one-half cent per point.

THE BIG RACE IS ON

NO GAMBLE—WE PAY EVERYBODY

POINTS GIVEN FOR ORDERS

For orders sent in and reaching our office prior to midnight of December 31st, 1919, we will give:

For a 1-Year Subscription at \$1.50	30 Points
For a 2-Year Subscription at 2.00	50 Points
For a 3-Year Subscription at 3.00	100 Points
For a 5-Year Subscription at 4.00	200 Points

For orders sent in after the 31st day of December, 1919 and prior to the closing of the Contest, midnight of April 30th, 1920, we will give:

For a 1-Year Subscription at \$1.50	25 Points
For a 2-Year Subscription at 2.00	45 Points
For a 3-Year Subscription at 3.00	90 Points
For a 5-Year Subscription at 4.00	180 Points

CLUBS GIVE BONUS POINTS

We will give for the forming of Clubs of 50 members bonus points which represent not only handsome cash values, but very materially increase your number of points toward the winning of the Ponies. (See table below.) Each Club representing 50 members are all to be sent into our office together and should be marked 1st, 2nd, 3rd or 4th club formed. Take notice that the 2nd club formed earns more bonus points than the 1st; the 3rd more than the 2nd; and the 4th more than the 3rd. Remember, these bonus points are in addition to the points earned on each order as above table.

The Bonus Points given for forming clubs of 50 members are:

	On the 1st Club	On the 2nd Club	On the 3rd Club	On the 4th Club
All 1-Year Subscriptions	500	1,000	3,500	5,000
All 2-Year Subscriptions	1,500	3,000	6,000	10,000
All 3-Year Subscriptions	3,000	6,000	12,000	18,000
All 5-Year Subscriptions	5,000	10,000	18,000	26,000

CLUBS MEAN BIG CASH VALUES

By forming the above Clubs your total record would show exclusive of points earned on expiry slips, the following number of points and their cash value. In these figures we have included the 1000 entrance points:

	1st Club Value Points Cash	2nd Club Value Points Cash	3rd Club Value Points Cash	4th Club Value Points Cash
All 1 Year Orders	3,000—\$18.00	5,800—\$37.50	10,500—\$62.80	17,000—\$85.00
All 2 Year Orders	5,000—\$25.00	10,800—\$62.50	19,000—\$95.00	31,800—\$157.50
All 3 Year Orders	9,000—\$45.00	20,000—\$100.00	37,000—\$185.00	60,000—\$300.00
All 5 Year Orders	16,000—\$80.00	38,000—\$180.00	64,000—\$320.00	100,000—\$500.00

The above figures in each case show the grand total number of points and full cash value. For example: The 4th Club of 50 members, all five-year

subscriptions, means that you have actually gained over the 3rd Club 36,000 points, and in cash \$180.00.

Five-year orders are much cheaper for subscribers and are worth many more points to the entrant, therefore, entrants should always try for five-year subscriptions.

POINTS FOR EXPIRY SLIPS

On the back cover of each copy of The Canadian Thresherman and Farmer is the pink expiry slip, showing the name and to what date the subscription is paid. The figures in the lower left hand corner indicate this. For example, 11—19 means the subscription expires November, 1919, and 2—22 would mean February, 1922. A slip showing a series of figures as: 1—17—18—19—20 means the subscription expired in January of each of the years, was renewed annually, but finally expires in January, 1920. For each one of these pink expiry slips, clipped with enough of the cover to show same was taken from the current month's issue and sent in to the office attached to the coupon below, we will credit the entrant's record with two points. By keeping a sharp look-out for these you can always know when a subscription is about to expire. Ask your postmaster when The Canadian Thresherman and Farmer comes in to his office. Maybe he will also tell you who are subscribers.

PAID IN ADVANCE SUBSCRIBERS

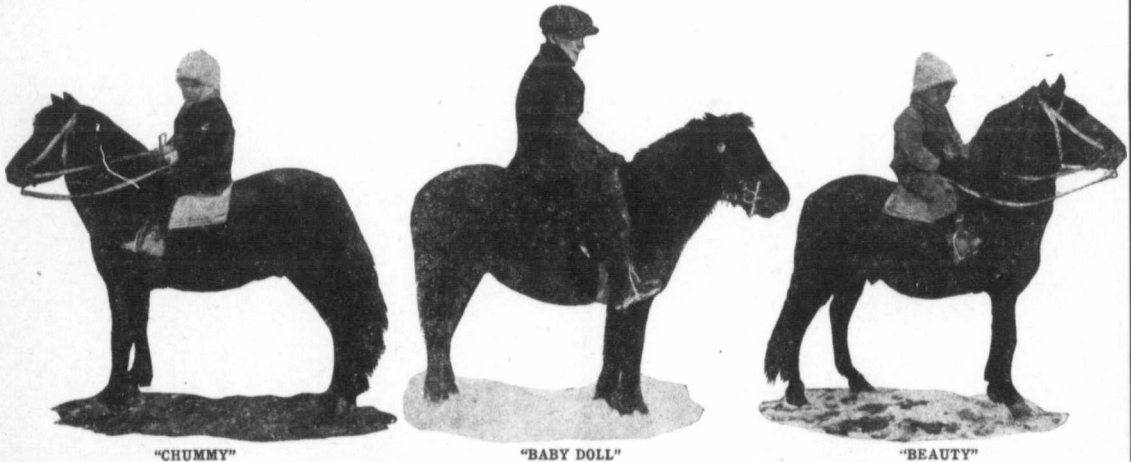
Persons sending new or renewal subscriptions direct to the office of The Canadian Thresherman and Farmer may request that points to which their order is entitled be credited to any one of the entrants. This request must accompany the subscription order. Present subscribers, regardless of how far in advance their subscription is paid, cannot have any points credited to entrants on that account. They may, however, renew and extend their subscription if desired. In all cases renewal subscriptions will be extended from present expiry date.

THREE JUDGES WILL FIND THE WINNERS

On May 1st, 1920, all records pertaining to this contest will be turned over to three Judges. It will be their duty to find the winners, and their findings from the record cards will be final. The Judges will be three men in no way connected with the staff of The Canadian Thresherman and Farmer or with the firm of the E. H. Heath Co., Limited. No one having a relative entered in the contest can be a member of this board of three Judges.

YOU WILL ALWAYS KNOW YOUR STANDING

Each issue of The Canadian Thresherman and Farmer, beginning December, 1919, will show a chart of the standing of the different contestants, and by watching for this you will always know your position in the prize list.



Entrant Coupon

THE CANADIAN THRESHERMAN AND FARMER,
WINNIPEG, MANITOBA
SHETLAND PONY CONTEST MANAGER:
Please enter my name as a contestant in your big Shetland Pony Contest, and credit me with 1,000 points.

Name.....
My age is.....
Town.....
Province.....

In connection with this contest address all communications to
W. L. WILLIAMS, Circulation Manager,
THE CANADIAN THRESHERMAN AND FARMER.
Published by, E. H. Heath Co., Limited, Winnipeg, Manitoba.

Contest
Closes
April 30th,
1920

All contest
orders must be
in our Office
prior to
mid-night of
April 30th,
1920.

Expiry Slip Coupon for November

THE CANADIAN THRESHERMAN AND FARMER,
WINNIPEG, MANITOBA
SHETLAND PONY CONTEST MANAGER:

Gentlemen:
Attached please find..... expiry slips clipped from the November, 1919, issue of the Canadian Thresherman and Farmer. Kindly credit my record with 2 points for each, a total of..... points.
NOTE:—Only slips clipped from the November issue are to be attached to this coupon. Slips taken from old issues will not be accepted or credited.

Name of Entrant.....
Town.....
Province.....

There will be a coupon in the December issue for December expiry slips.

ARE YOU IN IT?

Stop That Draft!

ANTI-FROST WEATHER STRIP used on windows and doors keeps the heat in and the cold out. Especially in these days of fuel shortage and high prices, it will pay you to stop that draft by using



Anti-Frost Weather Strip

ANTI-FROST WEATHER STRIP keeps your rooms warm and helps to conserve fuel. Use it, and be assured of warmth and comfort this winter. Sold at your dealers in 38-foot lengths. If he doesn't carry it write direct to

**The Burlington Windsor
Blanket Co., Ltd.**

TORONTO

ONTARIO

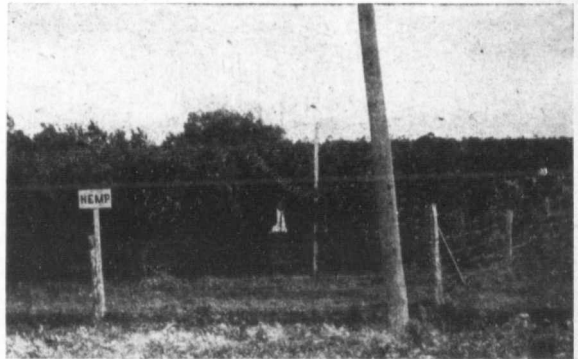


HEMP. (Continued from p. 14)

The last question deals with the uses to which the fibre can be put to. Hemp fibre can be used in the manufacture of any article at present made from jute, flax or manilla, but the company only intends for the present to manufacture cordage, binder twine, commercial twine, ropes, fish nets, bags, tents and kindred articles; and as the introduction of the hemp plant into Western Canada combines production with manufacture it can be seen that the enterprise is fundamentally

munications to be addressed to the above, and endorsed hemp department will receive prompt attention.

The "Canadian Thresherman and Farmer" entertains very great hopes as to the economic success of hemp growing in Western Canada. It can abundantly verify the statements herein made and, knowing the men who are behind the project, can say that with reasonable co-operation on the part of the farmers, its commercial success may be taken for granted.



Portion of plot No. 1 grown by W. Buchanan, Dauphin

secure. The first thing that we will be able to do will be to supply our own requirements at a much less cost than heretofore, and afterwards to export the surplus to the markets of the world where there is an unlimited demand for it at the present time.

To thoroughly insure the year's crop it is important that at least 10,000 acres of suitable land should be contracted for before December 15th. This is necessary in order that the company can procure the seed and have it sent out to the farmers not later than March 15th. Owing to the delay in estimating last year, the seed was in transit when the strike began with the result that it arrived too late for seeding. The company has selected the Dauphin district for their centre of operations, extending to other parts of the province, providing the farmers of Dauphin district should warrant the shipping of the special machinery and breaking mill. One thousand acres contracted for hemp in any township in any suitable hemp district reasonably close to railroad would warrant the company furnishing the machinery.

W. Grassie, Tribune Bldg., Winnipeg (who has spent years in careful study of this great industry, and who has charge of the commercial end of the proposition), will furnish contracts, attend farmers' meetings in any part of the province to give the farmers any information they require on the subject. Any com-

BURNING WOOD WITH COAL

I HAVE found that a mixture of wood and coal in either furnace or stove, but particularly in the former, produces a very efficient fire, and is rather more economical than the use of either fuel alone, unless the wood may be had for the asking; and in the case of those homes that are somewhat difficult to heat, the mixture renders particularly good service.

The exact ratio in which the two fuels should be mixed, of course, depends upon the character of each of them and upon the efficiency of the stove or furnace. When the wood is thoroughly seasoned, about equal parts by weight of wood and coal give good results; when the wood is somewhat green a rather larger amount may be used—say one-third coal, two-thirds wood. The kind of wood burned, however, undoubtedly has some effect upon these proportions.

One of the most noticeable effects of burning wood with coal is that the coal is entirely consumed, clinkers scarcely ever forming. This probably is traceable to the fact that the wood keeps the coal from packing and permits the largest measure of oxidation of the coal particles. Invariably the combined ashes are completely powdered, thus showing that combustion has been complete.

E. V. Laughlin.

SHIP YOUR FURS TO W. A. BROTHERS

For Fair Treatment and Highest Prices Ship Your

HIDES **WOL** **W** **W** **W**
PELTS **TALLOW** **SENECA** **ROOT**


Prompt Returns
 We Charge No Commission

A. Carruthers Co., Ltd.,
 Winnipeg

Ship to Our Nearest Branch

Branches:
 Brandon
 Saskatoon
 Moose Jaw
 Edmonton
 Lethbridge

GET TOP PRICE FOR EVERY HAIR OF EVERY HIDE YOU SHIP!



CEMENT — THE FARMERS' "HANDY-MAN"

TIME and again we have referred to the convenience and economic features of cement to the farmer and to anyone who is seeking first-rate building results at a minimum outlay of time, labor and money.

The number of uses to which concrete can be put cannot easily be tabulated, but many of them and the most important of these will occur to the reader. We have pleasure in directing attention to the request made by the Canada Cement Co. to any farmer contemplating the use of cement in any scheme of building or improvements to send for their new book on "What the Farmer Can Do With Concrete."

This is a wonderful production—it is absolutely free—and whether the farmer has any plans immediately in view or that he hopes to carry out later on, no time will be found so opportune as the present period of rest from many of his outdoor occupations to have the matter carefully studied and figured out. We refer our readers to the announcement on page 43 of this issue, and urge them to take advantage of the opportunity to get free the last word on concrete.

"CANE MOLA" IN STOCK FOOD

ON another page will be found some particulars of "Cane Mola"—the latest, and said to be one of the most effective and economic preparations to be used with feed. We have seen a big stack of unsolicited testimonials from stockmen who have used the preparation in combination with their straw-pile, old hay, ensilage fodder and screenings, etc., and they all bear unqualified testimony to its value and to the readiness with which the live stock take to anything which has been "baited" with "Cane Mola."

Since it consists of 100 per cent pure sugar cane molasses, there need be no anxiety as to its partaking in any way of the nature of "dope" or a drug that might occasion trouble. It has been analyzed by the head chemist of the Central Experimental Farm at Ottawa. It is claimed that with the use of "Cane Mola" horses will winter at hard work better than under their old regime; cows will yield more milk; and hogs will gain healthy weight quickly. Judging from the testimonials we have seen, it seems that the claims made in its behalf have been fully substantiated.

Heck—Yes, I have met with your wife. In fact, I knew her before you married her. Peck—Ah, that's where you had the advantage of me—I didn't!



Forty Below — or ninety in the shade

All weathers, all temperatures and under all conditions, North Star Batteries never fail to give a full measure of service. They stand up against all tests and deliver a steady, strong and dependable current. Climatic conditions must be taken into consideration during manufacture and we have a right to claim that

North Star Batteries

manufactured in Winnipeg—will give the best service in Western Canada. The experience of North Star users has proven this to be the case, and you will find that for any purpose—autos, tractors, bells, telephones and hand-lights—North Star gives bigger value.

Obtained where first-class goods are sold

Canada Dry Cells Limited
 WINNIPEG

No More Dread OF THE DENTIST CHAIR

Every modern scientific equipment is in this modern establishment in the hands of skilled dentists—makes the work painless.

Our work is incomparable in finish and appearance. Have you been dreading to have your dental work done? No need of it; we have scores of satisfied patients who will tell you we

"DIDN'T HURT A BIT"

Are you dissatisfied with the fit of your artificial teeth? If so, try our

Painless Double Surcins
 Washburn Vaseline Plates, set \$10.00
 Expression Plates, from 15.00
 Gold Crowns, 22-k. gold, 7.00
 Gold Bridge Work, per Tooth, 7.00
 Porcelain Crowns, 7.00
 Porcelain Bridge Work, per Tooth, 7.00

Painless extracting of teeth. Gold Fillings. Porcelain Fillings. Silver and Alloy Fillings.

Every bit of dental work carries the Robinson stamp. When you get tired experimenting with unskilled dentists, give me a trial. Hundreds upon hundreds of testimonials from patients. I have no other office in Western Canada. Do not be deceived by unscrupulous dentists who try to make you believe they have my system.

Remember the location.

DR. ROBINSON
 Dentist and Acupuncturist
 Birks Bldg., Smith and Portage
 WINNIPEG, CANADA

DAYTON AIRLESS TIRES

Can't Puncture Can't Blow Out

Piers of live, elastic rubber built about one inch apart inside the casing and vulcanized or welded to take the place of an inner tube. Nothing can happen but wear.

30x3 and 36x3 sizes only—Ford Sizes. More than 50,000 cars equipped with them in 6 years.

Big Money is becoming our exclusive dealer in your county. Tire experience unnecessary. Write today for terms.

Dept. PR The Dayton Rubber Mfg. Co. Dayton, O.

BOOK ON Dog Diseases AND How to Feed

Mailed Free to any address by the author

America's Pioneer **H. Clay Glover Co., Inc.**
 119 West 51st Street
 Dog Remedies NEW YORK, U.S.A.

FREE CASH PRIZES

We have already given away \$5,000 FREE. \$200.00 more IN CASH and numbers of Merchandise Prizes will be GIVEN AWAY at an Early date.

1st Prize, \$50.00 in Cash. 2nd Prize, \$40.00 in Cash
 3rd Prize, \$35.00 in Cash. 4th Prize, \$25.00 in Cash
 5th to 9th Prizes—Each \$10.00 in Cash.

TOGETHER WITH MANY MERCHANDISE PRIZES

Herewith will be found the picture of a Log Hut in the Woods. At first glance all you see is a man, a woman and a dog. If you look closely the faces of 8 other persons will be found. Can you find them? It is no easy task but by patience and endurance can be accomplished.

You may win a cash prize by doing so. Many have done this as will be shown by the names and addresses which we will send you. If you find the faces mark each one with an X, cut out the picture and send it to us, together with a slip of paper on which you have written the words "I have found all the faces and marked them." Write these nine words plainly and neatly, as in case of ties, both writing and neatness are considered factors in this contest.

This may take up a little of your time but as TWO HUNDRED DOLLARS in cash and many merchandise prizes are given away, it is worth your time to take a little trouble over this matter. Remember all you have to do is to mark the faces, cut out the picture and write on a separate piece of paper the words, "I have found all the faces and marked them."



WE DO NOT ASK YOU TO SPEND ONE CENT OF YOUR MONEY IN ORDER TO ENTER THIS CONTEST

Send your answer at once; we will reply by Return Mail telling you whether your answer is correct or not, and we will send you a complete Prize List, together with the names and addresses of persons who have recently received over Five Thousand Dollars in Cash Prizes from us, and full particulars of a simple condition that must be fulfilled. (This condition does not involve the spending of any of your money.)

Although these persons are entirely unknown to us, they are our references. An enquiry from any one of them will bring the information that our contests are carried out with the utmost fairness and integrity. Winners of cash prizes in our late competitions will not be allowed to enter this Contest.

This Competition will be judged by two well known business men of undoubted integrity, who have no connection with this Company, whose decisions must be accepted as final.

Your opportunity to win a good round sum is equally as good as that of anyone else as all previous winners of cash prizes are debarrued from entering this contest.

Send Your Reply Direct to
GOOD HOPE MANUFACTURING COMPANY
 46 ST. ALEXANDER STREET, MONTREAL, CAN.

Don't Fail to Renew your subscription if it has run out. There are Great Things Coming!

OUR WOMEN FOLK

CONDUCTED BY
PEARL RICHMOND HAMILTON

S A WOMAN IS SINGING TO ME
OFTLY, in the dusk, a woman is
singing to me;
Taking me back down the vista of
years, till I see
A child sitting under the piano, in the
boom of the tinkling strings
And pressing the small, poised feet of a
mother who smiles as she sings.

In spite of myself, the insidious mastery
of song
Betrays me back, till the heart of me
weeps to belong
To the old Sunday evenings at home,
with winter outside
And hymns in the cosy parlor, the tinkling
piano our guide.

So now it is vain for the singer to burst
into clamour
With the great black piano appassionata
The glamour
Of childish days is upon me, my man-
hood is cast
Down in the flood of remembrance, I
weep like a child for the past.

"BRING HIM TO MY BEDSIDE"

Stephen Leacock Tells How They Fetch
the Doctors in the Canadian Countryside

STEPHEN LEACOCK, professor and
humorist, has two sides to him, and
they are both shown in his new
book, which Mr. John Lane sends us—
"The Hohenzollerns in America and Other
Impossibilities"—and which will be
widely read.

One of the most charming chapters in
the book is the last, on "Fetching the
Doctor," being a recollection of the
writer's childhood in the Canadian
countryside.

RAW FURS

Hides, Wool,
Seneca Root

Ship all yours to us. You can
depend on honest grading, top
prices and prompt payment.

Write for price list and shipping tags.

"20 Years' Satisfactory
Service to Shippers"

**B. Levinson
& Bros.**

281-283 Alexander Avenue
WINNIPEG

75,000 Skunk Skins

All kinds of furs, cattle and horse hides
wanted. Write for price list. We will
make to order for you coats, furs and
robes from your hides and skins.

Northern Trading Co.
362 PACIFIC AVE. WINNIPEG, MAN.

"We lived far back in the country,
such as it used to be in Canada, before
the days of telephones and motor cars,
with long lonely roads and snake fences
buried in deep snow, and with cedar
swamps where the sleighs could hardly
pass two abreast," says Mr. Leacock.
"Here and there, on a winter night, one
saw the light in a farm house, distant
and dim.

"Over it all was a great silence such
as people who live in the cities can never
know.

A Sudden Alarm

"And on us, as on the other families
of that lonely countryside, there some-
times fell the sudden alarm of illness,
and the hurrying drive through the snow
at night to fetch the doctor from the
village, seven miles away.

"My dear brother and I—there was a
long tribe of us, as with all country
families—would hitch up the horse by
the light of the stable lantern, eager
with haste and sick with fear, counting
the time till the doctor could be there.

"Then out into the driving snow,
urging the horse that knew by instinct
that something was amiss, and so mile
after mile, till we rounded the corner
into the single street of the silent
village.

"Late, late at night it was—eleven
o'clock, perhaps—and the village dark
and deep in sleep, except where the light
showered red against the blinds of the
"Surgery" of the doctor's rough-cast
house behind the spruce trees.

Hurry and Come

"'Doctor,' we cried, as we burst in,
'hurry and come. Jim's ill—'

"I can see him still as he sat there in
his surgery, the burly doctor, rugged and
strong for all the sixty winters that he
carried. There he sat playing chess—
always he seemed to be playing chess—
with his son, a medical student, burly
and rugged already as himself.

"'Shut the door, shut the door!' he
called. 'Come in, boys; here, let me
brush that snow off you—it's my move,
Charlie, remember—now, what the
devil's the matter?'

"Then we would pant out our hurried
exclamations, both together.

"'Bah!' he growled, 'ill nothing! Mere
belly ache, I guess.'

"That was his term, his favorite word,
for an undiagnosed disease—"belly ache."
They call it super-gastral aesthesia now.
In a city house, it sounds better. Yet
how we hung upon the doctor's good old
Saxon term, yearning and hoping that it
might be that.

"But even as he growled the doctor
had taken down a lantern from a hook,
thrown on a huge, battered fur coat that
doubled his size, and was putting
medicine—a very shopful it seemed—into
a leather case.

"Your horse is done up," he said.
'We'll put my mare in. Come and give
me a hand, Charlie.' He was his own
ostler and stable-man, he and his burly
son.

Driving Through the Storm

"Then, in a moment, as it seemed, out
into the wind and snow again, the great
figure of the doctor almost filling the
seat of the cutter, the two of us crushed
in beside him, with responsibility, the
unbearable burden, gone from us, and
renewed comfort in our hearts.

"Little is said on the way: our heads
are bent against the storm; the long
stride of the doctor's mare eats up the
flying road.

"Then as we near the farm house and

see the light in the sick-room window,
fear clutches our hearts again.

I'll Go Right In

"'You boys unhitch,' says the doctor.
'I'll go right in.'

"Presently, when we enter the house,
we find that he is in the sick-room—the
door closed. No word of comfort has
come forth. He has sent out for hot
blankets. The stoves are to be kept
burning. We must sit up. We may be
needed. That is all.

"And there in that still room through
the long night, he fights single-handed
against Death. Behind him is no human
help, no consultation, no aid from the
colleges to call to, only his own unaided
strength, and his own firm purpose and
that strange instinct in the fight for a
flaming life, that some higher power
than that of colleges has planted deep
within his soul.

One Who Has Conquered

"So we watch through the night hours,
in dull misery and fear, a phantom at
the window-pane: so must we wait till
the slow morning shows dim and pale
at the windows.

"Then he comes out of the room. His
face is furrowed with the fatigue of his
long vigil. But as he speaks the tone of
his voice is that of one who has fought
and conquered.

"There—he'll do now. Give him this
when he wakes."

"Then a great joy sweeps over us as
the phantom flees away, and we shudder
back into the warm sunshine of life,
while the sound of the doctor's retreating
sleigh-bells makes music to our ears.

Once It Was Not So

"And once it was not so. The morn-
ing dawned and he did not come from
the darkened room: only there came to
our listening ears at times the sound of
a sob or moan, and the doctor's voice,
firm and low, but with all hope gone
from it.

"And when at last he came, his face
seemed old and sad as we had never seen
it. He paused a moment on the threshold
and we heard him say, 'I have done all
that I can.' Then he beckoned us into
the darkened room, and, for the first
time, we knew Death.

When the Great Fear Comes

"All that is forty years ago.

"They tell me that, since then, the
practice of medicine has been vastly im-
proved. There are specialists now, I
understand, for every conceivable illness
and for every subdivision of it. If I fall
ill, there is a whole battery of modern
science to be turned upon me in a
moment. There are X-rays ready to
penetrate me in all directions. I may
have any and every treatment—hypnotic,
therapeutic or thaumaturgic—for which
I am able to pay.

"But, oh, my friends! when it shall
come to be my lot to be ill and stricken
—in the last and real sense, with the
Great Fear upon me, and the Dark
Phantom at the pane—then let someone
go, fast and eager—though it be only in
the paths of an expiring memory—fast
and eager, through the driving snow to
bring him to my bedside. Let me hear
the sound of his hurrying sleigh-bells
as he comes, and his strong voice with-
out the door—and, if that may not be,
then let me seem at least to feel the
clasp of his firm hand to guide me with-
out fear to the Land of Shadows, where
he has gone before."

A GREAT INDICTMENT OF WINE DRINKING

A Study of the Wine Drinking of the Spanish People

MISS WEST'S appreciation of the
great Spanish novelist, Ibanez,
awakens interest in his other
books, and the New York Times calls
attention to his famous story, "La
Bodega," which was published 16 years
ago.

Few people perhaps realize when they
see an ugly house with "Bodega" on it
that it is a Spanish word meaning "the
fruit of the vine," and the novel which
bears this name is an indictment of
wine-drinking in Spain. It is of special
interest to recall it just now in view of
prohibition in the United States, and
the Government's desire in this country
to demobilize the Liquor Control Board.

"You Lie!"

"Ibanez embodies in story form the
results of his study of the universal
habit of wine-drinking upon the Spania's
people of both high and low degree, but
especially upon the very poor," says the
New York Times.

"It must be said at the very start that
those who are demanding the exemption
of 'light wines and beer' from the pro-
spective constitutional amendment con-
cerning alcoholic drinks will get no
backing and no comfort, so far as wines
are concerned, from this novel. And as
for those who are fond of referring to
the wine-drinking nations of Europe as
proof that the custom is wholesome and
desirable, Senor Ibanez' novel points an
accusing finger at them that says 'You
lie!' as plainly as if it were printed in
capital letters upon every page.

"The story is painted upon a broad
and crowded canvas with great and
varied detail, and the spirit of 'The
Fruit of the Vine' moves here and there
and everywhere among the mingling
groups, and wherever it passes there are
drunken and shameless orgies, the wealth
of the prosperous is dissipated, the poor
become wretched and debased, and shame
and sorrow follow in its footsteps. It
is difficult to put into English the full
and exact meaning which Ibanez has
given to his simple title, which he has
made richly symbolical, although Mr.
Goldberg has done fairly well by it with
his explanatory sub-title, 'The Fruit of
the Vine.'

North Star Drilling Co.

LIMITED

Manufacturers of

Well Drills and
Augers, Wood and
Iron Pumps

Dealers in Pumps,
Engines, Windmills
and Supplies, Saws,
Screens, Sand Points
and Dynamite. Also
Power and Hand
Washing Machines
and Cream Separators

Contracting Well
Drillers and Boil-
ing and Press-
ing Machinery
Canadian Agents
for

Gus Pech Co.
Foundry Co.
Monitor Well
Drills and Augers



Warehouses, Factory and Office:
Corner Dewdney and Armour Streets
Phone: 5232 and 3367 REGINA, SASK.

Pastry
(that)
Appeals



PURITY FLOUR

"More Bread and Better Bread"

10

"Bodega"

"In some Spanish-speaking countries a 'bodega' is any sort of warehouse, but in the part of Spain—Andalusia—where this story is located it appears to signify only a shed, or cellar, or warehouse in which wine is stored. And Ibanez sees this wine shed or warehouse with its tiers upon tiers of casks or bottles as a mighty, sinister Presence striking its roots deep into the soil, breathing destruction, and with its heavy hand crushing the poor and helpless into deeper misery. And yet there is no more propaganda against wine-drinking in the work than there is against bull-fighting in 'Blood and Sand.' The story merely makes a careful, realistic, judicial study of the lives, the conditions, and the unfolding relations of several large groups of people in a wine-making district.

The Land of Sherry

"The scene of the story is South-eastern Spain, not far from Cadiz, and the action takes place in and around the City of Jerez de la Frontera, which,

some centuries ago, when it was spelt with an 'X' which was pronounced 'Sh,' gave its name to sherry. Central interest is the great wine-making and wine-dealing house of Dupont, with its wide-spreading vineyards, its bodegas filling an entire section of the city and its agencies scattered all over Europe.

"Nearly all of the characters are in some way connected with this huge commercial enterprise, upon vineyard or farm, or in wine sheds or offices, or related to the head of the firm. As in most of Ibanez' fiction the interest inheres more in the delineation of the characters and their influence upon one another than it does in the development of the story. And this novel is particularly rich in its character portrayal.

Rich in its Characters

"Among its people is a man, the Marquis de San Dionisio, who bears a curious resemblance to the cynical old hard-riding Spanish-South American ranchman of 'The Four Horsemen' in the riotous virility of his primitive nature.

He has developed, however, not on wide and lonely pampas in grim combat with nature and animals, but cushioned by luxury in the land of the vine. Till death overtakes him he races at furious speed from orgy to orgy with a hulloaloo that greatly entertains the city and the countryside, and his two daughters carry on the family reputation with almost as much energy as their father had shown.

"In striking contrast is the revolutionary agitator, Salvatierra, a wandering, hovering, elusive figure of ascetic habits, deeply beloved by all who have been associated with him. Every now and then he appears, a pale, cold flame like some flitting will-o'-the-wisp, but always in his wake unrest stirs in the breasts of the wretched, and there are attempts at revolt pitiful in their futility. Salvatierra is the only one of the book's scores of characters of every social and economic grade who refuses to drink even the mildest wine. In his eyes' the wine warehouse was the modern counterpart of the feudal fortress that held the

masses in slavery and abjection, and he cursed the power that alcoholic poison wielded over the people, transmitting its evil from generation to generation.

Appalling Misery

"There is much realistic description of the appalling misery in which the wretched laborers, men, women, and children, on vineyard and farm toil through weary day after day and sleep like animals in the promiscuous association of their quarters. The food served them is barely enough to keep life in their bodies, and in this half-starved condition they dream of wine, beholding in it the strength of their existence, the delight of their thoughts. The glass of wine stills hunger and with its fire for a moment gladdens life. There is one rich employer, cousin of the head of the great house of Dupont, who is a roystering young person, a patron of bull-fighters, and delighting in madcap and strenuous forms of vinous exhilaration. It gives him the greatest pleasure to gather in the wretched laborers and

Why Not Have Your Next Suit or O'Coat Made to Measure by the World's Largest One Price Tailors?

ONE PRICE
\$24
to Measure

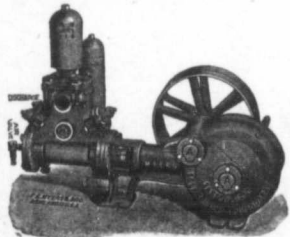


You save from \$10 to \$15
If you do not live in or near a city where there is a Tip-Top one price Tailoring store—write for new Fall samples, Style book and measurement form. We guarantee satisfaction or money back.

Tip-Top Tailors

A chain of stores from coast to coast.
Mail Order Dept.
263 RICHMOND ST. W.
TORONTO
All orders from Winnipeg or West of Winnipeg—\$28.00 for suit or overcoat.

MYERS POWER PUMPS



Standardised, Simplified, Dependable. For home and farm service. Operation by gasoline engine motor or other power. Styles and sizes to meet all requirements. Ask your dealer. Catalog gladly mailed.
P. E. MYERS & BRO. Ashland, Ohio

WE NEED

RAW FURS

The season for raw furs is on and we want every shipper to know that we always pay top market prices. All furs are higher than ever so get on our shipping list. We also want your

BEEF HIDES

And we advise prompt shipments while prices are high. Market is sure to go lower later on. Our new price list is now ready. Write for one to-day.

NORTH-WEST HIDE & FUR CO., Limited
278 Rupert Avenue, WINNIPEG

Make Big Money Boring Wells

Have water on your own farm. In spare time make wells for your neighbors. It means \$1000 extra in ordinary years, double that in dry years. No risk—no experience necessary.

One Man One Team
Complete Outfit for Getting Water Quickly Anywhere
Includes boring rigs, rock drills, and combined machines. One man with one horse often bores 100 feet or more in 10 hours. Pays \$10 to \$1 per foot. Engine or horse power. Write for Easy Terms and Illustrated Catalog.
Little Big Co., Chicago, Ill.
Address: Saskatoon, Sask. 101

crave or stupefy them upon the choicest and most expensive wine in the firm's bodega. It is one of these mad pranks, when he has succeeded in making drunk not only the laborers but the overseer's household and all the guests with wine from the precious bottles, that results in the tragic climax of the personal phase of the story. But intertwined with the personal interests is another that is more abstract, although it seems to hold for the author a keener interest. For in the shocking labor conditions and the drunkenness of the region he feels the concern of the reformer and the revolutionary that he is first of all. And he brings that interest to its climax at the end of the book in a disastrous attempt at revolt that is grim with its mocking ironies. And afterward the sinister hand of 'La Bodega' crushes the poor wretches down more masterfully than before."

CANNING MUTTON

How to Use the Cheapest Meat a Farmer Can Raise

By Alta Vedder Blend

MUTTON is the most economical meat to produce that the farmer can grow on his place. There are few farms, even small ones, that could not grow enough mutton for the family's needs on material that would otherwise go to waste. Sheep and goats are the only animals that will turn weeds into delicious meat. In these days of high-priced feedstuffs that is an item worth considering. Many farm families would find it a great advantage both to their health and pocketbooks to sell part of their usual allowance of pork and eat mutton in its place.

This is the method of canning that I followed when we killed our last sheep: The sheep was killed in the afternoon of a summer day, and the carcass cut into quarters and placed in a screened porch to cool. The next morning the meat was cut up and the ribs fried, as we are very fond of mutton chops. While they were frying I cut out the pieces for roasts and placed them in a large pan in the oven. The meat that was suitable for steak was partly cut for that purpose and some of it used fresh. The rest was set aside to can. Part of the steak meat was cut as thin as I could cut it and set aside, then part of the good, tender meat was set aside for grinding.

A Dressing for Steak

The meat that was left was cut off the bones in pieces that would go into jars

Teach the Children to Save

Habits are acquired early in life. Children, who are taught the value of money and the habit of saving, grow up into good business men and capable women.

The easiest way to teach children to save, is to start a Savings Account for each child (\$1.00 each is sufficient). After a child has saved another dollar to make an additional deposit, he or she will have a better appreciation of just what a dollar stands for, and how much work and self-denial it represents.



THE MERCHANTS BANK

Head Office: Montreal, OF CANADA. Established 1864.
With its 30 Branches in Manitoba, 44 Branches in Saskatchewan, 74 Branches in Alberta, 9 Branches in British Columbia, 131 Branches in Ontario, 42 Branches in Quebec, 1 Branch in New Brunswick and 2 Branches in Nova Scotia, serves rural Canada most effectively.
WRITE OR CALL AT NEAREST BRANCH.

and put into quart and pint jars. The jars were filled with this meat raw, not crowded though. A teaspoonful of salt was put in each quart jar and half a teaspoonful in the pint jars. The rubbers and covers were put on, the covers screwed on tightly, then turned back half an inch, or if the spring-top jars were used the lower spring was not tightened. No water was put in. By this time the ribs were fried; they need not be fried much, just browned a little. They had been cut into short lengths—about two ribs in a piece. These were put into jars and a little water poured into the pan they were fried in. The brown juice resulting was then poured over the ribs in the jars; not enough to cover them; just a little for gravy. The covers were put on and these jars and the others put in the canner with cold water in it and processed one hour after the heat reached fifteen pounds pressure.

Some of the steak I cut into pieces about two or three inches, browned a little on each side and packed into jars. I will give the recipe for its use later.

The steak that was cut very thin was cut into pieces three inches square and spread with the following dressing: One pint bread crumbs, one small beaten egg, butter the size of an egg, broth or water enough to moisten. Add salt, pepper and sage to taste. Roll the meat like jelly-roll cake, tie with a string, and brown these rolls carefully in butter or fat. Pack into jars. Put a little water in the pan they were fried in and put a few spoonfuls of this juice into each jar.

Farmers' Sons

- 1 Can you compose a good business letter, and spell well?
- 2 Are you rapid and accurate in figures?
- 3 Can you keep farm accounts and do your own bookkeeping?
- 4 Do you know the laws governing Cheques, Notes, Drafts, Leases, Mortgages, Contracts, etc.?
- 5 Can you write a good business hand?

A Better Education will Make You a More Successful Farmer or Business Man

A COURSE OF FROM 3 TO 6 MONTHS

In our Business Department will be worth many times the cost. Write us for full particulars.

THE
Success Business College
LIMITED
Corner Edmonton Street and
Portage Avenue
WINNIPEG, MAN.

"BOB LONG"
PURE WOOL WORSTED JERSEYS
FOR BOYS



• THE KIND THAT STAND ROUGH WEAR

You want him good and healthy. You want him big and strong. Then give him a pure wool jersey. Made by the finest, Bob Long.

• KNOWN FROM COAST TO COAST

Let him romp with all his vigor. He's the best boy in the block. And he'll always be bright and smiling. He wears a Bob Long Jersey.

R.G. LONG & Co., Limited
TORONTO - CANADA

A Prize Winning
SHEETLAND PONY
For the Price of a Subscription!

See pages 44 and 45

R. S. ROBINSON

Established 1883 Buyer and Exporter of

Raw Furs, Hides, Seneca Root Wool and Peltries

Highest Prices paid for Raw Furs. Write for latest Price List. For immediate shipments of Hides, etc., I will pay the following high prices:—

Salted and Frozen	.25-.30	Horse Hides, each	\$5-\$12
Beef Hides	Wool35-.45
Salted and Frozen	.35-.40	Prime Sheepskins \$1.35
Kip Hides	Root
Salted and Frozen	.45-.50		
Calf Hides		

SHIP PROMPTLY TO
Top prices for Sheep Pelts
Head Office: 157 Rupert St., Winnipeg—also 150-152 Pacific Ave. East

SKUNK

Your RAW FURS

FOXES

Will Again Bring Highest Prices From Your Old Friends

The Northern Fur Co., Limited

183 St. Paul St., West, Montreal

RATS

WRITE FOR NEW PRICE LISTS AND SHIPPING TAGS

WOLF



**Chaffless
Coffee
is Not
Injurious
But it IS
Delicious**

"Smooth as
Velvet."

Sold Standard

RECIPES

TABLE SALT FOR SCOURING
How many of your readers know that table salt, used to scour lamp chimneys or other fine glass, will remove burned places or other stains without injury to the glass?
It is also good to scour an electric flat-iron that has by any chance become a trifle rough.

ALLOWING FOR SHRINKAGE
When grandmother had a cotton garment to make, instead of putting the goods into a tub of water and letting it shrink there, wringing it out, hanging it out to dry, and then pressing it, she did away with all this work in a most ingenious manner. She would cut two squares of the cloth to be used exactly the same size, shrink one, and then allow on the seams of the garment as she cut it as much as the square had shrunk.

REMOVING INK STAINS
Black ink stains may be removed from colored garments, even when they have been in a long time, by soaking the part affected in clear kerosene. Rub gently with the hands. If necessary, soak and rub again. This method has been used for a pink and white chambray with good results, though the stain was regarded as hopeless and had been in the garment for nearly a year.

TO LENGTHEN THE LIFE OF OILCLOTH
Before subjecting a new oilcloth or linoleum to hard usage give it a coat of good floor varnish. If a coat of varnish is applied about twice a year at spring and fall house-cleaning time, the pattern on the oilcloth will not wear off so quickly and leave the unsightly spots that one so often sees when the floor covering is still good in other respects.

A CHILD'S PLAY TABLE
A mother who realized that the furniture in the average home is not well adapted to the use of children devised a temporary play table which was a source of much pleasure and comfort to her little ones. She secured a smooth board about four feet long. This she painted white, decorated with a border of transfer pictures, and then varnished it. When the ends of the board were placed on two chairs a table was formed at which the little folks could sit comfortably on their stools and enjoy their crayons, water colors or toys.

A HOME-MADE BREAD RAISER
In cold weather it is difficult to hold the bread sponge or dough at the right temperature so that it will rise within the time desired. A bread raiser made from a pine box will help overcome this difficulty.

Select a box two feet or a little more in length, and about eighteen or twenty inches in the other dimensions. Remove one side and make a door of it, which hang with a pair of small hinges. Set the box on end so that the door will swing like a cupboard door.

About ten inches from the bottom of the box nail cleats on the inside, and on these a shelf of slats, or, if one solid board, bore several holes in it. Four inches above this place another shelf, both of them being removable. Just under the lower shelf fit a piece of galvanized sheet iron a little wider than the shelf. It will be necessary to curve it a little to make it slip in and stay in position. This serves to prevent burning the shelf when a lamp is placed below it.

Several small holes should be bored in the sides and in the top of the box to give free ventilation. Set a small lamp in the bottom, and place a shallow pan of water on the lower shelf to keep the air moist. An incubator lamp will be found about the right size and perfectly safe for the purpose required.

By using a thermometer the proper temperature can be maintained by regulating the flame of the lamp. The pan or bowl of sponge or dough is placed on the upper shelf, and the temperature kept at 85 to 90 degrees for quick rising. If the sponge is set overnight the temperature had better be 65 to 70 degrees, raised 86 after the dough is made up in the morning.

WHICH HOUSE IS YOURS?

HECLA WARM AIR FURNACE

FEATURE

Have a "pure air" house—easy to keep clean—economically heated. The reasons are told in a booklet "Comfort and Health."

Ask for it on the Coupon

Name _____ Address _____

Clare Bros. Western Limited, Winnipeg, Man.
Please send me "Comfort and Health" also guaranteed house heating plans.

Buy An Irrigated Farm
In Sunny Alberta and
Get a Crop Every Year

The most important factor in the growth of large crops in Western Canada is moisture. Given plenty of moisture at the right time, big crops are assured. This is what the farmer on irrigated land can have every year. In Southern Alberta such varied crops as wheat, oats, flax, barley, rye, alfalfa, timothy, brome grass, and all kinds of fodder, tomatoes, beets, potatoes, roots, vegetables, are grown profitably on irrigated land. Ideal mixed farming proposition. First-class land, \$50 acre, including water rights. Easy terms, only one-tenth cash and 20 years to pay. \$2,000 loan for buildings, etc. A splendid chance to become independent.

Write now for free booklet, containing full information, to
ALLAN CAMERON,
912 First Street East
General Superintendent of
Lands, C.P.R., Calgary

**Use Less Powder—
Get Better Baking**

**EGG-O
Baking Powder**

Follow the directions on the label

Egg-O Baking Powder Co., Limited, Hamilton, Canada

**BIG BUYERS OF
CANADIAN RAW FURS**

We have a shipping clientele of approximately twenty-two thousand throughout the Dominion of Canada. We are known everywhere for our high prices, liberal assortment and quick returns

References
Our Shippers; any Bank or Financial Agency in Canada

GIVE US A TRIAL

The George Monteith Fur Co.
21 Jarvis Street, TORONTO, Canada

**KILL THE WOLF By Using
SURE DEATH CAPSULES**

25 Capsules, \$1.35; 100 Capsules, \$3.75. Endorsed and recommended by the U.S. Forest Rangers. One wolf killed will save you many dollars.

ORDER TO-DAY
Write for free Catalogue Number 9, "How to Trap Wild Animals."
Capsules sent by Express only.
Manufactured by Northwestern Hide and Fur Co., Minneapolis, Minn.
Send all orders to our Canadian Distributors.
WINNIPEG VETERINARY & BREEDERS' SUPPLY CO., LTD.
281 James Ave. Winnipeg, Man., Canada

WANTED—Man experienced with farming in Western Canada, and capable of position as manager of large farm. E. G. Dollenmeyer, Bricecrest, Sask.

FREE! To Trappers and Shippers!

Get your name on our list **TODAY**—for all the Funsten free service—3-in-one Book, Trappers' Guide, Game Laws and Supply Catalog, Weekly Market Reports and Free Shipping Tags. This is going to be a **big fur season**—get posted **now** on prices, market conditions and kinds of furs wanted. Write us today!

Thousands of Canadian Trappers Ship to Funsten

We buy thousands of skunk, fox, mink, wolf, coyote, beaver, otter, muskrat and other furs from Canadian Shippers yearly. The wise ones know St. Louis is the world's fur headquarters and ship where they get

TOP PRICES—HIGHEST GRADING

Don't hold your furs—don't wait! Ship while the market is good and prices high. We give same high grading, pay just as well for a few furs as for many. Pack up all you have and—

Ship Your Furs To FUNSTEN

The World's Largest **FUR HOUSE** St. Louis, U. S. A.

There Is No Duty on Raw Furs From Canada to St. Louis, U. S. A.

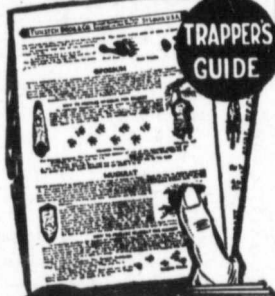
Funsten Animal Bait \$1 Per Can or 6 for \$5

Irresistible! Draws animals great distances to your traps. Earns its cost with first pelt taken. Bottle makes more than 100 sets. Different bait for every kind of animal. See our catalog for money-saving prices on baits, traps, smoke guns, etc. Make your outfit complete now. Biggest season of all is coming. Funsten will pay you highest prices for your pelts. Deal with the "World's Largest Fur House." Write today.

FREE! Trappers' Guide

Big "3-in-1" Book free. Pictures of animals in colors by Charles Livingston Bull, America's greatest animal artist. Successful trapping methods, how to prepare and ship furs, etc. Catalogs trapping supplies and gives game laws. Also get on our list for free Market Reports and Shipping Tags.

FUNSTEN BROS. & CO.
International Fur Exchange
991 Funsten Bldg. St. Louis, Mo.



THE SAVING MERIT OF THE PEACE TREATY

The obvious lack of finality in the treaty may come to be regarded as its saving merit.

(Sir Robert Falconer in his masterly address to the recent Educational Conference made a point which many superficial spectators of and participants in the great war would do well to thoroughly get hold of, namely when he took issue with Dr. Gordon as to liberty having been won by the sacrifices of that great cataclysm. The winning of the war did not mean the final deliverance of liberty to the world, but only the removal of one great obstacle to that great objective.—Ed.)

The Future

THE German signature of peace marks the first stage, but only the first stage, in the reconsecration of Europe," says the "New Europe"; "and it is the duty of all serious students of foreign policy to combat the growing tendency towards indifference and slackening of efforts which is already noticeable in many quarters. With victory the supreme danger is over; but it now rests with the victors to prove their constructive force, their faith in the principles in whose name they mobilized the nations, and their firm resolve never to look back upon the smoking cities of the plain.

"When the dust clears away it will be evident that a vast amount of work has been done in Paris, such as may fairly be said to atone for the lack of method and coherence or the undue secrecy in which its highly amateur decisions were veiled.

"What at first sight might seem to be the treaty's condemnation—namely its obvious lack of finality—will, we venture to prophesy, come to be regarded more and more as its saving merit.

A Safety Valve

"Former Congresses, such as those of Vienna and Berlin, laid down settlements designed to be immutable, and made no attempt to provide a safety valve. The present Treaty for the first time supplies proper machinery by which the international situation can be modified to meet each turn of the political kaleidoscope. As we have always contended, the Covenant of the League of Nations is not to be regarded as a panacea, or indeed as anything more than a paper prescription whose efficacy remains to be tested. It may be that the League will remain a splendid dream, but in that case the fault will be with ourselves—a generation which was incapable of averting the greatest disaster in history and too feeble of faith to retrieve it afterwards. To admit the failure of the League would be to confess the bankruptcy of civilization; to work for its success is the duty of every believer in the constructive idea of Integral Victory.

"The signature of peace with Germany can bring no real slackening of effort; for the moment it can only mean the diversion of effort to other fields. New problems of internal development will at once arise in every European country. The announcement of the new frontiers will release economic forces hitherto arrested by the prevailing uncertainty. At least five problems of the first magnitude—Constantinople, Syria, the Adriatic, Austro-Hungarian and Turkish financial liquidation—must be faced and solved without further delay, and in the consciousness that until they are solved, the germs which produced the present war will continue to infect the body politic of Europe. It is sincerely to be hoped that the Big Four or Five (or Three, or Ten, or whatever the magic number may be that is to go down to history) will at last regard their task as completed, and will henceforth allow a properly constituted body of competent and representative statesmen to act as the forum of the League until its first formal meeting in the autumn.

The League's First Meeting

"At that meeting a number of other no less vital problems will have to be discussed; and there is still an immense

amount to be done in the necessary education and preparation of public opinion in all the countries concerned.

"The definition of the mandatory principle and its application to the concrete cases of the German colonies and to the utterly different cases of territories formerly under Ottoman rule; the adoption of some uniform international code for all tropical colonies; the enforcement of drastic limitation of armaments and the abolition of private ownership of all means of war production; the establishment of an international force under the orders of the League, as the only possible means of overcoming many serious objections to the present Covenant; the establishment on a permanent basis of several of the economic commissions without which the war could not have been won; and the consolidation of credit in the newly-formed European States, to say nothing of some even among the Great Powers—these are only a few of the more urgent and vital problems which surround the cradle of the infant League.

Germany and the League

"And, whether we like it or not, the question of Germany's future admission to the League is certain to force itself into the discussion. That admission is impossible so long as there is occupation, that there must be occupation so long as the fulfillment of the Treaty is in doubt, and that the incident of Seapa is calculated to increase the doubts already so widespread, need not blind us to the need of a definite German policy, not a mere attitude of passionate resentment. We shall have to live with Germany in the years of peace, and we must maintain a ceaseless vigilance very different from the old careless spirit of pre-war days.

"But, while equally avoiding sentimental advances and vindictive abuse, we must do all in our power to prove to the German, collectively and individually the hopelessness of another bid for world power, and at the same time the possibility of a return to the comity of nations and even to material prosperity. To drive Germany to despair will merely react against ourselves. True statesmanship will henceforth seek to convince her that the path of repentance and reform offers better prospects than that of continued defiance of the outside world. Incidentally it is already making the practical discovery that it is useless to expect payment from a bankrupt or work from a cripple."

J. & S. WEININGER

MR. TRAPPER, send us your next shipment of Raw Furs. We pay highest Market Prices.

SATISFACTION GUARANTEED

Reference: Molsons Bank of Canada

319 St. Paul St. West, MONTREAL

GENUINE **DIAMONDS**
ON APPROVAL \$2 A MONTH

Wear a genuine, perfect diamond for one week at our expense. Examine the stone under all conditions, then don't buy unless we save you from 10% to 40%. We sell direct to you, at importer's prices. We can give you best values in Canada.

OPEN A CHARGE ACCOUNT Those who wish to may pay as low as \$2 a month. No notes or mortgages. Small deposit with order balance as desired. All Charge Account dealings confidential. 10% cash discount. 7 1/2% increase guaranteed. Diamonds purchased from us may be exchanged any time at a 75% increase.

CATALOG FREE A letter or postcard brings exclusive diamond rings, pendants, tiepins, etc. Gives history of the diamond, explains qualities and values, and how you may get one to wear a week without cost over every diamond-lover should have. Send to-day.

DIAMONDS LIMITED
Dept. 100 6 Temperance St., Toronto

PATENTS TRADE-MARKS AND DESIGNS

Write for booklet, circulars, terms, etc.

FETHERSTONHAUGH & CO.

FRED. B. FETHERSTONHAUGH K.C.M.E.
GERALD S. ROXBURGH, B.A.Sc.

36-37 Canada Life Bldg. WINNIPEG

WANTED to hear from owner of good thrashing machine for sale. Send description and price.
C. C. SHEPARD, Minneapolis, Minn.

Hides FUR Wool

If you want quickest returns and most money for your Furs, Hides, Wool, etc., ship them to

FRANK MASSIN

Brandon Manitoba

Write for prices and shipping 10¢

HOW BURBANK REMAKES VEGETATION

By R. Russel Fleming

LET some artist in the wildest flights of his imagination conceive a flower combining in itself characteristics never before seen in combination. Let him stipulate how tall it shall grow, what kind of leaves it shall bear, the color and size of its flower, the width of its stalk, its manner or reproduction and the climate in which it shall grow. Let him pass it on to Burbank and give him his time—five, ten, fifteen or say twenty years. At the end of this period let the artist pay the "master" a visit and he will see this wild product of his one-time flights of fancy become a living thing of beauty before him.

Many like to speak of Burbank as "the wizard of California," others refer to him as the "King of Horticulturists," or other eulogistic titles. Personally, I like to think of him as plain father Burbank—a plain, ordinary, everyday farmer, if you like to call him so, who began life by breaking the hearts of his family and parents, by leaving the town and city with its "wealth of opportunity" to bury himself on a little farm; and who lived to see the day when the workshops and factories, schools and legislatures of a whole State would close their doors on "Burbank Day" as a means of recognizing his contribution to mankind.

Born in the little town of Lancaster, Mass., just outside of Boston—in an environment that included in its inhabitants such a notable figure as Emerson, Burbank early showed a great desire to be delving into the mysteries of nature around him. Nothing seems to have brought more delight than a tramp into the fields, from which many flowers would be gathered and carried home. At an early age he was sent to work in a factory in Worcester, where he seems to have displayed considerable mechanical ability, being credited with having made an important invention for cheapening the process of manufacturing a plow. And when, after becoming disgusted with indoor factory life with its long hours and meagre pay, he decided to turn to market gardening, it is not to be wondered at that his parents and relatives considered his actions as at best unprompted by wisdom.

Adds \$20,000,000 to National Wealth
Potatoes were soon growing on the little patch of land he acquired and but a short time later a discovery was made that won him early fame and gave to the world the Burbank potato. Amongst a dozen potato tops, the curious phenomenon of one of them bearing a seed-ball was noticed—which so interested him that he put it aside and developed it; and I suppose, in his precarious financial condition, when a local seedman came along and offered him \$150 for it, he thought he was about to enter the realms of high finance. It was only the Burbank potato—that was all—a potato that "besides disproving the assertion that a potato famine was at hand because of the steady deterioration of the world's stock, had added to the wealth of the American nation alone, upwards of \$20,000,000.

Unfortunately, however, a sunstroke soon after, forced him to look to some other climate, where there would not be as much danger of a return attack. So we find him next, at the age twenty-five, settling down in a quiet little valley about 50 miles north of San Francisco—a valley then unimproved but now a rich fruit and farming country.

Delivered the Plum Trees on Time
Here for several years a struggle went on to get a footing—just that sort of an early struggle that seems to have molded most of the world's great men. But on account of his recent illness and a naturally none too robust physique, difficulties with him were of a peculiarly aggravated nature. After gathering together a few dollars he was able to locate on a few acres and began soliciting orders as a nurseryman. Then one of those opportunities came along that comes to most people if they are only ready. Burbank was one of those men who make it their business to be ready. A certain man wishing to plant an orchard was in need

BLUE RIBBON TEA


The best tea packed in Canada, can be bought for 60c per pound
Why pay more?

of twenty thousand plum trees, a request, under ordinary conditions, not out of the way. This particular orchardist, however, had to have them in nine months. As the request was made in the fall the young trees could not be planted till the spring and two years after that would be needed to get them ready for transplanting and delivery. Nobody could fill the order. Burbank was offered it and jumped at the chance. It is said of the Bethlehem Steel Co. that its marvelous growth under the guidance of that genius, Charles M. Schwab, has been due to the fact that they, more than any other firm in the steel business, could take huge contracts and deliver them on time. Consequently when the war broke out, time being the all important consideration, they got the contracts. Now, I suppose, if you want young chickens running around when the snow is banked against the house, you would take the mother hen and set her in an old box on the kitchen stoop; and if you want luscious tomatoes to eat when other gardeners have not yet thought of even planting their seeds, you will go to a greenhouse or similar artificial aids to realize your wishes. So, too, if you want young plum trees out of season, you have got to resort to similar artificial means. That is just where Burbank scored. Almond trees were very fast growers and could be planted immediately. Plum branches could be grafted on to them. That is all. In nine months the trees were delivered—trees which to-day compose one of the excellent orchards of California.

This early success led to others; he was now netting close to \$10,000 per year. But once more his plan changed. The problems of the nursery business had led him into a study of the problems of plant breeding. In connection he read widely and deeply the writings of Darwin, Tyndall, Huxley and others, all of whom provided for him much useful information on the subject of breeding operations in general and plant breeding in particular. It was settled! He would now desert the nursery business and devote his time and efforts to plant breeding. Ten thousand a year or no ten thousand a year, nothing would stand in the way of furthering his one ambition. And once more his relations and friends stepped in to pronounce him little short of "daffy." Former Premier Asquith of Great Britain has said that all of the important steps of his life were taken against the advice of his elders. So it was with Burbank. And what, I wonder, would have been the loss to the world had it been otherwise? But now we must turn to the opening of that chapter in his life which was to produce benefits for the world that can never be estimated.

TRAPPERS

It's FREE



Send For This Great Book

It's just what you've been looking for. THE ART OF TRAPPING is the best and most complete Trapper's Guide ever published—prepared at great expense—by experts. It gives a complete and accurate description, pictures and tracks of the different fur-bearers of North America; it tells when and where to trap; the best and most successful trapping methods; the right kind of baits and scents; the sizes of traps to use; the correct way of skinning and handling the different pelts to make them worth the most money; the trapping laws of every province.

"SHUBERT" will send this great book FREE to any one interested in trapping or collecting fur-bearers. Just sign and mail the coupon today.

THE ART OF TRAPPING is NOT a supply catalog—but a real Trapper's Guide containing information of inestimable value to any trapper. It will guide and help the experienced trapper and teach the beginner the art of successfully trapping the North American Fur-bearers. No trapper or fur collector can afford to be without this great book. Send for your copy at once.

A. B. SHUBERT, LTD.
THE LARGEST HOUSE IN THE WORLD DEALING EXCLUSIVELY IN
NORTH AMERICAN RAW FURS
324 DONALD ST., WINNIPEG, CANADA.

SIGN AND MAIL THIS COUPON TODAY

WITHOUT OBLIGATION SEND ME "THE ART OF TRAPPING"
THE BEST AND MOST COMPLETE TRAPPERS' GUIDE EVER PUBLISHED
and keep me posted on Raw Fur Market 116
Conditions during the Fur Season of 1919-1920

Name _____ (PLEASE PRINT NAME)
Post Office _____ R.F.D. _____ Box No. _____
Electoral District _____ Province _____
City _____

Cream Shippers Attention!

WE PAY THE EXPRESS

If you desire the best returns for your cream—bill your NEXT CAN to us. Our prices always highest—test and weights correct and returns mailed promptly.

Shipping Cans furnished at the following prices: 5-gals. \$4.50; 8-gals. \$5.50

SHIP YOUR EGGS TO US

The Tungeland Creamery Co., Brandon, Man.



COWAN'S COCOA

MAKES CHILDREN ROBUST.

WRITE FOR RECIPE BOOKLET. THE COWAN COMPANY LTD. TORONTO.

Look

at our price lists, before you ship your furs. Compare our figures with the prices quoted by other houses. You, too, will be convinced that

We Pay More MONEY For All Kinds of FURS

Send us your next shipment, and see for yourself that we live up to all our promises—higher grading and more money. We pay all U.S. and Canadian Trappers the very best prices at all times for their furs, and now offer you, also this opportunity to cash in on the

World-Wide Markets of the CLAY EXPORT CO.

We sell to buyers in Russia, China, England, North and South America. We always sell in those markets where prices are highest. Therefore, we can pay you and all other U.S. and Canadian Trappers the very highest prices for furs. Make up a shipment today. Send to Clay Export Co. and get the world's best prices.

Write for High Export Price List and Free Book

Write for our price list—also free book, "Trapping Secrets." Greatest trapping book ever written. Tells secrets of famous trappers, like Crockett and others.

Let, Carson, Bessie, and others, describe how you make more money. Free to trappers only. Write for copy. We'll also keep you posted on the fur market.

CLAY EXPORT COMPANY
—Furs for the World's Trade
1125 F — West 35th St., Chicago, Ill.



Plant breeding being now his sole of fruits, flowers, grasses, trees and vegetables.

2. "The merging of wild, or degenerate types of plant life with tame, or cultivated ones, in order that the union may be of service to both.

3. "The creation of absolutely new forms of life, unknown to the world before—the highest act of the plant breeder."

Lead Nature with a String

Of course breeding of anything implies an outside agency who directs the union, according to intelligent principles; and in so doing the process of selection follows the constant choosing of the fittest in order that it may survive. The principles underlying all forms of life are the same, whether plant, animal or human. And that is why the man who in a simple way is raising hogs or sheep or chickens, or the university scientist in his study of eugenics, each and all turn their steps to this great waster of the art of breeding. It was the opinion of the ancient philosophers that nature stumbled; that she was guilty of many imperfections and that it was the duty of art to set her right. Consequently in their painting and sculpture they sought to improve on nature. The mere reproduction of nature by them on canvas or in stone exerted no appeal; that would be merely photography—so with Burbank. Early observation taught him that nature was ready to follow if only intelligently led. He had but to use his imagination; to form conceptions of an ideal in his mind—and the union of the elements of perseverance and time would achieve his ambition. That is why his creations have been so successful. He is absolutely unfettered by traditions of any kind. The fact that things have always been done in a certain way influences him not a whit. He will grow for you potatoes on tomato vines; roses without thorns; flowers with or without scent; plums with stones or without; almost, you might say, anything that one could wish for. All he needs is nature herself and time.

"From his own catholic point of view," a biographer, H. S. Harwood, tells us: "Burbank's mission among men is to do the greatest possible good to the greatest possible number of the human race." Briefly his aim has been as follows:—

1. "The improvement of old varieties

FREE DANDY BICYCLE AND GREAT WATER PISTOL

Boys send us your name and address today and you can get a Real Dandy Water Pistol and our great Flying Champion Bicycle in return for a little easy payment week. This is the best bicycle any boy could wish. It has a 22 inch frame, coaster brake, sun-aid tires, rear chain, and all the most up-to-date improvements—just the absolute, perfect bicycle you've ever seen. And the Dandy Water Pistol beats all. Just sit at you're always wanted. It looks like a real automatic revolver, but shoots a straight, powerful stream of water that will stun dogs or cats. It provides a barrel of fun.

Here's Our Proposition for Live Boys

No money in advance.—Just send your name and address today and get a free sample package of "Dainties", our delicious new vitamin cream candy coated health pastures that we want everybody in the land to try. With the free sample we send you just 200 handsome packages that we want you to induce among your friends at only 10c a package. The sample package will make it easy for you. Just send it and ask your friends to try a couple of "Dainties". They will like them so much that they will buy a package or two at once. A couple of little "Dainties" will satisfy the most and perfect the flesh. Everybody just loves them. No trouble at all to us!

Return our \$3.00 when the breathlets are sold and we will promptly send you a charge prepaid, the dandy Dandy Water Pistol, and the great bicycle you can sit out without telling any more goods, by just showing your free prize to your friends and getting only six of them to sell our goods and earn our fine premiums as you did. Write to-day boys and you can soon own these fine rewards.

Address—THE REGAL MANUFACTURING CO. Dept. N 38 TORONTO, ONT.



Our Young Folks

OUR BOYS AND GIRLS

WHY DID YOU LEAVE THE FARM, MY LAD

WHY did you leave the farm, my lad?

Why did you bolt and leave your dad?

Why did you beat it off to town And turn your poor old father down? Thinkers of platform, pulpit and press Are wallowing in deep distress. They seek to know the hidden cause Why farmer boys desert their pa's.

Well, stranger, since you've been so frank, I'll roll aside the hazy bank; I left my dad, his farm, his plow,

Because my calf became his cow. I left my dad, 'twas wrong, of course, Because my colt became his horse. I left my dad to sow and reap Because my lamb became his sheep. I dropped the hoe and stuck the fork, Because my pig became his pork. The garden truck that I make grow Was his to sell, but mine to hoe.

It's not the smoke in the atmosphere, Nor the taste for life that brought me here, Please tell the platform, pulpit, press, No fear of toll nor love of dress Is driving off the farmer lads, It's just the methods of their dads.

Deafness



Perfect hearing is now being restored in every condition of deafness or defective hearing from causes such as Catarrhal Deafness, Relaxed or Stunned Drums, Thickened Drums, Roaring and Whining Sounds, Perforated, Waxy or Partially Destroyed Drums, Discharge from Ears, etc.

Wilson Common-Sense Ear Drums
"Little Wireless Phones for the Ears" require no medicine but effectively replace what is lacking or defective in the natural ear drums. They are simple devices, which the wearer easily fits into the ears where they are invisible. Soft, safe and comfortable. Write today for our 168 page FREE book on DEAFNESS, giving you full particulars and testimonials. 118 WILSON EAR DRUM CO., Incorporated Inter-Southern Bldg., LOUISVILLE, KY.



Join the Parade

Start now and ship every skin you handle this season to the greatest fur house in the world, Abraham Fur Co., St. Louis.
You are about to start the greatest fur season in the history of the fur trade—you will receive the highest prices for your furs ever known and if you want every dollar coming to you for your shipments, send them to the Abraham Fur Co. We have cleaned out all of our old supply, lock, stock and barrel, and have nothing on hand but money—millions to pay for furs.

TRAPPERS

Write today and get in line with the most successful fur institution in the world. Our tremendously large business was built on a policy of Fair Grading and Highest Prices to the Trapper, and today we are in a better position than ever to carry out this "winning" policy.
Don't ship a single skin to any other fur house before you have carefully investigated the Abraham Fur Co. of St. Louis.
Order an Abraham Smoke Pump. Holds the world's record for long distance smoking and is a sure winner.

Price Postpaid, \$2 Each
FREE Fur Facts and Trappers' Supply Catalog

Greatest trappers' guide ever published, most complete catalog of trappers' supplies. Send for a copy today—find out all about our new line of traps. You can't do without them. They have many new features which no other traps have. Our catalog tells you all about them. Not the cheapest, but the best. Write today—our post card brings you one dollar's worth of fur information. Don't delay—Write today.

Abraham Fur Co.
213-215 N. Main St. Dept. 203
St. Louis, U.S.A.
"Ship your furs to Abraham"

MORE \$\$\$\$\$\$ FOR YOUR RAW FURS IN NEW YORK

My Prices Are Guaranteed
Beware of High Price Lists sent out to deceive you and get your furs. The higher they quote the less you get.
The secret of a square deal is honest grading at market prices. I guarantee my price until next list is issued and will not quote more than I can pay on an honest assessment.
Enjoy that peace of mind that comes to a shipper when he knows he is shipping to an honest firm.
You will make no mistake, shipping to me will be glad to make my acquaintance!
NOW AT GRADING HIGHEST PRICES
The consistent dealer, they receive in normal times, they will return yours when you ship. Please return yours when you ship. Please return yours when you ship.
BENJAMIN DORMAN
177 W. 25th St. NEW YORK

THE BLUEBELL

HERE is a story I have heard—
A poet learned it of a bird,
And kept its music every word—

A story of a dim ravine,
O'er which the towering treetops lean
With one blue rift of sky between;
And there, two thousand years ago,
A little flower as white as snow
Swayed in the silence to and fro.

Day after day with longing eye,
The floweret watched the narrow sky,
And fleecy clouds that floated by.

And through the darkness, night by night,
One gleaming star would climb the height,
And cheer the lonely floweret's sight.

Thus, watching the blue heavens afar,
And the rising of its favorite star,
A slow change came—but not to mar;

For softly o'er its petals white
There crept a blueness, like the light
Of skies upon a summer night;

And in its chalice, I am told,
The bonny bell was formed to hold
A tiny star that gleamed like gold.

Now, little people sweet and true,
I find a lesson here for you
Write in the floweret's bell of blue:

The patient child whose watchful eye
Strives after all things pure and high
Shall take their image by and by.
—Julia A. Eastman.

Dear Boys and Girls:—Let us have letters from our boys and girls on this subject: "What I Enjoy Most About My Home." A prize of one dollar will be awarded to the boy who writes the best letter, and a prize of one dollar to the girl who writes the best letter. Let us fill our department with letters of appreciation about our homes. Send all letters to the Editor of Young Folks' Department, 983 Grosvenor Ave., Winnipeg.

AVIATOR GAME

Boys and girls, how would you like to visit an aviation field to-day and watch the soldiers as they are having a lesson in flying? See how straight and tall these soldiers are and how they salute their officer. How exciting it must be to go up in an aeroplane and fly like a bird! Ask your teacher to let you play this game at school.

Activities

1. We go out to the hangar and get ready for a flight. Stand in aisle and skip in a lively manner round the room several times, with windows open, or on nice days skip to the yard.
2. We start the propeller.
Stoop and turn an imaginary crank. Count "One—two." This is a good exercise for trunk and arms if done vigorously.
3. Show us how it runs along the ground at the beginning of the flight.
Place hands on the desk, face the side of the room and run lightly and quickly on toes in place.
4. The machine leaves the ground and we start to fly!
Face front of room, raise arms sideward and run lightly round room, moving arms up and down.
5. Suddenly a wing breaks and we get a crash into a river or lake.
At signal all suddenly stoop to floor.
6. Of course all aviators must know how to swim, so we swim safely to shore.
Rise, place one foot forward and place palms together in front of chest. On "one" push arms and body forward, on "two" pull arms sideward (as in breast stroke), on "three" place palms together. Repeat several times.
7. Some one must row out and pull in the aeroplane.
Sit on top of desks, facing the side of the room. Count "One—two" while making motions of rowing.
8. We must exercise to keep from taking cold after being drenched in the water.
Stand in the aisle. One count. "One—

Tone as delivered by The Brunswick

—is really natural. This is due to the all-wood tone-chamber, oval moulded entirely from choice woods. No metal whatever. This superior construction complies with the approved law of acoustics. Like the soundboard of a fine piano or violin it gives the resiliency that unfolds—amplifies—and projects true tone. With this feature the Brunswick gives you also the Ultona—that wonderful invention which plays every make of record exactly as it should be played. By a mere twist of the wrist the "Ultona" provides the exact weight, the correct diaphragm and the precise needle for any make of record.

Find out for yourself! Hear the Brunswick at your nearest dealer's. But first mail the coupon below, and let us show you the simple yet 100% efficient Brunswick new method of reproduction.

SEND THIS COUPON

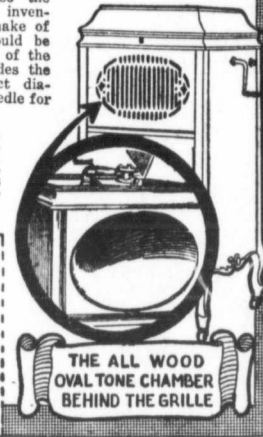
The Musical Merchandise Sales Co., 143 Portage Ave., Winnipeg.

Without any obligation on my part, please send me, free of charge, your booklet "All Phonographs in One."

NAME _____

ADDRESS _____

C.T.F.



THE ALL WOOD OVAL TONE CHAMBER BEHIND THE GRILLE

No One Else Would Pay So Much For Furs

Silberman and Sons
THE HOUSE WITH A MILLION FRIENDS

That's what W. F. Kumm, Shawano, Wis., wrote us when he got his Silberman check. R. E. DeVries, Nutley, New Jersey wrote he was very much pleased with his check. W. C. James, Florence, Colo., says his check was larger than from any other fur house. Herbert Henshall, Blitter Creek, Wyo., wishes he had started shipping to us earlier, as he was very much pleased with his returns.
And thousands of others say it is safe, wise and profitable to ship your furs to S. Silberman & Son.

We are proud of our long business record—our liberal grading, larger checks and prompt returns—which have won for us "The Trapper's Seal of Approval." You, too, can share in these extra profits—if you join the big family of Satisfied Silberman Shippers.
Ship to us—get "The Check That Satisfies" in full immediately. Over \$2,000,000 Capital behind every check. Good at any bank or general store in the country.

Write Us for Price List
and see for yourself why thousands of trappers ship only to us. Ship or get that price list now—it will mean more money in your pocket.

S. Silberman & Sons
THE LEADING HOUSE IN THE BEST MARKET
1113-D West 35th St. Chicago, Ills.



Mistress—"So your matrimonial life was very unhappy? What was the trouble? December wedded to May?"
 Chloe Johnson—"Lan' sake, no, mam! Wuss'n dat. It was labor day wedded to de day ob rest!"

Jaeger

Should Be Worn By Ladies

Constitutionally women are much more delicately constructed than men, and their bodies being of a much finer texture, are more susceptible to weather changes. Jaeger Pure Wool Underwear affords complete protection in all weather and at all seasons.

A fully illustrated catalogue free on application.

For sale at Jaeger Stores and Agencies throughout Canada.

DR. JAEGER Sanitary Woolen Co. Limited
 Toronto Montreal Winnipeg
 British "founded 1883".

FREE

1920 EDITION

The Hallam Fur Fashion Book

Contains 48 pages and cover illustrating over 300 beautiful Fur Garments, all genuine photographs of the articles just as they are and real people wearing them. It shows you a much greater variety than you can see in most stores and will save you many dollars. Send for your copy to-day—it is absolutely free.

John Hallam Limited
 605 Hallam Building, TORONTO.
 THE LARGEST IN OUR LINE IN CANADA

two" fling arms round body vigorously. Then on same count have them vault over seats several times. This last is splendid exercise for the big muscles of the body. It increases circulation.

9. We skip back to our tents. Skip back to room if out of doors, or round room several times. Seats.

BOY'S PRIZE LETTER

Druid, Sask.

Dear Cousin Doris:—I have been an interested reader of your corner, and in reading the letters of the club I came to one I had written. Imagine my joy. Say, I jumped about three feet in the air, and in falling the seat of my chair gave way, and the next place I found myself was on the floor. Well, in my last letter I said "Arokyas" was my motto, and I mean to stay by it. Even if I did not get the prize, was I going to go back and wait for someone else to? No, "I stick to it," and mean what I say (sometimes).

I live on a farm about half a mile from town. We have altogether 480 acres, and of course, I help with the work. Last year I helped to work the land by harrowing, floating, discing and cultivating our 50 acres of summerfallow. I then harrowed about 175 or 200 acres; besides I stooked about 90 acres in the fall, but it was thin and there was not so very much to stook.

How many of the members have any experiments? I have a few with electricity. I had my bedroom lit up with a tiny bulb and some dry cells. It worked dandy. I had it hanging from the roof by an insulated cord two feet long.

We had a baseball team last year and challenged another town to play a series of five games throughout the season. They beat us the first game. Then we beat them the second game. We got the next two games, and they got the best of two other teams to play with them, and we beat them. Altogether we got about sixty dollars in prizes, and bought balls, mitts, gloves and bats.

I spoke of stamp collecting some time ago, and I wonder if any collectors have duplicate stamps for sale. I would like to get some if they could spare them. I am thirteen years old and have passed my entrance. I have not gone to high school yet. We are organizing boy scouts and girl guides in towns, and we are going to give a big concert to raise funds. I wonder if I am taking up too much room in the corner. I believe I am, and I think I shall have to quit, so I wish the club every success and hope to win the prize. Yours truly,—Frank C. Sheppard (13).

P.S. to Cousin Doris—Does this club have any motto and what is it?

Will you write us about your boy scouts?—C.D.

GIRL'S PRIZE LETTER

Melita, Man.

Dear Cousin Doris:—I noticed Our Young Folks' Club in the Canadian Thresherman and Farmer, so I decided to write and see if there is room in your most delightful club for a very interested reader. I also noticed that the admission was an interesting letter, but no war tax, so I thought I could afford that much.

I will now endeavor to tell in an interesting manner about our winter sports here. We usually delight in such sports as skating, sleighing, snowshoeing, tobogganning and such things, and we sure have plenty of fun. Last winter a "bunch" of girls, myself included, decided to "catch on" to a bob-sleigh and ride out into the country three or four miles, and then try and get a ride back home on another one. However, the first thing we came to was a hay-rack, so, of course, we all made a dash for it. Most of us managed to get our big feet on, but some were forced to walk behind, yet they were lucky, as you will soon see. Never thinking that a hay-rack upset rather easily, we all got on one side, and crash! over went the rack. Fortunately, the driver was a good-natured "Yankee," and he picked us up, and then we helped him to straighten up the rack. None of us were hurt as we fell into a nice, big snowdrift. You may be sure we were more careful the second time. We all got on again, and had a delightful ride. After we had gone quite a distance, we saw a "bob" going toward home, so thanking our driver, we jumped off the

Old Dutch

acts like magic in removing stains, rust and sticky substances from steel knives and forks

Wholesome, Nutritious, Economical.

McCormick's

Jersey Cream Sodas

Sold fresh everywhere. In sealed packages.

Factory at LONDON, Canada.

Branches at Montreal, Ottawa, Hamilton, Kingston, Winnipeg, Calgary, Port Arthur, St. John, N.B.

AMERICA'S LEADING FUR HOUSE

TRAUGOTT SCHMIDT AND SONS

WE PAY THE MARKET'S HIGHEST MARK

Not only do we pay the HIGHEST prices for your furs, but we do not quote a "siding scale" of prices. Our price-list quotes one fixed price for each size skin, and we actually pay that price. You positively know what your furs will bring before you skip them. 45 years in the fur business and our capital of \$1,500,000 assures you a square deal.

WE CHARGE NO COMMISSION

You get all the value of your furs—every cent—without any deductions. Our expert graders give you a fair, liberal assortment and you get their full value.

WE PAY SHIPPING CHARGES. All express or parcel post charges are paid by us. This saves you lots of money—sometimes as much as \$5 that you save on your catch for the season. We send your money the same day furs are received.

WRITE US TODAY

Before letting a single skin go, be sure to get our price. Write today for valuable booklet, "Successes of Trapping." Tells how to get the most money out of your furs. Also our latest marked news, price-list and shipping tags—all free. Write us NOW.

TRAUGOTT SCHMIDT & SONS.

126 Monroe Ave., Detroit, Mich.

FREE SUCCESSFUL TRAPPING

TRAUGOTT SCHMIDT & SONS, Detroit, Mich.

Send me your booklet, price-list, market news and tags—all free.

Name _____
 Address _____

rack and made a bee-line for this "bob." The driver this time happened to be a grumpy old man, and he refused to let us ride with him, saying that his horses were tired. We were rather mad, but still we began on our homeward march. However, luck was with us, for after we had gone about a quarter of a mile we saw another "bob," so, of course, we all ran to "catch on" to it. This time the driver was just a young boy about eight years old, so he let us ride home with him. My, but we did enjoy ourselves singing songs, etc.

I hope none of the members of this club have had the "flu." I have not had it yet, and I guess I will not get it now; at any rate I hope not. Well, Cousin Doris, Mr. W. P. B. will be getting this letter for breakfast very likely so I will close now. Hoping to receive the prize, I remain, ever your loving cousin.—(Miss) Edythe Graham.

Domremy, Sask.

Dear Cousin Doris:—We just got the mail among which was the Canadian Thresherman and Farmer, and I turned right over to the Young Folks' Club to see who had won the prize. I am a member of the Young Canada Club, and I would also like to become a member of this one. I have been going to school this winter. I am in Grade VIII. I like going to school. We live two and a half miles from our school, which is called "The Northern Light." There are thirty-one children going to this school, and there are nine different grades. We live ten miles from town and railroad, which is called Domremy. I have not travelled much by rail, as my parents came up here fifteen years ago, and I was not born then. They drove out from Prince Albert, about 36 miles from here, with horses and wagon through woods and sloughs, no roads at all. They had to cross the North Saskatchewan River on a ferry, and a few days after they had crossed it the ferry broke down. Weren't they lucky to get over it so soon?

I have six sisters, four of which are school teachers, and one is a nurse. I have three brothers. They are all farmers. We also live on a farm. I would sooner live on a farm than in a city. I must close now. Wishing the club every success. May I come again, Dear Cousin?—Myrtle O. Grambo.

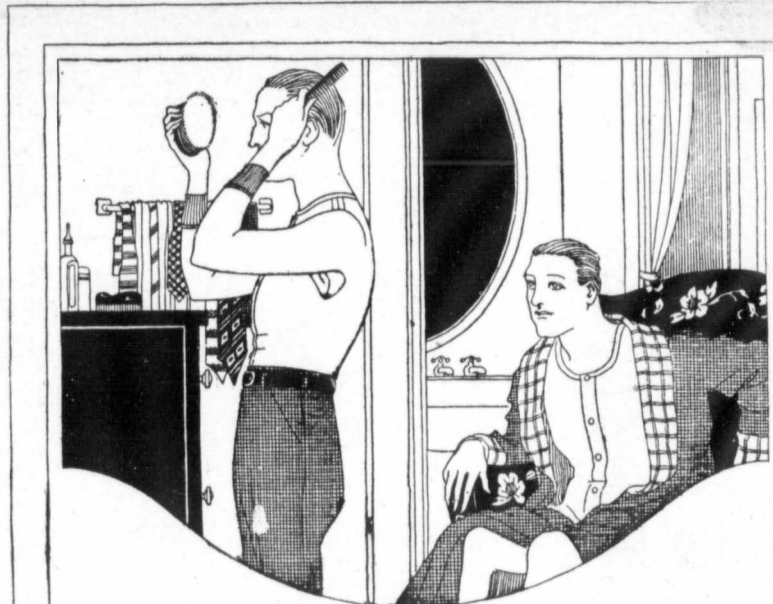
I like the name of your school, Myrtle.—C.D.

Stettler, Alta.

Dear Cousin Doris:—I read your interesting letters in the Canadian Thresherman and Farmer, and I thought I would like to write, too, and see if I could win a prize. We have a nice pony, and her name is Bessie. She is also kind to me. She comes after me when I go to get some hay. I am in Grade VII, now and hope to get in Grade VIII, soon. I like to go to school. We have twenty members in our school. I think my letter is getting rather long, so I have to stop now. Yours sincerely.—Hilda Klaus (age 12).

Neville, Sask.

Dear Cousin Doris:—I have read the letters in the Canadian Thresherman and Farmer for some time, and think there are some very interesting ones. I have often thought of writing to the page, but never got up enough courage until now. I was fifteen years old my last birthday, which was on the tenth of September. I tried my entrance this year, but don't know yet whether I passed or not. What I am going to write about is a prairie fire which happened two years ago last fall. The fire started from a burning straw stack. There was an awful high wind that day and everything was so dry that there was nothing to stop it. When it started it was about five miles southwest of our place, and in less than half an hour it was about three-quarters of a mile south of here. The threshing machine was on our place threshing, and when the men saw the fire they stopped threshing and went out fighting the fire. There were people from miles around helping to put it out. The threshers came back here for supper about six o'clock. But they were satisfied to think the fire was out. It did not do very much damage, only burnt a lot of pasture land. Well, I guess, I will stop



Penmans Underwear

THE STANDARD OF EXCELLENCE

People of varied occupations and in different climates require different garments. Penmans Underwear is made in various weights and fabrics to suit all these conditions. Each garment fits perfectly and is made to wear well.

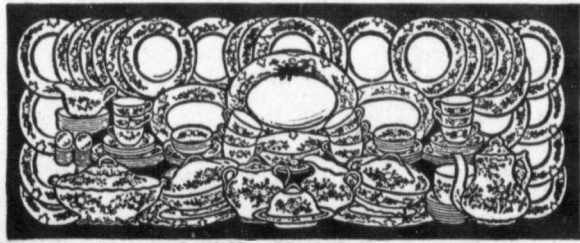


Also makers of Sweater Coats and Hosiery

Penmans, Limited, Paris

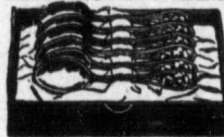
152

Free! 97 Piece Dinner Set and Lovely Set of Rogers Spoons



A MARVELLOUS OFFER TO QUICKLY INTRODUCE A DELIGHTFUL NEW PERFUME!

YOU can secure without a penny of cost this magnificent 97-piece English Dinner Service and a lovely set of half dozen Wm. A. Rogers teaspoons. Each dinner service is guaranteed full size for family use, its 97 pieces comprising 12 cups and 12 saucers, 12 plates, 12 dinner plates, 12 bread and butter plates, 12 soup plates, 12 second dishes, 12 plates, 2 oval covered vegetable dishes, a cream jug, covered sugar bowl, a gravy boat, pickle dish, and a salad bowl. It is handsomely decorated in rich floral design and will surely delight the most fastidious housekeeper. The beautiful set of teaspoons are in the famous Wm. A. Rogers Hidden Castle design beautifully finished and fully guaranteed for wear and satisfaction.



Send Our Wonderful Offer
We have just produced a delightful new perfume known as "Coronation Bouquet." It is so delicate and fragrant that we know every woman who tries it once will use it always, so we are granting no expense to secure representative in all parts of Canada who will help us by introducing this lovely new perfume to their friends and neighbors. That is why we offer to give away these magnificent and costly perfumes.

Will you sell just 16 bottles among your friends at only 25c. each?
You can do it quickly and easily in your spare time as everybody you know will gladly buy a bottle of this lovely new perfume at only 25c. Send us your name and address to-day and we will send you the 16 bottles all postage paid, and trust you with them until sold. Then return our money, only \$4.00, and we will promptly send you the beautiful set of spoons, and the handsome dinner set you can also receive without selling any more goods by simply showing your fine reward among your friends and getting only seven of them to sell our goods and earn our fine premiums as you did. We arrange to pay all delivery charges right to your door.
REMEMBER YOU TAKE NO RISK. You do not spend a cent of your own money. We trust you with our goods until sold, and if for any reason you cannot sell them we will take them back and give you beautiful premiums or pay you a big cash commission on the quantity you do sell. Write to-day. Address:
THE REGAL MANUFACTURING CO., D-38 Toronto, Ont.

COMBINGS!

Special to Ladies:
Any amount of combings made up
\$2.00
Also 15c Postage

Elite Hair Parlors
283 Smith Street
WINNIPEG

ALL TOILET ARTICLES
CARRIED
(Note change of address)

BOB LONG
UNION MADE
OVERALLS
SHIRTS & GLOVES



Known from Coast to Coast
R. G. LONG & CO. LIMITED
TORONTO CANADA

Lovely Heart Locket and Chain
Magnificent Wrist-Watch
and Fine Ring Given to You



Girls—these fine articles of jewelry can be obtained without spending a single penny. We are prepared to give away absolutely free 500 of each. The lovely heart-shaped locket is warranted gold filled, richly engraved and set with pearls, has space inside to hold two photos, and is on a fine 14-inch neck chain fitted with a strong safety clasp. The beautiful gold filled ring is set with three fine brilliant that sparkle like diamonds, while the magnificent wrist watch is of the most octagon shape, very small and dainty and a genuine time keeper.

All these wonderful gifts are given just for introducing our delicious "Fairy Berries" the new Cream Candy-Coated Biscuits that everybody loves. They sweeten the breath and leave a clean and fragrant taste.

Just send your name and address girls and we will send you a full size sample package free and just 50 big handsome packages to sell among your friends at only 10c each. Open your sample package and send your friends to try a Fairy Berry. They will certainly treasure and will buy one or two packages at once. You will be surprised at the short time it will take to sell them all.

Then return one \$2.00 and for your work we will also send you, by mail prepaid, the lovely locket with fine chain and the sparkling ring, and the lovely wrist-watch you can also secure without selling any more goods by just showing your fine prizes to your friends and getting only six of them to sell our goods and earn one fine prize as you did.

You take no risk. If you do not sell all the goods we take them back and will pay you in cash commission on premiums for what you do sell. Write to-day to:

NATIONAL PRODUCTS, LIMITED
Dept. W 88 Toronto, Canada 218

WANTED — Position as steam threshing engineer in Manitoba or Saskatchewan. Run sixteen falls. Age 27. State wages.
MILLARD CHRISTOPHER, Letcher, S.D., U.S.A.

FARMS, BRANDON, MANITOBA — We have an excellent list of improved farms in this famous agricultural district for sale at \$35.00 to \$50.00 per acre. Farmers enjoy all the advantages of a high-class community, situated close to a good city. Write for particulars. **O. L. Harwood, Brandon, Manitoba.**

writing as I am afraid I have already taken up too much of your valuable space. I would like to win a prize for this letter, but it is not very good, and if I don't I will try again. I remain, your friend.—Kileen Kelly.

McLean, Sask.

Dear Cousin Doris:—I have often read the letters on the young folks' page and found them very interesting, so decided to write too. I am nine years old. My birthday is on the twenty-ninth of April. I live on a farm four miles from town. I trap gophers in the spring. The council pays two cents for every gopher we catch. We have to cut off the gophers' tails so that they will know how many we get. I got three dollars last spring.

I go to school and am in Grade III. I was up to my cousin's home for my holidays last summer. I had a good time. There was some old machinery there and we had lots of fun building threshing machines out of them. I was sorry to come home and go back to school. We have a boat on the slough, and we have a fine time in it in the summer time. My cousin and I made a rat, too. My uncle gave me two white rats for pets a long time ago. They lived in the henhouse. If they went off to the barn the cows did not like it. One morning they were gone and we have not seen them since, so they must have died. We have a big Persian cat. We call it "Fluff." I used to have two rabbits, but the cat got one and the other died. They used to follow me around, and if I tapped on the floor they would come to me. I caught a rabbit in a wire snare this winter. I will close now. Hoping to see my letter in print. I remain, yours sincerely.—John E. Cowan.

Aneroid, Sask.

Dear Cousin Doris:—I have just been reading some of the letters in the Canadian Thresherman and Farmer and thought I would write to you. I am an English girl. I came from England six years ago. I would like to go back there for a visit, but not to stay there. All my relations except mamma, papa and my brothers and sisters are in England.

I am very fond of reading and have read quite a few books. I am reading David Copperfield at present. My favorite author is L. M. Montgomery. I have one sister married. She has a little baby girl five months old; her name is Viola May. I stayed with my sister a month this winter. I suppose nearly all the girls and boys have their soldier brothers coming home. Isn't it nice to think the war is over? I guess we are all glad, aren't we, folks?

We planted 350 acres of wheat, 100 of flax and 70 acres of oats. Our farm consists of 800 acres, but 160 acres is not broken. We have 16 head of horses, 12 head of cattle and six pigs. We also have a car and a tractor. We have had two dry years and one rusty crop. But I'd rather have a rusty crop than a dry one. I go to school every day and am in the sixth grade. I like all my studies except arithmetic and history. I guess I don't like arithmetic because I'm such a dunce at it. Well, I guess, I must close as my letter is getting so long. I am sure would like to get a prize, but I know I have not the slightest chance of getting it when I see what good letters the other girls write. But I hope to get it printed. Yours sincerely.—Malins Paddington.

Farmingdale, Sask.

Dear Cousin Doris:—I have read your most interesting letters and thought I would venture to write one, though I do not expect to win the prize. It is a very handsome prize for a letter. I am thirteen years old. We came up here from the United States five years ago. I was eight when we came. I will tell you of an accident I had on the way. We were in Winnipeg and were walking on a sidewalk watching the trains and street cars. I felt very dizzy. Suddenly I fell on the street. An old woman saw me and picked me up in time to save my life, for just then a car came along. I was always getting into mischief as I had never been travelling much before. Our school will soon start now. May I come again, Cousin Doris? Then I will tell of our school frolic. Must stop. Hoping to see by letter in print. —Alida Dora Dahl.



HIS DECISION

Doctor: "Now, McTavish, it's like this; you've either to stop the whiskey or lose your eyesight—which is it to be?"
McTavish: "Awel, doctor, I'm an auld man noo an' I was just thinkin' I've seen maist a' things worth seein'."

THERE'S A LONG LONG TRAIL
of Bugs, Fleas, Flies, Roaches, Mosquitoes, etc., all killed by

KEATING'S

15c, 25c and 40c

HIDES
Farmers and Beef Ring Secretaries
WE ARE WANTING
HIDES
Write for prices, it will pay you

THE WHEAT CITY TANNERY
Brandon, Man.
Reference, Bank of Commerce

GENUINE DIAMONDS
CASH OR CREDIT
Write for catalogue to-day
We trust any honest person

JACOBS BROTHERS
15 Toronto Arcade Toronto

CATELLI'S MILK READY-CUT

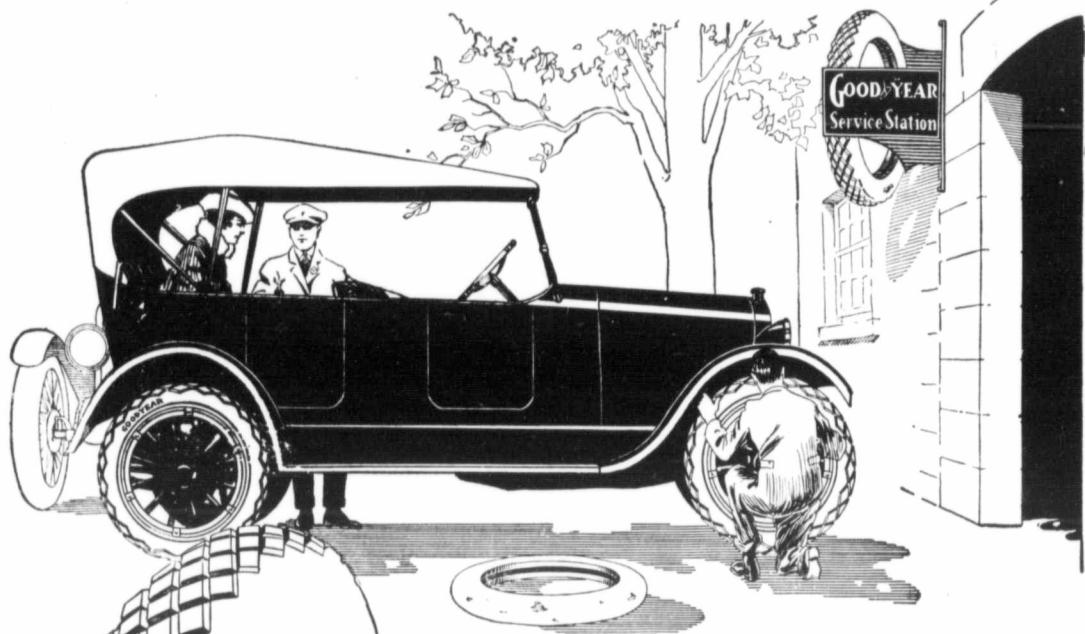
Delicious in Taste
—Convenient in Size

Actual Size of Cattelli's Milk Ready-Cut

Its food value is greater than eggs or meat and it costs less. Simple and easy to prepare. For sale everywhere.

Over 100 recipes in our illustrated book. We will send you this free. Write us.

The C. H. Cattelli Co. Ltd.
MONTREAL
Quebec



Know the Tire You Buy

You can't tell the value of a tire by its looks. The unused tire is a riddle. Its sleek and unscarred surface tells no story. Its real value is hidden.

Nor can you tell the value of a tire by its price. The price may be too low. It may not allow of building a good tire. The price may be too high. It may be far above the value you will get.

But there is one reasonably safe indication of a tire's value available to everyone.

That is the service that tire is rendering in general use.

On this basis, we believe you will come to Goodyear Tires.

More Goodyear Tires are used than any other brand. They have received, and are receiving, the most severe test a tire can be given.

If you will talk to men who drive cars, you will find a strong majority for Goodyear Tires. A majority based on this very test of actual experience.

It will probably surprise you how many hard-headed men of your acquaintance are buying Goodyear Tires for the value which is in them.

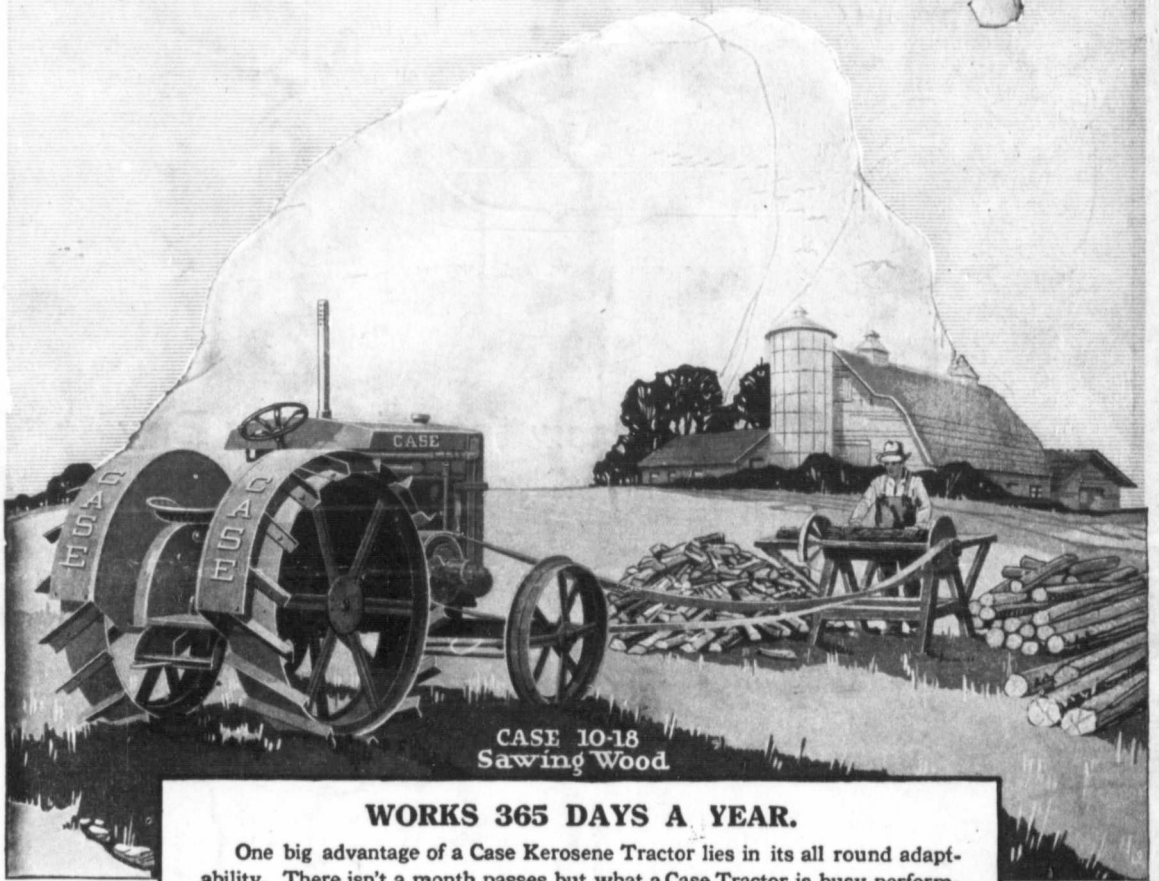
Ask the Goodyear Service Station Dealer to tell you the experience of the men to whom he sells tires.

The Goodyear Tire & Rubber Co. of Canada, Limited

GOODYEAR
MADE IN CANADA

CASE

KEROSENE TRACTORS



CASE 10-18
Sawing Wood

WORKS 365 DAYS A YEAR.

One big advantage of a Case Kerosene Tractor lies in its all round adaptability. There isn't a month passes but what a Case Tractor is busy performing some drawbar or belt job. If it isn't plowing, it may be found discing, harrowing or seeding, haying, harvesting, potato digging, road dragging, road grading or hauling. At the belt it is adapted to threshing or hulling, baling, silo filling, feed grinding, lime pulverizing, rock crushing, drilling, wood sawing, pumping, etc. All this can be done economically with Case Kerosene Tractors. Three hundred and sixty five days a year a Case Tractor stands ready to do its duty. When its work stops, its expense stops.

You should know all about Case Tractors with their specially designed 4 cylinder valve-in-head kerosene burning motors. You should be acquainted with the one piece frame construction, the cross mounted motor advantages, the Case patented Air Washer, the enclosed-cut steel-spur gearing, and the many other mechanical superiorities. They are all explained in our latest Tractor Booklet.

J. I. CASE THRESHING MACHINE CO. Inc.
RACINE, WIS.